

Game-Based Learning Platform and its Effects on Present Tense Mastery: Evidence from an ESL Classroom

Mohd Iskandar Idris, Nur Ehsan Mohd Said and Kim Hua Tan

Universiti Kebangsaan Malaysia (UKM)

Bangi, 43600 Selangor, Malaysia

<https://orcid.org/0000-0001-6445-2725>

<https://orcid.org/0000-0002-2891-327X>

<https://orcid.org/0000-0003-3787-5006>

Abstract. In the 21st century, gamified learning is found to be essential for educators to assist students in achieving mastery of English grammar because the English language proficiency of Asian students, including Malaysians, remains at an unacceptable level. However, the literature on the effects of gamification on the learning of English tenses is somewhat limited. To address this issue, this study aims to examine the effectiveness of *Kahoot!*, a game-based learning platform, in reinforcing simple present tense verb learning amongst young English-as-a-second-language (ESL) learners. A total of 31 Year 3 students (aged 9) at a national primary school in the central region of Peninsular Malaysia were involved in the study. A one-group pre-test post-test research design was employed with an intervention programme that spanned four weeks. Results analysed using paired sample t-test revealed that the performance of pupils in the post-test improved significantly ($M = 5.61$, $SD = 2.04$) with the application of *Kahoot!* as compared with that in the pre-test ($M = 3.35$, $SD = 1.89$). Discussion of the main findings revealed that gamification, through its captivating features, was responsible for lowering the learners' affective filter during grammar lessons and subsequently increasing their learning motivation. The implications of the findings suggest that *Kahoot!* is a relevant teaching tool for the current generation of learners and educators may explore the possibilities which *Kahoot!* has to offer with other grammatical components.

Keywords: gamification; grammar; *Kahoot!*; present tense; ESL

1. Introduction

The use of technology has been improving and increasing tremendously in the Fourth Industrial Revolution to the extent of penetrating the educational field. In Malaysia, the Education Ministry has proposed a 21st-century learning approach

to accomplish the main objective of the National Philosophy of Malaysian Education, which is to produce a holistic individual through education (Ministry of Education Malaysia, 2013). Students in Malaysia are exposed to approximately 11 years to 13 years of formal English language education before furthering their studies at the tertiary level. Nevertheless, a study conducted by Singh et al. (2017) has indicated that most students still have problems with mastering English grammar. Nearly 30% of the grammatical errors made by diploma students in Malaysia involve the use of verb tenses, including present tense verbs. In reality, students have been taught grammar since primary school, yet they still struggle to form grammatical sentences (Darus & Kaladevi, 2009) Stapa & Izahar, 2010) which are partly due to limited vocabulary in the language (Misbah et al., 2017; Ang & Tan, 2018). Thus, this issue must be addressed immediately.

In parallel with the existing trends in the Malaysian curriculum, the incorporation of information and communications technology (ICT) in schools is valuable. Learners are driven towards the relaxing atmosphere of learning with the inclusion of ICT in teaching and learning (Azmi, 2017). Yunus (2018) claims that educators are 'forced' to change their pedagogical practices in consideration of ever-changing technology. The concept of gamification, which was introduced by Pelling (2002), has accordingly resulted in the invention of interactive applications, namely, *Kahoot!*, Socrative, Quizzes, Quizlet and Plickers. Kapp (2012) defines gamification as the application of game-based mechanics, aesthetics and game thinking for the purpose of captivating people which will, in turn, motivate their action, promote active learning, and eventually solve problems. It is also the process of transforming typical academic components into gaming themes.

Researchers in different parts of the world report that gamification has shown positive outcomes in aiding the motivation, engagement and enjoyment of learners in learning for the past decades (Cheong et al., 2013; Denny, 2013; Dong et al., 2012; Li et al., 2012, Tan & Tan 2020). Despite the extensive literature on the use of *Kahoot!* to enhance English grammar learning, limited Malaysian studies can be found that discuss how *Kahoot!* influences present tense verb learning, especially amongst young English-as-a-second-language (ESL) learners. Most of the studies were conducted abroad in either high school or tertiary-level students. Thus, such research must be carried out with local research participants.

Present tense verb learning is relatively difficult to be mastered by young ESL learners because one may be confused as to when to add 's' to verbs, mainly when the grammar system of their native language does not require so. This rule is somehow intertwined with plural forms, in which the letter 's'/'es' is needed to be incorporated into nouns. The participants of this study are also found to be facing this issue as indicated by their past performance through grammatical mistakes of such nature in written assignments.

