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The use of blended learning model based on quizizz application in improving english learning outcomes

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ABSTRACT

Technology is advancing quickly, and one example of this is the spread of computer networks and internet services into practically every sphere of daily life. As long as they are connected to a computer network system via the internet, educators and students can engage and communicate anytime, anywhere, without being constrained by place or time, thanks to technology. This study uses a descriptive qualitative action research methodology in the classroom. This study is a staged, multi-cycle controlled investigative method designed to identify and address learning issues in the classroom. The 32 of AKPER YPIB Majalengka students who participated in this study were the subjects. The deployment of blended learning based on the Quizizz application can increase student learning outcomes, notably in the cognitive element, where students in cycle II have acquired a learning mastery of 96.88%, which can be inferred from the description and analysis of the research. Based on the study's findings, it can be concluded that Quizizz application-based blended learning can enhance student learning outcomes in English classes. The improvement is evident in the rise in student test scores since each learning cycle was put into place.

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1. INTRODUCTION

The growth of computer networks with Internet services is one of the advances in information and communication technology (ICT). Internet-based computer network systems are currently creating objectives to support managers' and organizations' needs. This is an endeavor to assist and support human life and organizational activities, including educational and learning activities in the field of education. Information and communication technology advancements have an impact on education, particularly in the area of learning (Santika, 2017). Modifications to students' learning processes and strategies are among the effects of this development (Ramadhani & Andre, 2019). Thus, one of the Tri Dharma tasks of higher education, particularly the teaching sector, requires that the required academic needs be prepared to adapt to information technology. Additionally, it will be simpler to create adaptable and effective learning approaches (Fies & Marshall, 2006); (Febrini et al., 2019); (Huda & Faiza, 2019).

An approach is a methodical approach to starting the implementation of an evaluation activity in order to accomplish predetermined goals (Sangidu, 2004). Furthermore, according to (Mulyono, 2011), there are several strategies to attain various learning objectives in various contexts. As a result, learning requirements and desired learning outcomes must be taken into account while choosing a learning strategy. Additionally, it may be inferred from the aforementioned opinion that the learning process is a comprehensive plan and that the subject matter is presented in a methodical way.

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The blended learning model is the evolution of the e-learning model, a teaching strategy that mixes an online learning environment with in-person instruction (Okaz, 2015). Additionally, (Mardikaningsih & Kurniasari, 2021) offer three definitions of blended learning in (Kristanto et al., 2017), namely: 1). The combined total of traditional learning methods combined with web-based, entirely online ways (taking inspiration from Harrison's artwork); 2. the total amount of media and technology used in an e-learning setting; and 3). the combination of several pedagogical methods, regardless of understanding how a generation uses technology (drawing on the paintings of Driscoll). By combining traditional learning models with web-based learning models and using media and resources that can be used in an e-learning learning environment, blended learning can be defined as a type of learning model based on this concept. A learning approach known as blended learning incorporates several delivery methods, instructional models, learning styles, and various technology-based media. This learning paradigm also provides a number of benefits, including enhancing learning outcomes, learning effectiveness, learning comfort, cost-effectiveness, and adapting to each student's learning preferences. The student-centered paradigm has replaced the teacher-centered one, and the blended-learning learning model has assisted students in learning autonomously and achieving learning objectives (Stein & Graham, 2014).

Internet-based apps have now been integrated into the development of the mixed-learning learning model as a supporting medium for the learning process. The educational components of online sessions can be supported. This web-based program in the form of learning management software, more commonly referred to as LMS (Learning Management System), is able to provide virtual classroom activities. Quizizz is one of the LMS software that has a free access structure, making it available without charge, unlike other LMS.

Currently, information technology and the educational sector need to be integrated (Santika, 2017). The approach that can be used is either employing game-based learning techniques or online learning support (Wungow et al., 2016). Students who study in the right way will comprehend the tools the teacher provides more readily (Ramadhani & Andre, 2019); (Choirudin et al., 2020); (Subandi et al., 2018). This game-based learning strategy can give pupils new learning opportunities (Bicen & Kocakoyun, 2018).

