

Use of Digital Game-Based Learning, Kahoot to Improve Students English Expressions Mastery

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Article Info

Article History

Received : 11 March 2023

Publish: 14 March 2023

Keywords:

Digitalgame-based learning, English expressions, Kahoot!

Abstract

The results of the on-the-ground research revealed that undergraduate students of PGPAUD UPBJJ UT Semarang enrolled in Bahasa Inggris course (PAUD4105) had problems, as evidenced by the course's poor semester test scores, which averaged under 60. Additionally, according to the English tutors, UPBJJ UT Semarang students had significant problems mastering English expressions. They had a very limited understanding of English expressions. As a result, it was necessary to make an effort to overcome this, specifically by establishing relevant, enjoyable, and effective media. This research examined whether game-based learning, Kahoot! could increase students' English expression mastery. The participants in this research were sixth-semester (6) PGPAUD undergraduate research program students at Patebon Pokjar Kendal in the academic year 2019/2020.2. This research was classroom action research with two cycles, a pre-test, and two post-tests. **Planning, acting, observing, and reflecting were the four stages of each cycle.** Descriptive statistics were used in this investigation. According to the research's findings, the mean pre-test score was 45.95, the average post-test score 1 was 73.35, and the average post-test score 2 was 85.59. In other words, the average score increased by 27.40 points from the pre-test to post-test 1 (from 45.95 to 73.35). Additionally, there was an increase of 12.24 points in the average score from post-test 1 to post-test 2 (from 73.35 to 85.59). Therefore, it could be said that S1 PGPAUD UPBJJ UT Semarang students' mastery of English expressions could be improved by using digital game-based learning, Kahoot!

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1. INTRODUCTION

English language proficiency is one of the talents that aspiring millennial teachers must have in order to succeed in the current era of society 5.0. An absolute necessity for achieving this goal is the ability to communicate effectively, with language serving as the primary medium. In the discipline of aphasiology, language has traditionally been seen as a symbolic system with rules that must be understood in order for a speaker to make a coherent speech (Shapiro et al., 1993; Thompson et al., 2003). This is in line with the English Curriculum for early childhood education teachers of Open University which is designed to provide competencies and skills for early childhood education teachers' education students to communicate orally or written using simple English. Here, mastery of English expressions is indispensable for successful communication. Without a good mastery of English expressions, of course, good communication will not be obtained. Therefore, students are expected to be able to master various expressions of English when learning in class by using language functions used in daily conversation. The outcomes of the fieldwork showed that S1 PGPAUD UPBJJ UT Semarang students taking Bahasa Inggris course (PAUD4105) experienced problems, as shown by the course's substandard semester exam scores, which averaged under 60. The UPBJJ UT Semarang students also had major difficulties acquiring English expressions, according to the English tutors. They had only

a very limited vocabulary of English. As a result, an effort had to be made to address this, particularly through developing engaging, effective, and relevant media. The media must also be in accordance with the current development of education, namely education in the era of society 5.0

Talking about education in the era of society 5.0 is certainly related to changes in the learning system in the era. This revolutionary era is closely related to 21st-century skills associated with rapidly developing technological advances. This also brings links to learning systems that refer to increasingly advanced technological concepts. 21st-century skills consist of three main types of skills, namely: (1) life and career skills, (2) learning and innovation skills, and (3) information media and technology skills (Trilling & Fadel, 2009). Surely the skills can be guides in learning in the 5.0 era so that the learning system can be in line with the concept of society 5.0. With what was conceptualized by the Director General of Education and Culture of the Ministry of Education and Culture (2017), skills in the 21st century which is in line with four types of skills, namely: (1) critical thinking and problem-solving skill (2) creating communication skills, (3) creativity and innovation, (4) collaboration. These skills are necessary for an English tutor in order to effectively convey the learning objectives of Bahasa Inggris course.