Various educational applications can be utilised by educators to transform tedious and complicated parts of grammar learning into fun and relevant ones for learners, particularly the young ones. The low memory retention of students in learning present tense verbs should be considered. Rote learning, in which students are given the rules of present tense verbs and asked to memorise them, may be adopted. However, in most situations, students tend to be confused with when to add 's'/'es' to verbs. They can hardly differentiate between present tense verbs and plural nouns. Hence, before deciding on the right method and approach to teaching present tense verbs, educators should be aware and comprehend that two types of memory exist, namely, declarative and procedural memory.

Declarative memory refers to the 'learning and storing of facts and events, including arbitrary information' (O'Grady, 2006). This type of memory is often linked to a lexicon or mental dictionary, in which the mind works when the learner can relate to the new knowledge obtained, including its meaning, pronunciation and use. However, the information kept in this memory requires one's conscious awareness upon retrieval. By contrast, procedural memory focuses on the use of a broad range of motor and cognitive skills, particularly the ones involving sequencing (Pinker & Ullman, 2002). This memory type helps the computations and symbol manipulation concerning grammar components, such as syntax, nonlexical semantics, morphology and phonology. This memory runs through unconsciousness. That is, learners may not be aware of and realise what enables them to form or interpret sentences, especially in first language acquisition. Declarative memory is involved in learning the grammar of a second language. Here, educators must ensure that the lesson employed triggers this part of mind in learning present tense verbs. Does the use of *Kahoot!* reinforce the present tense verb learning of young ESL learners? This study aims to examine the effectiveness of using *Kahoot!* in reinforcing present tense verb learning amongst young ESL learners. The findings of this research are expected to assist educators who are in the quest for a practical approach to teaching grammar, mainly present tense verbs. The rest of this article is structured as follows. Firstly, the literature reviews on *Kahoot!*, gamification and present tense are presented. Then, the research methods and procedures used in this study are described. Subsequently, the findings are discussed and summarised. Lastly, implications, limitations and directions for future research are provided.

2. Literature Review

2.1 *Kahoot!* and Previous Studies

Digital games have gained recognition from many educators due to the significant role of technology in language education. For example, *Kahoot!*, which was developed in 2006 at the Norwegian University of Science and Technology, is a popular game-based student response system. It aims to make learning pleasurable and entertaining across all languages and subjects via a free online game-based learning platform. Various digital devices can be used to launch this learning platform. *Kahoot!* is versatile because it can be tailored to accommodate the needs of learners. A good and stable Internet connection is mandatory for this method to work effectively. The gaming experience is

presented by the embedded graphical and audio elements. These features have the potential to promote motivation and learning among learners.

Kahoot! has become a popular online game used by educators as a stimulating platform to check the understanding of learners and enhance their participation in learning. It adopts gamification as a means to involve learners actively and motivate them eventually. Gamified learning, such as *Kahoot!*, facilitates the achievement of learners concerning the pre-test and post-test conducted (Bullard & Anderson, 2014; Wichadee & Pattanapichet, 2018). Learners show improved performance after the interventions due to their engagement in the games (Poondej & Lerdpornkulrat, 2016). Learning through a fun environment enhances the retention of the lesson learnt. These studies have revealed the effectiveness of using online language games in improving the grammar skills of learners. In another perspective of grammar learning, the outcomes from a survey conducted by Zarzycka-Piskorz (2016) have revealed that 70% of the participants feel motivated and inspired to learn grammar after having a session with *Kahoot!*. Here, *Kahoot!* has a high potential to elevate the enthusiasm and motivation of students to learn. *Kahoot!* has benefited learners of all ages since its first debut.

Students must register at <https://kahoot.it>. A unique game PIN number is given. Then, they have to key in the username of their choice (anonymous feature). The activities on *Kahoot!* are real-time, and quizzes are presented on a screen using an overhead projector. Students can monitor their progress or scores right after the game. The total score for each question is 1,000 points. The ratings they receive are based on how fast they answer the right item (Byrne, 2013). The overall number of scores gained by each player is displayed on the screen at the end of the quiz.

