

THE EFFECT OF USING POP-UP BOOK LEARNING MEDIA ON STUDENTS' MOTIVATION AND LEARNING OUTCOMES IN NATURAL AND SOCIAL SCIENCE SUBJECTS

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ABSTRACT: This research aims to describe; 1) the influence of using pop-up book learning media on student learning motivation, 2) the influence of using pop-up book learning media on student learning outcomes, and 3) the influence of using pop-up book learning media on student motivation and learning outcomes. This type of research is quasi-experimental research using a quantitative approach. The subjects of this research were 30 students in class V of Silih Nara 4 Elementary School. This research design uses One Group Pretest-Posttest Design. Data collection techniques use observation, questionnaires and documentation. The analysis technique uses a simple linear regression analysis test. The research results show that; a) there is a significant influence of the use of pop-up book learning media on student learning motivation, b) there is a significant influence of the use of pop-up book learning media on student learning outcomes, c) there is a significant influence of the use of pop-up book learning media on student motivation and learning outcomes.

Keywords: Motivation, Learning Outcome, Pop-up Book

1. INTRODUCTION

Education is basically a conscious effort to develop the potential resources of students by encouraging and facilitating learning activities. Education is one of the main pillars in determining social change. Changes towards progress and quality of life prosperity. Education is responsible for creating a complete generation of the nation, as stated in the outlines of state policy, namely the realization of an Indonesian society that is peaceful, democratic, just, competitive, advanced and prosperous, within the framework of the Unitary State of the Republic of Indonesia which is supported by healthy, independent people. , have faith, be devout, have noble character, love the country, be aware of the law and the environment, master science and technology, have a high work ethic and be disciplined [1]. In essence, education is a process of interaction between teachers and students to achieve educational goals that take place in a certain environment. Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing and evaluating students [2].

A teacher is a human being who has a

personality as an individual and has the main task of being an educator, teacher and guide. The main task as an educator is to help children mature psychologically, socially and morally. The teacher's task as an instructor is to assist intellectual, affective and psychomotor development, through imparting knowledge, problem solving, affective and skills exercises. The teacher's task as a guide is that teachers need to have a thorough understanding of their students, understand all their potential and weaknesses, problems and difficulties, with all their backgrounds [3]. Therefore, when carrying out the teaching and learning process, a teacher is required to be able to create a classroom atmosphere that can provide enthusiasm and motivation to students. Several indicators of successful learning are the presence of stimulating and enjoyable situations. Fun learning will have different results from learning that is carried out with compulsion, pressure and threat. Fun learning will be able to bring change to the learner [4].

In education it cannot be separated from the learning process. Learning is an effort to make students learn or can be said to be an activity to teach students. Learning is an effort to create

conditions for students to learn. In this case, learning can also be interpreted as planned efforts to manipulate learning resources so that a learning process occurs in students. In Law Number 2 of 2003 concerning the National Education System article 1 paragraph 20, it is said that learning is a process of interaction between students and educators and learning resources in a learning environment. Learning places more emphasis on how to achieve learning objectives related to how to organize learning content, convey learning content and manage learning. Learning includes 3 aspects, namely, educators, students, and learning situations [5].

In the learning process it cannot be separated from what is called learning. Learning is a necessity in life that requires self-sufficiency because humans from birth have the urge to live and have a certain goal. Learning can happen anywhere. It doesn't have to be in school but through informal, non-formal, natural or everyday social events. In essence, learning aims to obtain learning wisdom. In relation to understanding the wisdom of learning, there is a stage that students must go through, consisting of relearn (learning) and unlearning. Unlearn is defined as trying to throw away something from memory or knowledge that was previously learned or throwing away something that was previously learned like an old habit and no longer needing to think about it. Relearn is defined as learning something that has been forgotten or ignored [6].

One of the subjects at Silih Nara 4 Elementary School is Natural and Social Sciences subjects. Natural and Social Sciences subjects require teachers to be innovative in the use of media and teaching aids so that students understand the material being taught. That way students can understand the essence of the material. Silih Nara 4 State Elementary School is a formal educational institution that is equipped with adequate facilities and infrastructure. Based on the results of initial observations carried out at the Silih Nara 4 Elementary School, the use of media in Natural Social Sciences lessons was not used by students. Students often feel bored when teachers deliver natural and social science lessons in front of the class because they only use lectures. These problems can certainly hinder the achievement of cognitive, affective and psychomotor goals of the learning process. Besides that, students are less motivated in the learning process because of the lack of learning media used by teachers in conveying learning material.

