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### Learning Models And Students Personality Types On Learning Outcomes

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**Abstract**-This study aims to determine the effect of learning models and student personality types on learning outcomes in social studies subjects in Class IV SDN 30 Kota Selatan Kota Gorontalo. Sources of data in this study are primary data through distributing questionnaires and learning outcomes tests to the research sample (students). The data analysis technique used was anova 2x2 and *independent samples t test*. The results of this study indicate that (1) there is a significant difference in learning outcomes in the use of the Problem Solving learning model with conventional learning models in class IV Elementary School 30 Kota Selatan Kota Gorontalo with excellence in Problem Solving learning model, namely 88.125> 74.583. (2) there is a significant difference in learning outcomes in the use of the Problem Solving learning model with the conventional learning model for students who have extrovert personality types in class IV Elementary School 30 Kota Selatan Kota Gorontalo with excellence in the Problem Solving learning model, namely 96.667 > 70.833. (3) There is no significant difference in learning outcomes in the use of the Problem Solving learning model with conventional learning models for students who have introverted personality types in class IV Elementary School 30 Kota Selatan Kota Gorontalo with excellence in the Problem Solving learning model, namely 85.278> 78.333. (4) the interaction of the problem solving learning model with personality type has a significant effect on learning outcomes in class IV Elementary School 30 Kota Selatan Kota Gorontalo with a determinant value of 25.90%.

**Keywords:** Learning Outcomes, Problem Solving, Conventional, Extrovert, Introvert

#### INTRODUCTION

Learning outcomes are a measure of student success in learning the material presented by the teacher during a certain period. Through the social studies subject, it is hoped that students will be able to achieve the expected competency standards and even have mastery of social science concepts and contexts which can be proven by the good results (grades) of student learning. This is also the hope of Elementary School (SD) State 30 Southern City of Gorontalo City. This school was chosen because it has parallel classes and also has high expectations regarding the implementation of social studies subject learning, but in reality it is not in line with these expectations. Student learning outcomes of Elementary School (SD) State 30 Selatan City Gorontalo City, especially in grade IV can be presented in the following table:

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# Learning Models And Students Personality Types On Learning Outcomes

*by* Rusmin Husain

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**Abstract-** This study aims to determine the effect of learning models and student personality types on learning outcomes in social studies subjects in Class IV SDN 30 Kota Selatan Kota Gorontalo. Sources of data in this study are primary data through distributing questionnaires and learning outcomes tests to the research sample (students). The data analysis technique used was anova 2x2 and independent samples *t* test. The results of this study indicate that (1) there is a significant difference in learning outcomes in the use of the Problem Solving learning model with conventional learning models in class IV Elementary School 30 Kota Selatan Kota Gorontalo with excellence in Problem Solving learning model, namely  $88.125 > 74.583$ . (2) there is a significant difference in learning outcomes in the use of the Problem Solving learning model with the conventional learning model for students who have extrovert personality types in class IV Elementary School 30 Kota Selatan Kota Gorontalo with excellence in the Problem Solving learning model, namely  $96.667 > 70.833$ . (3) There is no significant difference in learning outcomes in the use of the Problem Solving learning model with conventional learning models for students who have introverted personality types in class IV Elementary School 30 Kota Selatan Kota Gorontalo with excellence in the Problem Solving learning model, namely  $85.278 > 78.333$ . (4) the interaction of the problem solving learning model with personality type has a significant effect on learning outcomes in class IV Elementary School 30 Kota Selatan Kota Gorontalo with a determinant value of 25.90%.