Additionally, with the advancement of IT, lessons in the classroom that aim to improve students' mastery of English expressions can be made more engaging and enjoyable by utilizing a variety of learning media, including online learning media. Online learning media can use digital game-based learning. The acceptability of digital game-based learning is viewed as a component of the broader acceptance of educational technology. Digital game-based learning could be viewed as the future paradigm in education because it combines serious learning and interactive entertainment (de Freitas & Liarokapis, 2011; Prensky, 2007). Numerous research offers quantifiable proof that digital game-based learning improves learning results (Clark et al., 2016; Fokides, 2020; Girard et al., 2013; Hamari et al., 2016; Hersh & Leporini, 2018; Kaimara et al., 2020).

One of digital game-based learning is the use of Kahoot! A well-liked online multiplayer real-time quiz platform called Kahoot! enables educators and students to anonymously, quickly, and entertainingly assess student learning (Bicen & Kocakoyun, 2017; Cutri et al., 2016). Educators can benefit from certain additional features provided by this gamified platform. It enables educators to assess how well their students (as a whole) comprehend and apply knowledge. It can also be used to reinforce the right responses by awarding points and vocal praise, allowing students to advance to the next learning stage (Cutri et al., 2016). The platforms also provide thorough data regarding a quiz's response time and accuracy. Some quizzing software provides comprehensive data on students' response times and accuracy. This information identifies the subject that the students have not grasped, giving lecturers the opportunity to either correct at the time, reteach and direct students to look at the topics again during individual study, or adjust the way in which information is presented in subsequent courses (Cutri et al., 2016; Dellos, 2015).

The researcher was interested in being able to overcome the problems that aroused in Bahasa Inggris class of UPBJJ UT Semarang because of the level of urgency which later S1 PGPAUD UPBJJ UT Semarang students will provide English language learning to PAUD students while teaching at their schools even though they are not from the English department so they should be able to master English materials well especially English expressions before teaching them to students. English materials for early childhood are contained in full in English Basic Materials Book (PAUD4105). Therefore, the researcher intended to carry out Classroom Action Research in order to understand the students of S1 PGPAUD UPBJJ UT Semarang to be able to master the materials in the book so that their learning outcomes were maximized and the knowledge gained could be taught to their students at school.

Tutors, on the other hand, could have a hard time establishing a class environment that was both fun and not boring. The tutor's use of relevant and enjoyable methods or media is very

important for this reason. In this research, English expressions were taught to students using Kahoot! Digital Game-Based Learning.

2. METHOD

The participants of this research were 21 sixth-semester students at the Early Childhood Education Study Program of Open University in the academic year 2019/2020.2 in Patebon Pokjar Kendal. Apart from being students at Open University, they are classroom teachers at the Early Childhood Education schools in Kendal.

This research was carried out by conducting a Classroom Action Research (CAR) that focused on the common issues or the existing problems in the classroom (Ary et al., 2019; Fraenkel & Wallen, 2012). The researcher found the solution to the problems that came up in the preliminary research in order to make an improvement on students' learning process or teachers' performance (Fraenkel & Wallen, 2012; Hendricks, 2017; McNiff & Whitehead, 2012).

In the research, the researcher and the collaborators conducted 2 (two) CAR cycles as formulated by Kemmis and McTaggart which consists of four steps: planning, acting, observing, and reflecting. The first cycle was done to check whether Kahoot! digital game-based learning can increase the students' English expression mastery and the second cycle is done to confirm or authenticate the data attained in the first cycle.

The data from the students' scores were analyzed by using descriptive statistics. Then, the result was used to determine whether the use of Kahoot! digital game-based learning can increase the students' English expression mastery. In order to support the data, the researcher also conducted a semi-structured interview in which the questions of the interview were pre-prepared (Mills, 2011). The researcher used a triangulation design to present more valid and reliable data since every data will complete one to another (Fraenkel & Wallen, 2012).

3. FINDING AND DISCUSSION

Planning, acting, observing, and reflecting are the four key components that were used in the primary activities of classroom action research. (Ary et al., 2019; Fraenkel & Wallen, 2012; Kemmis & McTaggart, 2000; Mills, 2011). These four components were essentially implemented the same way in cycles one and two. Simply put, in order to improve the outcome of this research, the researcher accompanied the students more in cycle two. This adjustment was based on the observation and interview data from cycle one. The researcher chose to employ Kahoot! digital game-based learning in the planning phase to address several issues that surfaced during the early research. With reference to the English Main Material Book (PAUD4105), the researcher created a tutorial activity design and tutorial activity units. The researcher also created all the teaching resources, including handouts and PPT. The researcher then created quizzes utilizing Kahoot! platform as another teaching tool. *Bahasa Inggris* course covers a wide range of topics. Therefore, it required numerous cycles for students to master all the content. Utilizing Kahoot! was the chosen solution.

