

Influence of Inquiry Method with Library Utilization of Social Studies Learning Outcomes

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Abstract—The problem in this study is that the library is not maximally utilized in the learning process. The formulation of the problem: (1) What is the description of the inquiry method with the use of the school library on student learning outcomes in social studies subjects in class IV SD Inpres 6/75 Malimongeng, (2) How is the description of student learning outcomes in social studies before and arrangement of learning treatment by utilizing the library in class IV SD Inpres 6/75 Malimongeng The purpose of this study are (1) To find out the method of inquiry method the use of the school library towards student learning outcomes, (2) to find out the previous IPS learning outcomes and the arrangement of learning treatments by using the library of grade IV students, (3) To find out the effect of inquiry method with the use of school libraries on student learning outcomes in social studies subjects in class IV SD Inpres 6/75 Malimongeng. This approach and the type of research are using a quantitative approach. The research sample was selected directly by selecting one class (without random), namely class IV with a total of 20 students. Data collection techniques used in this study are tests and documentation. Data collected from the provision of learning outcomes tests in the cognitive domain were analyzed by descriptive statistics and inferential statistics using the paired sample t-test using two-party test (two-tail test). Social studies learning outcomes in grade IV in the initial test (pretest) are in a low category, while social studies learning outcomes for grade IV students are in the high category at the end of the learning (posttest). Data analysis techniques are descriptive analysis and inferential statistical analysis. The conclusion is that there is an increase in social studies learning outcomes at the end of the learning (posttest) indicating that there is significant influence between the effect of using the library on social studies learning outcomes of grade IV students of SD Inpres 6/75 Malimongeng. The higher the utilization of the library, the higher the student learning outcomes.

Keywords—*inquiry, library, learning outcomes*

I. INTRODUCTION

In an effort to educate the nation's life as mandated by the 1945 Constitution, various improvements are made in the field of education, such as improvement of infrastructure, both in terms of quality and quantity. One of the educational facilities and infrastructure is a library whose existence is very important to support the smooth process of teaching and

learning and increase competence and increase reading interest.

In 2000, UNESCO and IFLA issued a manifesto about the School Library which stated: "Governments, through their responsibility for education ministries, are urged to develop strategies, policies, and plans that implement the principles of this manifesto" [1]. The Manifesto affirms that the government is responsible for education, developing strategies, implementing policies. In addition, the manifesto confirms that the school library provides information and ideas that are the basis for information-based and scientific society.

Meyer (1994) in his book, *The Little Brown guide to Writing Research Papers*: "Meek 2 young grew up in libraries, believing it their duty to accept the views which say". Those books are in the library, not to intimidate or enslave you but to serve you [2]. The library has a meaning as a place where there are meetings, activities, and dissemination (services) of all kinds of information, both printed and recorded and various media such as newspaper magazine books, films, tapes, tape recorders, videos, computers, etc. other. School libraries contribute to the implementation of education programs in schools [3]. Under the Law NO. 43 of 2007 concerning libraries, article 3 explains that the function of the library as a vehicle for education, research, conservation, information, and recreation to improve intelligence and empowerment of the nation. Ironically, such understanding has not yet been firmly rooted in society. As a result, the library is still used as a book storehouse and a mere complement to accreditation, even worse as a place for disposal of troubled people [4]. The benefits of school libraries are to incite students' love of reading, enrich the learning experience of students who are finally able to learn independently, can help students, teachers, and school staff members in following the development of language skills [5]. The school library is very necessary for its existence with the consideration that the school library is a learning resource in the school environment, school library is one component of the teaching system, the school library is a source to support the quality of education and teaching, the school library as a learning laboratory that allows students to sharpen and expand their ability to reading, writing, thinking and

communicating [6]. The implementation of the school library is not only for storing library material, but the library is expected to help students and teachers complete tasks in the teaching and learning process. Therefore, all library materials owned by the school library must be able to support the teaching and learning process. In procuring library materials should consider the school curriculum, as well as the tastes of the readers. School libraries are an integral part of the learning system in schools.