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## INTRODUCTION

Learning outcomes are a measure of student success in learning the material presented by the teacher during a certain period. Through the social studies subject, it is hoped that students will be able to achieve the expected competency standards and even have mastery of social science concepts and contexts which can be proven by the good results (grades) of student learning. This is also the hope of Elementary School (SD) State 30 Southern City of Gorontalo City. This school was chosen because it has parallel classes and also has high expectations regarding the implementation of social studies subject learning, but in reality it is not in line with these expectations. Student learning outcomes of Elementary School (SD) State 30 Selatan City Gorontalo City, especially in grade IV can be presented in the following table:

**Table 1.1: Achievements of Mid-Term Exam Study Results 2019-2020 Public Elementary School (SD) 30 Southern Cities Gorontalo City**

No.	Class	Total students	Completed		Not complete	
			n	%	n	%
1	4a	29	15	51.72%	14	48.28%
2	4b	25	14	56.00%	11	44.00%
3	4c	22	11	50.00%	11	50.00%
4	4d	25	12	48.00%	13	52.00%

Source: SDN 30 Kota Selatan, 2019

Based on the table above, it can be seen that of the 4 classes there are 2 classes, namely classes 4a and 4b which have a number of students with dominant learning outcomes complete than those who have not. Meanwhile, for grades 4a and 4d, there are a lot of students who have not yet completed it. This problem is because teachers do not apply varied learning models. Teachers tend to use the learning model based on their knowledge, namely the conventional learning model. So that many students whose social studies subjects do not reach the minimum completeness criteria at the end of the semester. This can be seen from students who are not able to respond well to the material being studied, most students are less involved in the process of learning activities, most students are less enthusiastic in participating in learning activities. The low learning outcomes achieved by students are caused by many factors, including internal factors and external factors. Relevant to the opinion expressed by Djamarah (2010: 68) the factors that influence the level of student learning outcomes can include ( 1) factors that come from within students, namely physiological factors and psychological factors. Physiological factors: physiological conditions, sensory conditions and psychological factors: interests, intelligence, talents, motivation, cognitive abilities (creativity), and ( 2) factors that come from outside the student consisting of a) environment: natural environment, social environment culture and b) Instrumental factors: curriculum, programs, learning models, facilities, and teachers.

Based on these descriptions, information is obtained that one of the causes of the low learning outcomes achieved by students is the learning model. In learning the application of the *problem solving* model students are required to carry out authentic investigations to find solutions to the problems given. In addition to the factors described above, another factor that affects student learning outcomes is student personality. The personality of each elementary school student is very diverse. According to Mussen in Hasanah (2014: 23) personality tendencies in children are grouped into two types, namely extrovert personality tendencies and introvert personality tendencies.

Expectations aimed at teachers as educators in educational units are to have the ability and capable skills to be able to foster student activity in learning by considering student characteristics, thus teachers can apply the learning approach effectively which is used as a learning strategy to arouse student enthusiasm for learning. by presenting a variety of lessons. However, the reality in the field of students has diverse personalities which makes the students absorb the concepts and context of the material taught

by the teacher fast and slow. There are students who want to study in groups and sometimes there are students who prefer to study alone.

## RESEARCH METHOD

This research was conducted in Elementary School 30 South City, Gorontalo City. The analysis design of this study was a 2 X 2 factorial design. The design in the study was seen in the following table:

**Table 2: Design of Anava 2 x 2**

Personality type	Learning model	
	<i>Problem Solving</i> (A <sub>1</sub> )	Conventional (A <sub>2</sub> ) (A <sub>2</sub> )
Extrovert (B <sub>1</sub> )	A <sub>1</sub> B <sub>1</sub>	A <sub>2</sub> B <sub>1</sub>
Introvert (B <sub>2</sub> )	A <sub>1</sub> B <sub>2</sub>	A <sub>2</sub> B <sub>2</sub>

The population in this study were all students in Elementary School (SD) State 30 southern city as many as 48 people where for class A as many as 24 people and class B as many as 24 people. If the population is less than 100 people, the sample is the entire population. So that the total population in this study was 48 students. Analysis of the data used in this study was a 2-way analysis of variance (ANOVA 2 x 2) with the f test at the significant level of alpha = 0.05 . In addition to the 2x2 ANOVA test, testing was also carried out by testing *independent samples t test*.

