

# Pre-Service Teachers' Views on the Implementation of Game-Based Learning for Academic Writing Skills

## *Pandangan Guru Pra-Perkhidmatan ESL terhadap Pelaksanaan Pembelajaran berasaskan Permainan (Game-Based Learning) untuk Kemahiran Penulisan Akademik*

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**Abstract:** Implementation of game-based learning has been perceived by educators as a mean to enhance the effectiveness classroom learning. Aspects in games have been identified to motivate learners to actively engage throughout the learning as it provides a fun, engaging and rewarding experience for the learners. Despite of the widespread of games implementation in classroom learning, limited exposure has been noted in the context of language learning particularly in ESL classroom. In regard to the aforementioned situation, the current study aims to discover the implementation of game-based learning in the context of language learning. Research related to writing skills found to be limited in nature; therefore, the current study has discovered a need to further investigate the implementation of game-based learning in writing classroom. In this study, a total of 32 pre-service teachers have participated in a survey conducted to discover their views on the implementation of games in a writing classroom. Data were analysed quantitatively using Statistical Package for Social Sciences (SPSS) by evaluating the mean value of the findings. The analysis from the data obtained showed that these students responded positively to the use of games in writing classroom. The students also believed that engagement among peers in the classroom appeared to be less threatening; therefore, knowledge transfer became naturally favourable throughout the pedagogical process. These results implied a useful insight for writing instructors to further equip language learners with the use of games in classroom learning.

**Kata kunci:** academic writing, English as a Second Language (ESL), Game-based learning, research writing, university students

**Abstrak:** Pelaksanaan pembelajaran berasaskan permainan telah diterima oleh pendidik sebagai kaedah untuk meningkatkan keberkesanan pembelajaran di bilik darjah. Aspek-aspek yang dipamerkan dalam permainan telah dikenal pasti memotivasikan pelajar untuk melibatkan diri secara aktif sepanjang pembelajaran kerana ia memberikan pengalaman yang menyeronokkan, menarik dan bermanfaat bagi para pelajar. Walaupun terdapat banyak pelaksanaan permainan dalam pembelajaran di kelas, masih terdapat pendedahan dalam konteks pembelajaran bahasa terutamanya dalam pembelajaran Bahasa Inggeris sebagai Bahasa kedua. Oleh itu, kajian ini

*bertujuan untuk meninjau pandangan para pelajar terhadap pelaksanaan pembelajaran berasaskan permainan dalam konteks pembelajaran bahasa. Penyelidikan yang berkaitan dengan kemahiran menulis didapati terhad. Oleh itu, terdapat keperluan untuk menyelidik pelaksanaan pembelajaran berasaskan permainan di kelas penulisan dengan lebih mendalam. Dalam kajian ini, sejumlah 32 guru pra-perkhidmatan telah terlibat dalam kajian yang dilakukan untuk mengetahui pandangan mereka terhadap pelaksanaan permainan di kelas penulisan. Data yang dikutip telah dianalisis secara kuantitatif menggunakan Statistical Package for Social Science (SPSS) dengan meneliti nilai min dapatan tersebut. Analisis dari data yang diperolehi menunjukkan bahawa pelajar-pelajar ini memberi reaksi positif terhadap penggunaan permainan di kelas menulis. Pelajar juga percaya bahawa penglibatan rakan sebaya di dalam kelas lebih mudah diterima dan pemindahan pengetahuan menjadi lebih semula jadi sepanjang proses pedagogi. Hasil kajian ini memberi impak yang berguna kepada para mengajar yang mengajar kemahiran penulisan untuk menyediakan lebih banyak aktiviti yang berasaskan permainan kepada para pelajar.*

**Keywords:** *penulisan akademik, Bahasa Inggeris sebagai Bahasa Kedua, pembelajaran berasaskan permainan, penulisan penyelidikan, pelajar universiti*

## Introduction

A new shift in industrial revolution has embarked a paradigm in the Fourth Industrial Revolution (4<sup>th</sup> IR). The growth of new technologies has provided a vast number of innovation and improvement in economy, society and individual lives (Hussin, 2018). One of the most prominent shifts from the rise of 4<sup>th</sup> IR is the initiation of the Term Education 4.0. It refers to the growth of education sector in providing better education, skills and jobs by 2030. Since the global COVID-19 outbreak in 2020, the urgency to provide better education for students started to grow even higher (Kaharuddin, 2020). More actions are required to fulfil the demand of new mechanisms for teaching and learning in a new ecosystem in a midst of a pandemic.

