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Comparison of Two Learning Models on Students' Process Skills in Elementary School

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ABSTRAK

Model pembelajaran merupakan salah satu komponen terpenting dalam proses belajar dan pembelajaran. Model pembelajaran yang baik akan membuat siswa menjadi lebih bersemangat dalam pembelajaran karena model yang digunakan menarik dan tepat guna. Tujuan dari penelitian ini adalah untuk menganalisis perbandingan model pembelajaran di sekolah dasar antara model problem based learning dan problem solving dengan problem solving siswa pada materi kubus dan balok terhadap keterampilan proses di sekolah dasar. Metode yang digunakan dalam penelitian ini adalah metode kuantitatif dengan tipe komparatif. Instrumen yang digunakan yaitu lembar observasi keterampilan proses siswa dan angket model pembelejaran. Populasi penelitian ini adalah 72 siswa dari dua sekolah yang terdiri dari 40 siswa perempuan dan 32 laki-laki sebagai subjek penelitian. Teknik pengumpulan data yang digunakan dalam penelitian ini adalah angket dan lembar observasi. Adapun teknik analisis data yang digunakan adalah purposive sampling . Hasil uraian tersebut dapat dikatakan bahwa berdasarkan hasil uji T dapat dikatakan bahwa model pembelajaran problem solving lebih unggul daripada model pembelajaran problem based. Dari hasil uji T untuk model pembelajaran keterampilan proses sains siswa dapat diketahui bahwa terdapat perbedaan model pembelajaran.

ABSTRACT

The learning model is one of the most important things in the learning and learning process. A good learning model will make students more enthusiastic in learning because the model is interesting and effective. The purpose of this study was to analyze the comparison of learning models of problem based learning and problem solving models with student problem solving on cube and block material on the skill process in elementary schools. The method used in this study is a quantitative method with a comparative type. The population of this study was 72 students from two schools, included 40 women and 32 men as students, were the subjects studied. The instruments used are student process skills observation sheets and learning questionnaire models. Data collection techniques used in this study were questionnaires and observation sheets. The data analysis technique used is purposive sampling. The results of the description can be said that based on the T test it can be said that the problem-solving learning model is superior to the problem-based learning model. From the results of the T test for the learning model of students' science process skills, it can be seen that there are differences in the learning model.

1. INTRODUCTION

Education is learning and knowledge and skills from previous generations to the next generation through teaching and training efforts. Learning is meant to foster critical and imaginative thinking in kids (Wahyudi et al., 2017; Hong & Talib, 2018; Crawley et al., 2019). The basic goal of education is to create intellectual generations who can integrate to information and abilities that serve as the foundation for social interaction (Darmaji et al., 2019; Raharjo et al., 2019; Flores-Tena, 2020). Preschool, elementary school, high school, followed by college, university, or an intership, are the typical phases of education (Putranto, 2018; Sanova et al., 2019). Primary education or school is taken with the initial education level for the first 6 years of the children's school period. In Indonesia, elementary school is the lowest level of official education (Emilzoli et al., 2021; Mutiani, 2021). Laying the groundwork for intellect, knowledge, and skills

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is another goal of elementary school education (Anisah & Suntara, 2020; Kjeldsen, 2019; Zarić et al., 2021). Because it will serve as a good foundation and be helpful when kids pursue education at higher level. Therefore, an educator's function is crucial in this context. Science studies in primary school cover fundamental knowledge and ideas (Pindo hutauruk, 2018; Anif et al., 2020; Century et al., 2020). Because junior high school lessons differed from those in elementary school, at first, junior high pupils thought learning there was challenging. Learning outcomes are significant factors that will be utilized as benchmarks for student achievement in learning and the extent to which the learning system offered, and learning involves critical thinking abilities that need to be built and learned by each individual (Widayat & Hindarto, 2017; Lilis Nuryanti, Siti Zubaidah, 2018; Udi Budi Harsiwi, 2020). By following the procedures of scientific endeavors, one can learn mathematics, which is a branch of science (Utaminingsih et al., 2018; Tri Pudji Astuti, 2019; Maison et al., 2020). Science comprises facts, concept, rules, and principles that are tested in space, as well as investigations covering various elements of products, processes, scientific viewpoints, and educational applications. Math is packed in this way as well (Cooper & Berry, 2020; Imaduddin & Khafidin, 2018; Wulandari et al., 2019). One of the subjects related to science in elementary school is mathematics which studies addition, subtraction, multiplication, and division.