## RESEARCH RESULT

### A. Descriptive Statistics Results

The results of descriptive analysis for each variable in this study are presented as follows:

#### a. Description of Student Learning Outcomes Variables

Descriptive statistics of student learning outcomes are presented in the following table.

**Table 3: Descriptive Statistics of Learning Outcomes**

No.	Learning model	Learning outcomes	Number of people	Percentage (%)	Total (%)
1	<i>Problem Solving</i>	Fulfill	19	79.17	100.00
		Remidial	5	20.83	
2	Conventional	Fulfill	13	54.17	100.00
		Remidial	11	45.83	

Source of Processed Data, 2020

<sup>1</sup> Based on the data in the table, it can be seen that the *Problem Solving* learning model will have a good impact on student scores because in this learning model there are more students who meet the minimum completeness criteria required in social studies subjects in Elementary School (SD) State 30 southern city Gorontalo City.

**b. Variable Description Student's personality type**

The descriptive statistics of students' personalities are presented in the following table.

**Table 4: Descriptive Statistics of Students' personality types**

No.	Learning model	Personality	Number of people)	Percentage (%)	Total (%)
1	Problem Solving	Extrovert	6	25.00	100.00
		Introvert	18	75.00	
2	Conventional	Extrovert	12	50.00	100.00
		Introvert	12	50.00	

Source of Processed Data, 2020

Based on the data in the table, it can be seen that grade IV students at SD State 30 southern city have a tendency to have an introverted personality so that it has an impact on students' passivity in learning activities, which has the final implications for the student's learning outcomes.

**B. Inferential Analysis Results**

The interaction between the learning model and the student's personality type can be realized by ANOVA analysis in order to find out which model is better and whether the model is suitable for use. The inferential test results can be presented in the following table:

**Table 5: Summary of Inferential Results**

Personality type	Learning model	
	<i>t</i> count or <i>F</i> count	<i>t</i> table or <i>F</i> table
$\mu A_1 = \mu A_2$	3,208	2013
AxB	4,528	4,062
$\mu A_1 B_1 = \mu A_2 B_1$	5,381	2,120
$\mu A_1 B_2 = \mu A_2 B_2$	1,143	2,048

Source: SPSS Data Processing 21, 2020

Based on the table above, it can be seen that of the 4 problem formulations, 3 are significant and 1 is not significant. Meanwhile, the results of the ANOVA 2x2 analysis found the results of the study, namely the average student learning outcomes which can be summarized in the table as follows:

**Table 6 : Average Results of Each 2x2 ANOVA Interaction**

Personality type	Learning model	
	Problem Solving ( <i>A</i> <sub>1</sub> )	Conventional ( <i>A</i> <sub>2</sub> )
Extrovert ( <i>B</i> <sub>1</sub> )	96,667	70,833



Introvert (B <sub>2</sub> )	85,278	78,333
<b>Whole</b>	<b>88,125</b>	<b>73,000</b>

Source: SPSS Data Processing 21, 2020

Based on the results in the table above, the following can be described as a discussion of the research results:

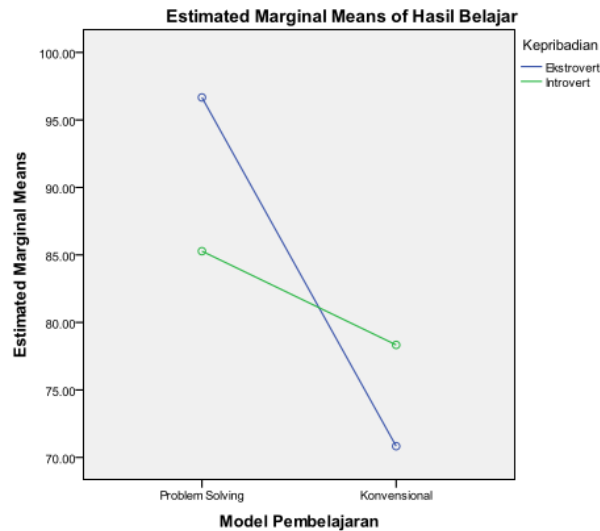
### 1. The difference in learning outcomes using the *Problem Solving* learning model with conventional learning models

