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Comparative Study Analysis of the Use of Whatsapp and Schoology on Learning Outcomes in Emergency Times

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Abstract: This research aims to determine the differences between learning using WhatsApp and learning using the Schoology web-based site. The method used in this research is a quantitative quasi-experimental type with a non-equivalent pretest and posttest group design. The samples in this study were students of class X Science 1 and students of class The results of this research show that there is a difference between the class group using Whatsapp and the class group using the Schoology web-based site, where the class group using Whatsapp has a higher average score compared to the class group using the Schoology web-based site. This shows that WhatsApp media is more effective in improving learning outcomes than learning using the Schoology web-based site.

Keywords: Whatsapp, Schoolgy, Learning, Emergency Time

1. Introduction

The COVID-19 pandemic has changed many aspects of life, including the education sector. Schools and educational institutions around the world have been forced to close their physical doors and shift to online learning to ensure the continuity of education. This emergency situation forces educators, students, and parents to adapt quickly to various digital tools and platforms that can support the teaching and learning process remotely, Kurniasih, et. al (2020); Ristiyani, et. al (2019); Wanabuliandari, et. al (2019); Wanabuliandari, et. al (2019). Two platforms that are widely used during this emergency are WhatsApp and Schoology, Umah, et. al (2020); Widianto, et. al (2019); Ahsin, et. al (2019); Ahsin, et. al (2019); Cahyono, et. al (2020). WhatsApp, a very popular instant messaging application, has been used by many educators because of its ease of access, simple interface, and familiarity for students and parents. With WhatsApp, teachers can send assignments and teaching materials and communicate directly with students or parents quickly and easily, Kara, et. al (2020); Lestari, et. al (2020); Nisa, et. al (2020); Nugraheni, et. al (2020). On the other hand, Schoology is a learning management platform (Learning Management System, LMS) that offers more comprehensive features for managing online classes. Schoology provides tools for creating curriculum, assessments, class discussions, and tracking student progress in a more structured manner. With these various features, Schoology can help create a more organized and formal learning environment. However, the effectiveness of these two platforms in supporting student learning outcomes during times of emergency still needs further research, Rodli, et. al (2019); Roysa, et. al (2020); Satria, et. al (2020); Sofia, et. al (2020); Sulistyowati, et. al (2020); Tamarudin, et. al (2020). How effective are WhatsApp and Schoology in improving student learning outcomes? Are there significant differences in the learning outcomes achieved through the use of these two platforms? These questions are the basis of this research, which aims to conduct a comparative study of the use of WhatsApp and Schoology on learning outcomes in times of emergency. Through this research, it is hoped that a deeper understanding can be found regarding the advantages and disadvantages of each platform in the context of online learning. in times of emergency. In addition, the results of this research can provide practical recommendations for educators and policymakers to select and implement the most effective platforms for supporting student learning outcomes in times of crisis, such as a pandemic.

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In this research, the approach used is a quantitative approach with a survey method. Surveys will be conducted on students and teachers in several schools who use WhatsApp and Schology in the teaching and learning process. The collected data will be analyzed using descriptive and inferential statistics to determine the differences between the use of WhatsApp and Scholology on student learning outcomes.

Previous research has shown that the use of information technology in education can improve student learning outcomes. However, the differences between WhatsApp and Schology in improving student learning outcomes are still unclear. Therefore, this research aims to fill this gap by collecting more specific and accurate data.

2. Structure of References

The research conducted by the author used several study reviews as a theoretical basis and also as a comparison with previous research that had been conducted. The study review conducted for this research involved several different sources. The previous research that was used as a reference focused on the results of using WhatsApp and Scholology, which could improve students' learning outcomes, Ahsin, et. al (2020); Ahsin, et. al (2020); Al Mabruroh, et. al (2020); Angelia, et. al (2020); Arukah, et. al (2020. Therefore, researchers carried out study steps on several previous studies in the form of articles and journals available via the internet, Arukah, et. al (2020); Devi, et. al (2020); Fathurohman, et. al (2020); Fathurohman, et. al (2020); Kara, et. al (2020). The comparison in this research will focus on the use of WhatsApp and Scholology in schools, Nugraheni, et. al (2020); Nurhadi, et. al (2020); Prayogo, et. al (2020); Purnaningtyas, et. al (2020); Purnaningtyas, et. al (2020).

The first was carried out by Khasnah et al. (2020), entitled "The effectiveness of group WA media in online learning." Based on this research, it can be concluded that learning using group WA media makes it easier for teachers to give assignments, collect assignments, and be more effective and efficient.

The two studies were conducted by Shobirin Muhammad (2021) entitled "Application of the Drill Practical Method to Improve the Ability to Write Advertisements in Class V Students at SDN Bendo." The results of the research show that the practical drill method is effective in improving writing skills in fifth grade students at SDN Bendo, Rembang district. The results of the research show that (1) the results of observations on the teacher's activities in implementing learning activities to write advertising essays using the drill and practice method show that the initial cycle average was 2.36 in the first cycle to 2.40 after the second cycle was implemented; it was 4.16; there was an increase of 1.76. (2) The results of observations on student activities during the implementation of advertising essay writing learning activities using the drill and practice method averaged 4.60% in the first cycle to 7.70% after the second cycle was carried out at 9.15%, an increase of 9.15%. 1.45%. (3) The results of the training and practice learning activities in writing advertising essays show that the level of mastery of students' skills in writing scripts at the beginning of the cycle was 9.09% in cycle I to 18.18% after the implementation of cycle II, which was 54.54%, an increase of 36.36%.