One of the fundamental sciences that is crucial to both daily living and the advancement of science and technology is mathematics (Siagian, 2016; Anwar, 2018; et al., 2019). Primary school mathematics learning can hone students' mathematical abilities to think logically, analytically, critically and systematically by improving the learning process proses (Nurlaily et al., 2019; Saleh et al., 2018). To answer challenges in mathematics, one needs perspective and soft skills (Hendriana et al., 2018; Ambussaidi & Yang, 2019; Lin et al., 2020). The material for cube and block nets is one of the materials used in mathematics. By incorporating a paradigm of growing creativity in the teaching and learning process of mathematics, efforts are needed to promote creativity in studying difficult content. The reason for comparing the two learning models is that an effective learning model is very helpful in the learning process so that learning objectives are easier to achieve. Learning models can provide useful information for students in the learning process. So that by comparing the two models, teachers can find out which learning model is suitable for use at the elementary school level in mathematics.

The teaching and learning process is carried out using a variety of instructional aids, with both direct and indirect use of all available resources, according to the learning model. According to (Ariandi, 2016; García-Merino et al., 2020; Hidayati et al., 2020). PBL is a teaching strategy that enables students to learn how to connect with others and solve problems in their daily lives. Utilizing their existing knowledge and skills to solve non-routine problems is practiced by students adopting the problem solving method to learning (B. Anwar & Asriani, 2017; Fauziyah, 2017; Ikhsan et al., 2017). To realize the hope that students become active, creative and have good mathematical understanding skills, of course, a learning model based on mathematical understanding actively and creatively is needed, namely problem based learning and problem solving learning models (Alan & Afriansyah, 2017; Sutarmi & Suarjana, 2017; Febriana et al., 2020). In the learning model there are also several important indicators, one of which is the students' science process skills. Teachers are not only concerned with conveying aspects of knowledge to their students during the learning process, but aspects of attitudes and skills are also important to achieve the meaning of learning. Process skills are knowledge that is very important to improve students' abilities to the wider world (Vansteensel et al., 2017; Stender et al., 2018; Vartiainen & Kumpulainen, 2020). Students are able to build concepts about science with a mixture of theory and observations (Labouta et al., 2018; Solé-Llussà et al., 2020; Stylinski et al., 2020). Learning about this process skill requires students to do and try something interesting based on their own experience (Kruit et al., 2018; Anna Solé-Llussà et al., 2019; Mutlu, 2020). So that process skills are very important for students in carrying out activities in everyday life.

This research is in line with previous research conducted by (Alan & Afriansyah, 2017; B. Anwar & Asriani, 2017; Sutarmi & Suarjana, 2017) about learning models. The learning model and student's science process skills were not, however, compared in prior study. Additionally, some of the tests performed in this study were not performed in earlier investigations. Some of the tests used are very useful to know about class comparisons and comparisons of indicators to be tested. Learning model testing is a test to find out whether the learning model can confront students from practical problems. The reason for comparing the two learning models is that an effective learning model is very helpful in the learning process so that learning objectives are easier to achieve. Learning models can provide useful information for students in the learning process. So that by comparing the two models, teachers can find out which learning model is suitable for use at the elementary school level in mathematics. By seeing how important the learning model and students' science process skills are from the attachment of the observation sheet, the researchers conducted the comparison between the problem based learning model and the students' problem solving on the material of cubes and blocks. To find out the comparison between problem based learning and problem solving learning models on process skills.