T<sub>count</sub> is still greater than the value of t<sub>table</sub> and the significance value is still smaller than the value of alpha used (0.002 < 0.05) so Ha1 accepted. So that the conclusion is that there is a significant difference from learning outcomes in the use of the *Problem Solving* learning model with the conventional learning model in class IV Elementary School (SD) State 30 southern city Gorontalo City. The average learning outcomes of fourth grade students in Elementary Schools (SD) State 30 southern city Gorontalo City in the use of the *problem* solving learning model were greater than the use of conventional learning models (88,125 > 74,583). So it can be said that the better the use of the *Problem Solving* learning model will have a positive impact on students or the learning outcomes of grade IV students in Elementary School (SD) State 30 southern city Gorontalo City will increase or meet the minimum completeness criteria (KKM).

### 2. The influence of the interaction of *problem solving* learning models with personality types on learning outcomes

The calculated F value for the effect of the interaction of the *Problem Solving* learning model with personality types on learning outcomes is 4.528 with a sig (2-tailed) value of 0.039. This significance value is still smaller than the alpha value used (0.039 < 0.05) so that Ha2 is accepted. So that in conclusion the interaction of the *Problem Solving* learning model with personality type has a significant effect on learning outcomes in class IV Elementary School (SD) State 30 Southern City, Gorontalo City with a determinant value of 25.90% . This shows that if the teacher uses a more modern and innovative learning model and is supported by the student's personality to be active in learning activities, it will have an impact on improving student learning outcomes.

The results of the above analysis are also strengthened by the Two Ways Anova Test Mean Plot Diagram as follows:



**Figure 4.1: Plot diagram of the Two Ways Anova test means**

Based on the graph above, it can be seen that the lines of the *Problem Solving* learning model with the conventional learning model lines intersect so that through this graph it can be said that using the *Problem Solving* learning model, students with extroverted personality types have higher learning outcomes than students with personality types. the introvert. Meanwhile, using conventional learning models, students with introverted personality types have higher learning outcomes than students with extrovert personality types.

### 3. The difference in learning outcomes using the *Problem Solving* learning model with conventional learning models for students who have extrovert personality types

$T_{count}$  is still greater than the value of  $t_{table}$  and the significance value is still smaller than the value of alpha used ( $0.000 < 0.05$ ) so  $H_{A3}$  accepted. Thus it can be concluded that there is a significant difference in learning outcomes in the use of the *Problem Solving* learning model with the conventional learning model for students who have extrovert personality types in class IV Elementary School (SD) State 30 southern city Gorontalo City. The average learning outcomes of grade IV students who have extrovert personality types in SD State 30 southern city Gorontalo City in the use of the *Problem Solving* learning model are greater than the use of conventional learning models ( $96,667 > 70,833$ ). So it can be said that the models of learning *problem solving* will make a student with an extroverted personality types are increasingly able to improve learning outcomes so that the learning model of *problem solving* into a solution for students to improve learning outcomes, especially for students with an extroverted personality types.

### 4. The difference in learning outcomes using the *Problem Solving* learning model with conventional learning models for students who have introverted personality types



The value of  $t_{\text{arithmetic}}$  is still smaller than the value of  $t_{\text{table}}$  and the significance value<sup>2</sup> is still greater than the value of alpha used ( $0.263 > 0.05$ ) so  $H_0$  is rejected. Thus it can be concluded that there is no significant difference in learning outcomes in the use of the *Problem Solving learning model* with the conventional learning model for students who have introverted personality types in class IV Elementary School (SD) State 30 southern city Gorontalo City. The average learning outcomes of grade IV students who have an introverted personality type in SD State 30 southern city Gorontalo City in the use of the *Problem Solving learning model* are greater than the use of conventional learning models ( $85,278 > 78,333$ ). So it can be said that students who have introverted personality types, the teacher must do a combination of learning models because students with this personality will tend to be less confident in expressing opinions or providing solutions to problems discussed related to the subjects taught by the teacher.