Learning outcomes include cognitive, affective and psychomotor abilities [7]. Given that IPS is an important thing in human life, it must be promoted at school. Social studies are very necessary as a means to support the moral values of students in filling development. Today, social studies at the primary and secondary levels do not have a clear direction. This is indicated by the many occurrences in schools that social studies lessons have been neglected by students so that the results of student achievement achieved have not achieved satisfactory results. Various efforts have been carried out by education practitioners with government support, including changes in curriculum, education and training, teachers, upgrading of teachers, provision of textbooks, addition of educational facilities, provision of lessons outside of class hours, but until now they have not been able to reach proud results [8].

Social studies is an analytical-interdisciplinary discussion of selected, empirical and contemporary social problems. Social studies are not always academic-university level; they are even learning materials for students since primary education. Social studies can serve as an introduction for the next or the next level to the Social Sciences discipline [9].

Social studies are interdisciplinary by choosing certain problems based on a reference frame and reviewing them from several angles while looking for the logic of the relationship that exists with each other. The social study framework in studying or studying social phenomena and problems in the community does not emphasize the theoretical field, but rather the practice field, not too theoretically academic, but rather practical knowledge that can be taught starting from the elementary school level. Counts (1978) states that social studies education is to prepare students to be good citizens in their lives in society [10]. Firmly said to prepare students to be well-functioning cities in a democratic society. Brophy (1990) said that the learning of social studies education emphasizes more on "education" aspects than "concept transfer", because in learning social studies education students are expected to gain an understanding of a number of concepts and develop and train attitudes, values, morals, and its ability is based on the concepts it has. Thus, the learning of social studies education must be formulated in the aspect of education [11].

According to Sund & Trowbridge (1973) inquiry is defined as the process of defining and investigating problems, formulating hypotheses, designing experiments, finding data, and describing the conclusions of these problems [12]. Krajick, Mamlok, & Hug (2001), explained that students could make an inquiry through several stages, namely: asking appropriate questions, finding and integrating information, monitoring scientific information, designing investigations and drawing conclusions [13].

In social studies, the topic of employment through the inquiry model will focus more on students, because students

who try to self-manage information to solve problems that will be solved and students get their own problem solving to the conclusion. The teacher only acts as a guide and guide for students to find and solve it. Teachers as learners are expected to understand more about student learning activities, both from the concept, utilization in life, and usefulness and importance to be applied in teaching and learning activities in the form of creative learning methods and strategies. To develop learning activities among elementary school students, the inquiry model has possibilities and is developed in primary schools in the topic of employment. The development of student learning activities through this inquiry model can be used as an alternative solution to the problems faced by teachers in developing social studies learning to be more attractive to the attention and interests of students while providing meaning for changes in attitudes and behavior [14].

Observations made at SD Inpres 6/75 in Salomekko District, Bone Regency, that learning by using the library has not been carried out optimally, because the library space is less extensive and there are limited supporting books. This study wants to show that some teachers in SD Inpres 6/75 in teaching and learning activities have not utilized the library well. The results, this study, will prove the influence of the library on student learning outcomes in social studies subjects.

II. METHOD

This study uses a quantitative approach. This approach departs from a theoretical framework, the ideas of experts, or the understanding of researchers based on experience, then developed into problems along with the solutions proposed to obtain justification in the form of empirical data support in the field. This study was conducted to determine differences in learning achievement of students who learn by using the library with other learning models such as direct learning models (direct instruction). The design used in this study is one group pretest and posttest design. In this research design only found in this research design, there is only one sample class used which is described in the table as follows.

TABLE I. SAMPLE CLASS

Group (class)	Pre-Test	Treatment	Post-Test
Experiment	O ₁	X	O ₂

O₁ = Pre-Test Value

O₂ = Post-test value

X = The treatment is given, and the effect was seen in the experiment

The population is an area of generalization consisting of objects/subjects that have certain qualities and characteristics, then determined by researchers to be studied and then drawn a conclusion [15]. The population of this study were all fourth-grade students of SD Inpres 6/75 Malimongeng; the total population was 20 students. The sample in this study is class IV. Data collection methods used are tests, observation, and documentation. The learning was held for four meetings; the first meeting was as a pretest, the second and third meetings as a treatment (action) and then the fourth meeting as a posttest. Each meeting is held in 3 x 35 minutes.