Game Quizizz is a game-based educational application that makes classroom learning dynamic and enjoyable while bringing comprehensive learning into the classroom (Purba, 2019). Students can complete assignments using electronic devices in the classroom when they are implemented as quiz games. Quizizz games include game features like avatars, themes, memes, and music to keep you interested as you learn, in contrast to other educational apps. Additionally, quizzes encourage pupils to compete with one another and enhance their academic performance. In class, students take many quizzes at once and track their progress on leaderboards. After the test, the instructor or instructors can take the course and upload the results to assess the student's progress. Quiz games can encourage pupils to study and enhance their academic performance. This supports assertion that play-based learning is more likely to be employed as a useful teaching strategy because it can activate both verbal and visual components. A game-based training tool called Quizizz offers multiplayer activities to create lessons, making practice more engaging and enjoyable (Fadhlurrohman et al., 2020).

Quizizz is a learning tool that may be configured by the instructor to look like a game. The Quizizz Game program enables students to complete in-class assignments using mobile devices. Quizizz gives students the opportunity to compete with one another, encourages learning, and enhances learning results. At the same time, each student will take a quiz in class, and the results will be displayed on the leaderboard. When the quiz is finished, instructors or professors can download the results to assess the students' grades. Participant motivation, learning outcomes, and learning quality can all be improved by quizzes.

The advantages of using game-based learning tools include more student activity, a more dynamic learning environment, and more learning opportunities overall (Licorish et al., 2018). Additionally, earlier literature searches that demonstrate how using technology-based learning media is typically seen as superior to conventional systems reinforce this (Fies & Marshall, 2006). Applications, such as Quizizz, that are frequently utilized in behavioral quizzes. Unlike other apps, this one is for learning. Students can react to surveys or questions in this application in a pleasing manner (Zhao, 2019).

Learning outcomes, according to (Dimyati & Mudjiono, 2013), are results obtained in the form of numbers or scores following the administration of a learning test at the conclusion of each lesson. The value that pupils have attained can be used as a benchmark to determine how well-versed they are in the subject. The various experiences students have that fall under the cognitive, emotional, and psychomotor domains are referred to as learning outcomes. The dominance of subject-specific theoretical notions is only one aspect of learning; other aspects include habits, perceptions, joys, interests, talents, social adjustments, different skill sets, ideals, wants, and expectations. This is consistent with Rusman's perspective, which claims that improvements in student conduct can be witnessed along with changes in perception and behavior (Rusman, 2017). Learning outcomes are skills that students hold following their learning experiences (Handayani et al.,

2017). In the meantime, according to (Sudjana, 2014), the outcome is an acquisition as a result of engaging in a process or action that modifies the input's functionality. In (Handayani et al., 2017), Howard Kingsley divides learning outcomes into three categories: a) skills and habits; b) knowledge and comprehension; and c) attitudes and ideals. Materials chosen by the curriculum can be used to fill each sort of learning outcome.

The advantages and applicability of the Quizizz application in the teaching and learning process have been studied in a prior study. According to this study, pupils are happy when Quizizz is frequently utilized in class. The Quizizz application enhances grammar abilities and has a greater influence on classes that use it frequently (Zhao, 2019); (Sinta et al., 2019).

According to the findings of the initial study observations and interviews, instructors have up till now used a blended learning model that is supported by suitable facilities and infrastructure. These amenities and infrastructure have not, however, been best utilized or developed. This results in low student learning outcomes since it makes the students bored. If teaching and learning activities are conducted using a range of models and interactive learning tools, learning results will improve. New learning techniques that are more appealing to students are therefore required. Many people have looked into the use of quizzes in learning and the application of blended learning in the past, but nobody has looked into the combination of the two during learning using the Quiziz program. As a result, the purpose of this study is to investigate how blended learning, based on the Quizizz application, can enhance student learning results.

2. RESEARCH METHOD

This study uses a classroom action research methodology and is descriptive qualitative. The purpose of classroom action research, or CAR, is to enhance the caliber of instructional methods in the classroom. A teacher who engages in classroom action research performs both the duties of a teacher and a researcher. In order to enhance the caliber of the learning process and outcomes, this research was carried out cyclically to identify and address learning problems in the classroom. The study's participants were 32 Nursing Academy YPIB Majalengka students who were enrolled in English classes using a blended learning paradigm based on the Quizizz app. There were 17 male students and 15 female students in total. In this study, a variety of techniques and tools, including tests, interviews, and documentation, were employed to collect data. Utilizing approaches for analyzing evaluation findings, learning outcomes were examined. to determine the level of learning mastery by the analysis of test result data using the standards for learning mastery. Next, the percentage of learning outcomes attained by these students is contrasted with the predefined KKM (Minimum Completeness Criteria). If a student receives a grade of at least 75%, it is said that they have completed their learning. Using a blended learning paradigm based on the Quizizz application, the test results for both the pre-test and the post-test are calculated by comparing the number of student scores to the maximum number of scores, which is then multiplied by 100%. By comparing the percentage of mastery learning in the use of the Quizizz application-based blended learning model in cycle 1 and cycle 2, data analysis was utilized to assess the increase in student learning outcomes. While the percentage of mastery learning is determined by adding 100% to the total number of pupils and comparing the number of students who have finished the learning.

