



Utilization of Educational Video as a Media for Learning Simple Accounting for Elementary School Students' during the COVID-19 Period

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ABSTRACTS

For approximately 2 years the learning was carried out online. UPI 2021 Community Service Program supports improving children's literacy skills during the pandemic. The purpose of this research is to increase numeracy literacy in Elementary School students' and make it easier for educators and parents to carry out online learning activities. Simple Accounting subjects were chosen to teach the value of money, strengthen mathematics subjects which are the basis of Accounting and to strengthen numeracy literacy in Elementary School students'. The type of research method used is quantitative research by distributing online questionnaires via Google form to measure second-grade students' at Cikutra Elementary School level of Understanding, the subject on Multiplication, Division, and Currency. The results of the research show that the average post-test score of students' is 72% greater than the average Pre-test score of 28.2% with a difference of 46.2%. Therefore, the use of Educational Video Media can be considered quite effective and has a positive impact, especially for students' who have problems using the Virtual Meeting application. Online learning through Educational Videos distributed via WhatsApp can be one of the easiest ways to help the Online Learning program.

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1. INTRODUCTION

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students' actively develop their potential to have religious-spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society. For the learning process to run effectively, teachers are required to be able to choose methods and design learning activities that are considered effective. Learning outcomes can be improved by utilizing software in learning (Muvawala, 2012). The software can be in the form of technology-based learning media. The presence of Modern Science and Technology provides convenience in the world of education to be more creative in making learning interesting and effective, both in the learning process and learning media, so that students' will be happy, interested, and enthusiastic during the learning process. Learning media plays an important role in attracting students' interest in learning (Kurniawan & Trisharsiwi, 2016).

Many research studies have discussed the use of educational video as a media for learning. One of the most popular learning media in the modern era is the Educational Video media according to (Novita, 2015). Educational videos are declared to affect student learning outcomes in digital simulation learning (Wisada & Sudarma, 2019). There is a research in grade 11 of High School Probolinggo City that stated educational video media can motivate students' in learning Mathematics as evidenced by the increase in the average score from 69, 19 to 81 (Purwanti, 2015). Another related research was also conducted in High School 1 Bajo, Luwu Regency, South Sulawesi. The results of the study show that video media can significantly improve student learning outcomes. The mathematics learning outcomes of class XI students' at High School Bajo before being given video tutorials were very low with an average of 33.75 increased significantly with an average of 78.25 from the ideal value of 100 (Baharuddin, 2014). With the use of Educational Video Media, the subject can be packaged as well as possible so that learning attracts students' attention, fosters student interest, stimulates students' to learn more about the subject, and makes it easier for students' to understand the subject presented by the teacher. However, the use of learning media that has not been maximized makes students' bored and not interested in learning (Sukmanasa et al., 2018).

Based on previous studies, many have used Educational Video Media to increase the effectiveness of learning, but very few have used it for second grade elementary school students' Mathematics learning media. Referring to the background above, further research for Utilization of Educational Video as a Media for Learning Simple Accounting for Elementary School Students' during the COVID-19 Period is necessary.

Mathematics is one of the subjects that is currently not favored by elementary school students' because it is considered difficult and boring (House, 2006). Online learning using textbooks without direct interaction with teachers gives less than optimal results, so it becomes a challenge to make math fun and easy to understand because numeracy literacy is very important, and needed in all aspects of life both at home, school, and in the community in everyday life. The simple accounting subject was chosen to teach the value of money and its efficient use as well as to strengthen the mathematics subject which is the basis of Accounting and strengthen numeracy literacy in elementary students'. The 2021 UPI Community Service Program supports improving children's literacy skills during the COVID-19 pandemic. During the pandemic where learning is carried out online the selection of learning media is not easy because there are still many students' who have obstacles such as only having 1 device for several family members, limited internet quota, fewer up-to-date

devices, and other obstacles. With UPI 2021 Community Service Program It is hoped that there will be an increase in numeracy literacy in Elementary School students' and make it easier for educators and parents to carry out online learning activities

Therefore, research was conducted on the Use of Educational Video Media as a means of Simple Accounting Learning at the Elementary School level during the COVID-19 period. The research used a quantitative approach using a pre-experimental method in the form of a one-group Pretest post-test design. The research results were analyzed using descriptive statistics by comparing the mean values in the pre-test with the Post-test.