Data processing results of the study were used statistical techniques, namely descriptive analysis techniques. Inferential statistical analysis is intended to test the research hypothesis, before testing the hypothesis first a prerequisite test is performed. Testing the data normality in this study uses the Kolmogorov-Smirnov Normality Test to find out whether the data obtained is normally distributed. Learning outcomes data are said to be normally distributed if the significance of the calculation results is greater than 0.05. To see the difference in test results before and after being applied, the data is analyzed using a paired sample t-test. Paired-sample t-test analysis is a procedure used to compare the average of two variables in a group. This means that this analysis is useful for testing one sample that receives a treatment which will then be compared to the average of the sample between before and after treatment. In searching for large t count before and after treatment, the following formula is used:

$$t_{hitung} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2} - 2r\left(\frac{s_1}{\sqrt{n_1}}\right)\left(\frac{s_2}{\sqrt{n_2}}\right)}} \quad (1)$$

Information:

\bar{x}_1 = average before treatment

\bar{x}_2 = average after treatment

s_1 = standard deviation before treatment

s_2 = standard deviation after treatment

n_1 = number of samples before treatment

To determine the previously fulfilled hypothesis, the table is determined first. For paired-sample t-Test the degree of freedom is the number of samples minus one or n-1. If t count <t-table then H0 is rejected and H1 is accepted. Likewise, vice versa if t count > t-table then H0 is accepted and H1 is rejected.

III. RESULT AND DISCUSSION

A. Research Results

The results and analysis of research data were made based on data obtained from research activities on differences in learning outcomes of students who were taught by using the library and without utilizing the library which was held for 4 meetings, where the first meeting was to find out the students' initial abilities and given posttest after treatment.

B. Results of Descriptive Statistical Analysis

1) Description of the Pretest Learning Data on Social Sciences

To provide an initial description of the results of social studies learning of grade IV students selected as an experimental class. Presented scores of Social Studies learning outcomes before being given treatment. The pretest is given in the form of multiple choice tests totaling 25 items.

TABLE II. DESCRIPTIVE DATA DESCRIPTION PRE-TEST

Pretest		
N	Valid	20
	Missing	0
Mean		47.35
Std. Error of Mean		3.089
Median		44.50
Mode		40
Std. Deviation		13.816
Variance		190.871
Range		56
Minimum		20
Maximum		76
Sum		947

Based on table 4. shows that the average score of student learning outcomes before being treated (pretest) is 47.35 out of 20 students. The average value obtained by students has not reached the defined KKM which is 70. Apart from the mean, there is a known standard deviation of 13,816. The standard deviation is the statistical value used to determine how the sample data is distributed and how close the individual data points are to the mean sample value. Standard deviations indicate the heterogeneity that occurs in the data being studied or can be said to be the average amount of variability in observations. If a standard deviation from a data set is equal to zero, it indicates that all values in the set are the same. Whereas the greater the value of the standard deviation, the greater the average distance of each data unit to the mean count. Frequency distribution of pretest results from social studies learning outcomes of grade IV students can be seen in the following tables and graphs:

TABLE III. DISTRIBUTION OF PRE-TEST RESULTS FREQUENCY

No	Score	F	F%
1	20.00	1	5.0
2	30.00	2	10.0
3	40.00	6	30.0
4	44.00	1	5.0
5	45.00	1	5.0
6	50.00	1	5.0
7	54.00	1	5.0
8	55.00	2	10.0
9	58.00	1	5.0
10	60.00	2	10.0
11	70.00	1	5.0
12	76.00	1	5.0
	TOTAL	20	100.

TABLE IV. CATEGORIZING PRE-TEST RESULT

Interval value	Frequency	Result %	Activity Learning Outcome
0 - 54	13	65%	Very low
55 - 64	5	25%	Low
65 - 74	1	5%	Medium
75 - 84	1	5%	High
85 - 100	0	0%	Very High
Total	20	100%	

In addition to table form, the frequency distribution of pretest results from social studies learning outcomes in class IV can be seen in the following tables and graphs:

