Application of Quizzz to Pascal Law Material in Increasing Student Response

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Abstract. The research is motivated by the rapid development of the times so that there is a need for the latest innovations for students so as not to be left behind, especially in the field of technology, the method used in this research uses a quantitative method. The population and sample in this study were class XI MIPA with 19 students at MA Darul Ulum Karangpandan. The results of the analysis of student responses to the application of Quizizz were that students were interested and happy to learn to use Quizizz. This is evidenced by the results of the questionnaire data, namely the answers to the results of class XI MIPA with 19 students having an average of 78% strongly agree, 100% agree, 12% doubt, 0% disagree, and 0% strongly disagree. Based on the results of the study, it can be concluded that there is an effect of Quizizz on increasing student responses to Pascal's legal material.

Keywords: *Quizizz, Pascal's Law, Improving Student Learning Outcomes.*

1. Introduction

With the rapid development of technology, communication and information, various platforms have emerged, both in the form of learning management systems and in the form of video conferencing. The learning management systems that are widely used include Google Classroom and E-learning portals owned by schools and universities. Meanwhile, video conferencing applications that are widely used during distance learning include the Zoom application, Google Meet, and Visco Webex. Apart from these applications, Whatsapp Group is also an alternative in the implementation of learning. However, not a few teachers and students have difficulty using these applications due to limited learning support facilities, especially technology support and internet networks (ZAM, 2021).

There are two psychological factors that have been proven empirically to have a significant effect on students' academic achievement at school. students who have high learning interest and motivation are usually characterized by good academic grades, have structured study habits, have a good understanding of each reading, have high self-efficacy, and have high learning performance. As for students who have low interest and motivation to learn, usually have a tendency to withdraw, do not go to school, drop out of school, have a relatively high sense of anxiety, and have low academic results (Ricardo & Meilani, 2017).

Alternatives that can be done to minimize or overcome the problems raised above, namely by utilizing one of the applications that are widely used, namely Quizizz. Quizizz is an interactive quiz application originating from Santa Monika, California, United States, which provides formative questions with a variety of choices that are presented in a fun and interesting way for all students. Educators are also able to choose learning media that are suitable for application. One suitable media is Quizizz media. This media is very interesting, has interactive properties that prioritize collaboration, communication, and can lead to interaction between students through games that can create learning motivation, namely fantasies, challenges, and curiosity (HASTUTI, 2021) .

Quizizz can be an evaluation medium for prospective educators by providing data in the form of statistics on student performance results and you can even download these statistics in the form of an Excel spreadsheet. Educators can easily find out students who have the most correct answers in ranking order. Utilization of Quizizz helps educators in conducting evaluations without limiting places, has an attractive appearance and also has a duration of time so that it can train students' concentration and responses.

2. Research Method

This research was conducted at MA Darul Ulum Karangpandan to be precise in Karangpandan Village RT 01 RW 04 Rejoso District, Pasuruab Regency, Postal Code (67181), in the even semester of the 2021/2022 school year. The researcher determined the characteristics of the subjects in this study were all students of MA Darul Ulum Karangpandan class XI MIPA in physics subject in Pascal's Law material.

The research approach used in this study, researchers took this type of quantitative research. The data sources that the researchers will use are primary data sources and secondary data sources. According to Sugiyono stated

that "Primary data sources are data sources that are directly given data to data collectors, and secondary data sources are data sources that do not directly provide data to data collectors, for example through other people or through documents" (Suharyanto, 2014). Based on this opinion, in this study the source of primary data is based on a questionnaire distributed to respondents. While the secondary data sources used are based on scientific journals or relevant reliable articles and other textbooks related to the issues that are the subject of discussion.

Researchers as actors who make observations and observe carefully the object of research. To obtain data about this study, the researchers went directly to the field. The presence of the researcher in this study plays an important role as a key instrument that acts as a non-participant observer, where the researcher goes out of his way not to involve himself directly in the life of the research object. In accordance with the characteristics of a quantitative approach, one of which is as a key instrument, with that researchers in the field are absolutely present or directly involved in conducting research.

