



Faculty of Education, Language and Communication

**The Effects of Gamified Learning Using Powerpoint Games on Young
ESL Learners' Engagement and Performance in Speaking**

Stephenie Omila Ujan Roy

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The Effects of Gamified Learning Using PowerPoint Games on Young ESL Learners' Engagement and Performance in Speaking

Stephenie Omila Ujan Roy

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DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



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Signature

Name: Stephenie Omila Ujan Roy

Matric No.: 21020567

Faculty of Education, Language and Communication

Universiti Malaysia Sarawak

Date :

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ABSTRACT

Gamified learning has gained popularity in language teaching and learning in the last two decades. This action research aimed to investigate the effects of gamified learning using interactive PowerPoint games on young ESL learners' engagement and performance in speaking. A gamified learning environment comprising six lessons was planned and conducted. The study involved 11 Year 4 learners aged 10 to 11 from a suburban school located in Sarawak, Malaysia, with low enrolment and zero Internet connectivity throughout the six cycles of study. This study employed reflective teaching journal entries to help develop the gamified learning framework, an observation checklist to acquire data on learners' engagement and a pre-post-test to evaluate their speaking performance. The data from reflective teaching journals were analysed using inductive content analysis while observation and speaking test data utilized descriptive statistics analysis. The reflective teaching journals' findings suggest that it established a framework and guidelines for designing and implementing a gamified learning environment for teaching speaking. The observation checklist data show that the learning engagement in behavioural, cognitive and emotional components had positive outcomes, such as showing eagerness, making an effort to speak English and being excited about completing the speaking activity while implementing the gamified learning approach. The speaking test results also show that the gamified learning approach improved the learners' speaking performance by significantly increasing their scores from the pretest to the post-test. This study also revealed that the utilisation of the reflective teaching journals significantly contributed to the learners' engagement and speaking performance, as the researcher was continuously making relevant modifications to the gamified learning materials to better improve pupils' learning outcomes. In summary, these findings aim to raise awareness among ESL practitioners about the

benefits of adopting a gamified learning approach using interactive PowerPoint games to enhance teaching and learning outcomes.

Keywords: Gamified learning, action research, learner engagement, speaking performance, young ESL learners

***Kesan Teknik Pembelajaran Gamifikasi Menggunakan Permainan Interaktif
Powerpoint Terhadap Penglibatan Dalam Pembelajaran Dan Prestasi Kemahiran
Bertutur Murid Bahasa Inggeris Sebagai Bahasa Kedua***

ABSTRAK

Penggunaan teknik gamifikasi dalam konteks pendidikan kian mendapat perhatian dan menjadi pendekatan yang semakin meluas diamalkan pada masa kini. Kajian tindakan ini bertujuan untuk mengkaji impak teknik pembelajaran yang berkonsepkan gamifikasi dengan menggunakan slaid interaktif PowerPoint terhadap penglibatan murid dalam aktiviti pembelajaran dan kemahiran bertutur murid-murid dalam subjek Bahasa Inggeris sekolah rendah. Kajian yang merangkumi enam sesi pelajaran menggunakan teknik gamifikasi ini melibatkan seramai 11 orang murid Tahun 4 dari sekolah bertaraf SKM (Sekolah Kurang Murid) luar bandar yang tidak mempunyai capaian Internet. Kajian ini menganalisis penglibatan murid dalam pembelajaran menggunakan jurnal refleksi guru, senarai semak pemerhatian dan ujian lisan untuk melihat impak gamifikasi terhadap prestasi kemahiran bertutur murid. Jurnal dianalisis secara induktif manakala data kuantitatif dianalisis secara statistik deskriptif. Dapatan kajian menunjukkan bahawa jurnal refleksi guru membantu dalam perancangan dan pelaksanaan pengajaran berasaskan gamifikasi. Teknik gamifikasi juga didapati meningkatkan penglibatan murid dari aspek tingkah laku, kognitif dan emosi, serta mendorong peningkatan signifikan dalam prestasi ujian bertutur. Kesimpulannya, kajian ini memberi kesedaran dalam kalangan guru Bahasa Inggeris sebagai strategi yang berkesan untuk meningkatkan mutu pengajaran serta memperkukuh keberkesanan pembelajaran murid secara menyeluruh menggunakan teknik gamifikasi.

Kata kunci: *Gamifikasi, penglibatan, prestasi kemahiran bertutur, murid Bahasa Inggeris, kajian tindakan*

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LIST OF ABBREVIATIONS

ESL	English as a Second Language
UNIMAS	Universiti Malaysia Sarawak
ToGL	Theory of Gamified Learning
MoE	Ministry of Education
CEFR	Common European Framework of Reference (CEFR)

CHAPTER 1

INTRODUCTION

1.0 Chapter Overview

This chapter introduces the study by providing the background of the study and the research problems that the study aims to address. The significance of the study, the research aims, objectives, research questions and justification are also explained in this chapter.

1.1 Background of the study

The prominence of English as a second language (ESL) in Malaysia has grown significantly, reflecting its global role in communication. The growth of English as a second language in Malaysia reflects its global role in communication, as English is widely used in business and education, making it essential for Malaysians to participate in the global community (Kashinathan & Aziz, 2021). ESL teachers must prioritize developing learners' English conversational skills for global competence, alongside reading and writing proficiency (Kashinathan & Aziz, 2021; Rivers, 1987). Malaysian education aims for students to master both Bahasa Malaysia and English by graduation, fostering bilingualism (Malaysian Education Blueprint, 2013; Aziz et al., 2019). Proficiency in English is crucial for career opportunities, particularly in workplaces where English is the primary language (Ting et al., 2017). Therefore, Malaysian ESL teachers play a vital role in ensuring students can confidently speak English, preparing them for future success.

In line with this, these days, technology affects every aspect of life and has an impact on schooling. Children are savvy with digital platforms and gadgets, especially the Alpha generation born in the 2010s (McCrindle, 2023). These digital natives learn a lot through games, thus, creative pedagogies that smoothly incorporate technology into the classroom

are necessary. To accommodate 21st-century learners who are utterly engrossed with technology and the Internet, educators must accept this technological reality and adapt their pedagogy. Recent trends in language learning, such as gamification and game-based learning, are reshaping language acquisition by maximizing skill development. Cook (2016) emphasises the critical role of second language acquisition in the modern era, while Richards and Rodgers (2014) stress that teaching methods must align with learners' needs. Teachers should design lessons that promote communication and practical language use. Gouëdard et al. (2020) and Hasanah et al. (2023) also agree that teachers play a crucial role in selecting appropriate language teaching approaches tailored to students' needs, emphasizing a student-centred learning environment. Malaysian ESL teachers are expected to be proficient in teaching strategies to effectively foster language acquisition, aligning with the goal of the Ministry of Education (MoE) to cultivate 21st-century skills, particularly communication, among pupils (MoE, 2019). Therefore, Malaysian ESL educators must constantly adjust their teaching methods to enhance the speaking skills of ESL learners.

1.2 Problem Statement

The inability to use the English language competently among ESL learners is a complex issue. While various efforts have been introduced by the Malaysian Ministry of Education, such as curriculum reforms and teacher training programs, several interconnected factors contribute to this problem. Specifically, ESL learners show both a hesitancy and fear when speaking English, which seriously impacts their speaking performance (Nuridzdzati & Akhiriyah, 2023; Kashinathan & Aziz, 2021). Many students are fearful of using the English language (Nijat et al., 2019) and use their mother tongue instead, even after being introduced to basic sentence structures and vocabulary. Sani and Idris (2017) also highlight how the native language can impede ESL learners' English speaking performance, as these learners

often speak their mother tongue first in early childhood before learning English in school. The limited exposure to the English language, often confined to formal instruction during school sessions (Yamil et al., 2022; Renganathan, 2021; Azar & Tanggaraju, 2020; Mustafa, 2018; Rahman et al., 2018), further contributes to their hesitation in using the language, particularly in speaking lessons. Therefore, a key aspect of this issue is the need to improve ESL learners' confidence and reduce their hesitancy in speaking English.

Furthermore, learners' low motivation is another major problem affecting their speaking competency in ESL lessons. Learners often find traditional speaking lessons dull and uninteresting, as Misbah et al. (2017) have noted. This lack of enthusiasm and engagement means they are less willing to make the effort to develop their language skills, which can seriously impede language learning. Several factors contribute to this low motivation. The over-reliance on textbooks in classrooms can lead to student disengagement and demotivation. Additionally, the heavy emphasis on reading and writing in English language teaching in Malaysia (Musa et al., 2012) often overshadows the development of speaking abilities. Teachers may prioritize reading and writing skills to help students pass exams, neglecting the importance of building communicative competence. Moreover, some ESL teachers lack the confidence and competence to implement interactive ESL speaking lessons, particularly with the introduction of the Common European Framework of Reference (CEFR) in the Malaysian English Primary and Secondary school syllabus (Chong & Yamat, 2021; Singh et al., 2021). These obstacles contribute to ESL learners' disengagement in speaking lessons and hinder the development of their speaking skills.

Consequently, to address these issues of hesitancy, fear and low motivation, the researcher intends to implement gamified learning using interactive PowerPoint games in teaching practice and investigate its effects on young pupils' engagement and performance

in ESL speaking activities through action research due to the limited internet connectivity in the school setting and utilisation of PowerPoint games as a practical and accessible tool for gamified learning.

1.3 Research Aim and Objectives

This action research aims to investigate the effects of gamified learning using interactive PowerPoint games on young ESL learners' engagement and performance in speaking. To achieve this goal, the following objectives were outlined:

- i. To develop ESL speaking lessons using a gamified learning approach by incorporating interactive PowerPoint games.
- ii. To examine the effects of gamified learning on young ESL learners' engagement in ESL speaking activities.
- iii. To determine the effects of gamified learning on young ESL learners' speaking performance.

1.4 Research questions

By achieving these objectives, this action research aims to answer the following questions:

- i. How to develop ESL speaking lessons using a gamified learning approach by incorporating interactive PowerPoint games?
- ii. How does gamified learning affect young ESL learners' engagement in ESL speaking activities?
- iii. To what extent does gamified learning affect young ESL learners' speaking performance?

1.5 Operational definitions

The three main key terms in this study are defined as follows:

- i. Gamified learning
- ii. Learner Engagement
- iii. Speaking performance

1.5.1 Gamified learning

Gamified learning refers to the utilisation of game elements in a learning context (Deterding et al., 2011). It involves the game elements such as timers, badges, points and leaderboards in an educational context. Several studies (Dicheva et al., 2014; Ekici, 2021; Landers, 2014; Landers et al., 2018; Ohn et al., 2018) also defined gamified learning as a technique involving the use of game components, such as the use of points and badges as student rewards, to the learning process to encourage learners and boost their performance. Gamified learning is becoming more popular now that young children, especially Gen Alpha, are mostly immersed in technology and known as digital natives (McCrindle, 2023). This is also in line with Ku Ahmad's definition (2003) in which she mentioned that the integration of interactive media could boost pupils' learning motivation compared to conventional teaching methods. Interactive PowerPoint game is built and developed solely with Microsoft PowerPoint software (Budasi, et al. 2020). Teachers can create and develop their own interactive PowerPoint games as teaching material to support the teaching and learning process. Hashim, et al. (2019), Ng et al. (2021), Rafiq, et al. (2020) and Wong, et al. (2021) developed their own interactive PowerPoint game to conduct gamified learning and turned out to have positive effects on pupils' learning in ESL lessons. In this study, gamified learning refers to the six interactive PowerPoint games that were adapted and modified with

gamification elements such as points, levels, badges, scores and quests to be included in the learning content from the Year 4 KSSR syllabus.

1.5.2 Learner Engagement

Learner engagement is essential in learning as it can help to measure the learning experience of the learners. Engagement can be measured through students' effort in completing the task or activity (Finn and Zimmer, 2012; Groccia, 2018; Newmann et al., 1988). Due to its increasing importance in learning outcomes, interest in pupils' learning engagement and its effects on learning success has increased significantly in recent years and previous studies demonstrated that students' academic performance increases when they participate actively in the learning process (Khan, Gul & Zeb, 2023). In a recent study involving students' ability to narrate stories, learners' effort is measured through the ability of the students to use an adequate amount and adequate vocabulary to complete their tasks (Malik & Pervaiz, 2023).

Learner engagement is undoubtedly crucial in teaching and learning activities. Groccia (2018) also agrees that engagement is important in the teaching and learning process. When learners actively participate in teaching and learning activities, they are making efforts to learn (Newmann et al., 1988). Engagement plays a vital role in determining the success of teaching and learning and this is in line with Groccia (2018) who mentioned that the success and the quality of teaching and learning are determined by the learners' engagement. There are three types of learner engagement observed, which are behavioural, cognitive and emotional. Nguyen et al. (2018) emphasize behavioural engagement in terms of passive and active participation. On the other hand, pupils' mental work and active thinking during the learning process are referred to as cognitive engagement (Al-Obaydi et al., 2023). In this study, cognitive engagement in this study refers to the pupils' ability and

their effort to use the words taught in making simple sentences for speaking activities. Both behavioural and cognitive engagement differ from emotional engagement. According to Khan et al. (2023), emotional engagement is the idea that pupils learn better when they feel emotionally invested in what they are learning especially when they feel motivated, engaged and involved actively. In this study, emotional engagement refers to pupils' emotional state during the gamified learning approach implementation such as their reactions of being enthusiastic, confident and making positive body gestures. This study is also in accordance with Groccia (2018) where emphasis on pupils' engagement and their learning effort during the gamified learning was observed based on the three aspects namely behavioural, cognitive and emotional using an observation checklist.

1.5.3 Speaking performance

Speaking skills is one of the most important aspects of learning a language. The main goal of learning a language should be the ability to converse and express our thoughts fluently with the other person (Luoma, 2004). This means that the success of language learning is assessed through the ability of the learners to use the language fluently in communicating their ideas and thoughts into words without hesitation. One's success in learning a language can be easily determined by their speaking performance. The success of learning the English language is often evaluated and assessed through the ability to speak the language proficiently (Richard, 2008). Speaking performance is assessed through scoring rubrics which involve grammar, fluency, vocabulary, pronunciation and comprehension (Brown, 2004). The ESL speakers need to master these aspects so that they can articulate their ideas fluently. In this study, speaking performance refers to young learners' performance in the pre and post speaking tests.

Their speaking performance is measured using scoring rubrics consisting of two criteria, namely fluency and vocabulary during a pre-test and a post-test. In this study, other elements such as grammar, pronunciation and comprehension were not included in the assessment in this study to keep the focus on vocabulary and fluency, which are more easily seen markers of young learners' progress in speaking. Fluency in a communicative context is linked to the ability to execute language skills in real-time interactions, as evidenced by studies on speaking fluency that emphasize coherent, rapid and context-appropriate language output (Drajati, 2018; Gurunandan et al., 2022). Vocabulary, on the other hand, refers to the repository of words and their associated meanings, as well as the ability to use these words correctly in different contexts. Vocabulary acquisition involves not only the memorization of definitions but also the integration of word meanings with existing knowledge structures and contextual usage (Naeimi & Foo, 2015).

1.6 Significance of the study

Current trends of gamified learning in language teaching and learning, particularly speaking usually focus on the use of ICT, media, fluency and motivation and speaking performance (Erdiana et al., 2023; Ng et al., 2021; Wong et al., 2021). The findings of this research aim to contribute to ESL learners' engagement and speaking performance through gamified learning. Concerns have been raised about pupils' poor performance and lack of engagement in ESL speaking lessons. This is especially troubling considering that these youngsters will probably continue their schooling or join the industry as adults. To keep this problem from coming up again, it is critical to fix it. Thus, the goal of this research is to further knowledge about the application of gamification in language learning and teaching while also enhancing the researcher's own ESL teaching methods.

Furthermore, this study also aimed to provide insights and empirical evidence of the effects of gamified learning on pupils' engagement and performance in speaking activities. The lack of theoretical and methodological robustness in the field of gamification (Hamari et al. 2014; Nacke & Deterding 2017 as cited in Rapp et al. 2019) motivated this study. Using both qualitative and quantitative data sources can expand and improve our understanding of how gamification is utilized in different contexts (Alsawier, 2019). The result of the employment of this action research design (if there's any difference) is important for teachers to diversify their teaching and learning methods. In line with previous research, ESL teachers should consider diversifying their teaching and learning approach to create interactive and student-centred lessons so that it would decrease pupils' hesitancy and anxiety in speaking the English language (Kashinathan & Aziz, 2021).

Lastly, this research aimed to aid ESL teachers in providing ESL learners with a new experience in learning the English language, especially young ESL learners in primary schools. It allows children to be active learners and responsible for their learning since they are involved in their learning, particularly in ESL speaking lessons. Schweitzer and Brown (2007) described active learning as involving students as much as possible in their learning. It is also intended that gamification would reduce the usage of another language in ESL classrooms while increasing students' confidence in speaking English through their engagement in gamified learning. Gamified learning can provide children with a safe learning environment because it is fun, enjoyable and less stressful. As a result, this research is valuable to students because it might provide them with new learning experiences.

1.7 Chapter Summary

In this chapter, the background of the study was introduced and fundamental research questions were described, which originated from the research objectives. The primary motivation behind conducting this research was also discussed. The following chapter delves into the relevant literature about the focus of this study.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

In this chapter, games and gamified learning will be defined and its advantages will be discussed, as well as how it relates to learner engagement. Additionally, the significance of speaking skills in the Malaysian ESL setting will also be discussed. This will help readers grasp the terms and context used in this action research. Previous research findings and theoretical framework are discussed to guide the study.

2.2 Games

Over the years, the term "games" has gained significant attention. The definition of the word “game” by Suits (1978) clearly defined that the game player will be achieving certain goals at the end of the game bound by certain rules. This is also in line with Becker (2021) who emphasised that games have three main properties: they are interactive, they have one or more goals and they have rules that the players must follow. A review by Stenros (2017) about the definition of a game on the other hand depicted over 60 game definitions since 1930a which are categorised into ten main interests which are the importance of rules, the purpose of the game and its function, activities, interconnection with the world, the role of a player, games productivity, games’ conflict and competition, goals and condition, constructions of the category and the coherence of the game while Cheng et al. (2015) viewed the game as an organised play with objectives, rules and challenges. It can be concluded that a game is a series of coherent activities that are goal-oriented which players must achieve to accomplish the mission and gain the desirable outcomes. There are a lot of game categories that exist such as puzzles, simulation, role-playing, adventures, real-time

strategies and many more. Statista (2022) stated that there are 1.7 billion mobile gamers worldwide up to this date. The numbers indeed indicate a growing popularity of gaming, particularly among children and young adults.

