

The Use of Gamification Quizizz as a Media for Online Learning Assessment During the Covid 19 Pandemic

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Abstract— Assessment of learning outcomes is an important aspect of learning as an indicator of success in the learning process. Learning assessment must be carried out effectively to be able to measure the level of student success. During the COVID-19 pandemic, learning was carried out online, including in the assessment system. This study aims to determine the use of Quizizz gamification as a media platform for student assessment in online learning during the covid-19 pandemic. The research method in this study uses descriptive qualitative methods. This research was conducted in an educational supervision class as a research subject. The results of research on the use of Quizizz gamification as an online assessment medium during the covid-19 pandemic can be used as a student assessment medium. Quizizz can be used as a more fun assessment medium with an attractive visual appearance.

Keywords—online learning, Gamification Quizizz, Student Assessment

I. INTRODUCTION

The COVID-19 pandemic is still being felt in various regions in Indonesia. The spread of the covid-19 virus requires the government to decide by extending the distance learning policy or online learning. Distance learning by utilizing the internet network as a learning process. Through this distance learning policy, it is hoped that it will reduce the spread of the COVID-19 virus in Indonesia.

This online learning policy requires teachers and students to be able to take advantage of the development of Science and Technology, in the era of online learning as it currently requires every individual to always be creative and innovative to utilize and develop technological capabilities. Today's learning continues to innovate, following the dynamic demands of 21st-century competencies. The change in the paradigm of student learning that is different from the previous period has resulted in a lot of homework that must be completed by teachers in schools with changes in the curriculum and student learning methods at this time [1]. Knowledge of the use of technology becomes

something important. Through various kinds of technological developments available today, it has facilitated the role of teachers in the online learning process. Teachers and students can use various kinds of artificial intelligence technology to support the learning process.

Various technological developments are currently available that can be used by teachers in online learning activities. Some examples of technological developments to be able to support online learning are video conferencing platforms such as google meet, zoom and others that make it easier for teachers to be able to carry out synchronous online learning. In addition to these media, teachers can also take advantage of various other media such as the Learning Management System (LMS) as a means of online learning [2]. The use of LMS as an online learning medium is important where teachers can create virtual classes to support the learning process. Some media that can be used by teachers such as the Edmodo platform, Google Classroom or MOOC which can be used as a means of online learning [3][4].

The development of digital-based platforms today has made it easier for teachers and students to carry out online learning. The success of online learning also needs to be supported by teachers in designing learning from the process of planning, implementing and evaluating online learning [5]. At the time of planning the teacher must be able to arrange distance learning activities that are easier to implement. Teachers are expected to be able to make teaching materials that are interesting and not boring for students. Teaching materials are a set of materials compiled by the teacher both written and unwritten to create a pleasant teaching and learning atmosphere. One of the media that can be used by teachers to be able to develop online learning is through learning video media. The use of learning video media during online learning makes it easy for teachers and students to learn the material. Through the use of learning video media, students will be more interested and not boring. The use of video as a learning medium

also makes it easy for students to be able to re-listen to the material that has been delivered by the teacher [4].

At the stage of implementing online learning, the teacher must also be able to provide convenience for students to access material and create a learning process that is not boring. The use of LMS as a virtual class during online learning can be utilized by teachers by designing the delivery of material through various media that are adapted to the characteristics of students. The implementation of online learning can be designed by combining synchronous and asynchronous learning processes. Teachers can organize learning that is fun and not boring so that learning will run effectively.

At the final stage, the teacher must also be able to evaluate learning. This online learning evaluation activity must also be able to measure the success rate of online learning implementation. Teachers can take advantage of various assessment platforms to support the success of learning evaluation. Currently, there are many kinds of technological advances available as media that can be used to carry out the student assessment process. One of the e-learning-based learning evaluation media is using Quizizz. Quizizz learning evaluation media also provides data and statistics about student performance, and you can even download these statistics in the form of an Excel spreadsheet. Teachers and even lecturers can track the number of students' answers. The use of Quizizz helps educators in conducting evaluations without being limited by place, an attractive appearance and regulated time settings guide the concentration of students.

Gamification Quizizz is a game-based educational app, which brings multiplayer activities to the classroom and makes the classroom practice interactive and fun. Implementation using Quizizz Game students can do exercises in class on their electronic devices. Unlike other educational applications, Game Quizizz has game characteristics such as avatars, themes, memes, and entertaining music in the learning process. Quizizz also allows students to compete with each other and motivates them to learn so that learning outcomes can improve. Students take quizzes at the same time in class and see their live ranking on the leaderboard. Instructors or teachers can monitor the process and download the results when the quiz is over to evaluate student performance. Quizizz games can help students' learning motivation and improve learning outcomes that have been using paper tests [6].