In order to confirm that the Kahoot! platform could indeed improve the students' mastery of English expressions, the researcher also conducted interviews with the students regarding how Kahoot! digital game-based learning was used in the classroom activities. The researcher observed the teaching and learning activities with the collaborators, paying particular attention to the effect of using Kahoot! on students' mastery of English expressions, and observed the performance of the students. Reflection is the final stage. The reflection was created using the student's test results in addition to information from an observation and an interview. In the first cycle, the researcher looked for elements that were effective or ineffective and required modification. The data was used as the guideline to make tutorial activity units for the second cycle. On the other hand, the second cycle of reflection was used to assess whether or not Kahoot! could improve the pupils' command of English expression.

Students' English expression mastery increasement

The results of observation in the first and second cycles showed that students' mastery of English expression had improved. Instead than only giving short answers to the questions in Kahoot! students were able to expound. Additionally, the students made an effort to provide justifications, clarifications, supporting details, examples, and other information. It enabled other students to comprehend the information presented in Kahoot! questions. In cycle one, students had trouble answering the questions when there were no visual cues, such as pictures, to provide context. In cycle two, the researcher included hints, such as images, to aid in the participants' understanding of the questions. "The lesson today was excellent. The student's involvement in responding to the questions was remarkable. They were proficient at developing materials from the questions and quick to respond to inquiries on English expressions. The researcher's usage of Kahoot! as a teaching platform for the students was superb. Here, Kahoot! could enable students to participate more actively and learn how to elaborate the English expressions." [Collaborator 1] "It was really trustworthy to utilize Kahoot! Many students took an active role in the classroom, dare to express their thoughts, and genuinely love to study." [Collaborator 2] In addition to the observation data, the student's results on each posttest also demonstrated advances in their mastery of English expressions.

Table 1. Students' scores in pre-test, post-test 1, and post-test 2

	Pre-test	Post-test 1	Post-test 2
Sum	965	1582.50	1797.50
Average	45.95	73.35	85.59
Median	42.50	75.00	82.50
Mode	42.50	75.00	85.00

Based on the table above, we can see that students' scores in cycle one is better than scores in preliminary research and scores in cycle two is better than scores in cycle one. It can be seen that the total score in the pre-test was 965, while the mean score was 45.95 with a median of 42.50 and a mode of 42.50. In post-test 1, the total score was 1582.50 with a mean of 73.35 with a median of 75.00 and a mode of 75.00. Meanwhile, in post-test 2, the total score was 1797.50 with a mean of 85.59 with a median of 82.50 and a mode of 85.00.

Based on the results obtained in each test, it can be seen that there is an increase in the average score from pre-test to post-test 1 of 27.40 points (from 45.95 to 73.35). Furthermore, there was also an increase in the average score from post-test 1 to post-test 2 of 12.24 points (from 73.35 to 85.59). Therefore, the researcher concluded that the use of Kahoot! digital game-based learning can increase the students' English expression mastery. The results of this research are in line with the results of Taylor & Reynolds' research that Kahoot! enhances vocabulary retention while promoting a good learning atmosphere and a fulfilling educational experience (Taylor & Reynolds, 2018). Along with increasing student involvement, it might also aid the tutor in grabbing the attention of those students who were distracted due to the online nature of the study. When Kahoot! was deployed, it was clear that every student had turned on their cameras and appeared to be paying attention. By applying digital game-based learning, students experience a higher degree of engagement with the game (Stubbé et al., 2017). In addition, tutors become very effective in teaching learning materials and students' involvement can be maximized. "The students were delighted with their learning and they were enthusiastic to complete the assignments they got through Kahoot! Implementing Kahoot! made the learning much more understandable. It formed a big influence on the students. They did not only listen to the tutor's explanation but they were also involved in discussions in class. Therefore, the use of Kahoot! digital game-based learning made the students learn more effectively." [Collaborator 1]

Based on interviews with students, the results obtained that most of the students were in agreement that Kahoot! digital game-based learning could aid in improving the students' command of English expression. These students claimed that their previous learning methods were monotonous because they only paid attention to the tutor's explanations. They came to understand the value of learning English expressions after using Kahoot! digital game-based learning.