2.3 Games and Children

With the rapid evolution of technology and the unavoidable utilisation of it, children nowadays are mostly exposed to games and most of them spend most of their time playing games. Supporting this, Lenhart et al. (2008) mentioned that video games have quickly spread to be a part of every child's development. According to a study by Gilsenan (2021), gaming is the top interest among boys aged 8 to 15, surpassing movies, music and TV shows. This shows that gaming has become the highest interest among children. Although there are concerns regarding the negative effects of video games on children's development such as harm children's physical health, impair cognitive and language development and increase behavioural issues like aggression, anxiety and attention problems (Bassam & AhmedQalawa, 2021), playing games can also have benefits for the development of children's brains, such as can enhance children's cognitive abilities by improving thinking speed and stimulating brain development (Rosyati et al., 2020). Therefore, this study aimed to investigate the impact of incorporating game elements such as points and badges in ESL classroom activities for young children using PowerPoint games.

2.4 Games and their elements

Games consist of multiple elements that can captivate players and motivate them to complete tasks. Becker (2021) highlighted that games have three main properties which are interactive, have one or more goals and have rules to be followed by the players. The social mechanisms in the games such as badges, points or leaderboards are often used to increase

learners' motivation and engage the learners in their learning process. According to Landers et al. (2018), Dicheva et al., (2014) and Landers (2014) incorporating game elements like badges, points, challenges and leaderboards can improve learners' engagement and performance in learning. Not only in the educational field, but gamification has also been widely used in various industries, including education, business, retail and healthcare to motivate workers and consumers (Wunderlich et al., 2019).

The most common game elements that are identified in the gamification research are points, badges and leaderboards. These elements are frequently used to encourage and motivate people in different fields, such as education and business (Hallifax et al., 2023; Saleem et al., 2021; Ekici, 2021; Tobon et al., 2020; Muangsrinoon & Boonbrahm, 2019; Rodrigues et al., 2019; Jakubowski, 2019; Nah et al., 2014). It is a common practice to use points to provide the users with instant feedback and to monitor their activity. Badges, on the other hand, are used to acknowledge individuals when they meet certain criteria. Leaderboards take this a step further by introducing competition through the ranking of users according to their scores. In learning, this is also helpful for the teacher to provide feedback to the learners about their progress in learning activities, as well as engage them in their learning progress. All the elements like points, badges and leaderboards motivate users by providing immediate feedback (points), recognizing achievements (badges) and fostering healthy competition (leaderboards), which together enhance engagement, encourage persistence and promote active participation in learning or task completion.

Other than these, levels are another popular type of game element that divides the learner's path into clearly defined stages and thus influences the learner's progression. Like game completion, learners are often engaged to get to the next steps to complete their learning progression. They are very useful in the educational context as they can construct

learning into a series of simple steps which, if followed appropriately, help improve learning outcomes (Costa, 2023; Saleem et al., 2021; Silva et al., 2019; Nah et al., 2014). The application of levels is useful in maintaining user engagement since they provide a sequence of challenges and rewards when solving a problem. In addition, timers are used to introduce a sense of urgency and time management into gamified systems. They can be particularly effective in scenarios where time-bound tasks are essential, such as in certain educational activities or business processes (Saleem et al., 2021; Nah et al., 2014). Thus, incorporating game elements such as points, badges, leaderboards, levels and timers is promising in engaging the learners as users in the educational context.

2.5 Games and Education

Game elements are being used more in teaching to boost learners' motivation and learning, whether in physical or digital media. Online and offline educational games for young children have rapidly developed over the years. Playing games is a great way for children to enhance their vocabulary skills. (Rosyati et al., 2020). Recent studies have found that the use of games in teaching and learning has been found to increase students' motivation and engagement in learning (Dicheva et al., 2014; Ekici, 2021; Eltahir et al., 2021; Landers, 2014; Landers et al., 2018; Marzuki & Kuliachana, 2021; Ohn et al., 2018). Not only that, but games can also be used as one of the speaking performance assessments (Brown, 2004) – instead of relying solely on traditional tests like oral interviews or presentations, which can sometimes be anxiety-inducing, games offer a more natural and communicative environment for assessment. Games can engage the students in teaching and learning and motivate them to achieve the desired outcomes in the learning process. The games used can be online games such as Kahoot, Quizziz, or any other suitable online games and for some teachers, offline games are also often used in their teaching and learning such

as flash games and PowerPoint games. Some creative teachers even made the PowerPoint games themselves to suit the learners' interests and levels. Hashim et al. (2019), Rafiq et al. (2020), Ng et al. (2021) and Wong et al. (2021) created their own PowerPoint games and showed positive effects on the learners' engagement and their performance in ESL learning, especially in vocabulary, speaking and grammar. PowerPoint games positively impacted ESL learners by boosting their motivation and active participation, leading to improved vocabulary acquisition, speaking fluency and grammar comprehension. In this study, a PowerPoint game is going to be a part of the learning process. Not only that, there are also many educational games developed for children and most of them are free to download through Play Store for Android users and AppStore for Apple users. Hence, ESL teachers can integrate games into their teaching and learning to improve the children's learning experience and engagement.

2.6 Gamified learning

One of the latest trends to improve learners' performance and motivate them in their learning is to integrate gamification in teaching and learning. Deterding et al. (2011) defined gamification as the term using the game elements or characteristics in a non-gaming context. In the educational field, it is also known as gamified learning. Gamified learning can be defined as taking the game elements such as using points and badges as pupils' rewards onto the learning process to motivate the learners and improve their performance in learning (Dicheva et al., 2014; Ekici, 2021; Landers, 2014; Landers et al., 2018; Ohn et al., 2018). Teachers as developers do not need to create an entire game for learning but to integrate some elements in the learning content such as using points and rewards to increase their pupils' motivation and participation in the classroom. Likewise, Pham (2023) also stated that adding game elements is merely to enhance the instructional content.

In addition, Caponetto et al. (2014) expressed the view that gamification means the elements of games, such as points, mission, leader board and other elements, to be used in a non-gaming environment to enhance and improve the experience of individuals engaged. Rewarding points for achieving the learning objectives are an excellent way to motivate them. It can also aid in progress tracking and engagement. The rewards received for learning can also be used as a form of assessment of pupils' learning. Bedwell et al. (2012), as cited in Landers (2014), stated some attributes of gamification of learning, such as using the element of games in assessing the learners by giving points to reward the correct answers and tracking their progress in the learning. Therefore, incorporating gamification, such as points and badges as a reward in learning, is expected to boost pupils' engagement in speaking lesson activities.

At the same time, other studies reveal several challenges and potential downsides associated with gamified learning. One common concern is that an overemphasis on extrinsic rewards like points or badges which may diminish intrinsic motivation, causing learners to focus more on competition than on the actual acquisition of knowledge (Dichev & Dicheva, 2017). Moreover, improper design of gamified elements may lead to increased cognitive load, distractions, or a sense of inequity among learners who have varying levels of access to technology and differing learning styles (Topu, 2023). Ethical considerations, such as data privacy and equitable access, also emerge as key challenges that must be addressed to ensure that gamified educational tools benefit all learners without reinforcing existing disparities (Zhou, 2024).

In summary, while gamified learning offers considerable advantages by making the educational process more engaging, interactive, and enjoyable, it is not without its drawbacks, as noted by Song et al. (2022), who acknowledged that the strategy may also

present certain limitations. These include the risk of overreliance on extrinsic motivators, potential distractions due to poorly designed game elements and ethical issues surrounding data security and access (Zhou, 2024; Dichev & Dicheva, 2017; Topu, 2023). A balanced and critically informed approach to the design and implementation of gamified learning environments is therefore essential for realizing their full educational potential while mitigating associated risks.

2.6.1 Theoretical foundation of gamified learning

Landers (2014) developed a psychological theory of gamified learning based on Bedwell's game attribute taxonomy – gamification via moderation and gamification via mediation. According to Landers (2014), gamification via moderation means that instructional designers can add additional narrative (game elements) into an existing instructional plan to boost student motivation as well as to improve the instructional plan itself while gamification via mediation lets the learners spend more time to utilise the similar narrative (game elements); for example, at home which could result in more learning. In other words, teachers could use gamification in moderation is used to enhance the quality of lesson content and learning outcomes meanwhile gamification in mediation is used to use the gamification to influence learning. The proposed theoretical framework for this action research is based on Landers' (2014) theory of gamified learning (ToGL).

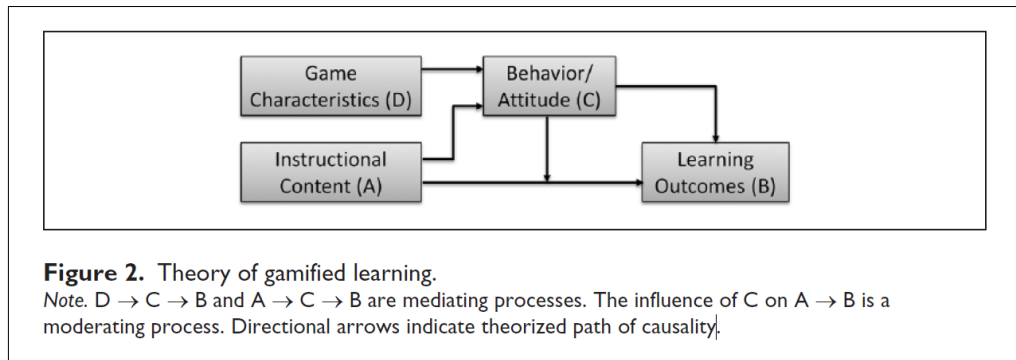


Figure 2.1: Theory of gamified learning by Landers (2014)

As seen from the figure above, gamification is categorised into four different interrelated components, namely game characteristics, instructional content, behaviour and attitude and lastly, learning outcomes. The theory proposes two pathways through which gamification influences learning: mediating and moderating processes. The mediating process suggests that game elements directly motivate and engage learners, for instance, through real-time challenges that create pressure and drive better learning outcomes. Conversely, the moderating process posits that gamification enhances learning by revising instructional content to improve learning outcomes, with game elements acting as a motivator for sustained engagement. In this research context, adopting gamification via moderation processes is going to be explored, where the researcher, as an ESL teacher, added a few game elements such as points, scores and badges to enhance pupils' engagement and performance in speaking as the learning outcomes.

2.6.2 Gamified learning and language teaching

Gamified learning is seen as one of the effective strategies in learning (Wen, 2023) and it has been gaining a lot of attention in the field of language teaching and learning. Richter et al. (2014) also agreed that gamification has gained popularity in recent years and a significant amount of language researchers are also studying the effects of the

incorporation of gamification elements in teaching and learning (Mohandas et al., 2020). Based on a systematic review done by Zhang and Hasim (2023) in studying its empirical evidence, the fusion of gamification elements in teaching EFL and ESL contexts offers a lot more advantages than disadvantages. Gamification is known to have great potential to motivate young learners as the elements associated with games such as points, timers and badges are exciting to them. As cited by Dugalich et al. (2020), Seaborn (2015) also concluded that gamification can aid as a teaching technique to create fun and exciting task-based learning in teaching English lessons. Similarly, a systematic review of using gamification in supporting English language learning by Hojjat Dehghanzadeh et al. (2019) also mentioned that gamification can provide fun and enjoyable learning experiences. Learners can learn and use the language in a less stressful environment and thus motivate them to speak the English language willingly. This is also supported by Iaramenko (2017), who mentioned that games have the potential to provide a stress-free environment to learners, which is believed to decrease the fear and anxiety in using the language. Therefore, this research aimed to incorporate gamification elements in speaking activities to engage and motivate the learners to speak without feeling anxious.

2.6.3 Gamified Learning using Interactive PowerPoint Games

Gamification techniques can be conducted online and offline during teaching and learning. ESL teachers have numerous options to rejuvenate their teaching and learning methods using available online games such as Kahoot!, Quizziz, Socrative and other interactive games by integrating gamification elements. However, for schools with low to zero network connectivity, PowerPoint games can be a lifesaver for ESL teachers. Past studies have shown great interest in studying the effects of using PowerPoint games in ESL classrooms. Integrating game-based learning through platforms like PowerPoint presents a

promising method for enhancing engagement and learning outcomes (Kapp, 2012; Prensky, 2001). This approach leverages interactive elements and game mechanics to foster student motivation and confidence in language acquisition (Harmer, 2007; Scrivener, 2011). By strategically employing PowerPoint's features, such as hyperlinks, animations and triggers, ESL teachers can create dynamic and engaging learning experiences that align with established principles of multimedia learning and interactive pedagogy (Clark & Mayer, 2016; Ur, 1996). The design of these digital games, while drawing upon general game-based learning theories, can be tailored to the specific linguistic needs and cultural context of Malaysian ESL learners (Hockly & Dudeney, 2017).

Recent studies on gamified learning in Malaysia have shown that language learning through gamification enables teachers to provide a fun and meaningful learning environment for students (Hashim et al., 2019; Rafiq et al., 2020; Wong et al., 2021). Not only that, a study by Huseinović (2024) on gamified learning involving higher education levels in Bosnia and Herzegovina also suggests that gamified learning offers benefits to enhance learning outcomes, motivation and language abilities in the English language. Wong et al. (2021) also stated that using PowerPoint games to integrate gamification can be a booster for teachers to enhance pupils' learning experience, especially in rural school areas. Teachers do not need a network connection to conduct PowerPoint games in the classroom and it is cost-effective as well (Rafiq et al., 2020). Teachers are also able to download available online templates that are suitable for their lesson content. Besides that, teachers also can make their learning interactive by adding game elements to their PowerPoint presentation slides or even better, some of them developed their own PowerPoint games from scratch (Hashim et al., 2019; Rafiq et al., 2020; Ng, et al., 2021; Wong et al., 2021). Therefore, this action research involved adapting and modifying PowerPoint games to be used in speaking

activities and exploring their effects to enhance pupils' engagement and speaking performance.

2.7 Gamification elements and learner engagement

Gamification can engage the learners in teaching and learning. Learner engagement is crucial to motivate the learners to complete tasks. Students' effort in completing the task or activity can be used to assess their engagement (Groccia, 2018). As cited in Dugalich et al. (2020), Seaborn (2015) stated that gamification can support the creation of fun and exciting task-based learning to engage learners in English lessons. Deterding et al. (2011) also suggested that the use of gamification – adding game elements such as scores specifically, has been known to increase learners' engagement. Game elements such as points, levels and badges are acknowledged to increase extrinsic motivation because they give the learners the feeling of accomplishment which is rewarding to them (Muntean, 2011 as cited in Richter et al. 2014). Thus, this research aimed to explore the effects of gamification on young ESL learners' engagement and performance in speaking activities.

In this research context, the element of games such as badges and points are added to the PowerPoint slides to engage the young learners to complete their speaking tasks. According to Reinhardt (2019), a game that is a thematically designed series of storylines can intrigue learners to solve problems. Six interactive PowerPoint games were adapted and modified to suit the learners' interests so that they would feel motivated and engaged to complete the mission. This is supported by Renniger & Hidi (2017) who emphasised that interest is powerful in engaging humans to do something. Therefore, learners' interests were taken into account in this action research to adapt and modify six PowerPoint games for a gamified learning approach in investigating the effects on engagement and performance in speaking.

2.8 Speaking skills

Speaking skill is an ability to communicate with others and it involves the speaker and listener to transfer and deliver information effectively. Speaking skill is important as it enables effective communication (Leong & Ahmadi, 2017; Kashinathan & Aziz, 2021) and communication occurs a lot in one's daily life. Similarly, Rivers (1987) argues that speaking skill is also frequently used, the same as reading and writing. To encourage learners to speak, language teachers should aim to improve their fluency in expressing their ideas in the targeted language rather than focusing on their accuracy. Games can also be used to evaluate a speaker's speaking performance (Brown, 2004). This way, it provides a safe environment for pupils to speak the English language as games can be fun, engaging and entertaining. Harmer (2002) stated that it is okay for teachers not to give feedback immediately during communicative activities if the pupils make some grammatical or pronunciation errors to avoid stress among the learners. This practice also promotes spontaneous communication and Krashen (1976) strongly believes it is best to have natural communication to acquire a language.

2.8.1 Speaking Skills in Malaysian ESL Context

The Ministry of Education also emphasised the importance of Malaysian students mastering both Bahasa Malaysia and English to succeed in the workforce. They are also encouraged to be proficient in English as delineated by the Ministry of Education which falls under the second attribute; namely Bilingual Proficiency in Malaysia Education Blueprint (2013-2025). Significantly, the English language has undoubtedly become the lingua franca and the teaching and learning of the English language should be emphasised to prepare our ESL learners to survive in the Fourth Industrial Revolution (IR4) which is in line with Ting

et al. (2017) that English proficiency is deemed beneficial in securing jobs and professional development.

Teaching speaking skills in the Malaysian context is vital as the usage of English language as a second language in the country has become more prominent over the years. Speaking skills is equally important, as same as reading and writing (Rivers, 1987). As a part of the education paradigm shift, the English language is considered an important medium to produce globally competent individuals. It is also important to note that the English language is being widely used across the world as a medium of communication. Malaysian students are expected to be proficient in both languages, namely Bahasa Malaysia and English language at the end of their school years to prepare them for their future and use the languages in the workforce, especially the English language (Malaysian Education Blueprint, 2013) which is seen as an effort to promote bilingualism and multilingualism among the citizen (Aziz, et al. 2019). It is also crucial for job hunters to have good English command if the organisation uses English medium as their working language (Ting et al., 2017). In line with this statement, it is important to note that English proficiency helps students to create more job opportunities in the future.

In the recent curriculum shift, Malaysia adopted a CEFR-aligned curriculum in teaching English. The Common European Framework of Reference for Languages (CEFR) measures the ability to use the language with six different performance levels. Based on the roadmap entitled The English Language Education Reform in Malaysia: The Roadmap 2015-2025 launched by the ministry, pupils in primary school are required to master at least level A2 in CEFR after 6 years of studying English language subjects in all skills. Teachers are also expected to attain at least C1 in CEFR level to teach the English language. In Year 4, pupils are expected to achieve at least mid-A1 in CEFR level. Sidhu et al. (2018)

mentioned that the adoption of a CEFR-aligned curriculum in primary school to teach English subjects has innovatively transformed the traditional learning assessment by highlighting the significance of learner autonomy to amplify the language learning experience among ESL learners.