Based on research conducted by Lusiani (2020) regarding the use of the Quizizz online application in analyzing students' cognitive test results, the results of using the Quizizz application provide an overview to educators that students' cognitive test learning outcomes can be easily obtained in a fast time to get an evaluation of learning outcomes, so that can be recommended as a medium for evaluating learning in various fields and various subject matter [7]. Another study conducted by Rahman et al (2020) The use of the

Quizizz application has a positive and significant role in increasing the learning motivation of Social Science Education students at Manado State University based on data analysis using the correlation test and the normalized gain test. The correlation coefficient results is 56.25% and the rest of 44.75% is influenced by other variables [8].

The use of Quizizz Gamification as an assessment medium in universities has also been investigated by Pitoyo et al (2020) with research results showing that the use of Quizizz as an assessment medium influences students' motivation to learn more deeply after carrying out several tests through Quizizz [9]. The use of Quizizz can also be used by teachers to help students improve the material presented by the teacher by playing quiz games to evaluate students' understanding. This is based on research conducted by Rahayu (2018) which uses Quizizz as a self-assessment medium in improving material understanding [10].

From various research results on the use of Gamification Quizizz as an online learning assessment medium, the authors are interested in conducting further research on the use of Gamification Quizizz in educational supervision courses. This study aims to find out descriptively about the use of Quizizz as a student assessment medium in online learning during the covid-19 pandemic.

II. METHOD

The research method used is descriptive qualitative research method. The data collection method used in this study was through observation and documentation. Observations were made to see students' behavior towards the use of Quizizz as an assessment medium in educational supervision courses. While documentation is used to find out the results of student work in answering each question item on Quizizz which is used in the learning evaluation process. The sample used in this study was a total of 30 students who were conducted in class C7 students of the Education Administration Study Program, Faculty of Education, State University of Malang.

III. RESULT AND DISCUSSION

A. Gamification Quizizz

Gamification is a term that is currently being popular along with the development of information and communication technology. The use of gamification in the field of education is evidence of the progress of learning technology that continues to grow. Gamification refers to the use of learning technology that uses the term game in an educational context. Lander & Callan (2011) define gamification as the use of game elements for educational purposes. It aims to create more student abilities and motivate students to use it as a learning medium [11].

Currently, many gamifications can be used by teachers to support learning. Technological advances

have provided many options for teachers to use gamifications as a supporter of the learning process. Some of the gamification that teachers can currently use are Quizizz, Kahoot, Duolingo, and others. Gamification is the addition of game and educational elements such as points, badges, levels and so on which are modified to motivate students. Based on gamification like this, teachers can also use it in a more enjoyable learning assessment process [12].

Quizizz is a game-based educational app, which brings multiplayer activities to the classroom and makes in-class practice fun and interactive. Using Quizizz, students can do in-class exercises on their electronic devices. Unlike other educational applications, Quizizz has game characteristics such as avatars, themes, memes, and entertaining music in the learning process[13]. Quizizz also allows students to compete with each other and motivates them to learn [14]. Learners take quizzes at the same time in class and see their live ranking on the leaderboard. Instructors can monitor the process and download reports when quizzes are completed to evaluate student performance. Using this application helps stimulate interest and increase the concentration of learners [14].

The use of this Quizizz application is very easy for teachers and students to do. Teachers who want to use the Quizizz application can go directly to the website via: www.quizizz.com as shown in Figure 1. In the early stages, teachers who want to use this application are required to log in to create an account. If you have entered the web, you will be faced with a library with a collection of quiz media that has been made by the teacher. Can choose quizzes to be used by students in learning, and train students' concentration in choosing answers. In using the Quizizz application the first steps are to prepare questions for the quiz [1].

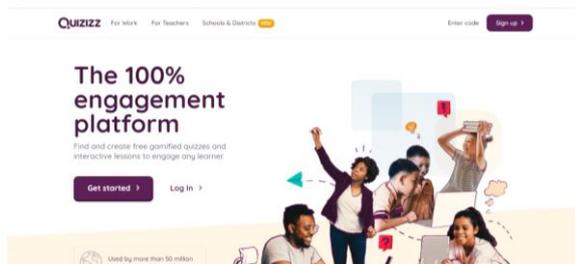


Figure.1 Quizizz preview

The use of Quizizz as an assessment medium is quite easy for teachers and students to do, quizzes that have been previously designed by the teacher can be directly added to Quizizz and can be determined by images, backgrounds, or choices. Teachers can enter questions and supporting pictures into Quizizz. Questions that have been completed by the teacher can be directly given to students by distributing codes to students. Quizizz presents statistical data based on the results of quizzes by students which can be downloaded in the form of an Excel spreadsheet. The use of Quizizz

is quite flexible because there is time management during the quiz which can be arranged by the teacher [7][15].