3. RESULTS AND DISCUSSION

The proportion of students who believe that English is very difficult serves as a marker for the beginning condition of student learning outcomes in English courses. This is evident from the subpar learning outcomes, which are demonstrated in the evaluation of the English material through the pretest and are shown in the table below:

Table 1 Pre-Action Student Score List

No	NIM	Score	Descript	tion
			Completed	Uncompleted
1	20001	60		1
2	20002	50		1
3	20003	80	1	
4	20004	70	1	
5	20005	60		1
6	20006	80	1	
7	20007	50		1

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No	NIM	Score	Description	
			Completed	Uncompleted
8	20008	70	1	
9	20009	80	1	
10	20011	50		1
11	20012	60		1
12	20013	60		1
13	20014	80	1	
14	20015	70	1	
15	20016	60		1
16	20017	65		1
17	20018	70	1	
18	20019	65		1
19	20020	65		1
20	20022	50		1
21	20023	70	1	
22	20024	70	1	
23	20025	60		1
24	20026	80	1	
25	20027	68		1
26	20028	65		1
27	20029	70	1	
28	20030	50		1
29	20031	60	1	
30	20032	75		1
31	20033	80	1	
32	20034	65		1
Amount		2160	14	18

Table 2 Pre-Action Student Score Recapitulation

No	Description	Pre-Action Learning Outcomes
1	Total score	2108
2	Highest score	80
3	Lowest Score	50
4	Average	65.88
5	Number of Students	32
6	Number of Completed Students	14
7	Number of Uncompleted Students	18
8	Mastery of Learning Outcomes (%)	43.75

The average score obtained was 65.88, with the greatest score being 80 and the lowest being 50, as shown in the above table. Thus, only 14 out of the 32 students have graduated, which is equal to 43.75%, while 18 students have not graduated, which is equal to 56.25%. There are more students who are still working on their learning outcomes before the action or throughout this pre-cycle than there are students who have finished. For this reason, having the appropriate answer is essential to enhancing students'

learning results in English classes. As a result, the researcher employs a blended learning paradigm based on the Quizizz program in the following cycle.

Cycle 1

As stated in the research topic, there were 32 participants in the study, including 8 male participants and 24 female participants. The researcher's activity planning consisted of the following:

- a. Creating a blended learning program based on the Quizizz application is one of the planned actions.
- b. Establishing a website or blog as a blended learning application based on the Quizizz program.
- c. Set up the tools you'll need to observe learning sessions.
- d. Create a test instrument based on the Quizizz application to be used as a tool to assess student learning outcomes in the use of blended learning.
- e. Designate coworkers to act as observers during the blended learning implementation based on the Quizizz application.
- f. Explain to the students how blended learning based on the Quizizz program will be used to do the research.

	Table 3 Fo	Table 3 Formative Test Scores in Cycle I			
No	NIM	Score	Description		
			Completed	Uncompleted	
1	20001	70	1		
2	20002	60		1	
3	20003	89	1		
4	20004	75	1		
5	20005	70	1		
6	20006	90	1		
7	20007	60		1	
8	20008	80	1		
9	20009	85	1		
10	20011	60		1	
11	20012	70	1		
12	20013	85	1		
13	20014	90	1		
14	20015	85	1		
15	20016	70	1		
16	20017	76	1		
17	20018	70	1		
18	20019	78	1		
19	20020	68		1	
20	20022	65		1	
21	20023	80	1		
22	20024	85	1		
23	20025	76	1		
24	20026	86	1		
25	20027	74	1		
26	20028	70	1		
27	20029	87	1		
28	20030	60		1	
29	20031	70	1		

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No	NIM	Score	Description	
			Completed	Uncompleted
30	20032	80	1	
31	20033	80	1	
32	20034	65		1
Amount		2409	25	7