To fulfil the demands of the Ministry of Education, teachers in Malaysia are also encouraged to incorporate active learning through 21st-century learning strategies, also known as PAK-21 (*Pembelajaran Abad Ke-21*) (PADU, 2018). Teachers are encouraged to incorporate various strategies to stimulate active learning among the students during speaking lessons; where students are actively participating in the lesson to express their ideas and opinions confidently. Gholami et al. (2014) also suggested that different strategies in teaching the English language will help the students retain the information and enjoy the learning process better. Thus, this action research aimed to determine the effects of transforming teaching practices by adding gamification in developing PowerPoint games to enhance pupils' engagement and performance in speaking activities.

Correspondingly, language teachers are also responsible for developing their teaching materials to enhance learners' experience and understanding. Material development in language teaching is also important where it is seen as equally crucial as teaching methods to enhance language learning. Learning materials including workbooks, videos, graphics dictionaries or any item that is used to enhance learning can be considered as learning (Tomlinson, 2011). Undeniably, rapid technological advancement has contributed to material development in language teaching and learning – teachers now can deliver their lesson content using computers in the classroom, such as using PowerPoint slides to make their lessons more interactive for the learners. Language teachers need to develop their materials to aid in language learning to improve learners' experience, knowledge and

understanding of their learning, as not all textbooks can fit all learners' needs and interests (Tomlinson, 2008). As mentioned by Aziz et al. (2020), the localization of materials development by language teachers can be seen as effective in enhancing learning as the materials are developed to suit the learners' needs and proficiency levels. Therefore, the need for material development in supplementing the textbook is vital to cater to the learners' needs in language learning, especially incorporating technology (Hashim et al., 2019; Rafiq et al., 2020; Ng, et al., 2021; Pazilah et al., 2021; Wong et al., 2021) in the ESL Malaysian classroom.

2.9 Review of past studies on gamification in teaching speaking skills

A few studies were conducted to study the effects of gamified learning using PowerPoint games in ESL classrooms, locally and internationally. A quasi-experimental study on the use of the "*Pick and Speak board game*" to enhance speaking skills by considering the four speaking components: fluency, pronunciation, vocabulary and grammar among primary school pupils was conducted in Malaysia. Although this study merely emphasised games and the integration of ICT in the classroom to enhance speaking skills among young ESL learners, this research has been selected to be referred to as one of the previous studies because of its concept of using teacher-made interactive PowerPoint games to enhance pupils' speaking skills. Ng et al. (2021) mentioned that the study involved 67 Year 3 pupils from 4 schools. The research participants were chosen through purposive sampling and conducted pre-tests and post-tests for their data collection.

A two-week implementation of the digital board games using PowerPoint games during speaking lessons was completed. The PowerPoint games were used as a treatment for the pupils. From the findings, there was a 16.4 % (55 scores) increment in the participants' vocabulary after implementing the board game and concluded that the game elements added

were beneficial to the young ESL learners. Ng et al. (2021) also suggested that ICT integration using a QR code and a digital version of the Pick and Talk board game are also seen as valuable strategies that increase players' intrinsic drive to speak and reduce their anxiety about making errors when playing the board game which is in line with studies done by Hashim et al. (2019), Rafiq et al. (2020) and Wong et al. (2021) – that learning using gamified learning is fun. Nevertheless, the study heavily focused on the integration and benefits of ICT in the classroom rather than gamification, although the study involved developing interactive board games to enhance speaking skills.

Wong et al. (2021) on the other hand, conducted a study that employed an ADDIE model to develop an instructional design based on gamified learning. A pirate-theme mission-based game was created as an innovation to explore the effects of gamified learning in enhancing speaking skills. The two-week research involved ten pupils from Year 3 via Google Meet. From their findings, Wong et al. (2021) concluded that gamified learning can change the dull learning environment to an exciting learning experience through the addition of game elements in the PowerPoint slides and can be used to motivate the pupils to enhance their fluency in speaking the English language during speaking lessons. Nevertheless, the study did not explicitly explain the gamified learning and motivation theory in their research and only focused on the effectiveness of the innovative gamified learning materials using the ADDIE model. This lack of theoretical grounding makes it difficult to fully understand *why* the gamified approach was effective, limiting the generalizability and replicability of the findings. A more detailed explanation of the specific game mechanics (e.g., points, badges, narrative) and how they relate to established motivational theories (e.g., self-determination theory) would have strengthened the study.

Another study that involved twenty-five high school students in their tenth year of study utilising PowerPoint games to improve speaking abilities, was carried out in Aceh, Indonesia. Erdiana et al. (2023) conducted a pre-experimental quantitative study in Aceh, Indonesia, involving twenty-five tenth-grade high school students. The study utilized the "Mystery Box" PowerPoint game to improve students' speaking abilities. Pre and post-test data were analysed using Microsoft Excel and statistical formulas, including mean, standard deviation and t-tests. The results showed a significant improvement in students' speaking scores after the intervention. However, the study's focus was limited to the use of a single type of media (the "Mystery Box" PowerPoint game) and its effect on speaking performance. It did not explore the broader aspects of gamification, such as the integration of various game elements, or the impact of these elements on different dimensions of student engagement (e.g., cognitive, emotional, behavioural). The study's narrow focus on a single game limits our understanding of how different gamification strategies might affect learning outcomes.

2.10 Research gap

This study is based on the gap identified in previous research. A review of studies by Erdiana et al. (2023), Ng et al. (2021) and Wong et al. (2021) reveals a focus on several important components in ESL teaching, including the use of ICT, media integration, fluency improvement, learner motivation and improved speaking abilities. Wong et al. (2021) developed an innovative teaching tool using the ADDIE model: a PowerPoint game.

However, despite this research on ESL education, there is a gap in the analysis of the effect of the gamified learning approach on speaking performance and learner engagement. Empirical research examining the effectiveness of gamification in ESL courses is still developing. There is a need to close this knowledge gap and develop a solid understanding of the advantages and disadvantages of gamified language learning.

Specifically, the gaps are:

- Erdiana et al. (2023) focused on a single medium (the "Mystery Box" PowerPoint game). This limits the understanding of how *different* gamification elements and game designs might impact speaking skills. A broader approach would examine a range of game mechanics and their individual and combined effects on learning.
- Wong et al. (2021) did not explicitly explain the gamified learning and motivation theories underlying their intervention. This makes it difficult to determine *why* the gamified learning approach was effective and how it can be applied in other contexts. A strong theoretical framework is needed to guide the design and implementation of gamified learning and to explain its effects on learners.

Therefore, an action research methodology was employed to fill this gap and give ESL teachers valuable insight into gamified learning approaches. An empirical method known as "action research" promotes active participation and self-reflection among instructors in their own classroom environments (DiLucchio and Leaman, 2022; Kemmis & McTaggart, 1988; Koshy, 2005). This approach encourages teachers to continuously improve their own teaching and learning strategies while also enabling them to customize gamified learning experiences to the unique needs of their students.

Additional research in this area is required in light of the aforementioned considerations. Employing an action research approach can help ESL teachers navigate and improve their pedagogical methods and then customise gamified learning experiences for their classroom environments. By adopting an action research design, ESL teachers can actively develop themselves, which would improve the language learning experiences of

their students. Further research is needed to fully realize the potential benefits of gamified learning in ESL classes.

2.11 Chapter Summary

In this chapter, a related literature review on speaking skills, gamified learning, and learners' engagement is discussed. This chapter also reviews past studies on the effects of games or gamified learning in Malaysian ESL classrooms to improve pupils' engagement and performance in speaking. Previous related reviews of the literature have discussed the benefits of gamified learning or gamification techniques in the education context and their relationship with motivation. Details of the proposed research design and procedures will be further explained in the next chapter.

CHAPTER 3

METHODOLOGY

3.0 Overview

This chapter explains the methodological aspects to answer the research questions. This chapter explains the research design, research participants, data collection, research procedure and data analysis.

3.1 Research design

This research employed a classroom action research method using Kemmis and McTaggart's (1988) model. Kemmis and McTaggart (1988) define action research as:

“...a form of collective self-reflective inquiry undertaken by participants in social situations to improve the rationality and justice of their own social or educational practices, as well as their understanding of those practices and the situations in which the practices are carried out.” (Kemmis and McTaggart 1988, p. 5)

Firstly, the action research model by Kemmis and McTaggart (1988) was employed as it directly addresses the issue of low pupil engagement in ESL speaking lessons within the researcher's own classroom context. This model is particularly suitable because it allows for a flexible and iterative approach (plan, act, observe, reflect) to implementing and refining solutions, such as gamified learning, in response to the dynamic nature of classroom interactions and student engagement levels. As the classroom teacher, the researcher is uniquely positioned to directly observe and assess the impact of these interventions on pupils' participation and learning engagement in speaking activities. The cyclical nature of action research enables the collection of data on engagement, allowing for data-driven adjustments

to the gamified learning strategies to maximize their effectiveness in addressing the identified issue. Furthermore, the focus on real-world classroom problems inherent in action research aligns perfectly with the need to find practical solutions (Koshy, 2005; Kemmis & McTaggart, 1988, as cited in Burns, 2010) to enhance pupils' active involvement and confidence in speaking.

Secondly, action research served as a powerful tool for enhancing my teaching as an ESL teacher, within my specific context to improve pupils' learning, aligning with the understanding that it aids in comprehending our context and improving our work outcomes (Alrichter et al., 2002; Sandberg & Fröjdendahl, 2023) by enabling me to better understand my problems and potential classroom solutions for achieving targeted learning outcomes; through rigorous investigation and reflection, this participatory approach to teacher development requires identifying specific classroom challenges or possibilities for improvement, actively engaging in data gathering and analysis and implementing interventions through cycles of planning, acting, observing and reflecting (Kemmis and McTaggart, 1988); this progressive approach not only leads to improvements in teaching and learning but also aims to cultivate a culture of ongoing professional development, as envisioned by the Ministry of Education Malaysia in their Action Research Manual Guidebook (2008), fostering teachers' autonomy, encouraging innovation and ultimately contributing to the development of more successful teachers capable of meeting diverse student needs and adapting to evolving contexts; moreover, the action research design allows teachers like me to employ research techniques more formally to investigate questions about their teaching and students' learning (DiLucchio and Leaman, 2022), thereby developing teachers' resilience to adapt to the dynamic educational field.

The action research employed in this study involved four stages, namely, plan, action, observe and reflect. The cycle is illustrated as follows:

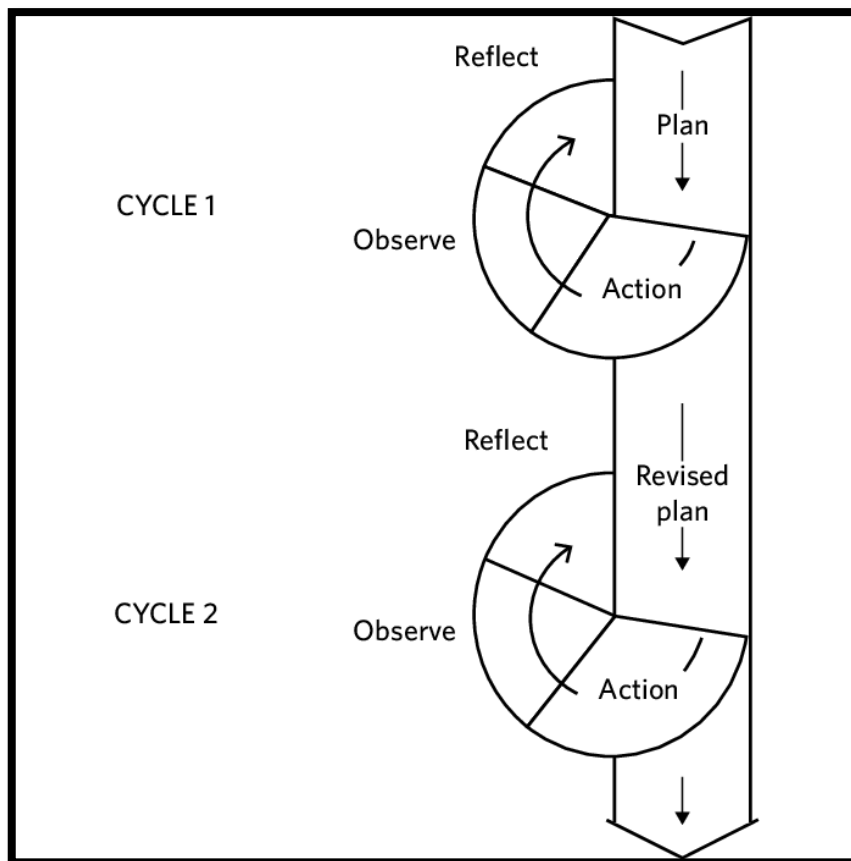


Figure 3.1: Cyclical Action Research Model by Kemmis and McTaggart (1988)

Finally, the action research design was also suitable to be employed to carry out this study because I intended to adopt gamified learning into my existing teaching practices to address the pupils' problem in speaking activities. This aligns with the understanding that teachers are best positioned to improve their students' learning (Sagor, 2005). The study employed an action research design using Kemmis and McTaggart's (1988) cyclical model (plan, action, observe, reflect) to systematically investigate the implementation of gamified learning using PowerPoint games to enhance pupils' engagement and performance in

speaking lessons. This approach allows for the practical application and evaluation of Landers' (2014) Gamified Learning Theory.

Specifically, Landers' theory, which proposes the moderation process, where game elements are added to enhance motivation and the instructional plan informs the planning stage of this action research. For instance, the design of the PowerPoint games incorporates elements like points, badges, levels and quests based on the theoretical understanding that these can foster learning engagement and outcomes as suggested by Landers. During the action phase, these gamified activities are implemented in the speaking lessons. The observation stage then involves gathering data on pupils' engagement and performance, allowing for an analysis of whether the implementation of these game elements, guided by Landers' theory, leads to the anticipated outcomes. Finally, the reflection stage involves critically evaluating the findings in relation to Landers' theoretical framework. For example, if the participants show increased learning engagement (observed data), this might support Landers' claims about the motivational power of certain game mechanics. Conversely, if certain elements are not effective, it prompts a reflection on how the application of the theory might need to be adjusted in subsequent cycles to better align with the specific context and pupils' needs.

3.1.1 Plan

At this stage, a problem was identified during previous speaking lessons and six sets of lesson plans focusing on speaking skills as well as six sets of PowerPoint games were prepared and adapted to meet the needs of the students. The PowerPoint games were developed using the Theory of Gamified Learning by Landers (2014) which is to add game elements to the instructional content to boost pupils' engagement and motivation. Each lesson would take one hour. In this stage, the problem and the objectives of speaking lessons

were identified to be addressed with the gamified learning approach. Pupils' specific needs such as their proficiency level were considered during this stage. The objectives for the gamified learning were directly derived from speaking sub-skills in the revised curriculum Year 4. By implementing the gamified learning approach, the pupils should be able to;

- i. 2.1.1 explain and give reasons for basic opinions,
- ii. 2.1.5 describe people and objects using suitable statements.
- iii. 2.2.1 keep interaction going in short exchanges by using suitable words: (ii) to ask for clarification.

For this study, two units of the Year 4 English KSSR Get Smart 4 were taught using a gamified learning approach. The units chosen were Module 1: "Where are you from?" and Module 2: "My Week". A pre-test and post-test would be administered before and after six weeks of implementation of the gamified learning approach. Other than that, observation checklist and reflective teaching journals were also used to study the effects of gamified learning approach.

Week	Unit/ Module (English Year 4 KSSR Syllabus)	Gamified learning elements included in the PowerPoint slides
1	Module 1: Where are you from?	Pre-test
		Points
2		Badges
3		Scores
4	Module 2: My Week	Levels
5		Badges
6		Quest
7	Post test	

Table 3.1: Scheme of Work for the gamified learning approach using the Theory of Gamified Larning by Lander (2014)

The lesson plans (see *Appendix F*) consisted of the essential elements and had the gamified learning elements in it. The lesson is developed according to 3 stages – pre-lesson, lesson development and post-lesson. In the pre-lesson, it would require getting pupils’ interested in the topic and get them introduced to the topic with various learning strategies. In the lesson development, I would teach and revise the sentence structures taught in the modules and then get the pupils to practice the language. The gamified learning elements would be added using the learning material, which was PowerPoint game (see *Appendix G*) and pupils would practice the language during the lesson development stage. For the post-lesson, the pupils would be required to produce, which challenged them to use the sentence structured learnt through communicative activities such as interview, oral presentation and other activities that could promote their communicative competence.

Table 3.2 Sample daily lesson plan for the gamified learning

Lesson Plan Year 4	
Class	: Year 4
Enrollment	: 11 pupils
Language skill(s)	: Speaking
Level of proficiency	: Low
Theme	: World of self
Topic	: Module 1 – Where are you from?
Learning standards	: 2.1.5 Describe people and object using suitable statements 2.1.1 Explain and give reasons for basic opinions
Teaching and learning materials	: English Textbook and PowerPoint Games (Mystery Box), laptop, LCD projector
Teaching and learning activities	: • Pre-lesson (5 minutes) 1. Pupils are shown a few flags pictures and tell the country’s name. Some pupils are asked about their daily routines. • Lesson development

Table 3.2 continued

1. The teacher re-introduces sentence structure (describing nationalities and daily routine) to pupils and does a quick revision on present simple questions with pupils.

Describing people (Nationalities)	Adverbs of frequency
i. She's _____ Korean _____.	i. I always/ usually/ never _____ in the morning.
ii. She is from _____ Korea _____.	ii. I always/ usually/ never _____ in the afternoon.
iii. She's _____ ten years old _____. (age)	iii. I always/ usually/ never _____ in the evening.
iv. Her name is _____ Ji Soo _____.	iv. What do you always/ usually/ never do in the morning/ afternoon/ evening?
v. She's Ji Soo.	

2. **Gamified learning session:** Pupils play PowerPoint games to review countries, nationalities and describe daily routines. (21st CA)

- i. Before playing the games, the teacher points out the rules.
- ii. During this gamified learning, the teacher will observe pupils' engagement using a checklist.

- **Post-lesson (10 minutes)**

1. For follow-up activity, pupils will be paired and ask questions to get to know about their friend.
2. Then, the teacher asks the pairs to introduce themselves and their friends in front of the class. Teacher gives feedback to pupils about their performance.
3. Lesson recapitulation.