While the whole world is adapting to the new norms, the term Education 4.0 started to become the most discussed topic among researchers due to its adaptability and relevance for teaching and learning improvement in a pandemic. The adaptability of online learning started to grow, and the dissemination of information becomes more and more viable through online platform. Both instructors and learners started to adjust to the new shift in education throughout the pandemic (Kaharuddin, 2020). In the context of online classroom learning, the most significant issue that rises

among learners is the ability to maintain their motivation and concentration in an online distance learning. Therefore, the main challenges lie on the instructors to ensure that the learners remained focus throughout the session.

The current situation calls for an immediate action for instructors to provide learners with appropriate approach for the lesson. In response to the current situation, the term game-based learning education is slowly arising and becoming one of the most interesting fields to be discovered. Game-based learning approach is a newly designed approach that aims to cater students' learning needs in a fun and engaging manner especially in an online platform. The implementation of games in learning is believed to spark learners' interests to learn in a lesson. Researchers have also previously noted the need for future discovery on the use of games in teaching and learning process (Da Rocha Seixas, Gomes, and De Melo Filho 2016). Implementation of games in classroom teaching also becomes an important aspect to be emphasized. This is because, the use of games may widen up more opportunities for the students to engage throughout the teaching and learning process. It is also notable that a shift of teaching techniques may significantly improve overall learning process. Thus, to further discover the implementation of game-based learning in language classroom, researchers in the

current study conducted a discovery on pre-service teachers' insights on their views of the implementation of game-based learning in an academic writing course. In this paper, the researchers presented an overview of English language learning and skills acquisition among ESL students particularly in productive skills (e.g.: writing and speaking).

## Literature Review

In English as second language (ESL) learning, the ultimate goal for all language learners is to master all four main skills namely listening, speaking, reading and writing. The ability to possess the aforementioned skills reflects the success of language learning. A successful language learner should be able to master all receptive and productive skills for an effective communication in using the language. Language learners, in general, have a tendency to perform well in receptive skills but unable to produce the outputs through their productive skills such as speaking and writing (Rose et. al., 2018). A successful language learner must be able to speak and write effectively in the target language. Therefore, the two skills are regarded as the most difficult skills to be mastered by all language learners. Writing skills require complex skills to be mastered by the students such as critical thinking, language use, structuring, and argumentating (Elander et. al. 2006). Previous researchers also suggested an introduction of guidelines to provide both instructors and learners with sufficient training for writing skills as these skills are considered as a complex physical and cognitive skills that requires extensive training and practice (Kellogg & Raulerson, 2007). Due to the complexity of writing skills, a number of research have been conducted to suggest multiple approaches and tools for writing skills enhancement among ESL learners. Digitalising writing activities has been noted to spark students' interest to learning writing skills. In a research conducted by Hembrough and Jordan (2020), a "Tablet Initiative" has positively impacted students' digital-literacy proficiency levels by introducing digital writing. The current approach has generally improved their course outcomes as they spent additional time both inside and outside of the classroom in reading course texts; researching their topic; planning, drafting, and revising their work; and conducting peer reviews of one another's essays.

Apart from digitalizing writing skills activities, previous research have noted vast emergence in the use of games in a classroom setting. Liao (2018) asserted

that the integration of game-based learning into the writing environment may be a practical approach that can facilitate student participation, not only helping students learn how to write, but also sustaining their willingness to write. The study, the researchers investigated the effects of the game-based writing environment on improving students' participation, performance, and interest in writing. The aforementioned findings are parallel to a study by Muhridza et. al (2018) to 29 undergraduate students in a university in southern Malaysia. The study suggests that the use of Kahoot! for classroom learning is proven to initiate and foster students' engagement in language learning activities while enhancing their language skills.