Numerous studies indicate that game show components, such as graphics, points, and audio, help to create a more effective learning environment (Abidin & Zaman, 2017; Aktekin et al., 2018; Baydas & Cicek, 2019; Lee et al., 2019; Moutinho & Sa, 2018; Susanti, 2017; Taylor & Reynolds, 2018; Turan & Meral, 2018). The students in this research class also have an interest in the subject and comprehend the benefits of digital game-based learning in the classroom. It appears that, at least for the students in the current research, the students' mastery of English expressions through Kahoot! was exceptionally good to reinforce attention, offer an element of enjoyable and healthy competition linked to the knowledge, and highlight topics for additional investigation.

An increased sense of excitement, motivation, and focus can result from the suspension that the game produces (Chaiyo & Nokham, 2017; Cutri et al., 2016; Ismail & Fakri, 2017; Licorish et al., 2018; Tan Ai Lin et al., 2018; Tan & Saucerman, 2017; Wang, 2015; Wang et al., 2016; Wang & Lieberoth, 2016; Wichadee & Pattanapichet, 2018). The implementation of Kahoot! based on digital game-based learning in the learning process of Bahasa Inggris course was well received by students. Additionally, they believed that utilizing this application had increased their motivation to learn. When this happened, students were better equipped to set learning goals, take more initiative to acquire learning resources, feel more confident, and develop their own learning objectives.

Kahoot! digital game-based learning helped boost motivation to participate in English language instruction. Kahoot! could boost students' motivation to learn English, according to all of the students. This inspiration was brought on by the Kahoot! platform's unique ability to pique students' enthusiasm in learning English. For the purpose of preventing boredom during the learning process, Kahoot! offer a unique and entertaining quiz environment. When using Kahoot! to help students learn English, there was a very high level of student participation in comprehending English expressions. Though students occasionally had internet connection issues, they felt at ease and challenged when using Kahoot!

Kahoot! is a significant and interesting media used in the learning process (Warsihna & Ramdani, 2020). The researcher concurs with Warsihna's statement. The results of this research and discussion also show that Kahoot! can be a highly valuable and fascinating learning tool, particularly when discuss English Expressions because it is proven that it can improve the mastery of students' English expressions.

4. CONCLUSION

According to the research's findings, the pre-test had an overall score of 965 and an average score of 45.95. The overall result for post-test 1 was 1582.50, with an average of 73.35. Post-test 2 had an average score of 85.59 and a total score of 1797.50. The findings of each test revealed a rise in the mean score of 1 of 27.40 points from the pre-test to the post-test (from 45.95 to 73.35). Additionally, there was an increase of 12.24 points in the average score from post-test 1 to post-test 2. (from 73.35 to 85.59). Subsequently, it may be said that using Kahoot! The mastery of English Expressions can be improved through digital game-based learning.

A number of recommendations addressing the usage of Kahoot! based on digital game-based learning in the English learning process are made by the researcher using the research's conclusion as a reference. First, using Kahoot! as an alternative to other entertaining and successful digital learning tools for tutors to employ with students can help them become more proficient in English expressions. Second, use Kahoot! for students. Digital game-based learning

has the potential to be a medium that improves academic competition while also allowing students to assess their progress in achieving their learning objectives. Third, the findings of this research can be utilized as a guide for future scholars to do additional research by considering other problem formulations.

5. ACKNOWLEDGMENTS

We would like to express our heartfelt gratitude to *Universitas Terbuka*, mainly *Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM)*, for providing us with this invaluable opportunity to get the grant and all the students as a source of data in research for helping the writers to complete this research.

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