3.1.2 Action

At this stage, a lesson plan emphasizing speaking skills was implemented and the adapted PowerPoint games were used. The PowerPoint games were utilised to teach speaking lessons while incorporating gamified learning strategies. The observation checklist

was fully utilised to assess pupils' participation and additional observations were recorded using a reflective teaching journal. Monitoring the learners' engagement during the session was essential in this implementation stage. To monitor their learning engagement, a comprehensive observation checklist was developed and adapted to match the research objectives and activities of the lesson plan. This enabled me as the researcher to record and measure a variety of engagement factors using the observation checklist, including pupils' interaction, enthusiasm and their engagement rates in their learning.

3.1.3 Observe

During the lesson, especially in gamified learning sessions, I also used my adapted classroom observation checklist (Appendix I: *Observation checklist*) to observe their learning engagement in the classroom. Not only that, but I also took note of some behaviours that were helpful to improve my lesson in the future. This observation checklist helped me to acquire a thorough knowledge of how engaged pupils were with class activities. The checklist's several sections each function as a useful tool for recording particular activities and interactions, enabling a more targeted approach to enhancing language learning and teaching. After the lesson has ended, the observation checklist was analysed thoroughly to determine the effects of gamified learning on learners' engagement.

3.1.4 Reflect

After the lesson ended, I immediately wrote my reflection on the reflective teaching journals (Appendix J). In this study, I noted that keeping a reflective teaching journal helped in the process of planning and developing the PowerPoint games based on the gamified learning theory by Landers (2014). At this crucial stage in this action research process, I considered this stage as a perfect time for me to reflect carefully on the ESL lesson that just

took place using the reflective teaching journal framework. This stage, which was based on the reflective cyclical framework defined by Kemmis and McTaggart (1988), is described by a continuous process of evaluation and adaptation, which is necessary for the ongoing improvement of instructional content and teaching methods. The observation checklist helped to highlight the patterns, trends and parts where pupils might have encountered difficulties or demonstrated noteworthy engagement, and this should be noted in the reflective teaching journal for room for improvement. At this point, I had to keep an observant eye out for areas that I could improve throughout the reflection process. The current cycle's problems and inconsistencies were acknowledged and dealt with to improve the upcoming lessons. These results provided important information that would help me to improve my instructional materials and delivery strategies in upcoming cycles. These four steps would be repeated for the next cycle to improve the researcher's teaching practice until desirable results are achieved and time is enough (Kemmis and McTaggart, 1988, as cited in Burns, 2010). The reflective teaching journal was then analysed with the inductive content analysis method.

3.2 Participants

This action research focused on eleven Year 4 pupils from a sub-urban school in Sarawak, which is classified as a Sekolah Kurang Murid (SKM) due to its low enrolment. These eleven students constituted the entire Primary 4 cohort at the time of the study. The participants, aged between nine and ten years (Gen Alpha or Alpha kids, born after the 2010s), were identified as having predominantly low English language proficiency in speaking skills based on several indicators: previous classroom speaking assessments (detailed in Appendix N), ongoing teacher observations and alignment with the lower band descriptors of the Malaysian English Primary 4 KSSR (Appendix M). Specifically,

observations revealed that these pupils frequently hesitated, often showed a lack of fluency, made noticeable grammatical errors, possessed limited vocabulary when speaking and were often reluctant to participate actively in speaking tasks during lessons.

These particular eleven pupils were purposively selected due to their identified challenges in speaking English. Their consistent low performance in speaking, in comparison to the expected proficiency levels outlined in the KSSR descriptors, indicated a clear need for targeted intervention. Furthermore, their observed reluctance and demotivation in speaking lessons resonated with findings from previous research (Yamil et al., 2022; Renganathan, 2021) that highlight the difficulties faced by ESL learners in similar rural contexts with limited exposure to English outside school and the influence of their mother tongue (Yahaya et al., 2021; Ooi et al., 2021; Renganathan, 2021). Being the entire Primary 4 cohort in this SKM school meant that all the students in this class exhibited similar characteristics regarding their limited exposure to the English language and their struggles with speaking proficiency.

The decision to employ purposive sampling was also informed by the aim to gather rich, in-depth data from a specific group experiencing a shared phenomenon (Creswell & Báez, 2021). In line with the factors highlighted by Etikan et al. (2016), the participants in this study shared similar ages (nine to ten years old), came from a similar cultural background within the sub-urban area of Sarawak and had comparable life experiences regarding their limited exposure to the English language environment. These shared characteristics were considered important for obtaining focused insights relevant to the research objectives. This approach aligns with studies by Ng et al. (2021) and Wong et al. (2021) that used purposive sampling based on the specific characteristics of the participants, matching their research criteria. Moreover, as these were my pupils facing these speaking

challenges, this action research directly addresses a problem within my classroom, aiming to improve both my teaching practices and my students' learning (Kemmis & McTaggart, 1988, as cited in Burns, 2010) through the integration of gamified learning. The selection of this entire class as participants allowed for the study of this intervention within a natural classroom setting (Creswell & Gutterman, 2021), considering the developmental appropriateness of gamified activities for this age group (Pustika, 2021).

3.3 Instruments

In this study, I utilised an observation checklist to observe patterns in learners' engagement, a speaking test, a speaking skills rubric and a reflective teaching journal for data collection.

3.3.1 Reflective Teaching Journal

A reflective teaching journal (refer to Appendix J) was utilised by the researcher at the end of each teaching day throughout the six-week duration of the intervention. This qualitative instrument served to evaluate the lessons, focusing on pupils' interaction, participation and engagement in speaking activities. As Stevens & Cooper (2023) note, a journal is a systematic writing comprising dated events, in sequence with the writer's personal views and reflections. Similarly, Fatemipour (2013) highlights the power and usefulness of reflection data for improving teaching practices. In this research, the journal allowed for reflection on aspects such as student responses to the gamified activities, challenges encountered during implementation, the effectiveness of instructions and observations of individual student progress in speaking. This aligns with Tompkins (2009), who suggests that reflective journals encourage teachers to critically examine their teaching and learning practice. By utilising this journal, the researcher was able to capture nuances potentially missed by the observation checklist and to note areas for improvement, such as

the clarity of instructions for the gamified learning approach. This practice also supports the development of reflective teaching skills and critical thinking (Liu & Zhang, 2014; Baresh, 2022) for the purpose of assessing one's own and others' teaching practices (Jemadi et al., 2023). Therefore, the use of a reflective teaching journal was consistent with the action research design's aim to identify and implement solutions in the classroom (Alrichter et al., 2002; Kemmis & McTaggart, 1988; Koshy, 2005; Sandberg & Fröjdendahl, 2023).

All the reflective data gathered from the teaching journal was analysed through an inductive content analysis. Inductive content analysis is a method used by qualitative researchers to answer research questions by identifying concepts discovered during the analytical process to respond to their research questions (Kynge et al., 2020). In this study, the process involved the researcher first reading through all the journal entries to gain a comprehensive understanding of the reflections over the six-week period. Next, significant phrases, observations and insights related to the implementation and impact of the gamified learning approach were identified and labelled with initial codes. These codes were then grouped based on similarities and differences to form broader categories, such as student engagement with game mechanics, challenges in speaking task completion and adaptations to instruction. Finally, these categories were further analysed to identify overarching themes that provided meaningful insights into the effectiveness of the gamified learning approach in enhancing speaking skills. This systematic analysis of the reflective journals aimed to provide valuable feedback to the researcher for maintaining the strengths and addressing the weaknesses of the gamified learning approach in subsequent lessons and research cycles. This approach aligns with Creswell (2015), who advocates for merging findings from different data sources to achieve a more complete understanding of the phenomenon under investigation.

3.3.2 Observation checklist

Observation is one of the ways of collecting information on any feature or event taking place during the teaching and learning process (Marzuki, 2017). This action research employed an observation checklist to determine pupils' learning engagement during the production stage and the researcher would be observing the pupils using the checklist during their oral presentation. This is in line with Sheal (1989) who stated that the observation checklist is a method to document certain behaviours and an effort to offer comprehensive information on a phenomenon. This is also in line with Wong et al. (2021) who employed this method to observe the pupils' speaking performance during gamified learning. The checklist comprised of a list of expected outcomes to assess the young learners' learning engagement during speaking activities using the gamified learning approach. Subban and Round (2015) mentioned that the observation checklist provides more focus, hence, greater efficiency and preciseness in the process of execution. This would help me as the teacher to look for specific behaviour regarding the pupils' engagement during the gamified learning approach.

There were 13 criteria observed during the gamified learning; such as showing eagerness, actively asking questions to the teacher and peers, being attentive and focused in the activity, actively discussing with peers, being able to complete the speaking activity within the time frame, making effort to speak English, showing minimal hesitation, able to produce speech with lesser gaps and pauses, making effort to make connections between learning topics by using appropriate vocabulary, expressing their enjoyment through positive body language (eg: smiling, laughing, happy), showing self-confidence and showing great enthusiasm by making efforts to collaborate with their peers. The criteria are described in the table as below.

Table 3.3 Self-developed observation checklist from adapted items

Item	Source of item	Original item	Revised item	Categories of engagement
1.	Cevikbas and Kaiser (2022)	<i>Eagerness, willingness</i>	During the interactive PowerPoint game lesson, pupils showed eagerness to complete the speaking activity.	Behavioural engagement
2.	Cevikbas and Kaiser (2022)	<i>Asking and replying questions</i>	During the interactive PowerPoint game lesson, pupils were asking questions to the teacher to complete the speaking activity.	Behavioural engagement
3.	Cevikbas and Kaiser (2022)	<i>Asking and replying questions</i>	During the interactive PowerPoint game lesson, pupils were asking question to the peers to complete the speaking activity.	Behavioural engagement
4.	Skinner et al. (2008)	<i>I pay attention in class.</i>	During the interactive PowerPoint game lesson, pupils were attentive and focused to complete the speaking activity.	Behavioural engagement
5.	Stephenson et al. (2020)	<i>I was an active learner.</i>	During the interactive PowerPoint game lesson, pupils were actively discussing with peers to complete the speaking activity.	Behavioural engagement
6.	Wong et al (2021)	<i>Pupils were able to complete the speaking activity within the time frame without struggling.</i>	During the interactive PowerPoint game lesson, pupils were able to complete the speaking activity within the time frame.	Behavioural engagement
7.	Wong et al (2021)	<i>Pupils made the effort to speak in English.</i>	During the interactive PowerPoint game lesson, pupils made effort to speak English language to complete the speaking activity.	Behavioural engagement

Table 3.3 continued

8.	Wong et al (2021)	<i>Pupils are able to speak with lesser gaps and pauses.</i>	During the interactive PowerPoint game lesson, pupils showed minimal hesitation in the speaking activity.	Cognitive engagement
9.	Wong et al (2021)	<i>Pupils are able to speak with lesser gaps and pauses.</i>	During the interactive PowerPoint game lesson, pupils were able to produce speech with lesser gaps and pauses in the speaking activity.	Cognitive engagement
10.	Cevikbas and Kaiser (2022)	<i>Making connections between learning topics</i>	9. During the interactive PowerPoint game lesson, pupils made an effort to make connections between learning topics by using appropriate vocabulary related to the task given.	Cognitive engagement
11.	Stephenson et al. (2020)	<i>I enjoyed this presentation.</i>	13. During the interactive PowerPoint game lesson, pupils expressed their enjoyment through positive body language (eg: smiling, laughing, happy) in completing the speaking activity.	Emotional Engagement
12.	Cevikbas and Kaiser (2022)	<i>Self-confidence, feeling of sufficiency</i>	12. During the interactive PowerPoint game lesson, pupils showed self-confidence in completing the speaking activity.	Emotional Engagement
13.	Wong et al. (2021)	<i>Pupils showed great enthusiasm to complete the speaking activity.</i>	11. During the interactive PowerPoint game lesson, pupils showed great enthusiasm by making efforts to collaborate with their peers in completing the speaking activity.	Emotional Engagement

3.3.3 Speaking test and rubric

A speaking test, aligned with the Year 4 Malaysian English KSSR Syllabus, was developed to measure the young ESL learners' speaking performance. This speaking test, used for both pre-test and post-test administration, involved presenting each participant with two sets of picture cards. One set of picture cards focused on depicting individuals of

different nationalities, while the other set illustrated various daily routine activities. For the nationality pictures, the pupils were required to identify the nationality of the person in the picture and provide a simple description of their identities or any relevant elements visible. For the daily routine pictures, the pupils were asked to describe the activity shown in each picture and narrate a typical day. Their responses were then scored by the ESL teacher and another rater who was the Head Panel of the English language of the school, using the adapted speaking skills rubric. Pupils were assessed based on the criteria listed in the rubric. The results were used to identify participants' speaking performance before and after the gamified learning approach.

To enable the teacher to measure the effects of gamified learning, a speaking skills rubric was created and adapted from the Ministry of Education Malaysia for the Year 4 English KSSR syllabus. The MoE's holistic rubric was adapted and modified to create an analytic rubric for this study. An analytic scale is used if the formative assessment is the goal (Mertler, 2001). Although the holistic rubric provided by MoE is inclusive, however, in this study, the holistic rubric was modified to an analytic rubric to evaluate the specific speaking tasks in the pre-test and post-test. The list of the MoE's holistic rubric provided a general overview of speaking proficiency levels. This holistic rubric was adapted and modified to create an analytic rubric for this study. An analytic scale is used if the formative assessment is the goal (Mertler, 2001). While the holistic rubric provided by MoE is inclusive, in this study, it was modified to an analytic format to evaluate the specific speaking tasks in the pre-test and post-test more precisely.

Specifically, the adapted analytic rubric broke down speaking performance into the following criteria: can communicate simple task, can manage interaction and classroom task, can describe people and objects and can narrate short basic stories. For instance, the broad

descriptors in the holistic rubric for fluency were expanded into specific levels in the analytic rubric, detailing the frequency and duration of pauses and the overall smoothness of the students' speech at each proficiency level. Due to the list of specific criteria in the analytic rubric, its utilisation for formative assessment could greatly improve the effectiveness and quality of feedback given to students. Using rubrics in assessing learning can provide feedback for the pupils, especially when used in a formative format (Panadero & Jonsson, 2020). Therefore, a specific rubric (refer to Appendix H (B)) for this action research was developed which was modified and adapted from Year 4 English KSSR syllabus descriptors to achieve the objectives of this study in measuring pupils' speaking performance.

Moreover, using tests is seen as one of the appropriate ways to evaluate the effectiveness of an intervention on a target group as indicated by Stratton (2019). Using the speaking test provided enabled the teacher to evaluate the efficacy of the gamified learning approach in enhancing pupils' speaking performance. Rahman (2016) also mentioned that using tests enables any educational institution to determine one's ability and in academics, to make an important decision to determine whether a student to be allowed to advance to the next level or vice versa. In this research, the speaking test was used to check whether there was any significant improvement or difference in their speaking performance before and after a series of gamified learning approaches using PowerPoint games had been implemented. Using a speaking test was suitable to measure the effects of gamified learning as Roediger III et al. (2011) believe it helps to provide useful information about students' understanding in addition to helping students learn.

Next, in this study, a pretest-post-test design was employed due to the involvement of the same group in measuring their speaking performance before and after the gamified learning approach as their intervention. The implementation of the pretest and post-test was

also in line with Stratton (2019), which emphasized the usage of pretest and post-test assessment to evaluate changes in knowledge. The same test was used to determine the changes in their speaking performance for both pretest and post-test. Abas et al. (2019) concluded that the usage of the identical test for both pretest and post-test is appropriate to evaluate improvement in learners' skills. Hence, the pretest and post-test design using the identical test were able to measure the difference in pupils' speaking performance before and after the implementation of the gamified learning approach.

Although Marsden & Torgerson (2012) argue there might be bias due to familiarity, the interval period between the pretest and post-test was 6 weeks after the implementation of the gamified learning approach. In line with Brown et al. (2008), suggested that a 3–6 weeks gap is sufficient to evaluate the effects of an intervention while reducing the familiarity of the test among the learners. Six-week intervals in this study helped to minimize the bias in the familiarity test and longer intervals also promoted better vocabulary retention (Suzuki, 2017; Küpper-Tetzel et al., 2014). Pupils were able to retain related vocabulary due to the longer implementation of gamified learning and able to practice the language in daily-life conversations. Thus, a six-week time interval in this study was appropriate for assessing young ESL learners' speaking performance.

3.4 Data collection procedures

The figure below shows the procedure of this study.

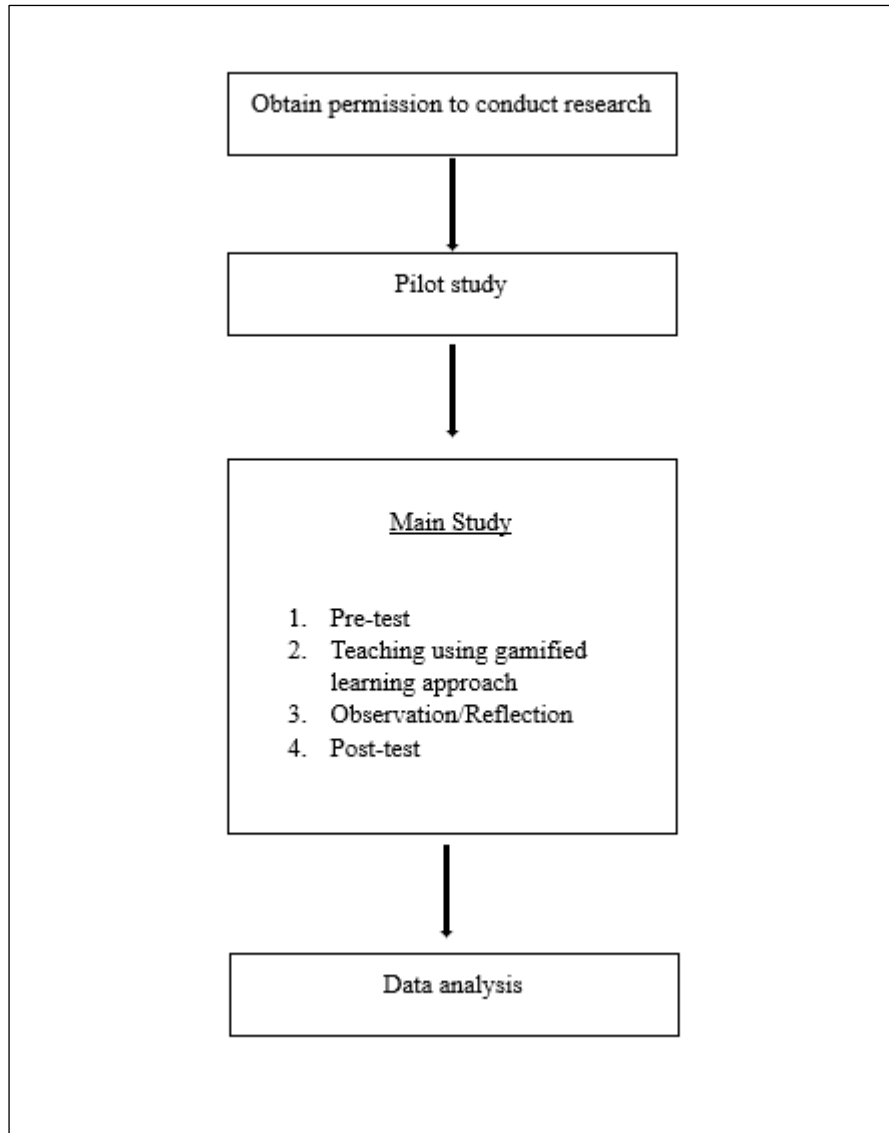


Figure 3.3 Flowchart of the data collection procedures

Before the implementation of the study, permission was requested from the Malaysian Ministry of Education officially via their website. The permission to conduct the study was granted by the Malaysian Education Planning and Research Division (EPRD). Permission from the Sarawak Education Department and the school was requested and given shortly after. Both the Sarawak Education Department and the school granted permission to

conduct the research. The approval process did not take long and it was stated that the research must be conducted within six months, from 4 September 2023 – 29 February 2024 as shown in Appendix A, B & C.