2.2 Gamification

The notion of computer technologies has enabled other principles, such as gamification, to emerge. According to Deterding et al. (2011), gamification or gamified learning has been defined as the use of game design elements in nongame settings to increase motivation and attention on a task. It also refers to the integration of game elements in nongame ones to solve the task at hand effectively (Khaleel et al. 2016). The difference between teaching through a gamified pedagogical method and instruction via the use of authentic games, which has been found to be a practical approach to teaching lessons, such as grammar, must be considered (Tuan & Doan, 2010; Yolageldili & Arikan, 2011). Gamification encourages grammar learning to be entertaining, enjoyable and lasting because the game successfully delivers a meaningful context for communicative grammar practice. Unlike teaching with games, gamified instruction is the incorporation of gaming principles, and this method of teaching and learning is earning popularity in the field of education (Caponeto, Earp & Ott, 2014; Domínguez et al., 2013). Gamification in the language classroom involves the dynamic participation of students, which gradually offers a solid platform for learners to learn grammar effectively and positively in ESL (Leaning, 2015). Students acquire more words and learn the right structures

of English when they are engaged in gamified learning. It promotes a remarkable learning experience where students keep looking forward to learn new words (Rao, 2014). A better version of the English language is offered on online language games, other than engaging students in ESL learning (Mullins & Sabherwal, 2018). Besides, students gain vocabularies in a difference way, whereby they acquire more words based on online games, compared to the chalk and talk method (Castaneda & Cho, 2016). These findings indicate that in assisting grammar learning, gamification has high potential to be adopted. Educators can generate situations which allow unconscious learning to occur through games because the attention of learners is not on the language but on the message itself (Cross, 2000). Learners eventually acquire the language unconsciously, in the same manner, they learnt their first language because they are focusing on the game as an activity. For this study, this element of unconscious learning is appropriately observed. According to Hussein (2015), gamification benefits learners through four key domains. Two out of the four domains are closely related to young learners. Firstly, children perceive this approach as entertaining and fun, thus reducing their affective filter and maintaining consistent engagement. Secondly, gamification permits learners to reflect upon their learning.

Young learners are said to have a short attention span. Within 10 min to 20 min of the lesson, their minds wander off. They lose their interest and motivation when dealing with grammar lessons due to the confusing rules and memorisation. On the contrary, high levels of engagement and motivation can be achieved with the elements of fun and competitiveness embedded in *Kahoot!*. The outcomes from a study conducted by Zarzycka-Piskorz (2016) revealed that 70% of the participants became motivated to learn grammar after learning via *Kahoot!*. The motivation is attributed to four reasons, namely, desire to win, master own knowledge, play with others and determine the purpose of the game, which include revising, checking and consolidating knowledge. Besides, 80% of the respondents believed that this application positively influenced their learning motivation because they were well aware of its purposes, which were to check, consolidate and review their knowledge on the content learnt.

Kahoot! is packed with the elements of gamification, such as leaderboards, points, feedback, performance graphs and social element/community collaboration (Flores, 2015). The 'Leaderboard,' as one of the main elements embedded in *Kahoot!*, shows the rankings of game players based on their accomplishment levels. The leaderboard, points and scores are closely related, and *Kahoot!* has all these features. Learners are granted with points based on their performance (Flores, 2015). A total of 1,000 points are offered for any correct response answered in under 0.05 s. From this feature, extrinsic motivation is evident, particularly when the students attempt to answer the questions by themselves. The integration of technical elements, such as music, graphics and colours, also helps retain the acceptance of *Kahoot!* amongst the users.

Kahoot! also encourages learners to compete to be placed amongst the high ranks, therefore making the learning experience fun and meaningful to them, especially amongst nine-year-old children. This learning platform is convenient for educators because it allows them to evaluate the progress of their pupils formatively. It enables future intervention to be made because the data can be made available right away. It also allows learners to continue trying to place themselves on board with the lessons without feeling scared of making themselves seem stupid. This condition is supported by the feature which only displays the top three scorers in the final leaderboard. As a result, those who do not perform well need not reveal their performance to others. These learners can learn at their own speed without incurring any negative feelings. This situation eventually contributes to meaningful learning.

2.3 Present Tense Verbs

Numerous scholars have defined and described the use and form of the simple present tense. The simple present tense, also known as the present simple, is considered the significant tense used in English to talk about things in general (Murphy, 1998). It is not merely about the present. It is also used to express that something happens repeatedly, all the time or in general. It is not about whether an action is happening at the time of speaking. For instance, 'Aminah goes to school by bus' and 'The doctors treat patients in the hospital'.

On the contrary, to Murthy (2003), present-tense verbs are used to demonstrate that action occurs at present. This definition is reflected in the sentence 'She speaks Arabic very well'. Similarly, Swan (2000) has indicated that such verbs are used for permanent situations or actions that happen regularly or all the time (not now). An example is 'My mother goes to the market about twice a week.' In a different view, Azar (2006) has claimed that the simple present expresses events or situations that usually happen, always, sometimes and habitually; they happen now, have happened previously and perhaps will happen again.

The abovementioned definitions imply that the simple present tense refers to events or actions which are always executed by a subject. It does not entail impermanent time. It is meant to be used wherever and whenever. Few past studies have been conducted on students' mistakes or errors in using the simple present tense.

