

## The influence of blended learning model assisted by YouTube application during the Covid-19 pandemic on fifth graders' thematic learning outcomes

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### ABSTRACT

The COVID-19 pandemic has forced educational institutions worldwide to rapidly adapt to remote teaching and learning methods. Blended learning models that combine online and offline methods have emerged as a popular approach to facilitate effective teaching during the pandemic. This study examines the influence of a blended learning model assisted by YouTube application on the thematic learning outcomes of fifth-grade students during the COVID-19 pandemic. The study uses a quasi-experimental design with a pre-test and post-test control group. The results show that the blended learning model significantly improved students' thematic learning outcomes compared to the traditional classroom approach. The study also found that the YouTube application played a significant role in facilitating students' engagement and motivation in the learning process. Overall, this study provides valuable insights into the effectiveness of blended learning models and the potential of technology-assisted learning during the COVID-19 pandemic.

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## INTRODUCTION

Education is a necessary process to balance and perfect the development of individuals and societies, therefore education is very necessary for everyone on this earth (Hanushek, 2020). Thematic learning is a form that will create an integrated learning, which will encourage the involvement of students in learning, make students actively involved in the learning process and will create problem-solving situations according to the needs of students, in learning thematically students will be able to learn and play with high creativity (Mustikasari et al., 2020).

The situation that we have never predicted in the past two years has spread the virus very quickly and also deadly which has resulted in changes in government policies in the education system in Indonesia. The government provided a new policy, changing the learning system that was originally required for students to come to class, to simply at home (Drane et al., 2020).

As stated in the Education Law Number 20 of 2003 Article 1: "Distance education is an education whose students are separated from educators and their learning uses various learning resources through communication technology, information, and other media." However, recently the government has again given a policy that it has been allowed to return to Limited Face-to-Face Learning even though there are still not 100% of students who can attend learning at school (Aliyyah et al., 2020).

Related to some of the factors above, the role of the teacher is very related in improving the learning outcomes of students (Carrillo & Flores, 2020). Because, based on the results of observations at Elementary school in Central Jakarta, which is one of the schools that has implemented an online and offline learning system. For example, during offline learning, many students make noise in the classroom. For example, chatting with friends, joking, and some are even lazy to take part in Limited Face-to-Face Learning because they have been studying online for too long at home. As for the problems that occur during online learning, for example, economic constraints on quotas are a problem, even though they have been given a free quota by the government, if the quota runs out and happens to be at home not using wifi or even students from underprivileged families will be burdensome if they have to buy a large quota (Bisik, 2022).

Therefore, teachers are required to be able to create learning activities that attract the attention of students, creativity and fun so that later they have satisfactory learning outcomes (Priyanto & Dharin, 2021). The problem that occurs at Elementary school in Central Jakarta is the low score of students in Thematic subjects on the theme 6 Subtheme 1 "Temperature and Heat". Based on the presentation of the existing problems, researchers want to conduct research with the title The Effect of Blended Learning Model Assisted by Youtube Applications during the Covid-19 Pandemic on Class V Thematic Learning Outcomes.

## **LITERATURE REVIEW**

### **Blended learning**

Blended learning is a teaching approach that combines traditional classroom teaching with online learning activities. It is sometimes also referred to as hybrid learning. In blended learning, students have some control over the time, place, and pace of their learning (Rasheed et al., 2020).

Blended learning has become increasingly popular in recent years, especially as more and more schools and universities have moved some of their instruction online due to the COVID-19 pandemic. It has many potential benefits, including increased flexibility for students, more personalized learning experiences, and the ability to combine the best of both online and offline teaching methods. However, it can also present some challenges, such as the need for teachers to have the technical skills and resources to create and manage online learning materials (Bouilheres et al., 2020).

### Learning process

Learning is a process, namely the process of organizing, organize the environment around students so that they can grow and encourage students to carry out the learning process. This learning is a process of the teacher providing guidance to students in a learning condition. In learning, of course there are many differences, such as there are students who are able to digest the subject matter easily, and there are also students who are slow in digesting the subject matter. These two differences will cause the teacher to be able to set strategies in learning that are appropriate to the circumstances of each student (Abdulrahman et al., 2020).

### Learning outcomes

Learning outcomes are changes in behavior in self students, which can be observed and measured in the form of changes in knowledge, attitudes and skills (Villena-Taranilla et al., 2022). The results of one individual who has been active and positive in learning where students have participated in a learning process that includes various abilities both cognitive, affective and psychomotor. Learning outcomes are also the results given to students in the form of assessments after participating in the learning process by assessing knowledge, attitudes, skills in students with changes in behavior. learning outcomes are changes in behavior in students, which can be observed and measured in the form of changes in knowledge, attitudes and skills (Isroani et al., 2022).

### METHOD

This research selects quantitative research methods (Lestari et al., 2019). A quantitative approach is obtained from validation, as well as conducting Pre-Tests and Post-Tests on students. The research method used in this study is a type of *Pre-experimental design (Nondesigns)* method. Which aims to determine the influence of *blended learning* model learning on the learning outcomes of elementary school in Central Jakarta, the research was designed with a *One-Shot Case Only design*.



#### Information:

X = Given Treatment (Independent Variable)

O = Obseration (Dependent Variable)

The subject of this research is a student at elementary school in Central Jakarta with total 30 students. The instrument of this research is a materials about thematic where is delivered to the subject with an online form.

### RESULTS

In this research design, there is only one class, namely a group that uses a *Blended Learning* learning model, then after the research is carried out, the *learning results* of students will be seen. The influence of learning models on student learning outcomes is measured by comparing learning

outcomes / *pre-test* results given by researchers to students before using the learning model and *post-test* results after using the *Blended Learning* model.