3.5 Validation of instruments

Before the implementation of the study, the content of the speaking test and rubric were validated by another expert in this field. The Head of the English panel of the selected school was involved in cross-checking the instruments used in the study and involved in the rating process for the pre-test and post-test. She was in her ninth year of ESL teaching and considered an experienced ESL teacher. She also holds a master's degree in early childhood education concentrating in TESL. Her experience in assessing and evaluating pupils' speaking performance, especially the young ESL learners – was needed as it allowed the evaluation of the appropriateness of the speaking test used and its suitability to the pupils.

Furthermore, it was also crucial to include expert raters or assessors in the study to ensure the validity and credibility of the results. In this study, the interrater approach was employed to reduce the bias in the speaking test result and evaluate whether the speaking score was consistent. Manzano (2022) concluded that interrater reliability consistency estimates assess the similarity of two or more sets of scores from different raters respectively. Involving an experienced teacher as an interrater helped to reduce the subjectivity and hence might provide reliable and valid results in the findings. To ensure the correlation between the scores of both raters, a Pearson correlation test to determine the consistency of the rating as follows.

Table 3.4 Pearson Correlation test between both raters

Test Type	Correlation Coefficient	p-value	Interpretation
Pre-test	0.939	1.88×10^{-5}	Significant high correlation
Post-test	1.000	9.37×10^{-72}	Perfect correlation, highly significant

Based on the table above, the Pearson correlation coefficient was employed as a correlation test to examine the link between Rater 1 and Rater 2's ratings. This indicates that the speaking test and the rubric are reliable, as evidenced by the high correlation coefficients and the lack of significant variations in the pre-test ratings. In conclusion, the data analysis demonstrates that the rubric is significant and reliable in giving consistent and accurate evaluations to grade the speaking performance of the participants.

3.6 Pilot study

3.6.1 Introduction

In this study, a pilot study was conducted to familiarise myself with the usage of the instruments and to gain experience in the environment and the interaction with pupils while implementing the gamified learning approach. It also helped me to assess the developed instruments to avoid any unforeseen issues that might come up during the full-scale implementation of the main study. The pilot study allows the researcher to troubleshoot and modify any issues that might arise during the pilot study with their instruments and research procedures before the implementation of the actual study (Sampson, 2004; In Junyong, 2017; Williams-McBean, 2017; Malmqvist et al., 2019; Pearson et al., 2020). These papers also suggest that implementing a pilot study enables the researcher to collect preliminary data

and provide initial insights into this research. Thus, a pilot study was crucially needed in this research to evaluate the instruments before the implementation of the main study.

The pilot study was designed to achieve several key objectives: firstly, to familiarize the researchers with the data collection procedures; secondly, to test and evaluate the research instruments, identifying any potential issues and making necessary adjustments if required; and thirdly, to assess the research procedures, identifying any potential difficulties and implementing any needed modifications. Upon approval from the school headmaster, permission to appoint the head of the Panel of English language as one of the raters was also given. She was briefed about the instruments used in the study. I requested her assistance to evaluate and assess the items in the instruments before the implementation of the pilot study, especially for the lesson plans, speaking test and rubric for its suitability with the pupils. For the pilot study, nine pupils of Year 5 in the same school were chosen to test the instruments.

The pilot study took approximately two weeks to test the lesson plans, PowerPoint games, speaking test and observation checklist with them. The pupils were selected based on purposive sampling and they had the same background as the pupils in the main study in terms of background, age from ten to eleven years old and low proficiency in English speaking skills which were very similar to the participants in the main study. The pre-test soon began after selecting the pupils for the pilot study. Both raters then recorded scores in different scoresheets to check the consistency of the scores to the pupils. The pupils' scores were then collected and gathered to compare the result after the gamified learning approach with the post-test result.

Next, the lesson plans and the modified PowerPoint games were tested to identify any issues during the teaching and learning session. Each lesson took approximately one

hour to complete. After the pilot study, it was learned that clearer verbal instructions to play the games were crucially needed to make the pupils understand better how to conduct and play the game. It was also noted that pupils could get so excited at times, therefore, classroom management could be a problem for the bigger class. For the pilot study, the classroom situation was still in control as there were only nine of them. The PowerPoint slides' animation and transition to create gamified learning effects were able to run smoothly. The smooth transition was able to captivate the pupils' attention and they were all engaged to complete the speaking tasks given. In conclusion, all the activities in the lesson plans were able to be executed during the pilot study. Therefore, the only improvement needed for this instrument was verbal instruction to enhance pupils' understanding of playing the games and enhance classroom management so that the situation remains under control.

3.6.2 Reflective teaching journal

In the pilot study, the reflection of the lesson was hand-written in the developed reflective teaching journal framework. The reflection was fully utilised to reflect and jot down any issues or challenges in the lesson after the lesson had ended while the lesson was still fresh in my mind. From the pilot study preliminary findings, I found that the reflective journal was able to provide valuable insights for the teacher to improve the lesson. Additionally, I also learnt that it was feasible to employ inductive content analysis using the reflective journal. As a self-evaluation and critical thinking tool, it helped me as the teacher to record my experiences, challenges and insights during the pilot study. The reflective journal was also able to provide an opportunity to modify teaching and learning instructions based on these reflections, thus improving the effectiveness of the gamified learning approach. Thus, it was decided that the developed reflective journal framework would be used for the main study.

3.6.3 Observation checklist

As planned, in the pilot study, the observation checklist was used to assess learners' engagement during the gamified learning approach was implemented. This was one of the most important instruments for this study since it offers important details for evaluating the effectiveness of the lesson plans, the modified PowerPoint games and the gamified learning approach. Implementing the gamified learning strategy utilising PowerPoint games would take between twenty-five and thirty minutes, during which time the observation checklist instrument would be used. From the pilot study, it was discovered that the observation checklist worked without any issues and that the small number of pupils made it easy for the teacher to monitor every student's behaviour during the full gamified learning process. It was also learnt that the observation checklist enabled the researcher to identify areas for improvement because of its ability to provide qualitative insights and quantifiable data. With a thorough analysis of learners' interactions, engagement and overall understanding of the lesson plan and PowerPoint games, I was able to reliably make changes to the instructional materials to maximize the impact on learning outcomes. In a nutshell, the data collected through this observation checklist paved the way for a more engaging learning experience in our formal classroom, allowing us to provide the best possible gamified learning experience for the pupils. From this pilot study, I concluded that the utilisation of the observation checklist in this research was feasible as the pupils were less than fifteen.

3.6.4 Speaking test and rubric

Another instrument in this study which was a speaking test and the rubric was also used with the same nine pupils for pre and post-test. During the pilot study, the series of pictures that were used for the picture cues were printed in larger sizes, around 4cm x 6cm (Appendix H). For each picture, pupils were expected to say at least three to four sentences

for the intermediate and at least two sentences for the low-proficiency pupils. Each pupil spent more or less than six minutes completing the speaking test. From the pilot study, it is learnt that the speaking test and the rubric did not have any problems and the raters were able to record a consistent score for the pupils during the test. Therefore, the use of the speaking test and the rubric was continued in the main study as it enabled the researcher to evaluate pupils' speaking performance before and after the gamified learning approach.

The pilot study successfully met its objectives, demonstrating that the research procedures and instruments were effective and required no modifications for the actual study. The pilot study was able to familiarise me as the researcher and the teacher to conduct the study. The only necessary adjustment during the gamified PowerPoint session was the simplification of verbal instructions by the teacher. As they found the game rules presented on the slides were slightly difficult to understand, I provided them a clearer, age-appropriate oral explanations to ensure that all learners could follow and fully engage with the activity. Consequently, the research procedures and instruments are deemed ready for implementation in the actual study.

3.7 Main study

3.7.1 Data collection procedure

The data collection procedures for the main study involved six cycles of gamified learning implementation following the initial pre-test. Each class session during these cycles lasted for 60 minutes. The pre-test was conducted a week before the main study. The main study started from 11 September 2023 and ended on 9 October 2023, approximately 4 weeks to complete. In each of the six cycles, the gamified learning approach was implemented and data were collected using three instruments, namely observation checklists, speaking tests (for pre-test and post-test) and teaching reflective journals. An observation checklist was

used during each of the six lessons to record pupils' learning engagement and participation. After completing each of the six lessons, a teaching reflective journal was written to document observations, challenges, and insights. A post-speaking test, similar in format to the pre-test, was administered after the completion of all six cycles.

The use of PowerPoint games intended to improve pupils' speaking performance and their learning engagement on the learning topics was a crucial part of the gamified learning strategy. Different PowerPoint games were used into all six learning cycles. The details of each PowerPoint game is described as follows.

3.7.1.1 The Mystery Box (Unit 1- Where are you from?)

The 'Mystery Box' game is an interactive game designed to facilitate English language learning through a competitive team-based activity. The game was downloaded from ESL learning resources online. The gamified learning element used in this game was points. In the game, teams choose a letter, answer the related question, and then strategically decide whether to keep or give a "mystery box" to the other team. Since each box has a hidden point value that can be either positive or negative, this "keep or give" choice adds an aspect of chance to team scoring. The game focused on building fundamental English communication skills through activities such as describing visual information, including nationalities, answering questions about daily activities, and responding to prompts about personal routines. Thus, the game incorporates these features and mechanisms to help players become more involved and help them learn the fundamentals of the English language.

3.7.1.2 Slingshot (Unit 1- Where are you from?)

In the PowerPoint game "Slingshot", pupils would have forty-five seconds to click the appropriate answer on the screen to answer each question. The game was downloaded and adapted to suit the learning content from Unit 1 – Where Are you From?. Badges and a timer were incorporated as gamified learning elements in this game. These questions frequently ask them to describe activities that are depicted in images, including whether someone is swimming, writing, or playing football. Correct answers in the game generate points, and the player can win a bronze, silver, or gold badge depending on how many points they earn (1-3, 4-6, or 7-9). This badge system gives a sense of accomplishment and serves as a reward.

3.7.1.3 Top 5 Quiz (Unit 1- Where are you from?)

In the PowerPoint game "Top 5 Quiz", pupils would have an interactive English quiz for Year 4 based on the unit "Where Are You From?", which asks them to describe everyday activities. The original game was downloaded from ESL games websites and adapted to suit the Year 4 syllabus. The quiz employs a question-and-answer format, utilising visuals to contextualize language use and stimulate comprehension. Questions target various English language skills, including accurate sentence construction, appropriate use of verb tenses, adverbs of frequency, and prepositions, alongside vocabulary development related to nationalities and routines. Other than using points or scores, this game also uses game-like elements such as immediate feedback, time limits, a "Top 5" leaderboard, and scoring to make learning competitive, engaging and rewarding mechanism to foster a sense of competition and achievement.

3.7.1.4 Super Mario – Levels (Unit 2 – My Week)

In this PowerPoint game, gamified elements with a Super Mario theme make learning about "My Week" engaging for Year 4 students. The game was downloaded online and then adapted to suit Unit 2 – My Week from the Year 4 KSSR Syllabus. The game is structured in levels and players earn points represented by Mario coins. To play, pupils need to answer speaking questions related to subjects and daily routines, advancing through levels as they complete challenges. Pupils will have to talk about their favourite school subjects, their school schedule, and chores they do at home. They will have a set amount of time, about 30 seconds to prepare and speak for each question.

3.7.1.5 Zombie Hunt (Unit 2 – My Week)

In this PowerPoint game, a gamified learning element, a badge with a Zombie theme was utilised to engage pupils in their learning. The original game was downloaded online and adapted to suit the Year 4 KSSR syllabus. Pupils play by viewing pictures related to weekly activities and school subjects, then "shoot" the correct answer from zombie options within a 45-second time limit, prompting them to speak about the image and answer related questions, such as using frequency adverbs. Points are awarded for correct answers, and cumulative scores determine achievement levels represented by badges. This approach focuses on developing speaking skills and vocabulary related to daily routines and schedules in a fun, interactive format.

3.7.1.6 Treasure Hunt (Unit 2 – My Week)

In this PowerPoint game, pupils will experience gamified learning through a quest narrative, where they will progress by correctly answering ten questions, creating a sense of adventure and reward. The game was downloaded from the ESL games website and then

adapted to suit the Year 4 KSSR syllabus. The language focus is on forming sentences and speaking about daily activities, routines, and school subjects. To play, pupils will have to click on numbered question buttons to reveal a prompt and if answered correctly, they will click a "Click to move" button to progress the pirate character on a map towards a treasure. This interactive and progressive format helped lower learners' confidence by providing a supportive environment with clear goals, achievable steps, and positive reinforcement through advancement in the game.

3.7.2 Data analysis

In this study, the data collected were analysed qualitatively and quantitatively. The data collected from the teaching reflective journal were analysed qualitatively while the observation checklist and speaking test were analysed quantitatively using descriptive statistics. For the quantitative analysis, the learners' engagement was counted using frequency distribution to analyse certain behaviours according to the criteria. The data analysis from this instrument would provide data for the researcher to improve pupils' learning experience with a gamified learning approach through the frequency distribution of learner engagement criteria in the checklist. The data would provide insights about trends, patterns and differences in learners' engagement through the statistics. The speaking test would be evaluated using quantitative analysis according to predetermined descriptors including fluency and vocabulary. In-depth data analysis from qualitative and quantitative methods enabled the researcher to evaluate the effects of the gamified learning approach in this study. The combination of both qualitative and quantitative analysis allowed the researcher to conduct a more detailed and comprehensive evaluation of the effects of the gamified learning approach. The term 'in-depth data analysis' in this study refers to how

both types of data were used together to provide a fuller understanding of the intervention's impact on teaching and learning.

3.7.2.1 Reflective teaching journal

In reflective teaching journals analysis, the codes or themes that emerged in my teaching reflection were analysed and interpreted thoroughly to improve the next lesson. The teacher's reflective views and processing of emergent codes and themes were thoroughly analysed using inductive content analysis. According to Kyngäs et al. (2020), inductive content analysis employs the process of simplification to summarize and organise data, enabling researchers to apply concepts, categories, or themes to address the research objectives. In the present study, the reflections written in the reflective teaching journals were examined to find open codes. In line with Kyngäs et al. (2020), these codes were then joined with additional open codes that have related content to create sub-concepts, categories and themes. These themes were crucial to be considered in developing and teaching ESL speaking lessons using a gamified learning approach to enhance pupils' experience in their learning.

3.7.2.2 Observation checklist

To evaluate pupils' learning engagement, the observation checklist (*Appendix L*) was fully utilized. The data from the observation checklist was analysed and presented using frequency distribution. In the data analysis, the frequency distribution of each item in observing learners' engagement during gamified learning experiences was analysed and interpreted. The analysis and evaluation of these findings were used to guide the researcher's actions in the following cycle.

3.7.2.3 Speaking test and rubric

The data from the speaking test (*see Appendix O*) was analysed using descriptive statistics and a paired t-test to determine the significance of both scores from post-tests of both raters. The paired t-test's findings were obtained from the post-test to determine the consistency of rating occasions. In the present study, the average mean of both raters from pre-test and post-test scores were compared to determine any significant difference in measuring the effects of the gamified learning approach. An increase in the average mean score would determine the positive effects of the gamified learning approach in teaching speaking skills.

3.8 Chapter Summary

In this chapter, the methodology of this research was explained in detail. The details include the research design, data collection methods, sampling techniques, data analysis procedures and cover ethical issues such as participant anonymity and informed concern. In conclusion, this chapter provides an overview of the methodologies used to address the research questions and achieve the research objectives.

CHAPTER 4

RESULTS AND DISCUSSION

4.0 Chapter Overview

This chapter focuses on the findings, analysis and discussion which are very important to answer the questions and objectives of this research. The data analysis involves quantitative and qualitative methods. The data gathered were analysed to evaluate the trends and patterns which are significant to this research. The data were then interpreted and concluded to summarize the findings of this research.

4.1 Insights from Reflective Teaching Journals on Developing ESL Speaking Lessons through Gamified Learning

There were three concepts identified in the reflective teaching journal using the inductive content analysis throughout the six cycles of speaking lessons using gamified learning approach by utilising interactive PowerPoint games; namely, pupils' response, implementation and improvement. These findings demonstrated how gamification via moderation was applied in practice. The term "cycle" in this study refers to one iteration of the teaching and reflection process within the action research framework. Each cycle consisted of planning, teaching an ESL speaking lesson using gamified activities, reflecting on the outcomes through a reflective journal, and making improvements for the next cycle. In each cycle, game elements such as points, scores and badges were added within the instructional content to enhance engagement and motivation. This aligns with Landers' (2014) concept of moderation, where gamification serves to improve the instructional design itself. A total of six cycles were conducted, with each cycle focusing on refining the lesson design based on pupils' responses and classroom experiences. The reflective teaching

journals were analysed using inductive content analysis as proposed by Kyngäs et al. (2020) and described in the table as follows.