### C. DISCUSSION

#### 1. Differences in learning outcomes in the use of *problem solving learning models* with conventional learning models<sup>1</sup>

The results of testing the first hypothesis show that there is a significant difference in learning outcomes in the use of the *Problem Solving learning model* with the conventional learning model in grade IV Elementary School (SD) State 30 southern city Gorontalo City. This significant result is as according to Hamdani (2011: 84) that the problem solving learning model or problem solving method, subject matter is not limited to books but also comes from certain events in accordance with the applicable curriculum. Learning Model Problem Solving is a method in learning activities to train students to face various problems, both personal issues and problems to be solved alone group or together. The learning orientation is investigation and discovery which is basically problem solving. The cause of the lack of problem-solving abilities and learning outcomes, usually occurs due to the less varied ways of teaching teachers so that students are not interested in learning mathematics. Most teachers still tend to use conventional learning. Students are less active and less practice in problem solving. So that the ability of students to solve problems is also very low. To anticipate the above problems, it is necessary to strive for a fun learning process and make students active in the learning process, as well as familiarize students with practicing problem solving. To improve problem solving skills and learning outcomes. One of the learning strategies that will be applied is Problem Based Learning (PBM), namely the *problem solving model*.<sup>2</sup>

This is as stated Pepkin (2004: 1) that the Problem Solving learning model is a learning model that focuses on teaching and problem solving skills, followed by strengthening skills. When faced with a question, students can use problem-solving skills to select and develop responses. Not only by memorizing but thinking, problem solving skills expand the thinking process. Problem solving as an attempt to find a way out of a difficulty in order to achieve a goal that is not immediately achievable. Problem solving is an effort to find a way out in achieving previously obtained goals into new situations. These results support the opinion of Hamdani (2011: 84) that the problem solving method is a way of presenting lessons by encouraging students to find and solve a problem or problem in order to achieve teaching goals. The advantages of problem solving learning models include training students to design an invention, think and

act creatively, solve problems faced realistically, stimulate the development of student thinking progress to solve the problems faced appropriately.

## 2. The influence of the interaction of *problem solving learning models* with personality types on learning outcomes

The results of testing the second hypothesis show that the interaction of the *Problem Solving learning model* with personality type has a significant effect on learning outcomes in class IV Elementary School (SD) State 30 Southern City Gorontalo City with a determinant value of 25.90%. In the use of the *Problem Solving* learning model, students with extroverted personality types have higher learning outcomes than students with introverted personality types. Meanwhile, in the use of conventional learning models, students with introverted personality types have higher learning outcomes than students with extrovert personality types. The significance of this result is because the problem solving learning method is not only a teaching method, but also a method of thinking, because in problem solving one can use other methods that start by looking for data to draw conclusions. Problems can be interpreted as deviations between what should be and what really happened, between theory and practice, between rules and implementation, between planning and implementation. This was confirmed Ningrum (2017) that the use of problem solving methods is needed to support the implementation of the learning process properly. The methods used to support problem solving consist of lectures, assignments, group discussions, and question and answer methods as well as using playing media so that students don't feel bored during the learning process.

This result is in accordance with the opinion of Sari (2012) that various psychological problems which are the basic characteristics of students have a great influence in the learning process. The learning process that takes place in schools must pay attention to the basic characteristics of students so that the expected learning outcomes can be achieved. The basic characteristics of these students are also one of the considerations for determining the learning model, learning methods and learning media that will be used during the learning process in class. Learning planning that must be done by a teacher before implementing learning must consider various fun learning models so that students can absorb the knowledge conveyed by the teacher. In addition to the learning model, good classroom management methods also support the success of the learning process.