The third research is from Adiwisastra Miftah Farid (2015), entitled "Designing an Interactive Quiz Game as Multimedia Drill Practical Learning to Improve Student Learning Outcomes." The research results show that the use of drill-and-practice multimedia learning techniques through interactive quizzes can improve student learning achievement. After conducting an assessment using a questionnaire, almost all students gave positive responses to this drill and practice multimedia learning model. They consider that this type of learning is beneficial, interesting, and able to improve student learning outcomes.

3. Research Methodology

The method used in this research is quantitative, a quasi-experimental type of research with a non-equivalent pretest and posttest group design, where the subjects in the research were two class groups consisting of a class group using Schoology and a class group using the Whatsapp application. The class determination is not chosen randomly but is based on the average value of learning outcomes in the previous semester. The population in this study was 40 students at level XI MA Asy-syakur Nglingi Ngasem Kalitidu Bojonegoro Regency for the 2019/2020 academic year, consisting of two classes, namely class-written tests and questionnaires to determine student involvement and activeness. Meanwhile, sampling in this research used a purposive sampling technique, which was used by determining specific criteria for the sample in the form of odd semester report card scores. The data analysis used is based on the initial test (pretest) as well as test result data after being given treatment or a post-test. Hypothesis testing is used using normality tests, homogeneity tests, and n-gain.

4. Result and Discussion

The research results were obtained through tests on material understanding of the elements of hadith, which were carried out twice, namely before learning (pretest) and after learning (posttest). By using N-gain, the learning outcomes for classes using the WhatsApp application are higher than those for classes using Schoology, as shown in the following table:

Table 1: N-gain of learning outcomes for Whatsapp class and Schoology calss

Class Group	N-gain Score
Schoology Class (Science 1)	0,44
KelompokWhatsapp (Science 2)	0,65

The results of research on the affective aspect of student activity in class groups using Schoology (class opinion of 56.02%) Meanwhile, the class group is using WhatsApp (class This shows that the results of affective student learning independence for the class group using the Whatsapp application (class X Science 2) are higher than the class group using Schoology (class X Science 1). There are three stages in this research that will be discussed, namely before learning, during learning, and after learning.

In the first stage, before learning is carried out, students in both the WhatsApp application class group and the Schoology class group are given a test. This is done to determine students' initial understanding of the material that will be provided in the learning process. It is known that the highest average pre-test score for class X Science 2 is 23, the lowest score for class X Science 2 is 21.2, and the average score is 21.8. Meanwhile, class X IPA 1 has the highest score of 23.4 and the lowest score of 21.6, and the average score is 22.4. This shows that there is a difference between class X IPA 1 and class Whatsapp for class X Science 2 and using Schoology for class Meanwhile, class

This shows that there is a difference in the average score between the Schoology class and the class that uses the Whatsapp application, where the class that uses the Whatsapp application is higher than the class that uses Schoology, or class X Science 2 has a higher post-test average score than class X Science 1. Using the WhatsApp application compared to using Schoology is easier for students to accept. This is because students are already familiar with the application. Compared to Schoology, students tend to be relatively new to Schoology, so they have to learn how to operate this web-based learning medium. By using the WhatsApp application, students can easily see video shows that teachers send to class groups. In this broadcast, the students gave each other comments and discussed them actively in the group.

This shows quite active student participation. Meanwhile, students consider Schoology to have an unattractive appearance and seem very formal, making them rarely open this web-based medium. Although teachers basically provide as wide an opportunity as possible for students to convey ideas and concepts and seek additional information to support learning from various media, both for students in the WhatsApp application class group and students in the Schoogy class group, the enthusiasm given by the students is different. The Schoology class group tends to be passive, with fewer comments and ideas than the WhatsApp application class group.

Compared to WhatsApp class groups, almost all participants in the group actively appear to convey ideas. In fact, on several occasions, students who were passive in class meetings were seen to be very active in commenting in the WhatsApp group. In line with the results of research conducted by Susilo (2014), which states that the learning process paradigm in the world of education today is not only biased through face-to-face meetings in rooms but can also be carried out online via the internet with various existing application media,. . One of the obstacles that occurs for Schoology class group students is that they have difficulty creating an account on Schoology as students. Moreover, the instructions are given online. Some of them are still adapting to online learning, especially regarding non-face-to-face instruction. So independent learning activities also experience obstacles. Moreover, the students were relatively new to the website called Schoology. As a note for the future, learning is not only done in class. However, the use of social media, such as the WhatsApp application, or the development of websites in the educational sector, such as Schoology, are suitable for use as learning media. It is very good for the future that real and virtual blended learning will certainly be able to improve the learning experience of students after the pandemic emergency period.

5. Conclusion (Simpulan dan Saran)

Based on the research results, it can be concluded that there are differences between students in class groups who use the Whatsapp application and students in class groups who use the Schoology web-based site. The class group that used the WhatsApp application had higher average scores compared to the class group that used the Schoology web-based site. As for suggestions for the future, when the pandemic outbreak ends, learning by combining real and virtual learning processes should be carried out by finding the right formula for using teaching materials and the right models so that it becomes an interesting, interactive, and communicative learning process with students to gain feedback. End. So in the future, it is hoped that there will be better formulations for managing learning media, both in terms of teaching materials and appropriate models for combined learning like this. Determining interesting topics in online learning must also be designed in such a way that good feedback occurs between teachers and students. This shows that learning can be very interesting and communicative without significant obstacles. This means that teachers are able to provide learning facilities both in class and outside of class, both during class hours and outside of class hours, both formally and

informally. In this way, students will play an active role in the teaching and learning process if there is a notification on their cellphone, so that the learning process occurs interactively and communicatively.

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