In this regard, in collecting data the researcher tries to create a very good relationship with the informants who are the source of the data so that the data obtained is truly valid. In carrying out this research the researcher will be present in the field since he is allowed to conduct research, namely by visiting research locations at certain times, both scheduled and unscheduled.

The class will be given an initial test (pretest) before the treatment is carried out and a final test (posttest) after the treatment is carried out and the results of the class are compared by the researcher (Sugiyono, 2019b). The research design can be seen in the table design as follows:

Table 1. Research Design

Pretest	Action	Postest
O_1	X	O_2

(Sugiyono, 2019b)
Detail :
O_1 = Pre test
X   = Action learning
O_2 = Post test

The population is the whole which includes research subjects (Arikunto, 2012). The population in this study were class XI students at MA Darul Ulum Karangpandan for the 2021/2022 academic year. The sample is part of the number and characteristics of the population that has been studied (Sugiyono, 2019a). The sample in this study were students of class XI MIPA. The sample selection technique that will be used in this study is total/census sampling, which is a sampling technique in which the entire population is sampled (Sugiyono, 2019b). Sampling with this technique aims to determine the increase in student learning outcomes during the application of learning methods.

3. Result and Discussion

Current technological developments, especially students, have the goal of optimizing the use of application software that is easy and powerful but still makes it easier for students to learn the material needed, such as Quizizz. Initially the use of software was only focused on data processing, but along with current technological advances the use of software is not only focused on data processing, but is also used to increase student responses so that they are always enthusiastic about learning. The following is a description of student response data presented in Figure 1.
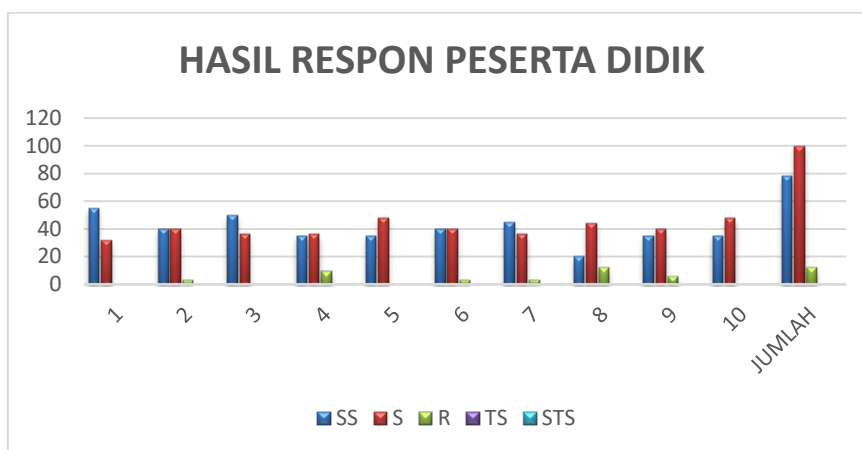

Figure 1. Respond Results

Description: SS = Strongly Agree; S = Agree; R = Doubt ; TS = Disagree; STS = Strongly Disagree.
Seen from Table 1.2 the results of the student response questionnaire to the application of Quizizz in the learning process, it can be obtained that class XI MIPA with 19 students has an average of 78% strongly agree, 100% agree, 12% doubt, 0% disagree, and 0 % strongly disagree.

4. Conclusion

The application of the Quizizz application in the physics learning process on Pascal's law material at MA Darul Ulum Karangpandan was measured with the aim of knowing the increase in creativity and student learning outcomes. Assessment of increased creativity is measured using the observation method when learning takes place and the results of the observation sheet. Success in improving student learning outcomes can also be seen from the results of the questionnaire above in accordance with what has been produced from the results of researchers in the form of, including:

a. Students are motivated to do the tasks given by researchers.
b. Many students are satisfied with the use of Quizziz media than other media.
c. The relationship between researchers and students is more intense because if there are students who still don't know, they will directly contact the researcher who is teaching.
d. From the results above, the intensity value of students who like the use of Quizizz media is very high.
e. For students, the Quizizz application media can be used as a reference to eliminate student boredom in implementing physics learning and other materials.

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