4.1.1 Reflective Teaching Journal Cycle 1

The analysis of the reflective teaching journal from Cycle 1 is presented in Table 4.1 and described below.

Table 4.1 Analysis of Reflective Teaching Journal Cycle 1

Raw data	Open codes	Sub-concepts	Concepts	Main concepts
<i>“Yes, the pupils were happy and enthusiastic during the lesson.”</i>	happy and enthusiastic.	Happy Enthusiastic		
<i>“Most pupils were eager to finish the speaking activity.”</i>	eager to complete	Eager	Pupils’ response	
<i>“Pupils collaborated with peers throughout the gamified learning lesson.”</i>	worked together	Collaboration	Pupils’ attitude	Pupils’ response
<i>“Few pupils were not satisfied with the game rules and it seemed didn’t resonate with their expectations.”</i>	dissatisfied with rules	Dissatisfaction Rules	Game rules	Pupils’ response / Implementation
<i>“Few pupils suggested to change the rules. Eg: without having minus scores.”</i>	Rules change suggestion	Suggestion Rules	Game rules	Implementation
<i>“Not to include minus scores as it confused pupils to count the overall scores.”</i>	confused with scores.	Scores	Game rules	

Table 4.1 continued

<i>“Consider to reward pupils with another system. Eg: badges, level.”</i>	include another gamification elements	Rewards	Game elements	Implementation/Improvement
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In the Mystery Box PowerPoint game, pupils were expected to talk about nationalities, from Unit 1 – *Where are you from?*. The game was structured around 26 boxes labeled A to Z. For each turn, pupils selected a letter, answered the associated question, and then revealed a hidden score, either positive or minus (negative). This point-based element was designed to introduce unpredictability and excitement into the learning activity, while encouraging full class participation through competition.

From the reflective journal, it is noted that pupils were eager to complete the speaking task and collaborated with others. However, the pupils were dissatisfied with the rules because they felt they were disadvantaged when they had managed to answer the questions but obtained minus scores from the Mystery Box which was indicated by the notes “*few pupils were not satisfied with the game rules*”. This note indicated that pupils were expressing their dissatisfaction with the minus scores and the calculation of overall marks confused them. It was also written “*consider to reward pupils with another system. Eg: badges, level.*” to sustain pupils’ engagement and motivation in the next cycle. Therefore, a few changes were made for the next lesson. As a result, the game was improved in the following cycle based on this reflection. In the revised version, the point-based system was removed and replaced with badges as a gamified learning element, using a different PowerPoint game.

4.1.2 Reflective Teaching Journal Cycle 2

The analysis of the reflective teaching journal from Cycle 2 is described below.

Table 4.2 Analysis of Reflective Teaching Journal Cycle 2

Raw data	Open codes	Sub-concepts	Concepts	Main concepts
<i>“Yes, pupils enjoyed the lesson.”</i>	enjoyed the lesson	Enjoy		
<i>“The atmosphere was vibrant.”</i>	Vibrant atmosphere	Vibrant	Pupils’ response	Pupils’ response
<i>“Pupils were eager to complete the activities and excited to get their badges.”</i>	eager and excited	Eager Excited	Pupils’ attitude	
<i>“The pupils loved the badges as their rewards.”</i>	loved the badges	Engagement Badges		Implementation
<i>“They loved the character (Alicia) from Agent Ali – children cartoon.”</i>	loved the character	Engagement Character	Gamification elements	
<i>“Low-proficiency pupils – most of them weren’t able to show confidence in answering/ completing the activities without friends’ help.”</i>	Low-proficiency pupils were not confident	Low proficiency Confidence		Pupils’ response
<i>“They tend to have a lot of pauses during speaking.”</i>	Low-proficiency pupils had pauses	Pauses	Pupils’ response	
<i>“The next PPT game could include a lot of answer choices with different allocation of marks to help the low-proficiency pupils to get</i>	consider answer choices	Choices Low proficiency	Differentiated marks and tasks Gamification elements	Improvement

Table 4.2 continued

marks and boost their confidence.”

Based on pupils’ responses from Cycle 1, the PowerPoint game in Cycle 2 were modified and different compared to Mystery Box. There were a few changes made such as explaining all the changes in different themes and different reward systems from points or scores to using badges. The theme used for this game was based on their favourite cartoon - Agent Alicia from Agent Ali, which the pupils had shared previously. In this cycle, pupils were required to talk about or describe pictures with correct sentences. The topic was about hobbies which was derived from Unit 1 – Where are you from?. Pupils were given 45 seconds to complete the task.

From the reflective journal Cycle 2, it is noted that the pupils were enjoying the lesson they loved the badges as their reward system. Their attitude in the gamified learning session remained positive as in the previous cycle as indicated by the code “vibrant atmosphere” – I also noted that the pupils loved the character used in the game – Agent Alicia, from their favourite cartoon Agent Ali. The sentence “*pupils were eager to complete the activities and excited to get their badges.*” also indicated that pupils were eager and excited during the gamified learning process. However, low-proficiency pupils still struggled to get good marks and their self-confidence was still low. Hence, for the third cycle, the decision was made to reintroduce the points system but with more choices. Each choice would have different scores, depending on the complexity. Longer responses would get higher marks. This allowed for differentiated outcomes where more detailed or extended answers earned higher marks, thereby encouraging all pupils to participate at their own level while still providing opportunities for progression.

4.1.3 Reflective Teaching Journal Cycle 3

The analysis of the reflective teaching journal from Cycle 3 is described below.

Table 4.3 Analysis of Reflective Teaching Journal Cycle 3

Raw data	Open codes	Sub-concepts	Concepts	Main concepts
<i>“Pupils were delighted to play the games.”</i>	happy to play	Delighted		
<i>“Pupils were all eager to complete the speaking activities during gamified learning.”</i>	eager to complete	Eager	Pupils’ response	Pupils’ response
<i>“All pupils managed to score.”</i>		Score		
<i>“All of the pupils were happy to get marks, even for the short answers.”</i>	managed to get scores.	Marks	Gamification elements	Implementation
<i>“They suggested to include their favourite such as Angry Birds, Super Mario and Zombies.”</i>	suggested their favourite characters .	Suggestion Favourite Character		
<i>“Perhaps it is best to include pupils’ favourite character to make it more interesting and engaging.”</i>	consider favourite characters	Favourite Character	Game character	Improvement

Based on pupils’ responses from Cycle 2, the PowerPoint game in this third cycle was adjusted to get the students to be more engaged in the activities. There were a few changes made. The gamification element used in this cycle was points but with lots of choices and different theme was also used. Each choice was awarded different scores, depending on the complexity of the responses. Longer responses were given higher marks. For example, in this cycle, pupils were expected to talk about pictures that were about nationalities and derived from Unit 1 – Where Are You From?. The pupils would need to

check whether their answers were listed in the top five answers or choices. Longer sentence structures would get higher marks. Pupils loved the points as it is inclusive as indicated in the table – “*All pupils managed to score.*”. It means that all pupils managed to get scores regardless of their ability in learning. In this cycle, everyone received marks scores.

In addition to their response, pupils also suggested playing learning games that included their favourite characters. As a result, in the next cycle – Cycle 4, Super Mario, their preferred character and level as the gamification element were included. If the pupils could answer questions in the first level, they would go to another level until they eventually rescued the main characters according to the storyline. Further improvement was made in the fourth cycle to maximise their gamified learning experience in speaking activity.

4.1.4 Reflective Teaching Journal Cycle 4

The analysis of the reflective teaching journal from Cycle 4 is described below.

Table 4.4 Analysis of Reflective Teaching Journal Cycle 4

Raw data	Open codes	Sub-concepts	Concepts	Main concepts
<i>“The pupils were more confident in the gamified learning activity.”</i>	more confident.	Confidence	Pupils’ response	Pupils’ response
<i>“The pupils loved the games – the characters and the storyline/mission.”</i>	loved the characters	Engagement Characters Storyline Mission	Engagement Games’ characters	Pupils’ response / Implementation
<i>“Some pupils suggested that the time taken to think of the answer should be shortened.”</i>	shorter period to respond	Response time	Game rules	Improvement
<i>“Make the “thinking time” to answer the questions shorter.”</i>	Shortened response time	Response time	Gamification elements	

Table 4.4 continued

Perhaps, less than 30 seconds.”

As mentioned earlier, Cycle 4 included characters suggested by students which was Super Mario and the gamification element used was level. When the pupils could answer questions in the first level, they would go to another level until they eventually rescued the main character – which was Super Mario according to the storyline. The time given for thinking was 30 seconds and responses were 45 seconds which sum up to 1 minute and 15 seconds for each question. In this game, pupils were expected to talk about favourite subjects in school for Level 1, which was easier and the house chores routine for Level 2. The topics involved were derived from Unit 2: My Week from Year 4 Textbook – Get Smart Plus 4. In this cycle, it is also noted that the response time was too long and they were too keen and eager to complete their mission on the game – which was to meet the Princess. Hence, for Cycle 5, the response time would be adjusted to cater to their preferences. Further improvement was made in the fifth cycle to maximise their gamified learning experience in speaking activity.

4.1.5 Reflective Teaching Journal Cycle 5

The analysis of the reflective teaching journal from Cycle 5 is described below.

Table 4.5 Analysis of Reflective Teaching Journal Cycle 5

Raw data	Open codes	Sub-concepts	Concepts	Main concepts
<i>“Yes, the pupils were excited and enjoyed today’s lesson.”</i>	enjoyed lesson	the Enjoy	Pupils’ response	
<i>“They were more excited about the character – Zombie.”</i>	excited to play	Excited	Pupils’ attitude	

Table 4.5 continued

<i>“Eager to complete – to hunt zombies and get badges.”</i>	eager to complete	to	Eager Badges	Gamification elements	Pupils’ response
<i>“More pupils were confident in completing the activities, rarely relying on teacher’s help.”</i>	more confident		Confident		
<i>“They showed a good collaboration among themselves.”</i>	worked together		Collaboration	Pupils’ attitude Activities	Implementation
<i>“Low-proficiency pupils still showed hesitation in answering the questions.”</i>	Low-proficiency pupils still hesitated		Low-proficiency Hesitation		
<i>“Provide simpler -game to help the low-proficiency pupils to boost their confidence in speaking activities.”</i>	design simpler games		Low-proficiency Simple games	Differentiated learning	Improvement

In Cycle 5, the timer for pupils’ responses was shortened to a maximum of 45 seconds for thinking and giving responses. The theme for the PowerPoint game in Cycle 5 was Zombie Hunt. In this game, pupils were expected to talk about the house chores routine. The topic was derived from Unit 2 – My Week. The gamification element used in this game was badges because from my previous observation, the pupils loved it so much. Therefore, badges and the suggested character such as Zombie were used to engage the pupils in the speaking activities. I also noted that the low-proficiency pupils still hesitated in answering the questions and sometimes needed assistance from their friends. Therefore, the next game would have simpler questions so that all pupils would be able to complete speaking activities confidently. Further improvement was made in the sixth cycle to maximise their gamified learning experience in speaking activity.

4.1.6 Reflective Teaching Journal Cycle 6

The analysis of the reflective teaching journal from Cycle 6 is described below.

Table 4.6 Analysis of Reflective Teaching Journal Cycle 6

Raw data	Open codes	Sub-concepts	Concepts	Main concepts
<i>“Yes, the pupils were delighted and happy to play the game.”</i>	delighted and happy	Delighted Happy		
<i>“They were more excited to play because the rules are easier.”</i>	excited play	to Excited	Pupils’ response	Pupils’ response
<i>“Eager to complete the activity.”</i>	eager complete	to Eager		
<i>“Low-proficiency pupils were more confident in today’s lesson.”</i>	more confident	Confident	Pupils’ attitude	
<i>“Most of them were able to complete the task.”</i>	able complete	to Ability complete	to Activity	Implementat i-on

Based on Cycle 5, the PowerPoint game for this cycle is adjusted to cater to low-proficiency pupils’ needs as they still hesitate to speak. From the previous cycle, it is concluded that the next game should provide simpler questions to boost their confidence so that the low-proficiency pupils would be able to talk confidently. In this cycle, pupils were expected to talk about favourite subjects and house chores which were derived from Unit 2- My Week. The gamification used in this cycle was a quest where the pupils were to complete speaking activities to eventually get into the quest and complete their treasure hunt. As the speaking task given was simpler, all of the low-proficiency pupils were able to complete the speaking task confidently. The pupils were able to complete the speaking tasks within the time frame given and completed the treasure hunt game. These outcomes suggest

that the adapted design effectively addressed the specific needs of low-proficiency learners while maintaining the motivational benefits of gamification.

4.1.7 Summary of the Reflective Teaching Journals Findings

In summary, the reflective teaching journal played an important role in both collecting data and guiding the development of ESL speaking lessons using a gamified learning approach. It served as both a data collection tool and a developmental guide for developing speaking lessons by employing a gamified learning approach using PowerPoint games. The journals helped capture the learners' engagement, responses and interactions with the gamified lesson elements, which allowed me to make improvements to the lessons throughout the six cycles.

In Cycle 1, pupils showed eagerness and enthusiasm, which confirmed that the gamified activities were effective in encouraging participation. This encouraged me to enhance collaborative tasks in the next lesson. In Cycle 2, the classroom atmosphere was lively, and pupils enjoyed the lesson, especially the badges and characters in the interactive PowerPoint games. Based on these responses, I decided to include more visual storytelling and rewards in the next cycle. By Cycle 3, pupils clearly enjoyed playing the games, were eager to complete the speaking tasks and felt satisfied when they scored well. This made me realise how important feedback and a clear sense of progress were, so I made sure to include more of those elements moving forward.

In Cycle 4, pupils showed strong interest in the game's storyline and characters, which led me to include more narrative-based elements in the lessons. In Cycle 5, their excitement about the zombie character and their ability to collaborate well encouraged me to continue using themes that appealed to them. Finally, in Cycle 6, I noticed that even pupils with lower proficiency levels were actively participating and appeared confident when the

lesson included familiar characters and engaging tasks. This confirmed that tailoring the content to the pupils' interests helped increase their motivation and speaking confidence.

These findings from the reflective teaching journals did not just show the positive effects of gamification. More importantly, they helped guide the way I developed and taught ESL speaking lessons. By reflecting after each lesson, I was able to adjust the content, teaching strategies and gamified elements to better suit the pupils' needs, which in turn made the lessons more effective and engaging.

4.2 The Effects of Gamified Learning on Young ESL Learners' Learning Engagement

The data on learner engagement were obtained from the observation checklist (Appendix L) were summarised in a table to determine the effects of the gamified learning approach on young ESL learners' engagement in ESL speaking activities in speaking activities from Cycle 1 until Cycle 6. The criteria were categorised as behavioural, cognitive and emotional engagement and displayed respectively. (Refer to Chapter 3, section 3.3.2). The numbers in the table indicate how many of the 11 pupils demonstrated each specific behaviour during the interactive PowerPoint game lessons in each cycle.

4.2.1 The effects of gamified learning on young ESL learners' behavioural engagement in ESL speaking activities.

Table 4.7 Observation checklist data for behavioural engagement from Cycle 1-6

Criteria	C1	C2	C3	C4	C5	C6
During the interactive PowerPoint game lesson, pupils showed eagerness to complete the speaking activity.	11	11	11	11	11	11
During the interactive PowerPoint game lesson, pupils were attentive and	11	11	11	11	11	11

Table 4.7 continued

Behavioural engagement	focused to complete the speaking activity.						
	During the interactive PowerPoint game lesson, pupils were actively discussing with peers to complete the speaking activity.	11	11	11	11	11	11
	During the interactive PowerPoint game lesson, pupils were asking questions to their peers to complete the speaking activity.	10	9	9	10	11	9
	During the interactive PowerPoint game lesson, pupils were asking questions to the teacher to complete the speaking activity.	9	9	7	6	6	2
	During the interactive PowerPoint game lesson, pupils made effort to speak English language to complete the speaking activity.	11	11	11	11	11	11
	During the interactive PowerPoint game lesson, pupils were able to complete the speaking activity within the time frame.	5	6	6	10	9	11

The observation checklist data presented in Table 4.7 shows that all 11 pupils showed eagerness in completing the speaking activity from cycle 1 to cycle 6. Similarly, all 11 pupils were attentive and focused as well as actively discussed with their peers and they also made an effort in speaking English language in completing the speaking activities. The data shows a decrease in asking the teacher questions from 9 in cycle 1 and 2 to just 2 in cycle 6. This decrease may be due to the pupils becoming more familiar with the gamified structure of the lessons and gaining confidence in how the tasks work.

On the other hand, the data shows an increase in the pupils' ability to complete the speaking activity within the given time. The number increased from 5 in cycle one to all 11 in cycle 6. Based on my reflection, I believe this was because the pupils became more comfortable with the game format and more motivated to complete the tasks, especially with the use of themes and characters they liked. Their confidence also seemed to grow with each

cycle, which helped them perform better and complete the tasks more efficiently. This shows how both the gamified elements and the structured reflection played a role in improving their participation and task completion over time.

4.2.2 The effects of gamified learning on young ESL learners' cognitive engagement in ESL speaking activities

Table 4.8 Observation checklist data for cognitive engagement from Cycle 1-6

	Criteria	C1	C2	C3	C4	C5	C6
Cognitive engagement	During the interactive PowerPoint game lesson, pupils were able to produce speech with lesser gaps and pauses in the speaking activity.	2	2	2	2	4	9
	During the interactive PowerPoint game lesson, pupils made an effort to make connection between learning topics by using appropriate vocabulary related to the task given.	11	11	11	11	11	11
	During the interactive PowerPoint game lesson, pupils showed minimal hesitation in the speaking activity.	2	2	2	2	6	9

The observation checklist data based on cognitive engagement presented in Table 4.8 shows that all 11 pupils made an effort to make connections between learning topics by using appropriate vocabulary related to the task given from cycle 1 to cycle 6. The data also shows an increase in pupils producing speech with fewer gaps and pauses – from 2 to 9 and pupils showing minimal hesitation in the speaking activity, from 2 to 9 throughout the six cycles.