In addition to the teacher being able to make self-made questions, teachers can also take advantage of the Quizizz library feature which contains document questions according to the course. However, it would be better if the teacher compiles and develops self-made questions that are adapted to the learning material. By compiling your questions, the assessment aspect will be following the competency achievements in the course. The display of the Quizizz library can be seen in Figure 2 where the teacher can choose according to the field of study. Although the questions available in the Quizizz library are still very simple and are not recommended for teachers to use them directly for the learning assessment process.

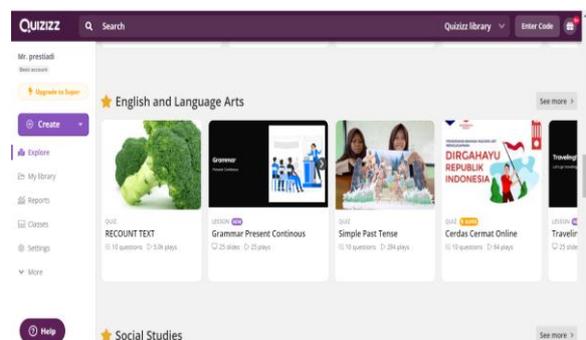


Figure.2 Display Quizizz Library

The completeness of the Quizizz application is very supportive for the success of online learning that can be used at various levels and courses. The development and use of Quizizz as a learning medium is needed to complete things that are still incomplete at the time of making and utilizing the application because it is related to the learning needs of students. The development of learning media that can accommodate learning in various subjects and levels will be very supportive to be developed by educators and further utilized by students in improving their competence.

B. Use of Gamification Quizizz as an assessment media

Assessment is an important element in learning activities. Implementation of the assessment of learning outcomes can be done with various methods and media that can be done by the teacher. In the online learning process as at this time the assessment carried out by teachers can be done by utilizing digital-based media. One of the media that can be used by teachers to carry out assessment activities is by utilizing platforms or applications that can facilitate teachers to carry out assessment activities.

One of the platforms that can be used by teachers to carry out assessment activities is by utilizing gamification such as Quizizz which provides features for teachers to conduct test activities in the form of

quizzes. The use of Quizizz as an assessment medium by teachers during the online learning period has now been widely used. With this Quizizz it will be able to assist teachers in conducting the assessment process in the form of quizzes so that students will feel more fun [16].

The use of Quizizz in carrying out assessments in class C7 of the Education Administration Study Program conducted in the Teaching Supervision course. Assessment using the Quizizz platform is used to measure aspects of student knowledge. Assessment is carried out during the midterm exam by first preparing the questions that will be included in the Quizizz. Next is to make questions on Quizizz on the available menu. The display for creating questions in Quizizz is shown in Figure 3.

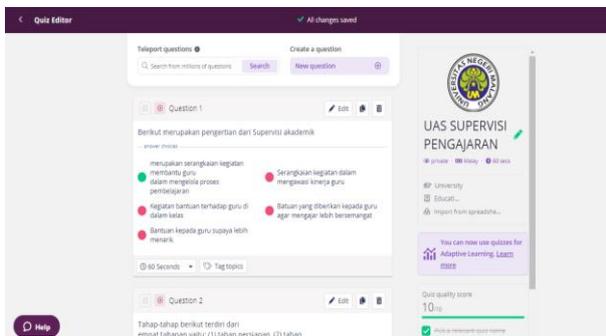


Figure 3. Display of quiz questions

After the questions have been created, the next step is to distribute the question codes to students to be able to start working on the questions. two options can be chosen in working on the questions, namely live quizzes and asynchronous learning in the form of assigned homework. After choosing one of the desired shapes, the next step is to distribute the code to students. Students can work directly by entering the code provided. This view can be seen in Figure 4.

