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## The Influence of Role-Playing Learning Models Based on Flipbook Media at the Elementary School

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### ABSTRACT

The Role-Playing learning model is a learning model designed by the teacher by assigning students to play a character in the material or events expressed in the form of simple stories to produce various forms of learning outcomes. The learning outcomes of Muhammadiyah 2 Elementary School students, Kupang, are still relatively low so it is necessary to apply learning models to improve learning outcomes. This study aimed to determine the effect of the Role-Playing Learning Model Assisted by Flipbook Media to Improve Student Learning Outcomes in theme of 6 My Goals Class of fourth grade at Muhammadiyah 2 Elementary School at Kupang City in the Academic Year of 2022/2023. The research method used was a pretest-posttest control group design. The research population was all fourth grade students at Muhammadiyah 2 Elementary School, with total 61 students consisting of two classes, namely Class of fourth grade B and C for 30 and 31 students, respectively. The research sample was 30 students from class of fourth grade B as the experimental class, while 31 students from class fourth grade C were used as the control class. The data collection tool uses objective tests. The data obtained were analyzed using descriptive statistical and inferential statistics to determine the normality test, homogeneity, and t-test to test the hypothesis. Data were analyzed using SPSS Version 22.0 For windows. The results of independent t-test calculations obtained a sig value of 0.000 < 0.05, so the hypothesis Ho was rejected, and Ha was accepted. Moreover, it can be concluded that there is an influence of the role-playing learning model assisted by flipbook media to improve student learning outcomes on theme 6 of my ideals for class of fourth grade at Muhammadiyah 2 Elementary School, Kupang City in the Academic Year of 2022/2023.

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## 1. INTRODUCTION

Education is essential to human life and cannot be separated from it. A person's quality can be enhanced through education, particularly in terms of knowledge, skills, and attitudes. This indicates that the quality of human resources improves beginning in kindergarten, elementary school, junior high school, and high school. A child's basic education is a continuous and directed formal education that precedes the higher level. Basic education aims to equip students with the skills they need to develop as individuals, as members of society, and as citizens who are prepared to continue their education. In this situation, the learning process in elementary schools must be geared toward instilling fundamental concepts in these students. Natural Sciences is one of the most important subjects in the Indonesian curriculum.

Science is a very important subject because it prepares students to face a variety of global challenges. According to Aiman & Sunimbar (2020), science education guides students to gain understanding and systematically discover something, so that science is not only a collection of knowledge in the form of mastery of concepts, facts, or principles, but also as a process of discovery. Science education in elementary schools is crucial because it contributes to the attainment of learning outcomes (Meilani & Aiman, 2020).

Behavioral modifications resulting from interactions between individuals and their environment constitute learning outcomes. In addition to changes in behavior, learning outcomes include an increase in students' abilities to plan their activities (Pearl, 2021). If educators and students have strategies for improving the learning process, this will result in change. In the science learning process at Elementary School Muhammadiyah 2 Kupang, it is observed that the interaction between teachers and students is not balanced due to the lack of use of various learning models, resulting in students not focusing on the material presented, preferring their own activities such as playing, and not really responding to what the teacher conveys. Consequently, many students have not yet met the maximum completeness criteria of 70, so educational objectives are not optimally met.

Considering the described issues, it is necessary to take steps to engage students in learning. Therefore, the researchers implemented a role-playing learning model aided by flipbook media to improve the learning outcomes of fourth-grade Elementary School Muhammadiyah 2 Kupang students regarding metamorphosis material. The Role-Playing learning model is a teacher-created model in which students assume the role of a character in the material or events expressed in the form of simple stories (Tarigan, 2017). According to Upik & Aiman (2021), the use of role-playing learning models in the learning process will improve students' creativity, insight, and ability to think independently, as well as their ability to work together.

In addition to the learning model, researchers utilize flipbook media to increase students' interest in the learning process. Flipbook media presents information in the form of words and sentences supported by images and appealing colors to capture students' attention (Aiman et al, 2022). The benefits of flipbook media include not only the presentation of multiple tests, but also animations, videos, etc.

This study aimed to determine the impact of the Role-Playing Learning Model Assisted by Flipbook Media on Student Learning Outcomes in Theme 6 My Goals Class IV Elementary School Muhammadiyah 2 Kupang City during the Academic Year of 2022-2023.

## 2. METHOD

### General

The research method used was an experiment with the Pretest-Posstest Control Group Design as shown in Table 1.

Table 1. True Experimental Design

Group	Pretest	Treatment	Posttest
Experiment	A <sub>1</sub>	X	A <sub>2</sub>
Control	B <sub>1</sub>	-	B <sub>2</sub>

(Dantes , 2017)

Symbols as:

A<sub>1</sub> : Pretest carried out in the experimental group

A<sub>2</sub> : Posttest carried out in the experimental group

X: Treatment given to the experimental group, namely the Rolle Playing learning model

B<sub>1</sub> : Pretest carried out in the control group

B<sub>2</sub> : Posttest carried out in the control group

### Procedure of Data Collection

This study's variables are independent variables, namely the Role-Playing learning model and learning outcomes. The study population consisted of all fourth-grade students at Elementary School Muhammadiyah 2 Kupang, a total of 61 individuals comprised of two classes, IVB 30 and IVC 31. The research sample consisted of 30 individuals from class IVB as the experimental class and 31 individuals from class IVC as the control class. The sample employs a technique of purposeful sampling based on specific considerations. The data was measured using objective tests on metamorphosis-related substances. Using two methods of data analysis, namely descriptive and inferential statistics. Where descriptive statistics describe the mean, the median, the

mode, the standard deviation, and the variance. In contrast to the inferential tests for normality, homogeneity, and the t-test. To analyze hypothesis 22 using SPSS assistance.