In university levels, an academic writing course is a compulsory subject for students in penultimate year or final year in universities. The current teaching method of this course is highly theoretical and formal. The uses of conventional methods commonly used before this has caused students to feel drained and anxious about the process of completing a piece of academic writing, which is one of the requirements for graduation (Alsowat, 2017). Therefore, the method of integration of games in an academic writing classroom was conducted as the alternatives to further equip the students with appropriate knowledge to write academically (Maznun et.al. 2017). A game-based teaching approach is hoped to improve the current pedagogical process of academic writing and eventually enable the students to write effectively particularly in academic writing. A survey research design has been conducted to discover pre-service ESL teachers' insights on the implementation of games in an academic classroom. The findings of this study are crucial for future language instructors to further improve the current pedagogy.

## Methodology

In a research, methodology serves as the main guidelines for any researcher to specifically design the research procedures by selecting appropriate measures to be taken in conducting the research. In the current study, a total of 32 pre-service teachers have participated in a survey conducted to discover their views on the implementation of games in a writing classroom. The participants have undergone a 14-weeks of game-based learning in an academic writing classroom. After 14 weeks, the participants' views on the implementation of game-based learning were surveyed. Data was collected through online survey

platform and the distribution of form was done after the 14-week session ended. Throughout the 14 weeks, the students online games such as Kahoot!, an online game platform was used by the instructor as a teaching and learning tool for the course. Data collected from the online survey form were analysed quantitatively and presented descriptively. The questionnaire that was adapted from Masrom (2006) was used as the main instrument in this research.

In the current study, data were presented according to the constructs in the questionnaire. Analysis of the data includes pre-service teachers' views based on their experience in an academic writing classroom using a game-based learning approach. These constructs include their views on learners' engagement in a game-based learning classroom, effectiveness of online games for learning and attractive features of games used in an academic writing classroom. Analysis of means were presented according to a 5-point Likert scale ranging from "1-Strongly Disagree", "1-Disagree", "3-Neutral", "4-Agree" and "5-Disagree".

This questionnaire used consists of two parts namely Part A and Part B. Part A contains items related to the respondents' background such as gender, age, race, years of exposure to English language. Respondents were required to fill in the information in the space provided. In Part B, students' perceptions on the use of games in writing classroom were discovered. A five-point Likert-scale questionnaire was used to discover their views on the implementation of games in a writing classroom. It focuses on students' perceptions as well as constraints and challenges faced by the students in a game-based classroom for writing skills enhancement.

## Results and Discussion

In the current study, 32 pre-service teachers have participated in a survey conducted to discover their views on the implementation of games in a writing classroom. A survey has been conducted and data were analysed quantitatively and presented descriptively. An adapted questionnaire was used as the main instrument in this research. The current study was conducted to examine pre-service ESL teachers' perceptions on the implementation of game-based learning in an academic writing classroom. Games were integrated in teaching and learning process that was conducted in a writing skills classroom particularly in an academic writing course. In this study, Kahoot!; an online game-based learning platform was integrated as a part of learning

activities for each lesson in this classroom. Results from the analyses will be presented according to the research objective of the study. The researchers aimed to discover pre-service ESL teachers' perceptions on classroom engagement in GBL classroom,

**Table 1:** Pre-Service ESL Teachers' Perceptions on Classroom Engagement in GBL Classroom

Classroom Engagement	
1. <i>Kahoot!</i> allows me to engage more with my friends.	4.21
2. I get to learn collaboratively with my friends through <i>Kahoot!</i>	4.37
3. I enjoy using <i>Kahoot!</i> with my friends	4.11

Table 1 presented the three most highly agreed statements by the respondents on the improvement of classroom engagement among learners in a game-based academic writing course. Analysis of the data revealed that majority of the respondents agreed that the use of Kahoot enabled them to learn collaboratively with their friends (M: 4.37). Implementation of Kahoot is also perceived as a mean for the students to engage more with their friends (M=4.21). Features presented in Kahoot enable them to actively participate throughout the learning process. These features also give them the opportunity to communicate and interact actively before and after the lesson. Competition element provided in Kahoot enables the students to be more proactive and competitive to be on the leaderboard (Chen and Yeh 2019). It is also noted that experience that students had after Kahoot session is highly accepted in and out of the classroom.