2. THEORITICAL FRAMEWORK

2.1. Learning media

Media are the communication outlets or tools used to store and deliver information or data. Learning media is a tools or equipment to implement processes that enable educators and learners to carry out learning activities. Learning media is needed to improve the effectiveness of learning achievement goals. The learning process will occur if there is communication between the recipients of the message with the source/channel message through the media. So that the learning process using the media becomes more effective, this message is delivered by the teacher, accepted by students to stimulate the thoughts, feelings, attention or willingness of students so that will encourage the learning process, messages or information brought by instructional media can be in the form of messages prepared to meet the learning needs and students' abilities so students can actively participate in the learning process ([Widodo, 2018](#)).

2.2. Educational video

An educational video or video lesson is a video which presents educational material for a subject which is to be learned. However there is a pervasive belief, increasingly being challenged by research, that television and video viewing is a passive activity in which viewers are only superficially reactive to what they are watching, and one that will, over time, hamper or displace academic achievement ([Cruse, 2006](#)). But there is research that stated while it may appear to be passive, animations have always been very popular with young kids, the cartoon type of explainer videos is easily understandable and is more entertaining ([Laaser & Toloza, 2017](#)).

2.3. Accounting

Accounting comes from English accounting which means to count or account. Accounting is a process of recording, classifying, summarizing, managing, and presenting data, transactions, and events related to finance so that it can be used by people who use it easily to understand for decision making and other purposes ([Sabrina, 2012](#)). Accounting science collects, identifies, and classifies, records transactions and other events related to financing so that it can produce information, namely financial statements that can be used by interested parties. To be able to process financial data, of course, we also need to first understand the value of the currency, and strengthen numeracy literacy. Mathematics is needed as a basis for learning Accounting. This is in line with the Basic Competencies of Second Grade Semester 1, namely:

- (i) 3.4. Explain multiplication and division involving whole numbers with products up to 100 in everyday life and link multiplication and division
- (ii) 3.5 Explain the value and equivalence of currency denominations.
- (iii) 3.5.1 Identifying the value and equivalence of currency denominations.

- (iv) 4.4 Solve multiplication and division problems involving whole numbers with products up to 100 in daily life and relate multiplication and division.
- (v) 4.5 Ordering currency values and demonstrating the various equivalents of currency denominations
- (vi) 4.5.1 Pairing currency values as well as various currency denomination equivalents.

3. METHODS

The type of research method used was quantitative research by distributing online questionnaires via Google form to determine the extent of understanding of second grade students' at Cikutra Elementary School, Bandung Indonesia towards Subjects for multiplication, division, and currency. The sample in this study was 22 class 2-B students' at Cikutra Elementary School who filled out a Google form questionnaire. **Figure 1** illustrates the research flow. This research was conducted in 2 stages, divided into 2 sessions, namely the first Pre-test, The pre-test will contain 10 multiple choice questions before the subject was presented this questionnaire was distributed to the second-grade students' of Cikutra Elementary to measure the level of students' understanding of the multiplication, division, and currency subject before the treatment. After that, then we introduced educational video as a learning media solution during the pandemic and carried out the treatment in the form of educational video media with multiplication, division, and currency subject in a row. After giving the treatment, then we redistributed the questionnaire with the same question in the form of a post-test to students' with the aim of knowing the extent to which students' understanding of the multiplication, division, and currency subject after treatment was carried out.