2. METHOD

The quantitative method used in this study is of the comparative type. The goal of quantitative research, a branch of study that stands alone, is to comprehend social reality (Khaldi, 2017; Sukamolson, 2007). Quantitative research which is divided into comparative and using survey procedures. A survey is given to a sample of people or to the entire population as part of a survey study design in order to describe views, opinions, behaviors, or other particular features of the population. The data obtained using numerical data with a Likers scale 4. Basic reasoning is used in this study to understand a phenomenon, and the viewpoint of the research population is typically included. An observation sheet, of process skills, served as the study's instrument. There are 24 items of process skill statements on a valid learning model sheet, which consist of 12 question items for problem based learning models and 12 statements for problem solving learning models. A Likert scale is used in this instrument. Strongly agree receives a score of 4, agree receives 3, disagree receives 2, and strongly disagree receives 1. The scale has a total of 4 points. Each statement is representative of each process skill indicator.

The grid on the science process skills questionnaire used in this study uses two indicators, namely grouping and compiling tables. The indicator of grouping in science process skills is useful for obtaining new knowledge or developing knowledge and in classifying students who are able to solve a problem. While the indicators of compiling tables are useful to be able to train students in providing or describing empirical data on experimental results that can be seen through graphs, tables or diagrams and train students in systematically compiling reports. Category of Student Process Skills on the material is show in Table 1.

Table 1. Category of Student Process Skills on the material of cubes and blocks

Category	Classification	Compiling a table
Very Not Good	5.0 -8.75	3.0-5.25
Not good	8.85 -12.5	5.35-7.5
Good	12.6 –16.25	7.6-9.75
Very good	16.35-20.0	9.85-12.1

In this study, a sample of VA and VB classes with 36 students in each class were utilized to administer 12 questions about process skills using a Likert scale with the following ratings : 1 (very not good), 2 (not good), 3 (good), 4 (very good). Two groups the experimental group and the control group make up the sample (Fromowitz, 2017). The population of this study was 72 students from two schools, namely Elementary School 156/I Bulian Baru and Elementary School 001/I Pasar Muara Tembesi. Total sampling is the sampling method. Class VA and VB, which included 40 women and 32 men as students, were the subjects studied. This study's sample was drawn using a sampling method. Probability Sampling is a sampling approach that gives every member (element) of the population an equal chance to be chosen as a sample member (Achdiyat & Utomo, 2018). The total number of samples that will be used in this study are students of grades VA and VB Elementary School 156/I Bulian Baru and Elementary School 001/I Pasar Muara Tembesi. This study's methodology involved handing out observation sheets, assessing quantitative data, and then identifying the findings for further investigation. 144 students from Elementary Schools 001/I Pasar Muara Tembesi and 156/I Bulian Baru completed questionnaires as part of the data gathering stage. Data analysis, including data coding, data filtering, and data analysis, was done using this information.

Sampling is the method of data analysis performed. The sampling strategy was chosen because it offers objective parameter estimations and works better in homogeneous populations (Tao & Ning, 2018; Bankole & Nasir, 2020; Alsabahi et al., 2021). The possibility of bias in the selection of cases to be included in the sample can be lessened through sampling. The sample frame is straightforward and general in nature, provided that random sampling is carried out due to the homogeneous population. This study was conducted beginning with the distribution of observation sheets, followed by the analysis of quantitative data and the identification of the findings for further investigation. At the data collection stage, questionnaires were given to 144 students in two schools, namely Elementary School 156/I Bulian Baru and Elementary School 001/I Pasar Muara Tembesi. Data analysis is subsequently performed using the data, including data coding, selecting relevant data, and data analysis. Descriptive and inverential statistics are employed to describe the data in the form of student attitudes and science process skills. A descriptive statistic is one that incorporates the mean, mode, median, maximum, minimum, and standard deviation when describing or presenting significant amounts of data untill the t test, inverential in the sense of independence. The data were then examined using the SPSS 26 program to determine their frequency, average, and standard deviation.