The omission, misformation, misordering and addition errors are the types of mistakes that students tend to commit in using the simple present tense. Amongst all of the mistakes, misformation is the most common error made by students (Siswoyo, 2016). In another similar study, omission errors have been found as the frequent errors made by students (Masruddin, 2019). From these studies, students are still struggling with present tense verb learning. Thus, educators must find ways and methods to overcome this situation.

3. Methodology

This research employed a pre-experimental method (one-group pre-test-post-test design). The data were collected exclusively from a comparison of pre-test and post-test data. The study was conducted in a primary school in Puchong, Selangor, where the main researcher is teaching. Convenient sampling was considered based on the information of researchers on the population of interest, the availability the sample and the objectives of the study. It involved manipulating an independent variable without random assignment of conditions or condition orders to participants.

The sample of this study consisted of 31 Year 3 pupils (male n=14; female n=17) without any control group. All of them are nine years of age studying in the same class. The total number of the participants was acceptable as a sample size of 15 students is considered acceptable when implementing classroom research (Dörnyei, 2007). The data were analysed quantitatively because the purpose of this research was to measure the effect of *Kahoot!* on present tense verb learning. The pre-test was administered at the beginning of the study. The final score in the post-test would indicate the learning progress. It was used as the benchmark to ascertain the effect of *Kahoot!* on the present tense verb learning of Year 3 pupils. The present tense verb test was the only instrument used for this research and was given before and after the application of *Kahoot!*.

As a means to measure the internal consistency of the item, reliability analysis was adhered using the IBM SPSS Statistics Version 23 software platform. The split-half reliability test was used to measure the internal consistency. It is commonly used for multiple-choice tests. The reliability of the instrument is almost acceptable with a reading of 0.774 based on the standard rule of thumb for interpreting split-half readings.

The intervention length was four weeks, which was equivalent to 12 contact hours. A prominent psychologist, Hermann Ebbinghaus (1885), concluded that students forgot approximately 56% of what they learnt within one hour, 66% forgot within one day, and 75% forgot within six days. Thus, he created 'the forgetting curve'. Current researchers still refer to this measure of how much people forget. From this finding, students would have forgotten nearly all of the pre-test questions and answers to replicate the same responses in the post-test taken after four weeks (28 days). Here, the intervention length was sufficient because the students would not have an opportunity to memorise or try to remember the exact questions and answers in the pre-test. Any outcomes made between the two tests are likely due to the influence of the intervention programme.

3.1 Research Procedure

The research flow is shown in Table 1.

Table 1: Research flow

	PRE-TEST ON PRESENT TENSE VERBS	KAHOOT! SESSION	POST-TEST ON PRESENT TENSE VERBS
RESPONDENTS	X	Y	Z

3.2 Pre-Intervention

The researcher firstly selected the targeted verbs. Thirty common verbs were chosen based on their standard frequencies in English language learning, as stated in the Year 3 syllabus. They were then transferred into *Kahoot!*. An appropriate image was inserted for each question to assist learning. The researcher felt that exposing the nine-year-old pupils to more than 30 verbs may lead to confusion and fatigue. Therefore, 30 common verbs, as shown in Table 2, were selected to support the research aim and examine the effectiveness of using *Kahoot!* in reinforcing present tense verb learning amongst the young ESL learners.

Table 2: Targeted verbs

Ask	Call	Come	Do	Feel	Get
Give	Go	Help	Like	Live	Make
Play	Put	Run	See	Take	Talk
Tell	Think	Use	Want	Work	Wake
Eat	Sleep	Cycle	Jump	Drink	Learn

At the initial stage, the pupils were administered with the pre-test, consisting of 10 multiple-choice questions. The researcher believed that the number of items was sufficient due to the age and their level of English proficiency of the pupils. The duration of the pre-test session was 30 min (equivalent to 1 period of English lesson). The researcher was present to monitor the course closely and to ensure that no one had a chance to copy from another classmate. The pupils were not informed about the purpose of the test. Before the test, the researcher gave them a short briefing by instructing them to read each question carefully, underline the correct answer and write the answer in the blank.

3.3 Intervention

After the pre-test, the pupils had the first lesson about the rules of present tense verbs and the introduction of all the targeted verbs. For future reference, they were instructed to write down the wordlist in their exercise book. The pupils were then familiarised to *Kahoot!*. The researcher also inserted a YouTube video about present tense verbs to enhance learning and to attract the attention of the learners. The quiz on present tense verbs was launched, and the pupils were instructed to answer it in pairs and individually, as illustrated in Figure 1 and 2.