## 3. The difference in learning outcomes in the use of *problem solving learning models* with conventional learning models in students who have extrovert personality types

The results of testing the third hypothesis show that there is a significant difference in learning outcomes in the use of the *Problem Solving* learning model with conventional learning models in students who have extrovert personality types in class IV Elementary School (SD) State 30 Southern City Gorontalo City. The significance of this result is as according to Sari (2012), namely because extroverts are described by Eysenck as a person who is easy to get along with, likes to party, has many friends, needs friends to talk to, and does not like reading or studying alone, really needs joy, takes challenges, often opposes danger, behaves without thinking first, and usually likes to indulge his heart, likes to joke, is

always ready to answer, and usually likes change, is cheerful, doesn't take much consideration (easy going), is optimistic, and likes to laugh and be happy, more likes to stay engaged in activities, tends to be aggressive and quickly dissipates anger, all feelings are not kept under control, and is not always trustworthy. With this, students with extroverted personalities will tend to like challenges in solving learning problems.

This result is in accordance with the viewpoint of Sudjana (2012: 125) which states that the *problem solving* model is a technique that describes a person's experiences or problems which are arranged to provoke the attention or feelings of the trainees. *Problem solving models can be used to* drive discussion, *improve* students' ability to analyze, assess and solve problems faced in the world of their life. This is also consistent with Mussen's view in Hasanah (2014: 23) that personality tendencies in children are grouped into two types, namely extrovert personality tendencies and introvert personality tendencies. Each of these personalities has different characteristics. Each student will find two personalities. Each personality type is thought to have a characteristic ability of creativity that can influence how to understand the concept and context of the material in learning activities. In some cases there is a tendency for students at the primary school level to have an introverted personality so that the learning model used by the teacher becomes a strategy in fostering the will and desire and even the openness of these students in learning activities.

#### 4. The difference in learning outcomes in the use of *problem solving learning models* with *conventional learning models* in students who have *introverted personality types*

The results of testing the fourth hypothesis show that there is no significant difference in learning outcomes in the use of the *Problem Solving learning model* with *conventional learning models* for students who have introverted personality types in class IV Elementary School (SD) State 30 Southern City Gorontalo City. This insignificant result is according to Uya (2016) that the difference between extrovert and introvert personalities is only in the emphasis of their attitude orientation towards their environment, not on differences in cognitive abilities. Students who are extroverted do not mean that they are smarter than students who are introverted in receiving, thinking about, and solving problems in building their knowledge of all the information or stimuli they face. There is a possibility that students who are extroverted have different learning outcomes with groups of students who are introverted, but the difference occurs because of their tendency to focus their attention on studying and processing teaching materials by utilizing stimulation in accordance with their own characteristics which will have an impact on learning outcomes. In this case it can be said that basically the learning model greatly determines student learning outcomes, but the use of the model must be in accordance with the circumstances or student personality, even if it is necessary to be more innovative, each learning model and the use of various models need to be considered.

This insignificant result is also reinforced by the statement from Indrawati, et al. (2016) that the teacher does not consider the personality factors of each student and considers all students to have the same personality and abilities. Students with introverted personalities are often blamed for their quiet nature. Today's culture inherits that a good student is an extroverted student, because our culture prefers



an action rather than an afterthought. School benches that were arranged in rows and columns are now arranged in a circle. This of course benefits extroverted students and harms introverted students. This loss is not only a loss for introverted individuals, but also a loss for the introvert's individual friends, then a loss for the community and a loss for the world because it has curbed the creativity and independence of an introvert.

In essence, each personality has advantages and disadvantages like extrovert students, although the cognitive and affective learning outcomes of mathematics are lower than introverted students, extrovert students actually excel at learning outcomes in the psychomotor domain, which emphasize the skills possessed by students. Extroverted students appear to be more skilled at communicating verbally so they do not hesitate to ask questions or other technical questions. In accordance with Hidayat's (2011) opinion that extrovert students are easier to socialize and are socially active, so it is appropriate that students who tend to be extroverted are superior to students who tend to be introverts who are known to be difficult to adapt and shy. Thus, introvet students should have diversity in the use of learning models so that they can adapt to the environment and learning process in the classroom.