4.2.3 The effects of gamified learning on young ESL learners' emotional engagement in ESL speaking activities

Table 4.9 Observation checklist data for emotional engagement from Cycle 1-6

	Criteria	C1	C2	C3	C4	C5	C6
Emotional engagement	During the interactive PowerPoint game lesson, pupils showed great enthusiasm by making efforts to collaborate with their peers in completing the speaking activity.	11	11	11	11	11	11
	During the interactive PowerPoint game lesson, pupils showed self-confidence in completing the speaking activity.	2	2	4	5	7	10
	During the interactive PowerPoint game lesson, pupils expressed their enjoyment through positive body language (eg: smiling, laughing, happy) in completing the speaking activity.	11	11	11	11	11	11

The observation checklist data based on their emotional engagement presented in Table 4.9 shows that all 11 pupils showed great enthusiasm by making efforts to collaborate with their peers and expressed their enjoyment through positive body language such as smiling, laughing and happy in completing the speaking activity from cycle 1 to cycle 6. The data also show an increase in pupils' self-confidence in completing the speaking activity, from 2 to 10 throughout the six cycles.

In summary, the observation data show that gamified learning increases learners' engagement in speaking lessons as the pupils consistently showed their eagerness, attentiveness, focus, actively discussed and asked questions to their peers and their teacher, made an effort to speak English language, the ability to complete the speaking activity within the time frame, producing speech with lesser gaps and pauses, making effort to make a connection between learning topics by using appropriate vocabulary, showing minimal

hesitation to speak, showing great enthusiasm, self-confidence and expressing their enjoyment through positive body language (eg: smiling, laughing, happy) in completing the speaking activity.

4.3 The effects of gamified learning on young ESL learners' speaking performance

The speaking performance was measured using a pre- and post-test (*refer to Appendix O*). The rating was done by two raters to ensure the reliability of the scores. Refer to chapter 3, section 3.5 for details.

4.3.1 Pupils' Pre-Post Speaking Test Scores

The scores were recorded in the speaking test rubric (Appendix H) and the findings were summarised (Appendix O) as follows. Table 4.10 below shows pupils' average scores from both raters in the speaking test before and after the implementation of the gamified learning approach. The average means were also calculated to determine any significant differences between pre-test and post-test results.

Table 4.10 Students Pre-post speaking test scores

Participant	Pre- Test Score	Post-Test Score
P1	2	3
P2	4	4
P3	3	4
P4	3	3
P5	2.5	3
P6	4	5
P7	2	3
P8	2	3
P9	2	3
P10	4	5
P11	3	4

Table 4.10 continued

mean	2.86	3.64
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The data shows that the mean score of the students in the pretest was 2.86 and 3.64 in the post. This shows an increase of 0.78 from the pretest to the post-test. This result indicates that the pupils' speaking performance improved after the implementation of the gamified learning using interactive PowerPoint games compared to before.

4.3.2 Paired T-test result analysis for post-test

The scores need to be evaluated if these improvements are statistically significant. In the present study, the scores were compared to the significance level of p-value less than 0.05. The average post-test scores from both raters were analysed using a paired t-test with SPSS software version 29 to evaluate the significance of the gamified learning approach and to determine if there is any significant difference between the students' speaking performance scores in the post-test. The results are shown in table 4.11 below.

Table 4.11 Paired t-test of pre and post-test average means scores

Paired Samples Test						
	Paired Differences			t	df	Significance
	Mean	Std. Deviation	Std. Error Mean			p-value Two-Sided p
Paired t-test of pre and post-test average mean scores	.77273	.41010	.12365	6.249	10	<.001

Table 4.11 shows that both the one-sided and two-sided p-values are less than 0.001. The p-values for both are significantly lower than 0.05. Given that the p-value is lower than the

0.05 cutoff, the results are statistically significant. This indicates that the pre-test and post-test scores differ significantly. It can be concluded that the gamified approach has significantly improved the pupils' speaking performance.

4.4 Discussion

4.4.1 Discussion of findings from reflective teaching journals

To answer RQ1, *How to develop ESL speaking lessons using a gamified learning approach?*, reflective teaching journals were analysed and interpreted using inductive content analysis. Three themes emerged from the inductive content analysis: student response, implementation and improvement in the reflective teaching journals.

The data demonstrated from the reflective teaching journals revealed that the reflective teaching journal was indeed functional and able to serve as a framework to develop and teach ESL speaking lessons using a gamified learning approach. Writing down the reflection immediately after the lesson helped the teacher to reflect and evaluate critically the environment and situation that had happened in the classroom previously. For example, it enabled the teacher to be attentive to pupils' responses so the game rules could be modified and adjusted to suit the demands of pupils. Keeping reflective journals to record their responses such as "enjoy" and "delighted" also helped me to improve the next cycle and classroom instructions and materials in the classroom. This resonates with Liu and Zhang (2014) which it is stated that keeping a teaching journal can help teachers improve their reflective teaching abilities. In addition, Tompkins (2009) highlighted that teachers who keep a journal of reflection are more inclined to reflect on their own methods for teaching and learning. Baresh (2022) also agreed that keeping a reflective teaching journal could greatly improve the teachers' ability to think critically in improving their teaching and

learning practices. Thus, utilising the reflective teaching journals in this study was indeed beneficial and greatly impacted the success of the gamified learning approach.

The findings also suggests that the reflective teaching journal can be used by the teachers as a guideline to create lessons that intend to employ interesting and engaging gamified elements. the present study, the design and development of gamified learning was greatly facilitated by the reflective journal utilisation which has led to positive attitudes, enthusiasm and engagement of pupils throughout the lessons. Pupils even recommended including their favourite characters or themes from mainstream media. Teachers could easily take note of pupils' preferences through the reflective teaching journals and through this practice, the teacher was able to create and develop gamified learning materials that were engaging to the pupils. Renniger and Hidi (2017) also advocated that emphasising the importance of interest is crucial in encouraging individuals to take action in doing something. Six interactive PowerPoint games were customized and modified to suit the learners' interests for them to feel motivated and interested in completing the task based on the reflective teaching journals. It is also learnt from the findings that pupils demonstrated a keen interest in the topics, characters and rewards included in the gamified lessons. The incorporation of their favourite characters such as Agent Alicia, Super Mario and Zombies made them interested and engaged in the learning. Likewise, Rafiq et al. (2020), the incorporation of main characters in the PowerPoint slides such as Pokémon, Harry Potter and Avengers helped to engage their secondary school learners while Wong et al. (2021) incorporated a pirate-theme mission to engage their Year 3 pupils with the gamified learning contents. The agreement between these findings within different contexts and methodologies implies that the elements added to the gamified learning content played an essential role in grasping pupils' attention and engaging them in learning. The use of a reflective journal

aided the process of developing elements of a gamified learning approach to enhance learner engagement in this study.

In the reflective teaching journals, the theme “pupils’ response” was identified. Based on the analysis, pupils’ responses towards the gamified learning approach were positive. Phrases like "happy and enthusiastic," "delighted and happy to play the game," and "eager to complete the task" demonstrated the pupils' positive engagement and enjoyment during the classes. Evidently, these sentiments were consistently expressed across the six cycles. Similarly, Wong et al. (2021) also noticed that pupils were fascinated by the animation used, tried their best to complete the mission and their anxiety to speak reduced. In this study, pupils' positive responses toward the gamified learning technique were further highlighted by the lively environment which was “the atmosphere was vibrant”, their keen interest to gain badges and their increased confidence. This highlights how the gamified learning approach affects the pupils’ response to create a fun, safe and positive learning environment and encourage learners to engage in learning as suggested by past studies (Erdiana et al., 2023; Hashim et al., 2019; Hojjat Dehghanzadeh et al., 2019; Iaramenko, 2017; Rafiq et al., 2020; Wong et al., 2021).

Moreover, the theme “pupils’ response” is also associated with pupils’ preferences for themes, characters and rewards in gamified learning materials emphasised the importance of relatability and personalisation. In the present study, it significantly affected their behaviour and learning engagement during the gamified learning process. Recent studies revealed that teachers also developed, adapted and even customised their own PowerPoint games from scratch as gamified learning materials to better suit their own pupils (Hashim et al., 2019; Rafiq et al., 2020; Ng, et al., 2021; Wong et al., 2021). In addition to this, the use of reflective teaching journals enabled me as the teacher to better understand

what motivated and engaged the pupils. Teachers could also utilise the journals as a platform for recording and analysing pupils' feedback, which would help them refine their lesson plans to suit the pupils' needs and keep them engaged in their learning. This theme also provided me insight as feedback to modify the instruction, choose the right gamification elements and sustain an enjoyable classroom environment for the pupils for the next lessons. Hence, keeping a reflective teaching journal is useful as a guideline for creating lessons for teachers.

With the "implementation" theme in this study, the importance of recognising that pupils have different language competency levels is acknowledged and taken into consideration throughout the teaching-learning process. The need to cater to different levels of proficiency among the pupils, especially those with low proficiency, was also highlighted in the reflective journals. Several amendments were also made in all cycles, especially in Cycle 3 and Cycle 6, such as giving low-proficiency learners different tasks and scores to encourage active participation and engagement. In Wong et al. (2021), the low-proficiency pupils were given a lifeline feature to help them attempt to complete the speaking tasks. In the present study, pupils who were considered low-proficiency pupils significantly showed improvement, especially in their confidence and the ability to complete the task within the time frame when I modified the gamified learning materials involving their needs. Wong et al. (2021) and the present study suggest the importance of acknowledging the different language proficiency levels in designing lessons, especially when involving low-proficiency learners. It is also important for teachers to think about how to implement gamified learning, about how the rules of the games match up with pupils' expectations, explore and consider alternative ways to reward pupils and encourage pupils of different skill levels and carefully control the flow of gamified learning lessons.

In implementing the gamified learning approach, utilising reflective teaching journals also enabled me as the teacher to have the opportunity to think through and put differentiated instruction techniques into practice. Accommodating learners with different language proficiency levels involved preparing different levels of questions or tasks as not all materials can fit all pupils' needs and interests as stated by Tomlinson (2008). In the present study, I was adapting and modifying PowerPoint games as gamified learning materials to cater to pupils' needs which resonates with recent studies done by Hashim et al. (2019), Rafiq et al. (2020), Ng et al. (2021) and Wong et al. (2021) where they as ESL teachers made their own PowerPoint games to suit to their pupils' needs as well. This finding also resonates with Aziz et al. (2020), the localization of materials development by language teachers is very effective in improving their learning process as the materials are specifically designed to suit the learners' needs and proficiency levels. Thus, the use of keeping a reflective teaching journal as a framework was indeed helpful to help me as the teacher to implement lessons that are inclusive and take pupils' level of proficiency into account.

The theme "improvement" is also as important as other themes. It helped me as a teacher to improve my lessons continuously. In improving my lesson for the next cycle, I had always acknowledged my pupils' responses regarding their interest and their points of view about the reward systems. The significance of relatability and individualisation in gamified learning was shown by my pupils expressing their admiration for the game design and the game rewards such as points, scores, badges and quests. The rules of games were also modified to suit their levels. Studies also revealed that learners may feel more engaged and connected when they are exposed to subject matters that they can relate to (Deterding et al., 2011). In this study, I noticed that pupils' engagement and interest in the materials which were the PowerPoint games, increased when they were familiar with the game design and

mechanisms. Thus, the theme “improvement” is seen as an important theme to enhance learner engagement in this study by taking into account the sense of belonging and relatability of the pupils.

The identified themes – pupils’ response, implementation and improvement played an important role in creating, designing and developing gamified lessons to teach ESL speaking skills. By incorporating pupils' responses, implementing of improvements and continuously reflecting on the learning outcomes, the interdependence of these three themes can promote positive outcomes in teaching and learning outcomes and engagement in educational action research. As a result, the pupils were consistently engaged and interested in completing the speaking tasks in this study. This is also in agreement with Kemmis and McTaggart (1988) who defined evaluation and adaptation as a continuous process that must be done for ongoing improvement of teaching content and teaching methods. This suggests that the reflective method promoted continuous development and improvement through the utilisation of reflective teaching journals to ensure that the gamified learning approach was relevant and effective to the pupils. It is also in tandem with the statement of Koshy (2005) who believes that action research is a practice that requires researchers to reflect on and improve their activities in their setting which could be seen in this research. In the present study, the pupils' speaking performance had significantly improved, although not much – after six cycles of a gamified learning approach.

In a nutshell, keeping a reflective teaching journal was indeed beneficial to improving the gamified learning approach, especially in catering and accommodating to pupils’ needs and their level of proficiency in the English language and improving the teacher’s teaching and learning practices. It significantly helped me as a teacher, serving as a framework and guidelines to develop and teach a gamified learning approach using

PowerPoint games in ESL speaking lessons by employing the action research model proposed by Kemmis and McTaggart (1988). However, it should be understood as a personal tool that guided my teaching rather than a universal framework. The findings suggest that reflective journaling can help teachers respond effectively to pupil needs and promote engagement, but the formulation of a clear guideline for developing gamified lessons remains a goal for future work.

4.4.2 Discussion of findings on pupils' learning engagement

4.4.2.1 Behavioural engagement

In the present study, to answer RQ2 *How does gamified learning affect young ESL learners' engagement in ESL speaking activities?*, the observation checklist from all cycles was analysed to determine the trends and patterns of each engagement component throughout the study period. The findings from the observation checklist gave an in-depth overview of the potential benefits of the gamified approach to education and provided insightful information about how pupils were engaged and able to interact with each other in the process.

The findings from this study show that all eleven pupils showed an immense eagerness to finish their tasks in each cycle. It indicates that the gamified learning approach during the speaking activity itself successfully engaged pupils and motivated them to pay attention and stay focused for the whole six cycles. This confirms findings reported from recent studies that gamified learning can boost learners' engagement (Deterding et al., 2011; Dicheva et al., 2014; Ekici, 2021; Landers, 2014; Landers et al., 2018; Ohn et al., 2018;). Several pieces of evidence in the present study also point to this, such as their willingness to finish tasks, their ability to be attentive and focused, their active participation in group discussions and collaborative efforts with their peers to complete the speaking activities

during the gamified learning process. In the same vein, Wong et al. (2021) also noticed the same pattern, pupils were showing great enthusiasm to complete the speaking tasks.

Moreover, the data from the observation checklist based on their behavioural engagement also shows a shifting trend in the number of pupils asking questions to the teacher throughout the six cycles from 9 to 2. This variation indicates that pupils are no longer depending as much on the teacher to provide guidance or explanation. This change indicates that pupils are becoming more confident and independent as they progress through the cycles and modifications to the teaching strategy made by the teacher encouraged students to look for answers on their own, making them self-direct their learning and more independent. It also indicated that more proficient pupils felt less of a need to question their friends to complete the tasks. Similarly, Wong et al. (2021) also noticed pupils Year 3 pupils in one of the rural schools in Sarawak also had greater confidence and reduced anxiety during the speaking activity where the pupils did not stutter much like they did in the earlier phase of the intervention and were able to discuss completing the mission. A similar situation also occurred in the present study where pupils showed a consistent trend throughout all six cycles where the eleven pupils consistently showed a great effort to speak English and discuss actively to complete the task in each cycle. These observations suggest that the gamified learning can motivate the pupils to interact and discuss with each other to complete their speaking tasks.

Findings on students' engagement also show that pupils' abilities to finish the speaking task in the allocated time throughout each of the six cycles displayed a fluctuating pattern – some variation in this behaviour from 5 to 11. Certain cycles, for example, Cycle 4 and Cycle 6 displayed a greater number of pupils finishing the task within the allocated time, while other cycles such as Cycle 1 until Cycle 3 showed a lower number. The

complexity of the task, the ability of the pupils to manage their time, or the strict time constraints set did play important roles in this variance. However, towards the end of the research, the pupils were able to complete the tasks on time as they were more familiar with the gamified learning environment. It implies that the gamified learning approach was able to motivate the pupils to finish their speaking tasks on time. This suggests that the gamified learning approach did affect young ESL learners' behavioural engagement in ESL speaking activities.

These observed behaviours together indicate a high level of participation which demonstrates the success of the gamified method in sustaining pupils' engagement during ESL speaking lessons and it was also noticed in a gamified learning study done by Wong et al. (2021) which also revealed that from their checklist, the pupils were consistently motivated in the gamified learning process. Pupils' positive response towards the gamified learning approach in the present study also echoes with the findings in recent studies done by Hashim et al. (2019), Rafiq et al. (2020) and Wong et al. (2021). Thus, from the observation checklist, it is learnt that gamified learning significantly impacted the pupils' attitudes towards the learning process with the evidence of the noticeable positive attitudes towards the gamified learning process itself.

4.4.2.2 Cognitive engagement

The data from Table 4.8 which was based on their cognitive engagement indicates that as pupils progressed through the cycles, there was a noticeable improvement in their ability to produce speech with fewer pauses and gaps. Fewer pupils showed the ability in Cycle 1 to Cycle 4, but more pupils were able to communicate with fewer gaps and pauses in Cycle 5 and Cycle 6. Likewise, Wong et al. (2021) also revealed that pupils were able to speak with fewer gaps and pauses during the second and third implementation which was

the last cycle of their study. This change was due to better confidence, more experience with speaking activity and language competency. Recent studies also suggest that gamified learning promotes confidence in speaking and reduces their anxiety (Hashim et al., 2019; Rafiq et al., 2020; Wong et al., 2021). In short, there was a noticeable upward trend in the number of pupils demonstrating this competence as the cycles progressed, indicating a good learning curve. Thus, it indicates that the gamified learning approach was able to motivate the pupils to produce speech with fewer gaps and pauses in the speaking activity.

Furthermore, the data from Table 4.8 also shows a very consistent trend through all six cycles in showing pupils consistently showed a great effort to use proper vocabulary to make links between various learning themes. Rosyati et al (2020) also suggest that vocabulary can be enhanced by playing games. In this study, the pupils were playing interactive PowerPoint games that were related to their syllabus. The present study revealed that pupils were able to relate different learning themes during the speaking activity by consistently applying their language abilities and knowledge. Past studies also suggest that gamified learning promotes language acquisition (Hashim et al., 2019; Ng et al., 2021; Rafiq et al., 2020; Wong et al., 2021). This was evident throughout all the cycles during the gamified learning process whereby the pupils attempted to communicate in English and chose relevant vocabulary to link to the learning themes, which were about the daily routine, nationalities, house chores, hobbies and school subjects.