To help the learning process, learning media is

needed. One of the learning media that can be used in learning is pop-up book media. Pop-ups are an interesting form of paper art that form a three-dimensional structure when opened and a two-dimensional structure when closed. Pop-ups do more than just produce 3D shapes, but use movements that can make readers feel happy. Pop-up book learning media is considered to have a special attraction for students because it is able to present visualizations with shapes created by folding, moving and appearing, thereby providing surprise and awe for students when they open each page. The advantage of pop-up book media is that it provides a special experience for students because it involves students shifting, opening and folding parts of the pop-up book [7]. A pop-up book is a book that has an image display that can be erected and forms beautiful objects that can move or provide amazing effects [8].

Pop-Up Books can be designed according to the needs of the material that must be taught by students and of course by paying attention to the student's learning steps. The advantage of pop-up books is that they can visualize images to make them more attractive. Pop-up books can be used as teaching materials for students individually or in groups and pop-up books are practical and can increase students' enthusiasm and interest in learning because they can visualize the concepts in the lesson in the form of 3-dimensional images. The pop-up book display is one of the advantages because its appearance is unique and different from other two-dimensional learning media. This pop-up book has image dimensions that can appear when the page is opened [9]. Based on the background stated above, it is necessary to conduct research so that the use of learning media in schools can be optimized properly and can increase student motivation and learning outcomes in Natural Sciences subjects. The aim of this research is to describe the influence of using pop-up book media on student motivation and learning outcomes in natural and social science subjects.

2. METHODS

This type of research is quasi-experimental research using a quantitative approach. The subjects of this research were 30 students in class IV of Silih Nara 4 Elementary School. This research design uses One Group Pretest-Posttest Design. Data collection techniques use observation, questionnaires and documentation. The data analysis technique uses simple linear regression analysis.

3. RESULTS AND DISCUSSION

- a. The effect of using pop-up book learning media on learning motivation

Tabel 1. Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Pop up book	30	2.8575	.61044	.13650
	Motivation to learn	30	2.8720	.52717	.11788

Table 2. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Score	Equal variances assumed	1.370	.249	-.080	28	.936	-.01450	.18035	-.37961	.35061
	Equal variances not assumed			-.080	37.211	.936	-.01450	.18035	-.37986	.35086

Based on the results of statistical tests, the p value (Sig. (2-tailed)) = 0.936. Because the p value (Sig. (2-tailed)) > 0.05, H₀ is rejected so it can be

concluded that there is an influence of pop-up books on learning motivation.

- b. The effect of using Pop-up book learning media on learning outcomes

Tabel 3. Group Statistics

	Grup	N	Mean	Std. Deviation	Std. Error Mean
Score	Pop-up book	30	2.9575	.61872	.13835
	Learning outcomes	30	3.4445	.63136	.14118

Tabel 4. Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Skor	Equal variances assumed	.043	.836	-2.464	28	.018	-.48700	.19767	-.88715	-.08685

Based on the results of the statistical test, p value (Sig. (2-tailed)) = 0.018. If the p value (Sig. (2-tailed)) < 0.05 then H₀ is rejected so it

can be concluded that there is an influence of pop-up books on learning outcomes.

- c. The effect of using pop-up book learning media on motivation and learning outcomes

Tabel 5. Descriptive Statistics

	Mean	Std. Deviation	N
Motivation to learn	18.95	7.236	30
Learning outcomes	3.4445	.63136	30

Tabel 6. Correlations

		Tabel 6.	Mathematical Disposition
Motivation to learn	Pearson Correlation	1	.915**
	Sig. (2-tailed)		.000
	N	30	30
Learning outcomes	Pearson Correlation	.915**	1
	Sig. (2-tailed)	.000	
	N	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the statistical test in table 6, it is obtained that p value (Sig. (2-tailed)) = 0.000 so it can be concluded that if p value (Sig. (2-tailed)) < 0.05 then H0 is rejected so it can be concluded that there is a significant influence in the use of pop-up books on student motivation and learning outcomes.

The results of the analysis based on exposure to research data showed that there was an influence of learning using pop up book media on students' learning motivation. This proves that the hypothesis (Ho) proposed in the research is rejected and the alternative hypothesis (H1) is accepted. This is in line with the opinion of Levied and Lentz stating the four functions of learning media, namely that media has an attentional function by attracting students' attention, an affective function can provide something new in the learning process, a cognitive function by making it easier for students to understand the learning material, and The compensatory function can organize information in remembering material easily so that students who are weak in understanding and remembering can easily understand it because the media in this function is able to concretize things that are still abstract [16]. In this way, learning conditions will be good which will give rise to reinforcement for students by using pop-up book media by referring to McClelland's opinion that children show that they have achievement motivation by having five attitudes, namely the desire to achieve goals, having responsibility for the tasks given to them, creative and innovative, able to solve problems that are considered difficult in the learning process and able to provide conclusions in the learning process.