Table 4 Recapitulation of Student Test Results in Cycle I

No	Description	Learning Outcomes in Cycle 1
1	Total score	2409
2	Highest score	90
3	Lowest Score	60
4	Average	75.28
5	Number of Students	32
6	Number of Completed Students	25
7	Number of Uncompleted Students	7
8	Mastery of Learning Outcomes (%)	78.13

According to the above data, the average student learning result score after using the Quizizz application-based blended learning model was 75.28, with the best student score being 90 and the lowest student score being 60. The total number of students who successfully completed their learning outcomes was 25, or 78.13%. While there are still students who haven't finished—up to 7 or 21.87%. The average value of the exam results acquired by new students is 75.28%, so while there has been an improvement since the first cycle, things are still not ideal. This is because the application-based blended learning methodology used by Quizzzz is novel to the pupils. There has been an increase in cycle 1 when compared to the pre-cycle or before the action, with as many as 2 students earning scores in the Very Very Good category, as many as 11 in the Very Good category, as many as 12 in the Good category, and as many as 7 in the Category Score is Sufficient category. Thus there is no longer a low-value category or a very poorvalue category.

The outcomes of the first cycle of action reveal that 78.13% of those who receive a score equal to or higher than the Completeness Criteria of 70 are affected by the new student learning outcomes. This indicates that cycle 1's actions did not yield the best outcomes. This means that the investigation will continue in cycle 2. Based on the findings of observations made by coworkers acting as observers on learning in cycle 1, it may be said that the lecturer has not completed a number of tasks, necessitating reflection. These tasks include:

- a. The internet network is interrupted when using the Quizizz application-based blended learning model, making it impossible to maximize the use of blended learning. As a result, it is required to plan for the following cycle.
- b. There are still a lot of students who do not carry cell phones, and some students have brought cell phones, but there is no internet quota, which is a weakness in the adoption of the Quizizz application-based blended learning model in cycle 1.

Cycle 2

Cycle 2 is an improvement over cycle 1 based on the reflections drawn from the observations and assessments made in cycle 1. The researcher followed the action scenario and the established learning implementation strategy when carrying out the learning action. Whereas cycle 1's professor appeared worse and less prepared, cycle 2's lecturer appears better and more prepared. In order to determine the degree of student achievement in the learning process that has been carried out, students are given a test at the conclusion of the process, as can be seen in the table below:

Table 5 Formative Test Scores in Cycle II

No	NIM	Score	Desc	ription
			Completed	Uncompleted
1	20001	90	1	
2	20002	86	1	
3	20003	89	1	
4	20004	89	1	
5	20005	90	1	
6	20006	95	1	
7	20007	80	1	
8	20008	80	1	
9	20009	85	1	
10	20011	80	1	
11	20012	85	1	
12	20013	85	1	
13	20014	90	1	
14	20015	85	1	
15	20016	80	1	
16	20017	86	1	
17	20018	80	1	
18	20019	88	1	
19	20020	89	1	
20	20022	85	1	
21	20023	80	1	
22	20024	85	1	
23	20025	84	1	
24	20026	86	1	
25	20027	84	1	
26	20028	92	1	
27	20029	87	1	
28	20030	90	1	
29	20031	95	1	
30	20032	89	1	
31	20033	90	1	
32	20034	68		1
Amount		2747	31	1

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Table 6 Recapitulation of Student Test Results in Cycle 2

No	Description	Learning Outcomes in Cycle 1
1	Total score	2747
2	Highest score	95
3	Lowest Score	68
4	Average	85.84
5	Number of Students	32
6	Number of Completed Students	31
7	Number of Uncompleted	1
	Students	
8	Mastery of Learning Outcomes	96.88
	(%)	

The average student learning outcome score following the implementation of Quizizz application-based blended learning in cycle II was 85.84, with the greatest student score being 95 and the lowest student score being 68, as can be seen from the table above. 31 students, or the same number, successfully completed the learning objectives, scoring 96.88%. Students who did not meet the completion standards or who did not finish at least one person or 3.12%.

These statistics show that there has been significant improvement in the second cycle, which is now thought to be at its peak due to the average student exam score of 96.88%. This demonstrates that students are aware of and appreciate the advantages of using blended learning techniques based on the Quizizz application in English courses. It is possible to compare the learning outcomes from one cycle to the next from the table of test categories for learning outcomes above. The category of very very good scores had grown to 8 individuals in the second cycle, and the category of very good scores had grown to 23 individuals, yet there was still an adequate category of just one student. While there is no longer an excellent, poor, or very poor category.