The initial step in data collection is to choose students according to the researcher's categories, after which a questionnaire on student attitudes toward science subjects must be administered. The SPSS

application was then used to process the survey data. Descriptive statistics in the form of mean, min, max, percentages, and student categories by using the SPSS application. The information required for research can be gathered or acquired from a variety of data sources. How the data collection procedures for this study were carried out is show in **Figure 1**.

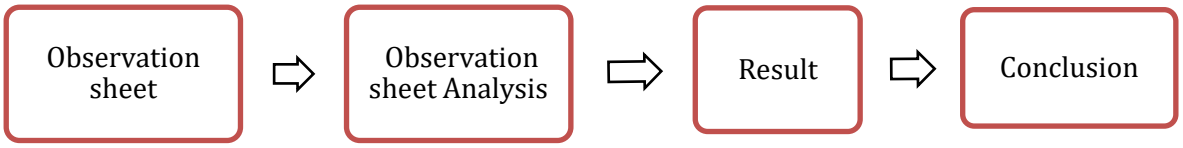

Figure 1. Research Procedure

3. RESULT AND DISCUSSION

Result

The following describes the results of descriptive statistics on the problem-based learning model, problem-solving learning model and students' science process skills in science subjects. Where the results obtained from the distribution of observation sheets in two schools and two classes, namely class VA and VB. The description of the classification indicators for the problem based learning model is shown in Table 2.

Table 2. Description of the classification indicators for the problem based learning learning model

Student response		interval	F	Percentage	Category	Mean	Median	Min	Max
Elementary School 156/I Bulian Baru	VA	5.0 -8.75	5	13.9%	Very Not Good	2.35	2.00	1.00	4.00
		8.85 -12.5	10	27.8%	Not good				
		12.6–16.25	10	27.8%	Good				
		16.35-20.0	11	35%	Very good				
	VB	5.0 -8.75	8	22.2%	Very Not Good	2.47	2.00	1.00	4.00
		8.85 -12.5	12	33.3%	Not good				
		12.6 –16.25	7	19.4%	Good				
		16.35-20.0	9	25%	Very good				
Elementary School 001/I Pasar Muara Tembesi	VA	5.0 -8.75	5	13.9%	Very Not Good	2.86	3.00	2.00	4.00
		8.85 -12.5	6	16.7%	Not good				
		12.6 –16.25	14	38.9%	Good				
		16.35-20.0	11	30.6%	Very good				
	VB	5.0 -8.75	8	22.2%	Very Not Good	2.47	2.00	1.00	4.00
		8.85 -12.5	12	33.3%	Not good				
		12.6 –16.25	7	19.4%	Good				
		16.35-20.0	9	25%	Very good				

Based on the results of the Table 2, it can be said that elementary school 001/I Pasar Muara Tembesi class VA and VB, is superior to the good category. The description of the indicators for Compiling a table of problem based learning learning models is shown in Table 3.

Table 3. Description of Indicators Compiling A Table of Problem Based Learning Learning Models

Student response		Interval	F	Percentage	Category	Mean	Median	Min	Max
Elementary School 156/I Bulian Baru	VA	3.0-5.25	5	13.9%	Very Not Good	2.35	2.00	1.00	4.00
		5.35-7.50	6	16.7%	Not good				
		7.60-9.75	14	38.9%	Good				
		9.85-12.0	11	30.6%	Very good				

Student response		Interval	F	Percentage	Category	Mean	Median	Min	Max
Elementary School 001/I Pasar Muara Tembesi	VB	3.0-5.25	8	22.2%	Very Not Good	2.47	2.00	1.00	4.00
		5.35-7.50	12	33.3%	Not good				
		7.60-9.75	7	19.4%	Good				
		9.85-12.0	9	25%	Very good				
	VA	3.0-5.25	1	2.8%	Very Not Good	2.86	3.00	2.00	4.00
		5.35-7.50	9	25%	Not good				
		7.60-9.75	20	55.6%	Good				
		9.85-12.0	6	16.7%	Very good				
	VB	3.0-5.25	3	8.3%	Very Not Good	2.47	2.00	1.00	4.00
		5.35-7.50	10	27.8%	Not good				
		7.60-9.75	19	52.8%	Good				
		9.85-12.0	4	11.1%	Very good				

Based on the results of the Table 3, it can be said that elementary school 001/I Pasar Muara Tembesi class VA and VB, is superior to the good category. The descriptions of indicators for Classification of problem solving learning models are shown in Table 4.