The provision of this *post-test* is carried out after students are asked to watch the YouTube video that the researcher provides will show how far the results are from the treatment. Learning by applying the *Blended Learning* model is very influential for students in participating in learning or not. At the end of the meeting, students were given a *questionnaire* containing several questions covering the daily lives of students after participating in learning using the *Blended Learning* model during the *Covid-19* pandemic.

The population in this study was grade fifth students of Elementary school student at Central Jakarta which amounted to 30 people. The reason why researchers chose grade fifth students was because researchers wanted to improve student learning outcomes. In this study, researchers chose the subject matter of Theme 6 Subtheme 1 Learning 1-3 with the subjects of science, Bahasa, social studies, Civic Studies, and Art Studies.

The data collection technique used in this study was to use *pre-tests*, *post-tests* and questionnaires (questionnaires) obtained from the learning results of Theme 6 Subtheme 1 students of grade fifth at Elementary school student in Central Jakarta. To measure the validity of an objective test in the form of a multiple-choice question, namely by using the *biserial point* correlation formula.

The learning outcomes in the Thematic Post-Test Theme 6 Subtheme 1 Learning 1-3 assisted by the Youtube application showed an average score of 85.6 reaching the highest score of 100 and the lowest score of 70 with a median of 85.5 modes of 89.5 and a standard deviation of 8. Meanwhile, the learning results on the Pre-test showed an average score of 57.03 with the highest score of 77 the lowest value of 37 and a standard deviation of 10. From the results of calculating normality using the *liliefors* test, the results on the Post-Test were obtained, namely  $L_{count} = 0.094$  with the number of  $n = 30$  and  $L_{table} = 0.161$ , then  $L_{count} < L_{table}$ , which is  $0.094 < 0.161$  the data is normally distributed. While in the Pre-Test, the results of  $L_{count} = 0.100$  with the number of  $n = 30$  and  $L_{table} = 0.161$ , then  $L_{count} < L_{table}$  the data is normally distributed. And it has been known that the data of both comes from normal data.

From the results of homogeneity using the *Fisher* test, the results at a significant level of  $\alpha = 0.05$  obtained  $F_{count} = 1.62$  and  $F_{table} = 2.00$ . Based on the examiner's criteria, namely  $F_{count} < F_{table}$ , then  $1.62 < 2.00$  and the alternative hypothesis is rejected ( $H_0$ ) then the sample is homogeneous.

After testing normality and homogeneity, it will be continued with the hypothesis using the t-test obtained by the result of *t counting* 10.9. Because  $t_{count} > t_{table}$ ,  $H_0$  is rejected which means that there is an influence of the *Blended Learning learning model assisted* by the Youtube application on the thematic learning outcomes of grade fifth Elementary school student at Central Jakarta.

The results of this study can show that there is an influence on the *Blended Learning learning model assisted* by the Youtube application on thematic learning outcomes of Theme 6 Subtheme 1 Learning 1-3 students of class V. This study used two test tests, namely Post-Test and Pre-Test. When conducting research, classes are given learning using the *Blended Learning* model and assisted by Youtube Videos.

At the time of applying the *Blended Learning* learning model, students looked very active, and also looked very interested because learning was assisted by video material provided from Youtube. Students are also very quick to do when they get assignments given by researchers. Unlike before using the *Blended Learning* learning model, students look very bored because they only rely on one-way learning and seem monotonous.

Thus, it can be said that there is an influence on the use of *the Blended Learning learning model assisted* by the Youtube application on the thematic learning outcomes of grade fifth student. this is evidenced by the average score obtained by students after the Post-Test test of 85.6 while during the Pre-Test test only got an average score of 57.03. For the data normality test, it can be seen that the two classes are normal because calculations are obtained for the Post-Test test  $L_{count} = 0.094 < L_{table} = 0.161$  and for the Pre-Test test  $L_{count} = 0.100 < L_{table} = 0.161$  so that it can continue to calculate the homogeneity test from the data.

Homogeneity tests need to be carried out to be able to prove the similarity of the two variants of the sample group. The homogeneity test in this study used a *fisher* test with the condition that the homogeneity  $F_{count} < F_{table}$ , then  $F_{count} = 1.62$  and  $F_{table} = 1.86$  were obtained, then the two samples were homogeneous. After the data from each of these samples proved to be normal and homogeneous, then after that the data can be processed with statistical calculations with the results of the t-test calculation and obtained the calculated t value = 10.9. Since  $10.9 > 2.00$  then  $H_0$  is rejected. This shows that there is a significant difference between the values during post-test and also during the pre-test.

## **DISCUSSION AND CONCLUSION**

The results of this study can indicate that there is influence on the Blended Learning learning model assisted by the Youtube application on learning outcomes Thematic Theme 6 Sub-theme 1 Learning 1-3 students in grade fifth. This study used two test tests, namely the Post-Test and the Pre-Test. When conducting research, the class was given lessons using the Blended Learning model and assisted with YouTube videos. Another research by Seage and Türeğün (2020) also find that blended learning has a significant learning outcomes for the student, especially on STEM subject as this study instrument.

Based on the results of data analysis and hypothesis testing, it can be concluded that there is a significant difference in thematic learning outcomes for grade fifth student at Elementary school in Central Jakarta, between before (Pre-Test) and after (Post-Test) using the Blended Learning learning model assisted by the Youtube application. The results of normality and homogeneity show that the data used in the study are normal and homogeneous. Testing the hypothesis using the t-test shows that there is a significant effect of the learning model on student learning outcomes. Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

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