Due to the rapid growth of communication and information technology that has started to permeate the educational system, traditional classroom learning methods need to be modified because they don't always accommodate the variety of students' learning preferences (Prihadi, 2013). In the current digital era, educators should make use of online learning resources and employ a range of media and teaching techniques in order to draw attention to their work and pique students' interest in learning during the course of the lesson. Learning that is conducted both in person and online is referred to as blended learning (Noviansyah, 2015). Additionally, according to (Dwiyogo, 2018), blended learning-based learning integrates the benefits of learning from the three primary learning sources face-to-face, offline, and online learning.

Blended learning combines in-person instruction in a classroom with online instruction via elearning portals, blogs, websites, and social media (Prihadi, 2013). In (Sutopo, 2012), Bonk and Graham define blended learning as learning that is accomplished through a combination of in-person instruction and online study. The presence of a computer in the classroom that teachers and students can use to access the internet is a must for the successful implementation of blended learning (Indah Susanti & Yoga Prameswari, 2020).

When using blended learning, it's common to divide the time allotted into 50% face-to-face learning activities and 50% online learning. This is known as a 50/50 composition (Dwiyogo, 2018). In addition, he added that blended learning consistently integrates in-person experiences with online learning in an effort to speed up learning. In order to improve student learning outcomes, blended learning combines face-to-face and online learning through the use of e-learning portals, blogs, websites, or social networks as well as a variety of learning methods and media.

Quizizz media can teach pupils to carefully answer questions (Noor, 2020). Quizizz media, which features practice questions and exam results, encourages pupils to be competitive while answering questions correctly (Zainuddin et al., 2020). Naturally, this encourages students to continue learning the content and practice conceptual development on their own. Students who use Quizizz to learn are encouraged to comprehend and study the content so that it may be mastered more effectively and using Quizizz, students can use digital learning through devices to make learning more enjoyable (Wihartanti et al., 2019). Students will find it simpler to remember the information they have learned if concepts or materials are developed autonomously and learned in a pleasant way (Agung & Ekayana, 2021; Mulatsih, 2020; Supartini & Susanti, 2021) also noted in his study that the majority of the responses to the questionnaires given to the students indicated that the Quizizz program could aid in their ability to retain the information.

Naturally, Quizizz media-assisted learning can also help lecturers become more creative in creating a variety of examinations that are appropriate for their pupils. Additionally, lecturers have more control over how to test activities are carried out and can stop students from cheating. The instructor can assess the achievement of student subject mastery using this application's feature that facilitates the material discussion feature for each question. In order to assist students in achieving better learning outcomes, the lecturer can continue to update the material and direct the monitoring of students' mastery of the pertinent subject. The Quizizz application can enhance student learning outcomes during the Pandemic (Afiani & Faradita, 2021). Additionally, (Hidayati & Aslam, 2021) show that Quizizz learning medium has a positive impact on students' cognitive growth. Similar to the findings of other studies, the use of Quizizz media in the delivery of lectures can enhance student learning outcomes in English courses. This conclusion is drawn from data on rising test results for students, which show an increase in average scores and an increase in the percentage of students who have at least a basic understanding of the material.

Based on the study's findings, it is clear that implementing blended learning strategies based on the Quizizz app can enhance student learning outcomes. By using this strategy, instructional time in the classroom is maximized because more time is spent on practical activities rather than on explaining the topic. Additionally, this technique improves students' readiness to study in a classroom. As a result, the application-based blended learning methodology used by Quizizz is ideal for usage in English learning in an effort to enhance student learning outcomes.

4. CONCLUSION

The deployment of blended learning based on the Quizizz application can increase student learning outcomes, notably in the cognitive element, where students in cycle II have acquired a learning mastery of 96.88%, which can be inferred from the description and analysis of the research. Based on the study's findings, it can be concluded that Quizizz application-based blended learning can enhance student learning outcomes in English classes. The improvement is evident in the rise in student test scores since each learning cycle was put into place.

Based on the study's findings, it is clear that implementing blended learning strategies based on the Quizizz app can enhance student learning outcomes. By using this strategy, instructional time in the classroom is maximized because more time is spent on practical activities rather than on explaining the topic. Additionally, this technique improves students' readiness to study in a classroom. This research suggests that lecturers may use the Quizizz application-based blended learning paradigm as a substitute in teaching activities. It is envisaged that future researchers would investigate blended learning more thoroughly by modifying it using a variety of apps that can help the enhancement of learning procedures and results.

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