**Table 2:** Pre-Service ESL Teachers' Perceptions on Effectiveness of Online Game in GBL Classroom

Effectiveness of Online Game	
1. The use of <i>Kahoot!</i> makes the teaching and learning process more effective than the conventional learning	4.10
2. The use of <i>Kahoot!</i> in the classroom helps me understand the topics better	3.98
3. The use of <i>Kahoot!</i> increases my interest to learn	2.88

Despite of the limitation of exposure to Kahoot as a teaching tool, the implementation of Kahoot for the teaching and learning of academic writing is perceived as an effective approach by the respondents. Respondents in this study presented a relatively high agreement on the statement "The use of *Kahoot* makes teaching and learning process more effective than the

conventional learning” with a high mean value (M=4.10). It is also agreed by the respondents that the use of Kahoot helps them to understand the topics better. Analysis of the data also revealed that despite of the positive engagement among peers, the use of games in classroom learning particularly in academic writing, does not increase the students’ interest to learn. Responses received from the questionnaire distributed revealed that a lower mean value (M=2.88). It could be concluded that inability of game-based learning approach in increasing students’ interest to learn is hindered by the complexity of the writing skills itself (Bal 2019; Elaimat et al. 2020).

**Table 3:** Pre-Service ESL Teachers’ Perceptions Interesting Features in Games

Games Features	
1. <i>Kahoot!</i> activities for group assessment is a fun experience	3.57
2. The use of <i>Kahoot!</i> is more appealing than the conventional teaching and learning process method.	3.32
3. The use of <i>Kahoot!</i> makes teaching and learning process more effective than the conventional method	3.21

Discussion on games features in Kahoot is also asserted by the researchers to further analyse the fun and interesting elements in Kahoot. Analysis from the study is beneficial for that students in providing an insight for the researchers on the aspects of games that could increase students’ quality of learning experience. In general, pre-service teachers in this study agreed that group assessment activities which is Kahoot is a fun experience in the lesson. Analysis of the data revealed a high value of mean (M=3.57) in the statement “*Kahoot!* activities for group assessment is a fun experience”. Figure presented in the statement reflected pre-service agreement that the implementation of Kahoot in classroom learning is a fun experience. Despite of respondents’ agreement of the fun learning experience obtained from Kahoot, it is also worth to note the pre-service teachers’ perception in comparing a game-based learning approach with a conventional method. From the statements “The use of *Kahoot!* is more appealing than the conventional teaching and learning process method.” and “The use of *Kahoot!* makes teaching and learning process more effective than the conventional method”, it is evident that the implementation of game-based learning approach does outperform a conventional teaching method significantly (Tan et al. 2019; Bicen & Kocakoyun 2018). The aforementioned statement is

concluded based on slightly lower mean value of both statements (M=3.32; M=3.21). Responses obtained from pre-service teachers could be influenced by their familiarity with the conventional teaching method.

## Conclusion

After the implementation of game-based learning in academic writing class, the pre-service ESL teachers yielded a positive view on the integration of games as a part of classroom formative assessment in academic writing class. A mean score of 3.93 from the findings showed that the game-based learning approach using Kahoot! can help them become more focused and enable better engagement in academic writing class. It is also noted that the implementation of game-based approach boosts students’ academic motivation to learn this subject in comparison to the previous conventional approach. The results of this study also noted that the integration of games and the implementation game-based approach has further improved their learning motivation and enhanced the teaching and learning process making it more comprehensive. The researchers in the current study also noted that the implementation of games as a part of formative assessment can fully utilize students’ potential and therefore, increase the effectiveness of teaching and learning process. In addition, it is also worth to mention that the use of games in classroom encourages active communication between teachers and students whereby it allows the students to communicate in the least threatening manner (Latif & Zulkifli, 2020; Li & Zhu 2013). In conclusion, the use of games in academic writing classroom should be further implemented in the future as a complementary for the current assessment.

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