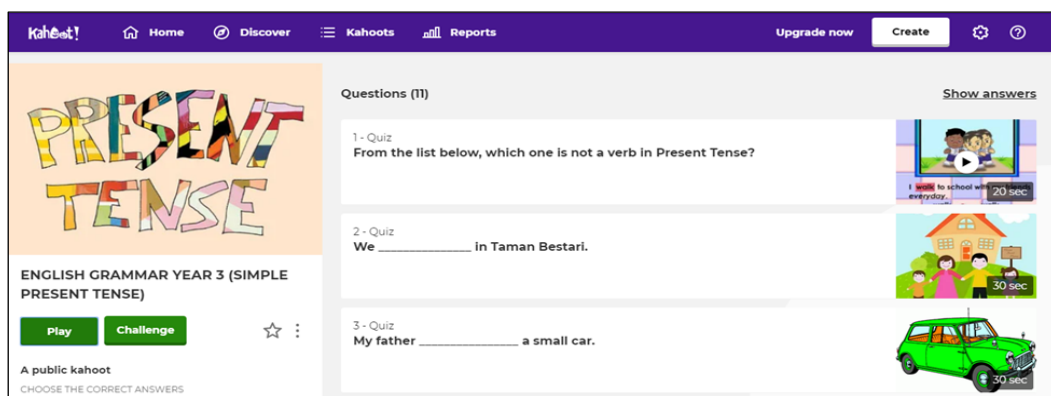


Figure 1: Kahoot! Interface

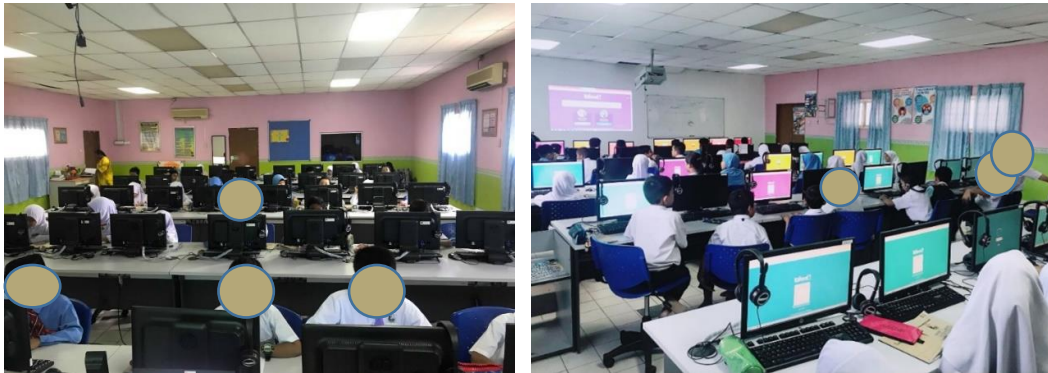


Figure 2: Kahoot! Session

3.4 Post-Intervention

The same questions were distributed in the post-test for the participants to answer on the final day of the experiment. The duration of the post-test session was 30 min (equivalent to 1 period of English lesson). The researcher was present to monitor the course closely to ensure that no one had a chance to copy from another pupil. Before the test, the researcher gave the pupils a short briefing by instructing them to read each question carefully, underline the correct answer and write the answer in the blank. The pupils were not informed about the purpose of the test.

3.5 Data Analysis

The researcher marked all scripts. The marks scored by the respondents in the pre-test and the post-test were tabulated. Next, a statistical analysis was executed by recording the scores of the participants' in both tests on the statistical software, IBM SPSS Statistics Version 23. The paired sample t-test was used to describe the difference in the mean before and after the use of *Kahoot!*. The result from the data was crucial in verifying the effectiveness of *Kahoot!* in reinforcing the respondents' learning and understanding of English present tense verbs.

4. Findings and Discussions

Ten multiple-choice questions were included in both tests, as mentioned in the earlier section. The percentage was calculated for both tests to determine any differences before moving on to the statistical analysis. The researcher must identify any improvement in post-test scores in comparison with the pre-test scores.

4.1 Research Question: Does the use of *Kahoot!* reinforce the present tense verb learning of young ESL learners?

The data revealed that the value of sig (p) paired sample t-test was 0.000, which was less than 0.05. Therefore, the null hypothesis (H₀) was rejected. That is, their scores increased after the treatment of *Kahoot!*. Besides, 22 respondents or 64.5% managed to obtain at least five correct answers out of the ten questions in the post-test compared with only 7 or 22.6% in the pre-test. This finding is shown in Figure 3.