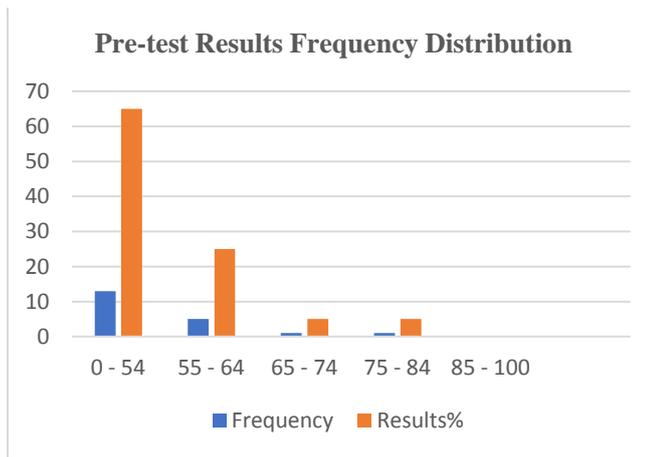


Fig. 1. Graph of Pretest Results Frequency Distribution Histograms

Based on the frequency table and histogram graph, it is known that the number of students who get very low category scores is 13 people with a percentage of 65%. While students get a low score of 5 people with a percentage of 25%. The number of students who get a grade with the medium category is 1 with a percentage of 5% and students who get a score with a high category amounted to 1 person with a percentage of 5%, and students who get grades with a very high category are 0.

Based on the results of the descriptive analysis that has been done it can be concluded that the results of pretest social studies learning outcomes in grade IV in the very low category. This is seen based on the average overall IPS learning outcomes with a value of 47.35. Overall from the average score of students from the results of the pretest with a score of 47.35 has not reached the Minimum Completeness Criteria, which is 70.

1. Description of Posttest Data on Social Studies Learning Outcomes

Posttest is done to determine student learning outcomes after being given treatment; the test given is in the form of multiple choice tests totaling 25 items. Posttest results data can be seen in table 5.

TABLE V. DESCRIPTION OF POSTTEST DATA

Posttest		
N	Valid	20
	Missing	0
Mean		78.25
Std. Error of Mean		2.445
Median		80.50
Mode		70
Std. Deviation		10.935
Variance		119.566
Range		46
Minimum		48
Maximum		94
Sum		1565

The table above shows that the mean of the posttest results is 78 out of 20 students. The mean value obtained by students has reached the defined KKM value of 70. Apart from the mean, there is a known standard deviation of 10.935. Standard deviation is the statistical value used to determine how the data is distributed in the sample, and how

close the individual data points are to the mean of the average sample value. If a standard deviation of a data set is equal to zero, it indicates that all values in the set are homogeneous, whereas the greater the standard deviation value, the more spread the observation data is, and the tendency for each data to differ from one another. The standard deviation obtained at the posttest is quite different from the standard deviation obtained at the pretest. This indicates that the smaller the value of any data in the posttest. The frequency distribution of the posttest categorization results from social studies learning outcomes can be seen in the following tables and graphs:

TABLE VI. CATEGORIZING POSTTEST RESULTS

Interval Value	Frequency	Result%	Activity Learning Outcome
0 - 54	1	5%	Very Low
55 - 64	1	5%	Low
65 - 74	5	25%	Medium
75 - 84	7	35%	High
85 - 100	6	30%	Very High
Total	20	100%	

Besides, in the form of tables, the frequency distribution of posttest results from social studies learning outcomes of grade IV students can be seen in the histogram chart table as follows:

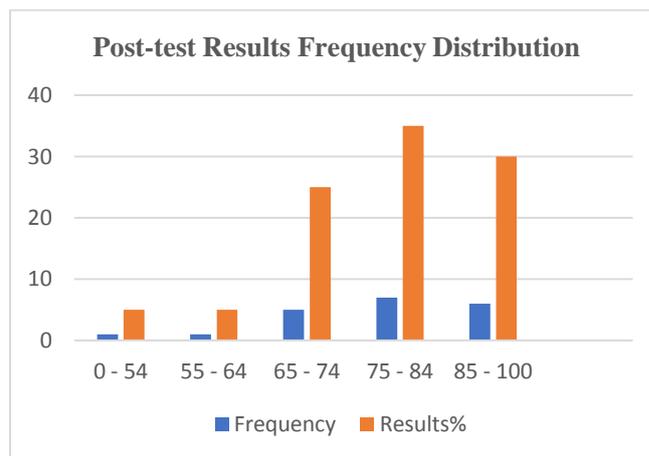


Fig. 2. Posttest Frequency Frequency Distribution Histogram Chart

Based on the frequency distribution table and the histogram graph, it is known that there are students who get very low category scores of 1 person with a percentage of 5%. While students who get a low score there is 1 person with a percentage of 5%. The number of students who scored in the medium category was 5 people with a percentage of 25%. Then students who get grades in the high category as many as 7 people with a percentage of 35% and students who get very high category scores as many as 6 people with a percentage of 30%. Based on the results of the descriptive analysis that has been done it can be concluded that the results of the post-test on social studies learning outcomes in class V are in the high category. This is seen based on the results of the mean overall social studies learning outcomes with a value of 78.25. Overall from the average student score from the posttest with a value of 78.25 has reached the Minimum Completeness Criteria value, which is 70.