## CONCLUSION

- Based on the results of research and discussion, the following research conclusions can be drawn:
1. There is a significant difference in learning outcomes in the use of the *Problem Solving learning model* with the conventional learning model in class IV Elementary School 30 Kota Selatan Kota Gorontalo. The learning outcomes of fourth grade students at SD Negeri 30 Kota Selatan Kota Gorontalo in the use of the *Problem Solving learning model* were greater than the use of conventional learning models ( $88,125 > 74,583$ ). So it can be said that the better the use of the *Problem Solving learning model* will have a positive impact on students or the learning outcomes of grade IV students in Elementary School 30 Kota Selatan Kota Gorontalo will experience an increase or meet the minimum completeness criteria (KKM).
  2. The interaction of the *Problem Solving learning model* with personality type has a significant effect on learning outcomes in class IV Elementary School 30 Kota Selatan Kota Gorontalo with a determinant value of 25.90%. This shows that if the teacher uses a more modern and innovative learning model and is supported by the student's personality to be active in learning activities, it will have an impact on improving student learning outcomes.
  3. There is a significant difference in learning outcomes in the use of the *Problem Solving learning model* with conventional learning models for students who have extrovert personality types in class IV Elementary School 30 Kota Selatan Kota Gorontalo. The learning outcomes of grade IV students who have extrovert personality types in SD Negeri 30 Kota Selatan Kota Gorontalo in the use of the *Problem Solving learning model* are greater than the use of conventional learning models ( $96,667 > 70,833$ ). So it can be said that the models of learning *problem solving* will make a student with an extroverted personality types are increasingly able to improve learning outcomes so that the learning model of *problem solving* into a solution for students to improve learning outcomes, especially for students with an extroverted personality types.

- 2
4. There is no significant difference in learning outcomes in the use of the *Problem Solving learning model* with the conventional learning model for students who have introverted personality types in grade IV Elementary School 30 Kota Selatan Kota Gorontalo. The learning outcomes of grade IV students who have an introverted personality type in SD Negeri 30 Kota Selatan Kota Gorontalo in the use of the *Problem Solving learning model* are greater than the use of conventional learning models ( $85,278 > 78,333$ ). So it can be said that students who have introverted personality types, the teacher must do a combination of learning models because students with this personality will tend to be less confident in expressing opinions or providing solutions to problems discussed related to the subjects taught by the teacher.

### SUGGESTION

Based on the research conclusions, the suggestions put forward by the researcher are as follows:

1. It is important for teachers to always teach material with various innovative and modern learning models such as problem solving which can make a significant contribution to student learning outcomes. The use of models must look at the characteristics of students and also the characteristics of the lessons being taught so that they can be a stimulant for students in improving their learning outcomes and even become a catalyst for school achievement that comes from student achievement.
2. Basically, the personality type contains both positive and negative things, so the teacher must be able to leverage these positive things by giving examples of attitudes, traits and enthusiasm for students and even collaborating with each student's parent in order to be able to understand students and provide teaching and learning, attention to students with the need for stimulation in order to be able to make their personality types positive for student learning outcomes.
3. As an effort to improve student learning outcomes, teachers must participate in developing their competences from both the non-formal and formal aspects of education. Teachers with strong competence and commitment will find it easier to encourage students to learn better because the teacher is able to make innovations in learning that are not only in the learning model but also in strategies and methods and even stimulation of the student's personality so that they are able to have a different effect. good in improving learning outcomes.
4. For future researchers, it is important to develop this research by adding assessment instruments even to the analysis used so that various research results can be obtained for the benefit of educational advancement in Gorontalo City. Innovations can be carried out by further researchers, namely by combining or interacting with the role of the teacher and the role of parents in improving student learning outcomes.

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