This finding is also relatable to a recent study by Ng et al. (2021) where it was learnt that there was a 16.4 % (55 scores) increment in the participants' vocabulary after implementing the PowerPoint board game although the study did not focus on the gamified learning approach. It also resonates with a recent study by Erdiana et al. (2023) there was a noticeable improvement in the students' scores between the pre-test and the post-test for

speaking skills after implementing the Mystery Box PowerPoint games. A survey on learners' perceptions about gamified learning conducted by Rafiq et al. (2020) in which 75.7% of ESL learners agreed that gamified learning can retain their vocabulary also resonates with the findings. In the present study, the findings show a great potential for gamified learning to motivate learners and improve their performance in learning as mentioned in past studies (Dicheva et al., 2014; Ekici, 2021; Landers, 2014; Landers et al., 2018; Ohn et al., 2018;). This also implies that the gamified learning approach promotes language competency and vocabulary retention.

The data also shows that throughout the six cycles, pupils' little hesitancy when participating in the speaking activity improved. Fewer pupils showed little hesitation in the earlier cycles, Cycle 1 to Cycle 4, while more pupils showed this behaviour in Cycle 5 and Cycle 6 from 6 to 9. This change implies that more pupils became more confident and less hesitant throughout the speaking activity as the cycles went on. This variance was due to increasing comfort level with the tasks, boosted confidence and enhanced speaking abilities. It was also due to the modifications to the instructional strategy that prompted pupils to lessen their hesitancy, such as simpler games in Cycle 5 and Cycle 6. Similarly, this finding also resonates with Wong et al. (2021) findings that pupils become more confident as the pupils manage to complete the activity without much stuttering after a few modifications were made to cater to the pupils' proficiency. All in all, the gamified learning approach did affect young ESL learners' cognitive engagement in ESL speaking activities.

4.4.2.3 Emotional engagement

The data from emotional engagement in Table 4.9 shows a consistent pattern of pupils showing great enthusiasm by making efforts to collaborate with their peers in completing the speaking activity throughout each of the six cycles. 11 pupils consistently

demonstrated enthusiasm and actively participated in team efforts to finish the speaking task in each cycle which shows that pupils consistently demonstrated a strong willingness to collaborate and contribute their efforts to accomplish the speaking task's objectives and of course to get their rewards in the gamified learning approach. Great collaboration among the pupils was observed and they were willing to work together which is also found in Wong et al. (2021) where the pupils were excited to complete the mission collaboratively albeit using improper grammar. Thus, the present study indicates that the gamified learning approach promotes collaboration in learning.

Moreover, the data in Table 4.9 also shows that students' levels of self-confidence changed throughout the six cycles. Less pupils showed self-confidence in Cycle 1 to Cycle 4, but more pupils showed self-confidence in Cycle 5 and Cycle 6. This pattern also implies that more pupils became more confident in their ability to finish the speaking task as the cycles went on. This resonates with findings by Hashim et al. (2019), Rafiq et al. (2020) and Wong et al. (2021) where gamified learning can boost confidence among pupils in learning. Growing familiarity with the activity, improving speaking abilities and getting familiar with the gamified learning approach were the factors contributing to this boost in self-confidence. This was also due to the modifications by instruction or feedback provided from previous cycles. The data also implies that the gamified learning approach was able to boost pupils' confidence when the modifications were done to cater to pupils' different levels of proficiency.

Finally, based on the data on Table 4.9, the data also showed a consistent pattern where all 11 pupils were displaying positive body language such as smiling, laughing and looking happy when learning using gamified learning approach. It also suggests that the pupils were comfortable, which helped them participate successfully in the speaking activity.

It also highlights the effectiveness of the gamified approach was able to foster a fun, safe and engaging learning environment in teaching ESL speaking lessons as mentioned in past studies (Hashim et al., 2019; Rafiq et al., 2020; Wong et al., 2021). Pupils were able to maintain their keen interest, stay engaged and successfully recall material as they enjoyed the learning experience. It also suggests that the pupils were engaged and comfortable, which helped them participate successfully in the speaking activity. This evidence is important because it implies that gamified learning was able to provide fun and meaningful learning, as well as a safe and non-threatening environment to pupils which is also mentioned in these recent studies by Hojjat Dehghanzadeh et al. (2019), Iaramenko (2017) and Wong et al. (2021). In conclusion, the gamified learning approach did affect young ESL learners' emotional engagement in ESL speaking activities.

4.4.3 Discussion of findings on speaking performance

In the present study, to answer RQ3, pre- and post-speaking tests were executed. The average mean scores of the students from the two raters in the pretest were 2.86 and 3.64 in the posttest. As revealed by the findings from the pre- and post-speaking tests, there was an increase of 0.68 from the pretest to the post-test speaking performance. The t-test results also showed that the difference in the mean scores is significant which means that the gamified learning had a significant positive effect on pupils' speaking performance.

The significant improvement in their speaking performance as evidenced by an increase in average mean from 2.86 in the pre-test and 3.64 in the post-test is also in line with the findings in studies done by Erdiana et al. (2023) Ng et al. (2021) and Wong et al. (2021) where the speaking skills had gradually improved after implementing gamified learning elements in their lessons. Rafiq et al. (2020) also noticed an improvement in pre-test and post-tests in pupils' grammar after implementing gamified learning. Similarly, most

pupils showed significant improvement in their fluency and vocabulary in speaking after the implementation of the gamified learning approach in this study. They were able to improve their ability in speaking skills as delineated in the KSSR syllabus which can communicate simple information, manage interaction, describe people and objects and narrate short basic stories appropriately. The result from their speaking performance also in tandem with Ekici (2021), Dicheva et al. (2014), Landers, (2014), Landers et al. (2018) and Ohn et al. (2018), where it is mentioned gamified learning approach has a great potential to improve learning outcomes in an educational context. Based on the result and previous studies, it suggests that the gamified learning approach did have significant effects in improving pupils' learning performance.

In short, the gamified learning approach enhanced the young ESL learners' learner engagement in behavioural, cognitive and emotional and performance in speaking by employing the gamified learning approach using PowerPoint games to teach ESL speaking lessons. As a teacher, I was also able to navigate the strategies to develop and teach ESL speaking lessons using gamified learning through the utilisation of reflective teaching journals as a framework. To sum up, the present study shed light on the gamified learning approach and its effects on pupils' learning engagement and the effects on their speaking performance.

4.5 Chapter Summary

This chapter presented the inductive content analysis and interpretation from the reflective teaching journal as a framework to guide the procedures to develop and teach ESL speaking lessons using gamified learning. The results of learner engagement using gamified learning were presented based on behavioural, cognitive, and emotional domains, while speaking test scores were analysed using descriptive statistics and paired t-tests; the findings were then discussed in relation to the relevant literature

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.0 Chapter Overview

This chapter presents the conclusion and recommendations of the study. The summary and the implication of the research are also discussed and followed by the limitations of the study and the recommendations for future research.

5.1 Summary of study

The study involved 11 Primary 4 pupils from one of the sub-urban schools in Sarawak. This action research aimed to investigate the effects of gamified learning using interactive PowerPoint games on young ESL learners' engagement and performance in speaking. This research employed action research which comprises quantitative and qualitative data collection where the findings were obtained from reflective teaching journals, gamified learning materials such as PowerPoint games and daily lesson plans, observation checklists and speaking tests throughout the six cycles. The study was carried out at a rural school in Sarawak, Malaysia. The school is verified as a low-enrolment school which is also known as *SKM – Sekolah Kurang Murid*, hence, the small sample size. The study has shown that the implementation of a gamified learning approach using interactive PowerPoints increased pupils' learning engagement and improved their performance in speaking. The following section explains the summary and implications of the findings from the study.

5.2 Summary of findings

This study investigated the effects of a gamified learning approach on young ESL learners' speaking skills and engagement, using a six-cycle educational action research

framework. Three key themes emerged from the findings, which were pupils' responses, implementation and improvement, and continuous reflections. These three themes were interdependent and instrumental in designing, developing and refining gamified ESL speaking lessons. The integration of these themes led to a cycle of ongoing improvement, where reflective practices, guided by teaching journals, helped adapt instructional strategies to better meet learners' needs. This aligns with Kemmis and McTaggart's (1988) and Koshy's (2005) assertions that reflection is vital for the continual enhancement of teaching practices.

In terms of behavioural engagement, the findings demonstrated that pupils were consistently eager to participate and complete their speaking tasks. Their motivation and ability to focus were sustained across all six cycles. Notably, pupils became more independent, as reflected in the decreasing number of questions posed to the teacher. This shift indicated growing confidence and autonomy among learners. The gamified environment fostered collaboration and active group participation, reinforcing existing literature that highlights the role of gamification in boosting learners' motivation and engagement (Wong et al., 2021; Deterding et al., 2011).

With regard to cognitive engagement, the data revealed that pupils showed gradual improvements in fluency, vocabulary use, and speech production with fewer pauses. These gains were more evident in the latter cycles, as pupils became more familiar with the gamified learning structure and content. Pupils were also observed making conscious efforts to link vocabulary with relevant learning themes, demonstrating enhanced language application skills. These developments support earlier findings by Rosyati et al. (2020), Ng et al. (2021) and Erdiana et al. (2023), which suggest that gamified learning can positively impact vocabulary acquisition and speaking proficiency.

Emotional engagement was also significantly enhanced through the gamified learning process. Pupils consistently displayed enthusiasm, enjoyment, and a willingness to collaborate with peers. Positive body language, such as smiling and laughter, was prevalent, indicating a comfortable and safe learning environment. In later cycles, increased levels of self-confidence were evident, as students became more familiar with the tasks and instructional style. These outcomes align with findings by Hashim et al. (2019) and Wong et al. (2021), who noted that gamified learning environments could reduce anxiety and encourage meaningful learner interaction.

Finally, the analysis of speaking performance based on pre- and post-tests revealed a statistically significant improvement. The average mean score increased from 2.86 to 3.64, indicating that the gamified approach had a positive effect on pupils' speaking abilities. Improvements were noted particularly in fluency and vocabulary, reflecting progress in line with the KSSR syllabus, including the ability to express simple ideas, describe objects and people, and narrate short stories. These outcomes are consistent with those found in previous studies by Rafiq et al. (2020), Ng et al. (2021), and Landers et al. (2018), all of which highlight the potential of gamified learning to enhance language learning outcomes.

In conclusion, the findings of this study suggest that gamified learning, supported by reflective teaching practices, can significantly improve pupils' engagement; behaviourally, cognitively, and emotionally. It helped to enhance their speaking performance in ESL classrooms. While the reflective journal served as a valuable tool for instructional refinement, further work is recommended to establish a more structured framework for developing gamified ESL lessons that can be adapted across various educational contexts.

5.3 Implications of the Findings

Firstly, the findings have valuable implications for the teaching and learning approaches. Teachers could use reflective teaching journals to improve their own teaching and learning pedagogies. The study highlights the ability of reflective teaching journals to serve as a framework and guideline in developing and teaching ESL speaking lessons using a gamified learning approach by identifying the emergence of themes and patterns in the journals. Three important themes were identified in the reflective teaching journals using inductive content analysis namely pupils' response, implementation and improvement. In the present study, the reflective teaching journals offered the opportunity for the teacher to critically reflect (Liu & Zhang, 2014) in evaluating my lessons. This process is crucial to improve the teaching and learning strategies as well as the materials used in the upcoming lessons. The continuous process of reflecting and improving the lessons in the present study reflects the crucial elements of action research as mentioned in Kemmis and McTaggart (1988) and Koshy (2005).

The reflective teaching journal writing also allowed the teacher to be critical (Baresh, 2022) and improve the outcomes of my practice in teaching and learning (Sandberg & Fröjdendahl, 2023). In addition to enhancing teaching and learning, this continuous procedure aspired to foster a culture of continuous professional development, as mentioned by the Malaysian Ministry of Education in their 2008 Action Research Manual Guidebook. Through the reflective teaching journals, teachers could simply implement a differentiated learning approach by acknowledging pupils' preferences in which Renniger and Hidi (2017) concurred that acknowledging the differences in pupils' interests is important in motivating and engaging them. Therefore, the use of reflective teaching journals in teaching practices

offers a great opportunity for teachers to improve their teaching practices and learning outcomes.

Secondly, teachers need to develop gamified lessons to engage the pupils, especially the young learners. As evidenced by the quantitative analysis using an observation checklist and speaking test, the gamified learning approach did have statistically significant positive effects on pupils' learning engagement and their speaking performance. Dicheva et al. (2014) Landers (2014) and Landers et al. (2018) strongly believe that gamified learning could improve the learning engagement and outcome which occurred in the present study. The findings are in line with previous studies done by Erdiana et al. (2023) Ng et al. (2021) and Wong et al. (2021) although the focuses on teaching speaking skills using game elements are different. From the observation checklist, it was noted that the pupils were enjoying the process of the gamified learning process by showing positive body gestures such as smiling and laughing. This resonates with Hojjat Dehghanzadeh et al. (2019), Iaromenko (2017) and Wong et al. (2021) who mentioned that gamified learning has a great potential to make fun and meaningful learning and pupils would feel safe learning English language in a non-threatening environment. The pupils showed consistent engagement, excitement and focus to complete the speaking tasks during gamified learning and previous studies (Dicheva et al., 2014; Ekici, 2021, Eltahir, et al., 2021; Landers, 2014; Landers et al., 2018; Marzuki & Kuliavana, 2021; Ohn et al., 2018) strongly agree that the gamified learning can engage the pupils in the learning activities. Thus, the present study concluded that gamified learning is beneficial in engaging the pupils, especially in speaking tasks – it was helpful to decrease the pupils' hesitancy in speaking and attract their attention to focus on the ESL speaking activities.

The findings also have implications for policymakers. Policymakers in education should emphasise the need to equip their teacher trainees and existing teachers with the ability to gamify their lessons. From this study, it is evident that gamified learning was able to engage the young ESL learners in the speaking lessons and improve their speaking ability. In this study, there was a notable significant improvement in the average means in pre- and post-speaking tests for most pupils. The average mean in the post-test shows a significant increase of 0.68. Although not much, the result implies that gamified learning has a great potential to improve learning outcomes as it can engage the learners in their learning. The result is also in accordance with the studies done by Dicheva et al. (2014), Landers (2014) and Landers et al. (2018) where gamified learning is learnt to possess a strong potential for learning improvement. Previous studies such as Erdiana et al. (2023) Hashim et al. (2019), Rafiq et al. (2020), Ng et al. (2021) and Wong et al. (2021) in ESL classrooms also have found the same effects of the gamified learning – the pupils showed an improvement when they were assessed in their speaking skills after the intervention of using gamified learning materials. Hence, gamified learning is deemed to have a promising future in education as it could be used as an intervention to improve learning outcomes in ESL classrooms.

Finally, it is also recommended that future studies include a qualitative analysis of students' interactions during the pre- and post-tests. Such an analysis would capture detailed changes in learners' vocabulary usage and fluency, thereby providing richer insights that complement the quantitative results. This could involve transcribing student dialogues, coding their speech patterns, and identifying shifts in lexical range, syntactic complexity, and fluency markers. Incorporating such a method would offer a more holistic understanding of the students' improved speaking performance and the depth of their language development following gamified learning interventions.

5.4 Limitations and recommendations for the study

This study adopted an action research design with the teacher being the researcher. The present study involved a small number of participants due to the school verified as *Sekolah Kurang Murid (SKM)*. 11 pupils of Year 4 and 9 pupils of Year 5 were all the school had for the enrolment of the present academic year and they were all participated in the present study for main and pilot study. Nevertheless, to reduce the biasness in the evaluation, the researcher involved the school's Head of English panel as another rater in the speaking test to evaluate and assess the pupils' speaking performance before and after the implementation of a gamified learning approach. Taking into consideration that action research design is prone to bias, future studies could utilise an experimental research design with the researcher not being the teacher to reduce biasness. It would be interesting to see the result from a large-scale sampling to evaluate the gamified learning approach. Thus, future research could be a large-scale experimental study involving several classes of different proficiency levels and several teachers at more schools.

The second limitation relates to the instrument in the present study which was the observation checklist. It is a fact that an observation checklist takes a lot of time and work to accurately record and record specific actions, events, or variables of interest in research using observations. However, in the present study, the observation checklist as the instrument was still manageable since the sample size was only 11 pupils and the observation would only take place when the pupils were playing the PowerPoint games for the speaking activities. As the teacher, the researcher was also familiar with all the pupils and able to recognise them individually even though they were designated with specific codes for confidentiality purposes because they were the researcher's pupils for the past two years. The period of the gamified learning process would last roughly around 30 minutes and it was

manageable for the researcher to observe their learning engagement using the developed observation checklist. On the other hand, using the observation checklist would be time-consuming to complete the observation checklist as the sample size grows. Due to its meticulous recording and intensity, it may not be manageable for a large sampling size. Thus, future studies that involve a larger sample could use video observations during the implementation of this study although it would require a lot of effort, especially in doing paperwork to convince the higher authorities, the school and the parents to address ethics-related matters.

The limitations of the study also prompt several other recommendations for consideration to improve its findings from similar studies. Future research could employ another research design that involves a larger sampling size. Non-participant observation could also be considered where the researcher takes on the role of a non-participant observer with a different person as the teacher (Sharif et al., 2023). In addition, Nagro et al. (2020) also suggested that video recording can also be used to reflect on own teaching practices. Different research designs could also be employed to study the gamified learning approach and its effects on their learning performance on various aspects of ESL skills such as listening, reading, writing, vocabulary acquisition, more speaking skills elements such as pronunciation and comprehension and even literature studies when implementing gamified learning in teaching young ESL learners.

Investigating and exploring these variables and contexts would offer a robust and in-depth understanding of gamification mechanisms in educational contexts, especially in ESL classrooms. The findings would also be beneficial and contribute to the teaching and learning of ESL classrooms as they offer teachers opportunities to be transformative and innovative in their own teaching and learning practices to enhance learning engagement and outcomes

among pupils, especially for ESL learners, who often face various challenges in acquiring speaking skills and learning English in Malaysian ESL classroom.

5.5 Conclusion

The present study explored the employment of a gamified learning approach in teaching ESL speaking lessons using reflective teaching journals as a framework, pre- and post-speaking tests and an observation checklist to investigate its effects on young ESL learners' learning engagement and speaking performance. The findings indicated that the gamified learning approach possesses the opportunity to enhance pupils' learning engagement and performance as it offers a fun, safe, meaningful and non-threatening learning environment. The use of reflective teaching journals also contributed to these findings as the teacher was continuously improving the gamified learning materials to better improve pupils' learning outcomes. Despite it being successful in achieving positive results in the present study, the result cannot be generated for all young ESL learners. More studies involving larger sample sizes, different research designs and different aspects of English language skills should be conducted to explore the potential of a gamified learning approach in ESL classrooms, especially in Malaysia.

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