

The Use of Online Media in Mathematics Learning in Elementary Schools

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Abstract: Learning media is the media used for the teaching and learning process. One form of learning media is online learning media. Online learning media is a media that can be used through the help of the internet as connectivity. Online learning media can be used in online learning. The use of online media in learning is expected to be able to improve the quality of education and increase the effectiveness of student learning. This study aims to describe what media are used by teachers when learning mathematics in elementary schools, and to describe the use of online learning media used in learning mathematics in elementary schools. The data obtained were analyzed using the narrative method by grouping the same/similar findings. The findings are that there are 6 online media used in learning mathematics in elementary schools. The online media consist of WhatsApp, quizizz, pear deck and jam board media, dragonbox algebra 5+, zoom and YouTube.

Keywords: Online Media, Elementary School, Mathematics

INTRODUCTION

The learning process carried out in the classroom is the responsibility of a teacher. A teacher should understand the characteristics of each student, both regarding their potential or weaknesses. That way, teachers can apply appropriate methods/strategies in teaching students. Conventional learning should be combined with digital-based media [1]. The combination of learning is expected to be able to overcome the problems that arise as a result of the times. The combination of learning can be done using media, tools and digital learning resources.

The development of information technology at this time requires teachers to have digital skills and a good understanding of technology. Through the understanding and skills of the teacher, it will have an impact on the learning process. Teachers who are proficient in using technology will lead to effective and interactive learning because they can use it. Nowadays, learning can be done online at home. Learning carried out online at home utilizes a variety of media [2]. Online learning is learning that takes place using technology and the internet [3]. Online learning has advantages over face-to-face learning. As stated by [4] that learning is done anytime and anywhere and does not recognize the term time that can be done by humans.

In addition to online learning has advantages, it turns out that online learning also causes several problems in learning for both teachers and students. the online learning process causes students to be bored and the delivery of material is not fully conveyed to students [5]. The number of problems that arise requires teachers to think creatively to create active and effective learning. In the learning process, students are required to be active. Learning requires active learning of students, student participation and interactive communication between teachers and students [6].

To create active and interactive learning, learning media is needed. Teachers need to take advantage of various teaching methods and learning media because these are included in the success of a teacher in teaching [5]. Learning media can create active participation and make it easier to convey learning materials/concepts that are packaged in the form of media. Based on this, researchers are interested in researching the use of online media in learning mathematics, this research interest is based on the curiosity of researchers about what mathematics learning media are used in online learning so that they can be a reference for elementary school teachers.

METHOD

In this study, the type of research used is a literature study. Literature study is research that has similarities with other research, only the sources and methods of data collection are through reading, recording and managing research materials [7]. In writing a literature review, the main source is academic journals which contain reviews of scientists on various research reports [8].

The journals selected and used in this study are journals that are considered appropriate to the topic raised by the researcher. Research articles were obtained based on search results on Google Scholar and using the publish or perish assistance application.

The data obtained are then presented in the form of a table consisting of the name of the researcher, year, research objectives and goals. After the data is arranged into the table, the researcher conducts an in-depth review and analysis of the article that at the final stage the researcher makes conclusions based on the analysis that has been carried out in depth.

Research is reported through the arrangement based on the principles of convenience and simplicity. This is because researchers have limited abilities that have not been able to research in depth. In addition, the researcher simply conveys the results so that readers can easily understand the use of online media in learning mathematics.

RESULTS AND DISCUSSION

The following are the names of the authors along with the types of research and the research objectives that form the blend or articles analyzed.

Table 1. Research articles analyzed

No	Author Name	Type of Research	Objective
1.	Shofiah et al.,[9]	Qualitative	descriptive To describe learning outcomes and determine the ability to understand mathematical concepts of elementary school students
2.	Al Mawaddah et al., [10]	Quantitative research	To determine the effect of the use of quizzes on student learning outcomes in mathematics subjects in elementary school
3.	Sulistyaningrum et al., [11]	Qualitative	descriptive To describe the use of pear deck and jam board media in learning mathematics in elementary school
4.	Sylviani & Permana, [12]	Research literature study	To describe the use of dragon boat algebra 5+ in improving understanding of

			algebraic concepts in elementary school
5.	Marsiding, [13]	Descriptive method	To describe the effectiveness of online learning by using zoom in mathematics learning in elementary school
6.	Sa'ria & Pangestika, [14]	studies for	The literature describes the use of YouTube learning multimedia in mathematics learning in elementary school.