### 3. RESULT AND DISCUSSION

Data on overall science learning outcomes for students between the experimental class and the control class are shown in table 2 below.

Table 2. Experimental class and the control class

Explanation	Control Class		Experiment Class	
	<i>Pretest</i>	<i>Posttest</i>	<i>Pretest</i>	<i>Posttest</i>
Mean	62.67	70.17	62.90	78.21
Median	64.00	72.00	64.50	76.00
Modus	64.50	77.00	64.00	80
Variance	205.609	205.791	105.813	133.334
Std. Deviation	14.339	14.345	10.287	11.547

The average score in Table 2 above shows the overall learning outcomes between the control class and the experimental class. It is clear that between the control and experimental classes the increase in the mean value of the experimental class students was greater than that of the control class. Hypothesis prerequisite test analysis was carried out by testing for normality and homogeneity. The data normality test aims to determine whether the data is normally distributed or not. The following table shows 3 normality test results.

Table 3. Normality Analysis

<i>Kolmogorov-Smirnov</i>				
Class	Keterangan	Statistic	Df	Sig
Control Class	<i>Pretest</i>	.170	31	.026
	<i>Posttest</i>	.137	31	.175
Experiment Class	<i>Pretest</i>	.138	30	.150
	<i>Posttest</i>	.174	30	.024

From the view of table 3, it means that the group between the control class and the pretest and posttest experimental data distribution is normally distributed. This is shown because the Significance > 0.05. Furthermore, the homogeneity test aims to find out whether the variance of the samples is uniform or not. The results of the homogeneity test can be seen in table 4 below.

Table 4. Homogeneity Analysis

Levene Statistic				
Class	Statistic	Df	Sig	Information
Control Class	.150	1	.57	.700
Experiment Class	.652	1	.59	.423

The results above show the data are the same, this is because the gain in the class Sig > 0.05 is 0.700, while in the experimental class Sig > 0.05 with a value of 0.423. The requirements for submitting data analysis are normal and homogeneous. Therefore, it is continued with hypothesis testing (t test) which aims to determine the effect of the role playing learning model assisted by flipbook media on metamorphosis material to improve student learning outcomes. In the selection of taking Sig > 0.05 then H<sub>0</sub> is rejected and <0.05 H<sub>a</sub> is accepted. The calculation results obtained are as follows.

Table 5. Analysis of the T Test

Class	Df	Sig	Information
<i>Pretest</i>	15	0,000	Signifikansi
<i>Posttest</i>			

Based on Table 5, the significance value is 0.000, which means <0.05, then H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. It was concluded that there was a significant effect of the role playing learning model assisted by flipbook media to improve the learning outcomes of fourth grade students on metamorphosis material at SD Muhammadiyah 2 Kupang.

From the data analysis, which has been carried out with the help of the SPSS version 22.0 for Windows program, it is known that learning using the role playing learning model assisted by flipbook media greatly influences student learning outcomes. This can be seen in the mean value between the control and experimental

classes showing a very large difference, namely the pretest control class average of 62.67, while in the posttest section the average score is 70.17. Furthermore, in the experimental class, the average mean ranged from 62.90 in the pretest class and 78.21 in the posttest class, which was categorized as high. This difference can be explained that the role playing learning model assisted by flipbook media provides opportunities for students to play an active role and be directly involved in the learning process. In this case students are more given the opportunity to find their own answers to problems presented in study groups and have a positive impact on student learning outcomes. With the learning model used it is expected to be able to form, and develop and improve student learning outcomes. In line with this, Kusumawati (2017) also stated that the role playing learning model provides opportunities for all students to participate in groups, and make decisions correctly.

The steps in learning role playing are required of students to obtain lessons in groups (shown to assist students in communicating and collaborating between group mates). This has also been stated by Paudi (2019) group division is the best way to build communication and cooperation in team. In role playing learning, namely choosing problems and role playing which is done to train students in doing, learning, accepting and sharing responsibility with their group mates.

#### 4. CONCLUSION

In accordance with the formulation of the research problem and based on the results of the study it can be concluded that there is an influence of the role playing learning model assisted by flipbook media on improving the learning outcomes of fourth grade students at SD Muhammadiyah 2 Kupang. Judging from the average value and the results of hypothesis testing using the t-test formula, shows that the average value of student learning outcomes before using the role playing learning model assisted by flipbook media is the average pretest control class of 62.67, while in the posttest section it is 70.17. Furthermore, after using the role playing learning model assisted by flipbook media, the mean average ranged from 62.90 in the pretest class and 78.21 in the posttest class. The results of testing the hypothesis obtained a significant difference in results, namely  $0.000 < 0.5$ , it can be concluded that  $H_0$  is accepted, meaning that there is an influence of the role playing learning model assisted by flipbook media to improve student learning outcomes on theme 6, my ideals, class IV SD Muhammadiyah 2, Kupang City Academic Year 2022/2023.

Based on the conclusions above, some suggestions are put forward as follows: For schools; The school should provide advice to SD Muhammadiyah 2 Kupang teachers so that the teaching and learning process in class uses a variety of learning models. One of them is by using the role playing learning model. For teachers; Providing new knowledge that the role playing learning model is a learning model to improve student learning outcomes. For advanced researchers; The results of this study can be used as a reference, input and comparison to make further research better.

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