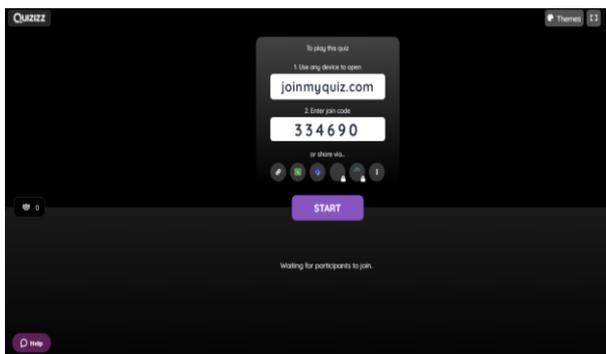


Fig.4 Quiz start screen

Based on Table 1 shows that the level of accuracy of students in answering each question varies. From these data, several questions have a low accuracy of 21%, while the highest level of accuracy is 91%. From the overall results of students' answers obtained an average of 60% which indicates that the aspect of

students' understanding of the material is still lacking. It is necessary to deepen the material on aspects that are still low. After the completion of the problem-solving activity, the results can immediately be seen as shown in Figure 5 below. The results of students' quiz questions can also be downloaded in excel form which can be used to analyze the results of students' work on questions. The results of using Quizizz in assessment activities in class C7 for mid-semester examination assessments obtained results as shown in table 1.

TABLE 1. RESULTS OF ANALYSIS OF STUDENT ANSWERS IN THE MID-SEMESTER EXAMINATION USING QUIZIZZ

| No | Accuracy | Percentage |
|---------|-------------|------------|
| 1 | Question 1 | 88% |
| 2 | Question 2 | 61% |
| 3 | Question 3 | 61% |
| 4 | Question 4 | 55% |
| 5 | Question 5 | 39% |
| 6 | Question 6 | 35% |
| 7 | Question 7 | 30% |
| 8 | Question 8 | 67% |
| 9 | Question 9 | 58% |
| 10 | Question 10 | 82% |
| 11 | Question 11 | 21% |
| 12 | Question 12 | 30% |
| 13 | Question 13 | 70% |
| 14 | Question 14 | 91% |
| 15 | Question 15 | 73% |
| 16 | Question 16 | 36% |
| 17 | Question 17 | 76% |
| 18 | Question 18 | 85% |
| 19 | Question 19 | 45% |
| 20 | Question 20 | 82% |
| 21 | Question 21 | 21% |
| 22 | Question 22 | 55% |
| 23 | Question 23 | 88% |
| 24 | Question 24 | 91% |
| 25 | Question 25 | 67% |
| Average | | 60% |
| Highest | | 91% |
| Lowest | | 21% |

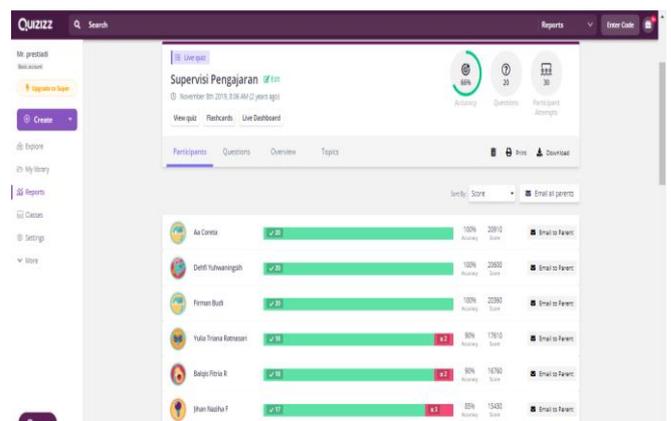


Figure 5. The results of the quiz questions

The use of Quizizz as gamification of this assessment is an innovation that can be used to facilitate teachers in conducting online assessments. Quizizz

provides a different look in the form of quizzes accompanied by avatars and some features that are more relaxed so that the assessment process can be carried out with fun and students enjoy playing like they are playing. The results of research conducted by Handoko (2020) concluded that the use of Quizizz as an assessment tool had a positive influence on students' interest in working on questions, students were more interested in answering questions when compared to paper or google forms [12].

IV. CONCLUSIONS

Based on the discussion about the use of Quizizz gamification as an assessment medium during online learning during the covid-19 pandemic, it can be concluded that the use of Quizizz gamification can be used as an assessment medium. The use of Quizizz as an assessment medium during online learning can be an alternative for teachers to carry out distance assessments. With a more attractive appearance, the use of Quizizz as an assessment medium can be combined with a more interactive quiz display so that students feel more fun in working on questions. the use of Quizizz as an assessment medium also has various other advantages, namely teachers can take advantage of existing features in Quizizz by storing assessment files in the library that can be used and developed in conducting assessments in other classes or in other learning in the future.

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