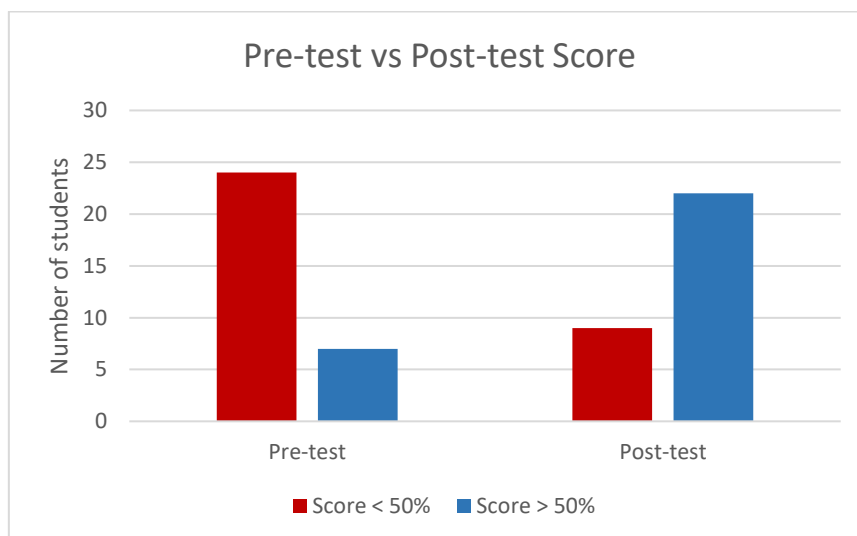


Figure 3: Comparison of result

The results of the pre-test and the post-test were keyed into SPSS Statistics Version 23 to determine the mean, standard deviation, t- and significant values for supporting the data. The outcomes for the abovementioned statistics are shown in Table 3.

Table 3: Comparison of pre-test and post-test results

	N	Mean	Std. Dev	t-value	Sig.
Pre-test score	31	3.35	1.889	-5.550	.000
Post-test score	31	5.61	2.044		

A significant difference was observed between the scores of the pupils' before and after the learning session via *Kahoot!* with $(t)_{30} = -5.550$, $p < 0.05$. A substantial change in the mean scores between the pre-test (mean = 3.35, s.d = 1.889) and the post-test (mean = 5.61, s.d = 2.044) was also found ($t = -5.550$, $p = .000$). The result from this table revealed a difference in terms of the means for the post-test. These statistics ascertained that the pupils' performance was improving over the treatment of *Kahoot!*. The value of sig (p) paired sample t-test was 0.000, which was less than 0.05. The effect size using Cohen's d was large, that is, Cohen's $d = (5.61 - 3.35) / 1.968027 = 1.148$. Based on the results of the t-test and Cohen's d, the null hypothesis (H_0) was rejected. The statistical analysis indicated a significant difference in terms of the performance of the pupils after the use of *Kahoot!* in learning present tense verbs. The respondents were able to reinforce their learning via *Kahoot!*. The results confirmed that *Kahoot!* reinforced the present tense verb learning of young ESL learners.

The features embedded and the relevance of the application to young learners could be related to the effectiveness of *Kahoot!* in reinforcing the respondents' learning of present tense verbs; *Kahoot!* features the elements of gamification,

such as leaderboards, points, feedback, performance graphs and social elements/community collaboration (Flores 2015). Bullard and Anderson (2014) and Wichadee and Pattanapichet (2018) further stated that gamified learning, such as *Kahoot!*, manages to improve the achievement of learners concerning the pre-test and post-test carried out. Besides, Zarzycka-Piskorz (2016) determined that *Kahoot!* could motivate learners to learn grammar. Concerning to the study by Rao (2014), he states that the effectiveness of using games to improve learners' achievement, lies in the engagement of learners towards learning and playing at the same time. Online language games are valuable to the 21st-century learning as students are able to improve their grammar in ESL with the assistance of the online language games (Mullins & Sabberwal, 2018; Leaning, 2015). Moreover, it can be said that students love something different in their typical classroom setting. Their learning motivation will increase too (Castaneda & Cho, 2016). This study also verified the statement made by Hussein (2015). He stated that this accomplishment might also be driven by the lowered affective filter triggered by the notion of gamification because learning grammar is somehow distressing to most second language learners.