Table 4. Description of the Classification Indicators for the Problem Solving Learning Model

Student response		Interval	F	Percentage	Category	Mean	Median	Min	Max
Elementary School 156/I Bulian Baru	VA	5.0 -8.75	5	13.9%	Very Not Good	2.35	2.00	1.00	4.00
		8.85 -12.5	10	27.8%	Not good				
		12.6 –16.25	10	27.8%	Good				
		16.35-20.0	11	35%	Very good				
	VB	5.0 -8.75	8	22.2%	Very Not Good	2.47	2.00	1.00	4.00
		8.85 -12.5	12	33.3%	Not good				
		12.6 –16.25	7	19.4%	Good				
		16.35-20.0	9	25%	Very good				
Elementary School 001/I Pasar Muara Tembesi	VA	5.0 -8.75	5	13.9%	Very Not Good	2.86	3.00	2.00	4.00
		8.85 -12.5	6	16.7%	Not good				
		12.6 –16.25	14	38.9%	Good				
		16.35-20.0	11	30.6%	Very good				
	VB	5.0 -8.75	8	22.2%	Very Not Good	2.47	2.00	1.00	4.00
		8.85 -12.5	12	33.3%	Not good				
		12.6 –16.25	7	19.4%	Good				
		16.35-20.0	9	25%	Very good				

Based on the results of the Table 4, it can be said that elementary school 001/I Pasar Muara Tembesi class VA and VB, is superior to the good category. The descriptions of indicators for Compiling a table of problem solving learning models are shown in Table 5.

Table 5. Description of Indicators Compiling a Table of Problem Solving Learning Models

Student response		Interval	F	Percentage	Category	Mean	Median	Min	Max
Elementary School 156/I Bulian Baru	VA	3.0-5.25	2	5.6%%	Very Not Good	2.86	3.00	2.00	4.00
		5.35-7.5	7	19.4%	Not good				
		7.6-9.75	19	52.8%	Good				
		9.85-12.1	8	22.2%	Very good				
	VB	3.0-5.25	0	10%	Very Not Good	2.47	2.00	1.00	4.00
		5.35-7.5	7	19.4%	Not good				
		7.6-9.75	20	55.6%	Good				
		9.85-12.1	9	25%	Very good				
Elementary School 001/I Pasar Muara Tembesi	VA	3.0-5.25	2	5.6%	Very Not Good	2.86	3.00	1.00	4.00
		5.35-7.5	7	19.4%	Not good				
		7.6-9.75	19	52.8%	Good				
		9.85-12.1	8	22.2%	Very good				
	VB	3.0-5.25	0	10%	Very Not Good	2.66	3.00	1.00	4.00
		5.35-7.5	7	19.4%	Not good				
		7.6-9.75	20	55.6%	Good				
		9.85-12.1	9	25%	Very good				

The elementary school 001/I Pasar Muara Tembesi class VA and VB is better than the good category, according to the results of Table 5.

Analysis Prerequisite Test
Normality test

Table 6. Normality test of Problem Based Learning and Problem Solving Model

Variable	Elementary School	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
PBL	156/I Bulian Baru	0.126	72	0.200	0.877	72	0.622
	001/I Pasar Muara Tembesi	0.138	72	0.200	0.864	72	0.270
PS	156/I Bulian Baru	0.113	72	0.200	0.845	72	0.366
	001/I Pasar Muara Tembesi	0.089	72	0.200	0.873	72	0.445

Based on Table 6, it can be concluded that the data is normally distributed, the normality test is obtained with the Kolmogorov-Smirnov test, the significance value is > 0.05.