The instrument designed is a two-choice Likert scale. A Likert scale is a psychometric scale that has multiple categories from which respondents choose to indicate their opinions, attitudes, or feelings about a particular issue. Some advantages of Likert-scale questionnaires are that data can be gathered relatively quickly from large numbers of respondents, they can provide highly reliable person ability estimates, the data they provide can be profitably compared, contrasted, , and interviews. The data obtained will be processed and then compared until finally the results will be concluded (Joshi et al., 2015).

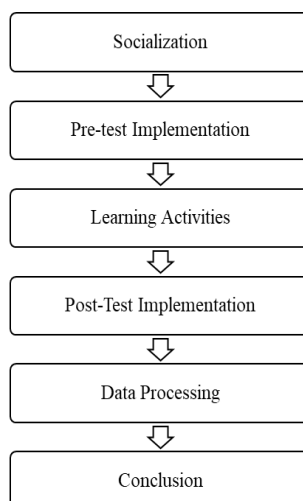


Figure 1. Method framework.

Figure 2 describes the details of men as much as 50% (11 students') and women as much as 50% (11 students'). With ages varying between 8-10 years, **Figure 3** describes the details of 18 students' aged 8 years, 5 students' aged 9 years and 10 years old 1 student.

4. RESULTS AND DISCUSSION

4.1. Demographics

This research was conducted at Cikutra Elementary School. The first stage carried out in this study was to survey the number of students' in class 2-B recorded as many as 28 students'. Then we selected a sample from the population and obtained as many as 22 students'. Class 2B students have learned about multiplication and division in mathematics, but the test results are quite disappointing because there are still many students who get scores below the minimum criteria (see **Table 1**). Only 12 students whose scores are above the minimum criteria value and 10 people have scores below the minimum criteria of which 3 people are known to have learning difficulties. There are still many students' who have obstacles such as only having 1 device for several family members, limited internet quota, fewer up-to-date devices, and other obstacles.

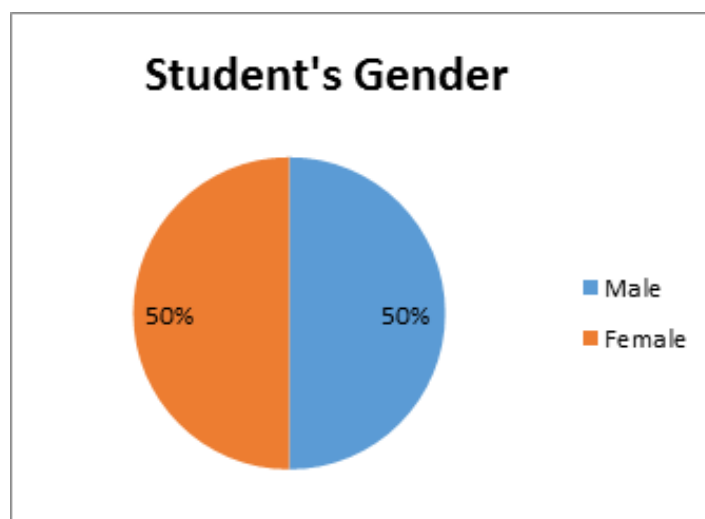


Figure 2. The student's gender.

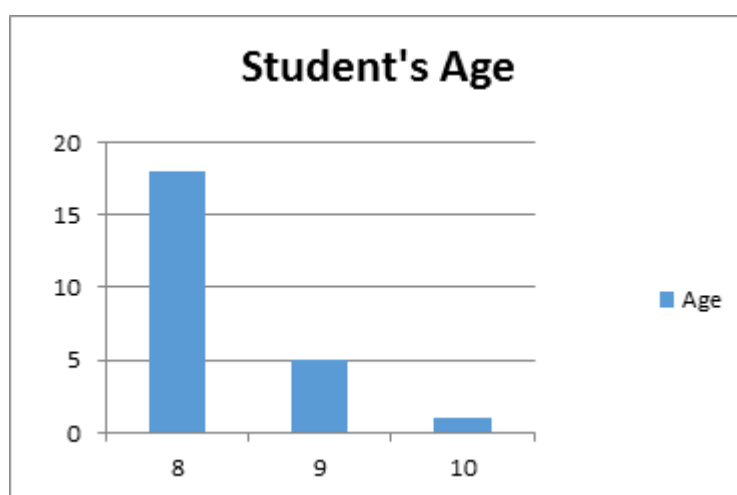


Figure 3. The student's age.