5. Conclusion

In the context of the present study, *Kahoot!* has been indicated to have a positive effect on grammar learning, in which a significant difference exists between the scores of the pupils before and after the learning session on the present tense, leading to the discussion of several implications. The findings suggest that gamification can enhance the teaching and learning experience and is thus, a suitable tool for ESL lessons. It provides thought-provoking ideas into the effectiveness of using *Kahoot!* in teaching grammar for young learners. Although the findings cannot be generalised to the entire population, they offer an exciting insight into the effectiveness of using *Kahoot!* in teaching grammar. Based on the findings, the following recommendations are offered for future research. This study serves as a starting point for subsequent research on different grammatical items, particularly for young learners at the age of 7 or 8 with large sample size. However, future studies may consider including a control group whenever possible to reduce external threats and to strengthen the research design. The study has also discussed infrastructure readiness as a main concern. A secure and stable Internet connection is crucial to execute the lesson successfully. Every school, either in rural or urban areas, should be well-equipped with a computer laboratory/room to meet the demands of 21st-century learning. *Kahoot!* maybe an inappropriate online learning platform for schools in rural areas due to poor Internet connectivity and the lack of information and technology infrastructure. Educators may further explore the possibilities which *Kahoot!* has to offer to deal with 21st-century learners, but they should carefully develop the content of the lessons in terms of the degree of difficulty and the nature of their students when considering this method. While such recommendations are made, interested parties must be aware that educators, learners and governments play a significant role in generating conducive, contemporary and relevant learning environments suited for the current generation.

6. Acknowledgements

We would like to express our gratitude to the administrators of SK Puchong for allowing us to carry out the study, the Sponsorship Division, Ministry of Education Malaysia for the scholarships awarded. Much thanks are also due to the Ministry of Higher Education Malaysia Grant FRGS/1/2018/SS09/UKM/02/1.

7. References

- Ang, L. H., & Tan, K. H. (2018). Specificity in English for Academic Purposes (EAP): A Corpus Analysis of Lexical Bundles in Academic Writing. *3L The Southeast Asian Journal of English Language Studies*, 24(2), 82-94. <https://doi.org/10.17576/3L-2018-2402-07>
- Azar, B. S. (2006). *Understanding and Using English Grammar*. Pearson Longman.
- Azmi, N. (2017). The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges. *Journal of Educational and Social Research*, 7(1), 111-118. <https://doi.org/10.5901/jesr.2017.v7n1p111>
- Bullard, S. B., & Anderson, N. (2014). "I'll Take Commas for \$200: An Instructional Intervention Using Games to Help Students Master Grammar Skills." *Journalism & Mass Communication Educator*, 69(1), 5-16. <https://doi.org/10.1177/1077695813518778>
- Byrne, R. (2013, November 4). *Kahoot - Create Quizzes and Surveys Your Students Can Answer on Any Device*. Free Technology for Teachers. Retrieved from <http://www.freetech4teachers.com/2013/11/kahoot-create-quizzes-and-surveys-your.html#.VLnc78buzuU>
- Caponetto, I., Earp, J., & Ott, M. (2014). Gamification and Education: A Literature Review. In *Proceedings of the 8th European Conference on Games Based Learning (ECGBL)* (pp. 50-57). Berlin: Academic Conferences and Publishing International.
- Castaneda, D. A., & Cho, M. H. (2016). Use of a game-like application on a mobile device to improve accuracy in conjugating Spanish verbs. *Computer Assisted Language Learning*, 29(7).
- Cheong, C., Cheong, F., & Filippou, J. (2013, June). Quick Quiz: A Gamified Approach for Enhancing Learning. In *PACIS* (p. 206).
- Cross, D. (2000). *A Practical Handbook of Language Teaching*. Longman.
- Darus, S., & Subramaniam, K. (2009). Error Analysis of the Written English Essays of Secondary School Students in Malaysia: A Case Study. *European Journal of Social Sciences*, 8(3), 483-495.
- Denny, P. (2013, April). The effect of virtual achievements on student engagement. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 763-772). Paris, France.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). In *the Proceedings of the CHI '11: CHI Conference on Human Factors in Computing Systems*, Association for Computing Machinery. Vancouver BC, Canada.
- Dong, T., Dontcheva, M., Joseph, D., Karahalios, K., Newman, M., & Ackerman, M. (2012, May). Discovery-based games for learning software. In *the Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 2083-2086). Texas, USA.
- Dörnyei, Z. (2007) *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford University Press.