Homogeneity Test

Table 7. Test the Homogeneity of the Problem-Based Learning and Problem Solving Model

Variable	Elementary School	Sig.
Problem Based Learning	156/I Bulian Baru	0.056
	001/I Pasar Muara Tembesi	0.058
Problem Solving	156/I Bulian Baru	0.067
	001/I Pasar Muara Tembesi	0.068

Hypothesis testing

In this test, it is carried out in order to find out the differences in variables on Mathematics subjects. The conditions in this test if the significance value is > 0.05, it can be said that the variable has no difference. If the significance value is <0.05, then the variable has a significant difference. The T-test of the learning model of the problem-based learning model is described in Table 8.

Table 8. The T-test of the Problem-Based Learning Model

Elementary School	Variable	Class	N	Sig. (2-tailed)
156/I Bulian Baru	PBL	V A	72	0.032
		V B	72	
	PS	V A	72	0.044
		V B	72	
001/I Pasar Muara Tembesi	PBL	V A	72	0.034
		V B	72	
	PS	V A	72	0.026
		V B	72	

From Table 8, it is found that there are differences in problem based learning and problem solving learning models in the Elementary School 156/I Bulian Baru and Elementary School 001/I Pasar Muara Tembesi. This is evidenced by the value of sig (2-tailed) < 0.05.

Discussion

The learning model is a series of teaching materials carried out by the teacher to carry out the teaching and learning process with all the facilities used directly and indirectly (Ariandi, 2016; García-Merino et al., 2020; Hidayati et al., 2020). The learning model used in this study is a problem based learning and problem solving learning model. PBL is a learning model that encourages students to know how to learn and interact in groups to find solutions to problems in life. Problem solving approach is a learning approach that allows students to gain experience using the knowledge and skills they already have to be applied to non-routine problem solving. With education and the teaching and learning process will make a person have a critical mind which will affect several aspects, one of which will guarantee success (Tanti et al., 2020; Fitriani et al., 2021). Process Skills is the ability of students to apply scientific methods in understanding, developing and discovering science. The indicators of science process skills are: observing skills (observation), classifying (classification), interpreting (interpretation), predicting (predicting), asking questions, formulating hypotheses , planning experiments, using tools/materials, applying concepts, and communicating. Confidence is an important aspect in the learning process. The higher students' self-confidence, the higher the desire to learn and will change students' attitudes towards science (Astalini, et al., 2018; Zubaedi et al., 2021; Darmaji et al., 2021).

In the results of descriptive statistical tests, researchers tested learning models in the form of problem based learning and problem solving as well as testing students' science process skills carried out at Elementary School 156/I Bulian Baru and Elementary School 001/I Pasar Muara Tembesi. There are two classes, namely class VA and class V B. In class VA there are 36 students including 20 female students and 16 male students. In class VB there are 36 students including 20 female students and 16 male students. With the tests that have been carried out on descriptive statistics, there are 2 indicators that need to be considered.

Classification and creating tables are two examples of science process abilities. The outcomes of descriptive statistical tests used to gauge students' process abilities toward problem-based learning and problem-solving as a learning paradigm According to the aforementioned indicators, Elementary School 001/I Pasar Muara Tembesi has a larger percentage of learning models and science process abilities than Elementary School 156/I Bulian Baru, which is indicative of the results of the tests that have been conducted. This indicates that Elementary School 001/I Pasar Muara Tembesi's problem-based learning and problem-solving learning models are superior to those of Elementary School 156/I Bulian Baru. Classification and table generation are two examples of scientific process capabilities. Descriptive statistical test results are used to measure students' processing abilities towards problem-based learning and problem solving as a learning paradigm. Based on the indicators above, SD 001/I Pasar Muara Tembesi has a higher percentage of learning models and science processes. the ability of SD 156/I Bulian Baru which is an indication of the results of the tests that have been carried out. This shows that the problem based learning and problem solving learning model at SD 001/I Pasar Muara Tembesi is superior to SD 156/I Bulian Baru.