C. Results of inferential statistical analysis

1) Normality Test Results

Normality test is used to determine the normality of the distribution of research data. Normality requirements are fulfilled to be a guarantee that the steps of statistical analysis and conclusions are taken can be accounted for. Normality test data obtained from the results of pretest and posttest student learning outcomes in social studies subjects. Data is stated to be normally distributed if the significance level is greater than 0.05 ($P > 5\%$), can be calculated using the Kolmogorov Smirnov formula.

TABLE VII. PRETEST AND POSTTEST DATA NORMALITY TEST RESULTS

Data	Sig.	Information
Pre-test	0.200	0.200 > 0.05 = normal
Post-test	0.200	0.200 > 0.05 = normal

The table above shows that the data from the pretest and posttest are normally distributed. Based on the results of the normality test on both data obtained a significant value of more than 0.05. Thus it can be concluded that the distribution of data is normally distributed.

2) Hypothesis Test Results

To see differences in test results before and after treatment by using the library, the data were analyzed using Paired Sample t-test. Paired-sample t-test analysis is a procedure used to compare the average of two variables in a group. This analysis was carried out by testing the results of the pretest and posttest using the IBM SPSS Statistics version 22 program assistance. The terms are said to be significant if the value is significant if $t \text{ count} > t \text{ table}$ ($\alpha = 5\%$) then a significant t count (null hypothesis / H_0 is rejected, and the alternative hypothesis H_a is accepted) and if $t \text{ count} \leq t \text{ table}$ ($\alpha = 5\%$) then the t count is significant (the null hypothesis/ H_0 is accepted, and the alternative hypothesis H_a is rejected). Because testing hypotheses use two tails, there are two parties testing. If the left-party test results are minus and the right-hand test results will be positive, the hypothesis is:

- If $t \text{ count} < t \text{ table}$ then the null hypothesis / H_0 is rejected, and the alternative hypothesis / H_a is accepted as well as vice versa if $t \text{ count} > t \text{ table}$ then the null hypothesis / H_0 is accepted, and the alternative hypothesis / H_a is rejected.
- If $t \text{ count} < t \text{ table}$ then the null hypothesis / H_0 is rejected, and the alternative hypothesis / H_a is accepted as well as vice versa if $t \text{ count} > t \text{ table}$ then the null hypothesis / H_0 is accepted, and the alternative hypothesis / H_a is rejected.

TABLE VIII. PAIRED-SAMPLE T-TEST PRE-TEST AND POST-TEST

Data	T	Df	Sig. (2-tailed)	Information
Pre-test and Post-test	8.946	20	0.000	0.000 < 0.05 (significant)

Based on the table above, you can see the Sig. (2-tailed) smaller than 0.05, it can be concluded that there are significant differences in learning outcomes in social studies material before and after being given treatment in the form of library utilization. If the t count is 8.946 compared to

table the values of α are 5% and $df = 20$, the value of t table is 2.63899. Then t count has a value smaller than t table ($8.946 < 2.63899$). If t counts more < t table can be concluded that there are significant differences.

IV. CONCLUSION

Based on the results of this study and discussion, it can be concluded that:

- Description of learning with the use of libraries on student learning outcomes in social studies classes IV SD Inpres 6/75 Malimongeng can be said to be good and very good. This can be seen from the enthusiasm and activity of students when the teacher conducts learning using the library. The active and enthusiastic students make the learning process effective and smooth;
- Social studies learning outcomes in grade IV in the initial test (pretest) are in a low category, while social studies learning outcomes for grade IV students are in the high category at the end of learning;
- There is an influence of the use of the library on social studies learning outcomes of fourth-grade students of SD Inpres 6/75 Malimongeng.

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