The relationship between pop-up book media and learning motivation can be described as stimulus and response. In line with Hamzah's opinion, the factors that influence learning motivation are the media, family encouragement and the environment [19]. This shows that students are motivated by using popup book media through the presence of stimuli and responses that will influence individuals to do something or take action. The use of pop up book media is to hone students' critical thinking skills so that students are able to understand, collect information, formulate problems, solve problems, conclude and provide arguments in the available media. A learning process that attracts attention and is fun will make it easier for students to understand the material easily. It is at that time that the child's critical thinking process will grow. Using pop-up book media has advantages, including being able to visualize the story better, displaying images that have dimensions and can move when opened can attract students to use pop-up book media.

The influence of using pop-up book media on learning outcomes can be seen from the results of hypothesis testing, namely that there is an influence of pop-up books on learning outcomes. This proves that learning using pop up book media has a positive influence on students' critical thinking skills. This is reinforced by Facion's opinion that there are six critical thinking skills involved in the critical thinking process. These abilities include interpretation, analysis, evaluation, inference/conclusion, and self-regulation [17]. The use of pop-up book media in the learning process will have an impact on increasing student learning outcomes. This is in line with Hamalik who stated that media in the

learning process has a role in critical thinking as seen through students' activities during the learning process which is important in achieving learning goals [18].

The benefits of media in teaching and learning activities are very important. The presence of media is useful for understanding certain concepts, which are not or are difficult to explain in language. The use of school equipment is not an additional function, but has its own function as a means to make the teaching and learning process more effective. The learning media used must be in accordance with the learning objectives and content, the use of media in learning helps facilitate the learning process, so that students can understand the objectives and teaching materials easily and more quickly. Learning media functions to improve the quality of the teaching and learning process. In line with research results [9]. Pop up book media is very helpful in improving student learning outcomes, as students progress in learning, they become more active in learning and their curiosity increases. Student enthusiasm is also high, seen in students who focus their attention on learning and dare to try using media in front of the class. Pop-up book media has the potential to develop as a medium because it has real benefits, namely being more practical than verbal media, and can be a learning resource for all ages because each page of the book can be filled with images and information. In accordance with the concept of dimensional space, this book can take the form of a three-dimensional structure so that this book is more pleasant to read. When learning occurs, students are happy and active. The class situation is a bit noisy because students focus on the media and lesson material, then work on the questions. During the exam, the students were very calm and the results were not disappointing. Based on the analyzed data, it can be seen that there is a difference between the use of pop-up books and the absence of pop-up books on student learning outcomes. This can be seen through the use of pop-up books, students are more active, enthusiastic about learning and dare to stand in front of the class to answer questions. A learning process that makes all students happy will make students more interested in learning and not feel bored, so that learning outcomes will be satisfactory. From the discussion above it can be shown that the media used by teachers has an influence on student learning outcomes.

Learning media is a container for messages that want to be conveyed to achieve learning goals creatively, making it easier for students to achieve learning goals [10]. According to [11] in selecting media based on criteria; 1) media is selected based on joint instructions or in general referring to cognitive, affective, psychomotor aspects, 2)

media selection is in line with what students need in achieving learning goals, 3) in selecting media teachers must be able to use it for the learning process in achieving goals. Choosing media to convey messages from educators to students is used to support learning interactions. There are many kinds of learning media, one of which is iPop-up book media [12]. A pop-up book is a book that, when the pages are opened, displays three-dimensional image components and extraordinary shading in it so that it can be attractive to students. Pop Up Book media is a tool that can be used as an intermediary to convey messages from teachers to children [13]. Pop Up Book Media is a book that stimulates students' creativity and imagination with three-dimensional elements that can move when the page is opened and beautiful and attractive images appear [14]. Appropriate learning media is needed so that student learning outcomes are better. The very important contributions of using media in the learning process are: 1) The delivery of learning messages can be more standardized, 2) Learning can be more interesting, 3) Learning becomes more interactive with the application of learning theories and accepted psychological principles in terms of student participation, feedback feedback, and reinforcement, 4) Learning implementation time can be shortened, 5) Quality of learning can be improved, 6) The learning process can take place whenever and wherever needed, 7) Students' positive attitudes towards learning material and the learning process can be improved, 8) The role of teachers is changing in a positive direction [20].

4. CONCLUSION

There is a significant influence in the use of pop-up book learning media on student learning motivation p value (Sig. (2-tailed)) = 0.936. Because the p value (Sig. (2-tailed)) > 0.05, b) there is a significant influence in the use of pop-up book learning media on student learning outcomes p value (Sig. (2-tailed)) = 0.018. If the p value (Sig. (2-tailed)) < 0.05, c) there is a significant influence in the use of pop-up book learning media on student motivation and learning outcomes p value (Sig. (2-tailed)) = 0.000 so it can be concluded that if p value (Sig. (2-tailed)) < 0.05

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6. REFERENCES

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