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learning is often a feat in itself for students. Students assume that mathematics is difficult learning. This opinion needs to be overcome with the creativity of the teacher to package learning by using effective media in learning mathematics. The use of online media in learning mathematics is one solution to make students able to follow the learning process and understand the material well. Based on the results of the analysis and search that has been carried out by researchers that there are several online media used by teachers in online learning in elementary schools. The online media are:

1. Whatsapp

The first online media is WhatsApp. This media is a messaging application that contains features that can be used by teachers and students. The main features that can be used are messages, voice messages, picture messages, video messages, video calls, group calls and groups. In the learning process, the teacher can use WhatsApp to communicate and explain the subject matter. Students learn independently at home with their parents according to the material delivered via WhatsApp [9]).

2. Quizizz

The use of quizizz in the mathematics learning process can help increase students' learning motivation and make students focused and enthusiastic about learning so that learning outcomes can increase [10]. Quizizz will help students understand the material through quizzes or questions. Quizizz besides being a learning media can also be used for learning evaluation. quizizz can be used as a fun learning strategy without losing the essence of the subject matter.

3. Pear Deck and Jamboard

Media The use of pear deck and jam board media can make students active and reduce face-to-face limitations between students and teachers in learning [11]. Teachers can present material or images as teaching materials that are packaged interactively. In this process, students can respond in writing through a virtual board. While the pear deck media is used to make presentations attractively so that presentations can be presented interactively. The use of these two media is very helpful in learning mathematics in elementary schools.

4. Dragonbot Algebra 5+

Dragonbot algebra 5+ is a game that can be run on a computer or smartphone. This platform is a platform that combines children's fun with education. Students receive algebraic concepts through games. This is in line with [12] that the use of Dragonbot Algebra 5+ can make students accept algebraic concepts in a fun and not boring way. Games that are liked by children

will indirectly have a positive impact if the game contains lessons. Games are packaged to foster creativity and problem-solving. In online learning, this platform is very suitable for instilling algebraic concepts independently at home. In addition to the fun that children get, they also get concepts and an understanding of algebra.

5. Zoom

The use of zoom in learning makes students feel learning directly because of all the supporting features. As revealed by [13] that Zoom offers learning that can be done virtually but teachers and students can communicate and meet face-to-face. The features in Zoom that can be used in learning are video conferencing features, chat rooms, share screens, and digital whiteboards. This feature can support learning so that it can be carried out even though learning is carried out remotely.

6. Youtube

The use of youtube as an online medium for learning mathematics is very effective. Youtube has a wide variety of math learning videos. Students can use the video to study independently, besides that the video can be watched and the speed level is adjusted to make it easier for students to understand the material. The use of youtube will increase students' interest in learning mathematics in distance learning [14]. Based on the results of these studies, YouTube can be one of the media that can be used by teachers and students in learning mathematics in elementary schools.

CONCLUSION

The use of online media in learning mathematics is one solution to make students able to follow the learning process and understand the material well. The first online media is WhatsApp. In the learning process, the teacher can use WhatsApp to communicate and explain the subject matter. Students learn independently at home with their parents according to the material delivered via WhatsApp. The second online media is quizizz. Quizizz will help students understand the material through quizzes or questions. Quizizz besides being a learning media can also be used for learning evaluation. quizizz can be used as a fun learning strategy without losing the essence of the subject matter. The third online media are Pear Deck and Jamboard Media. The use of these two media is very helpful in learning mathematics in elementary schools. The fourth learning media is Dragonbot Algebra 5+. In online learning, this platform is very suitable for instilling algebraic concepts independently at home. In addition to the fun that children get, they also get concepts and an understanding of algebra. The fifth online learning media is zoom. The use of zoom in learning makes students feel learning directly because of all the supporting features. The last online learning media is YouTube. The use of youtube as an online medium for learning mathematics is very effective. Youtube has a wide variety of math learning videos. Students can use the video to study independently, besides that the video can be watched and the speed level is adjusted to make it easier for students to understand the material.

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