Two tests the normality and homogeneity tests are conducted as part of the analysis precondition exam, often known as the assumption test. The normalcy test was used in the first test. The data is normally distributed, the normality test was obtained using the Kolmogorov-Smoniv test, and the significance value is > 0.05, according to the results of the problem-based learning model table. Based on the results of the problem solving learning model table, it can be concluded that the data is normally distributed, the normality test is obtained with the Kolmogorov-Smoniv test, the significance value is > 0.05. Based on the results of the table of science process skills, it can be concluded that the data is normally distributed, the normality test is obtained with the Kolmogorov-Smoniv test, the significance value is > 0.05. Therefore, since the significance value is greater than 0.05, it can be said that the data for the normality test is regularly distributed. The homogeneity test is the second test, and it is based on the results of the three examined tables. Since the significance value for the derived linearity test was greater than 0.05, it can be said that the variances of the two variables are connected. The criterion if sig < 0.05 then the data is prepared for computations in the study using the Anova test and the SPSS version 26 program (Astuti, 2017; Ernawati 2021).

In the T test, the results obtained based on the problem based learning model table, it can be seen that there are differences. This is evidenced by the value of sig (2-tailed) > 0.05. Based on the problem solving learning model table, it can be seen that there are differences. This is evidenced by the value of sig (2-tailed) > 0.05. Based on the table of the learning model of science process skills, it can be seen that there are differences. This is evidenced by the value of sig (2-tailed) > 0.05. So by looking at these 2 results, it can be concluded that there are differences between Elementary School 156/I Bulian Baru and Elementary School 001/I Pasar Muara Tembesi.

This study is consistent with earlier studies on learning models. The learning model and students' science process skills were not, however, compared in prior study. Additionally, some of the tests performed in this study were not performed in earlier investigations. Finding out the connection between the learning model and students' science process skills is the goal of testing the problem-based learning and problem-solving learning model on students. Comparing learning methods appropriate for use with elementary school pupils is another goal. Some of the tests used are very useful to know about class comparisons and comparisons of indicators to be tested. According to previous study state that learning model testing is a test to find out whether the learning model can confront students from practical problems (Fauziyah, 2017; Budiarti, 2022).

This study is consistent with earlier studies on learning models. Prior research, however, solely examined homogeneity and normalcy. The goal of homogeneity testing is to ascertain whether there are homogeneous variances in this investigation. Finding out whether students' typical attitudes are representative of a scattered population is the goal of normalcy research (Sultan & Bancong, 2017). As a result, some of the tests used in this study were not tested in prior research. This study supports earlier studies on kids' science process abilities. But prior research solely examined self-efficacy. The capacity to solve issues and students' beliefs about questions were correlated in this study because the students' beliefs about problem-solving will influence their learning outcomes (Utami & Wutsqa, 2017). As a result, some of the tests used in this study were not tested in prior research.

The implication of this research is that by analyzing problem based learning and problem solving models and science process skills in class VA and VB students at SDN 156/I Bulian Baru and SDN 001/I Pasar Muara Tembesi will have an effect and have an impact on schools because schools can improve the system. Teaching and methods used by teachers in the form of applying a good learning model so that students can develop. And this research can be used as a research source or reference for other researchers who want to use the same variables at the elementary school level. The limitations of this research are that it only develops students' problem-based learning, problem solving, and science process skills; it does not check the students' level of interest or motivation level. The learning model is the overall presentation of teaching materials that includes all aspects before and before teacher learning as well as all related facilities that are used directly or indirectly in the teaching and learning process. Learning motivation means encouragement from students to achieve learning goals, for example understanding the material or developing learning. Students working to learn will do so on their own initiative and without any pressure from. Based on this research, the researcher recommends learning for further research to test the model with other variables that are more varied in future studies in higher education levels.

4. CONCLUSION

There are differences in problem solving learning models and problem based learning models on cube and block material in elementary schools. An appropriate learning model is needed in studying cube and block material so that students can easily understand the material. Seeing the strong relationship

between the learning model and students' science process skills makes it easier for teachers to understand students' skills in the learning process. Further research is expected to examine other variables besides students' science process skills in order to obtain a good and effective application of the cube and block material learning model at the elementary school level.

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