- Ebbinghaus, H. (1885). *About memory: studies on experimental psychology*. Duncker & Humblot.
- Flores, J. F. F. (2015). Using Gamification to Enhance Second Language Learning. *Digital Education Review*, 27(21), 32-54.
- Hussein, B. (2015). A Blended Learning Approach to Teaching Project Management: A Model for Active Participation and Involvement: Insights from Norway. *Education Sciences*, 5(2), 104-125. <https://doi.org/10.3390/educsci5020104>
- Kapp, K. M. (2012). *The gamification of learning and instruction: game-based methods and strategies for training and education*. John Wiley & Sons.
- Khaleel, F. S., Ashaari, N. S., Meriam, T. S., Wook, T., & Ismail, A. (2016). The Architecture of Dynamic Gamification Elements Based Learning Content. *Journal of Convergence Information Technology (JCIT)*, 11(3), 164-177.
- Leaning, M. (2015). A Study of the Use of Games and Gamification to Enhance Student Engagement, Experience and Achievement on a Theory-Based Course of an Undergraduate Media Degree. *Journal of Media Practice*, 16(2), 1-16.
- Li, W., Grossman, T., & Fitzmaurice, G. (2012, October). GamiCAD: a gamified tutorial system for first time autocad users. *In the Proceedings of the 25th annual ACM symposium on User interface software and technology* (pp. 103-112). United States.
- Masruddin, M. (2019). Omission: Common Simple Present Tense Errors in Students' Writing of Descriptive Text. *Ethical Lingua: Journal of Language Teaching and Literature*, 6(1), 30-39.
- Ministry of Education Malaysia. (2013). *Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education)*. Kementerian Pendidikan Malaysia.
- Misbah, N. H., Mohamad, M., Yunus, M. M., & Ya'acob, A. (2017). Identifying the Factors Contributing to Students' Difficulties in the English Language Learning. *Creative Education*, 8(13), 1999-2008.
- Mullins, J. K., & Sabherwal, R. (2018). Beyond Enjoyment: A Cognitive-Emotional Perspective of Gamification. *In the Proceedings of the 51st Hawaii International Conference on System Science*. Waikoloa Village, Hawaii: USA.
- Murphy, R. (1998). *Essential Grammar in Use*. Cambridge University Press.
- Murthy, D. J. (2003). *Contemporary English Grammar*. Shivam Printers.
- O'Grady, W. (2006). The Problem of Verbal Inflection in Second Language Acquisition. *In the Proceedings of the 11th Conference of Pan-Pacific Association of Applied Linguistics*. Pacific Association of Applied Linguistics 2003. Kangwon National University, Korea, July 27-29, 2006.
- Pinker, S., & Ullman, M. T. (2002). The past and future of the past tense. *Trends in Cognitive Sciences*, 6(11), 456-463. [https://doi.org/10.1016/s1364-6613\(02\)01990-3](https://doi.org/10.1016/s1364-6613(02)01990-3)
- Poondej, C., & Lerdpornkulrat, T. (2016). The development of gamified learning activities to increase student engagement in learning. *Australian Educational Computing*, 31(2), 1-16.
- Rao, R. K. (2014). Enhancing Student's Grammar by using Games: A Practical Classroom Experience. *International Journal of Academic Research*, 1(3).
- Singh, C. K. S., Jageer Singh, A. K., Abd Razak, N. Q., & Ravinthar, T. (2017). Grammar Errors Made by ESL Tertiary Students in Writing. *English Language Teaching*, 10(5), 16. <https://doi.org/10.5539/elt.v10n5p16>
- Siswoyo. (2016). Students' Error in Using Simple Present Tense Mastery. *English Education: Jurnal Tadris Bahasa Inggris*, 9(2), 461-479.
- Swan, M. (2000). *Practical English Usage*. Oxford University Press.
- Stapa, S. H., & Izahar, M. M. (2010). Analysis of errors in subject-verb agreement among Malaysian ESL learners. *3L: The Southeast Asian Journal of English Language*

- Studies*, 16(1), 1-18.
- Tan, P. Q., & Tan, K. H. (2020). In-Game Instructions: The Extent of Their Usefulness in Enhancing the Vocabulary Acquisition of ESL Learners. *International Journal of Emerging Technologies in Learning*, 14(4).
- Tuan, L., & Doan, N. (2010). Teaching English grammar through games. *Studies in Literature and Language*, 1(7), 61-75.
- Wichadee, S., & Pattanapichet, F. (2018). Enhancement of Performance and Motivation Through Application of Digital Games in an English Language Class. *Teaching English with Technology*, 18(1), 77-92.
- Yolageldili, G., & Arikan, A. (2011). Effectiveness of Using Games in Teaching Grammar to Young Learners. *Elementary Education Online*, 10(1), 219-229.
- Yunus, M. M. (2018). Innovation in Education and Language Learning in 21st Century. *Journal of Sustainable Development Education and Research*, 2(1), 33-34.
- Zarzycka-Piskorz, E. (2016). Kahoot It or Not? Can Games be Motivating in Learning Grammar? *Teaching English with Technology*, 16(3), 17-36.