Table 1. Students' math score test.

Students'	Math test scores	Students'	Math test scores
A	55	L	55
B	75	M	65
C	75	N	75
D	75	O	75
E	60	P	75
F	75	Q	80
G	50	R	25
H	75	S	70
I	70	T	80
J	75	U	80

4.2 Phenomena in the learning process

From the student demographic data, it is found some complexity in the academic aspect, especially in the learning process. There are still many students' who have obstacles such as only having 1 device for several family members, limited internet quota, fewer up-to-date devices, a slow learner and other obstacles. In the first session when we distributed the pretest, students seem less enthusiastic about the learning process. Also, students have a low level of understanding. In the second and third session, an educational video is used in the learning process about Multiplication, Division, and Currency subject. Students seem to be getting enthusiastic about participating in learning. After that we distributed the post-test to know the extent to which students' understanding.

4.3. Pre-test and post-test results

Learning activities at Cikutra Elementary School are conducted online. The media used in learning is through Google meet, Google form and the delivery of assignments and other subjects through the WhatsApp application. **Table 2** describes the questions that have pre-test and post-test proposed. We distributed online questionnaires via Google forms which were distributed to students' through the WhatsApp to measure the level of students' understanding of the Multiplication, Division, and Currency subject. The first questionnaire that was made was a pretest questionnaire and the second was a post-test questionnaire.

Table 2. Students' pretest and post-test results.

Number	Question	Pre-test	Post-test	Gain
1.	Do students' understand the concept of multiplication?	30%	70%	40%
2.	Do students' understand the concept of division?	20%	65%	45%
3.	Can students' calculate the multiplication of whole numbers with products up to 100?	15%	65%	50%
4.	Can students' calculate the multiplication of whole numbers with products up to 100?	15%	50%	35%
5.	Can students' solve problems involving multiplication and division in everyday life?	9%	45%	36%
6.	Do students' know what money means?	32%	90%	58%
7.	Do students' know the value of currency denominations?	45%	90%	45%
8.	Can students' calculate currency values?	40%	90%	50%
9.	Do students' understand currency value comparisons?	32%	85%	53%
10.	Can students' solve problems involving currency calculations?	20%	70%	50%

4.4. Discussion

The results show several discussion points:

- (i) For question number one the result increased by 40%
- (ii) For question number two the results increased quite significantly by 45%
- (iii) For question number three the results increased quite significantly by 50%
- (iv) For question number four the result increased by 35%
- (v) For question number five the result increased by 36%
- (vi) Question number six increased the most among other numbers by 58% after the material was delivered
- (vii) For question number seven the reutilization of Educational Video as a Media for Learning Simple Accounting for Elementary School Students during the COVID-19 period increased quite significantly by 45%
- (viii) For question number eight the results increased quite significantly by 50%
- (ix) For question number nine the results increased quite significantly by 53%
- (x) For question number ten the results increased quite significantly by 50%

Table 2 shows that after students' were given educational video media there was a considerable increase, on average from 25.8 to 72.0% although there were still some subject whose level of understanding was still low even after treatment, the use of Educational Video media could be said to provide a positive impact. The result of this study are in accordance with previous studies which explain that learning outcomes can be improved by utilizing software in learning ([Muvawala, 2012](#)).

5. CONCLUSION

This study concludes that the results of the research show that the average post-test score of students' is 72.0% greater than the average pretest score of 28.2% with a difference of 46.2%. Therefore, the use of educational video media can be said to be quite effective and has a positive impact, especially for students' who have problems using the virtual meeting application. Online learning through educational videos distributed via WhatsApp can be one of the easiest ways to help the distance learning program.

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7. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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