Improving Science Learning Outcomes Through Two Stay Two Stray Assisted by Concrete Media

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A B S T R A K

Rendahnya hasil belajar IPA siswa yang disebabkan oleh kurang optimalnya penggunaan model pembelajaran yang inovatif dan kreatif serta kurangnya penggunanan media pembelajaran. Penelitian ini bertujuan untuk menganalisis pengaruh model pembelajaran *Two Stay Two Stray* (TSTS) berbantuan media konkret terhadap hasil belajar IPA kelas V SD. Kuasi eksperimen menjadi jenis dari penelitian ini dengan rancangan penelitian *non equivalent post test only control group design*. Populasi pada penelitian ini adalah siswa-siswi kelas V sekolah dasar yang berjumlah 211 orang. Pengambilan sampel dilakukan melalui cara *random sampling* dengan teknik undian. Jumlah sampel yang digunkan dalam penelitian ini adalah 48 orang. Metode pengumpulan data digunkan adalah tes pilihan ganda. Data yang didapatkan kemudian dianalisis menggunakan uji-t dengan rumus *polled varians* yang menunjukkan bahwa $t_{hitung} > t_{tabel}$ ($t_{hitung} = 6,16 > t_{tabel} = 1,68$). Hal ini berarti terdapat perbedaan yang signifikan hasil belajar IPA antara kelompok siswa yang dibelajarkan dengan model pembelajaran *Two Stay Two Stray* (TSTS) berbantuan media konkret dan kelompok siswa yang dibelajarkan secara konvensional. Berdasarkan hasil penelitian tersebut dapat disimpulkan bahwa model pembelajaran *Two Stay Two Stray* (TSTS) berbantuan media konkret berpengaruh terhadap hasil belajar IPA siswa kelas V.

A B S T R A C T

Science learning is one of the subjects in elementary schools to be able to develop students' process skills related to natural phenomena that occur as a source of knowledge. Science learning should be student-centered, but the learning process is still teacher-centered and only uses the lecture method. This study aims to analyze the effect of the Two Stay Two Stray learning model (TSTS) assisted by concrete media on the science learning outcomes at fifth grade primary school 2019/2020. Quasi-experiments became the type of this study with a non-equivalent post-test only control group design study design. The population in this study were 211 elementary school students. Sampling is done through random sampling by lottery techniques. The sample in the experimental group was 22 students and the sample in the control group was 26 students. The science learning outcomes test is a multiple-choice instrument used when collecting data through instrument validation conducted by experts in the field of science and has been tested. The data obtained were then analyzed using the t-test with the polled variance formula which showed that tcount> t table (t count = 6.16> t table = 1.68). This means that there are significant differences in science learning outcomes between groups of students who are taught with the Two Stay Two Stray (TSTS) learning model assisted by concrete media and groups of students who are taught conventionally. Based on these results it can be concluded that the Two Stay Two Stray learning model (TSTS) assisted by concrete media affects the learning outcomes of fifth-grade students.

Introduction

Science is a lesson that examines a natural phenomenon that exists in the environment. Science learning directs students to do something to gain experience about the natural surroundings. Science learning cannot be separated from humans, because science is essentially a science that studies and understands oneself (Kumape, 2015; Mahendrawati et al., 2016; Pratama et al., 2019; Wardani, 2019). The science learning purpose is that students are trained to understand and understand science in a broader context, especially in everyday life. Science learning in schools, especially in elementary schools, is expected to be a reference for students to learn about themselves, the natural surroundings, and apply the benefits further in their daily lives. Science education has a very important role in shaping the students' personality and intellectual development to develop process skills and

can train students to think and act rationally on problems in their surroundings (Dewi & Negara, 2020; Santiani et al., 2017). Science is very important in students' daily lives because they can train to think logically, rationally, critically, and creatively or think scientifically. This is following the characteristics of Natural Science (IPA) which is closely related to how to systematically find out about the natural surroundings so that Science is no longer just mastery of material knowledge in the form of facts, concepts, and principles. only, but also a process of discovery or practice (Rediarta, 2014; Santiani et al., 2017). To achieve better quality learning outcomes in every subject, especially in the eyes of science lessons, it must be followed by applying innovative, creative, varied, and fun learning methods and models.

Given the important role of science, science learning needs to be designed and structured to provide opportunities for students to develop attitudes, knowledge, and skills. If this has been done, students' learning success in science subjects will increase (Sari et al., 2018; Wirawan, 2017). Science learning, which should be able to activate students in the learning process, in its implementation provides students with some memorizing concepts without an experimental activity in it. This has deviated from the meaning and purpose of science itself. If in science learning the teacher only uses lectures and questions and answers, it will cause students to become bored quickly during the learning process given by the teacher, and result in students being less focused and making learning outcomes low. Students joke more with their classmates, because they feel that the learning method is boring. During the learning process, the questions given by the teacher are only answered by 4-5 highly skilled people and the other students just sit to hear what has been said without any understanding at all. Students tend to choose to do something or assignments given by the teacher individually, this results in low ability students being unable to improve their learning outcomes. This happens because there is no interaction and socialization between students and students which makes high-ability students feel they are very great these activities are not good if they continue in the learning process. The hope that is desired in learning science is of course making students who think rationally in taking any action when a problem arises. But the reality is not following the expectations in the field.

Based on the observations and interviews results that were conducted in Gugus V, Kecamatan Sukasada, there were complaints that in science subjects the dominant student learning outcomes were low. This can happen because the majority of fifth-grade teachers of Gugus V Kecamatan Sukasada do not use models or learning media that attract students' motivation to learn to improve student learning outcomes in Science. Some of the accepted reasons are that teachers do not want to bother themselves while teaching in class, they only rely on lectures and the blackboard as a medium when the learning process takes place. The lecture method is deemed ineffective when used in the learning process which makes students just sit back and listen to what the teacher says and wait for the teacher's instructions when answering questions in the book. This activity has no variation at all, both in terms of the model and the learning media, so that students feel bored faster and tend to play with their classmates, and student learning success decreases. This can be seen from the data on students' midterm test scores (UTS) when studying documents on science subjects which show that 211 students in Gugus V Kecamatan Sukasada, 63% were mostly under the KKM and 37% were above the KKM. The low science learning outcomes are caused by several factors, including: (1) The teacher implements conventional learning or is still centered on the lecture method. (2) Lack of learning models and media that attract students to learn. (3) The teacher provides materials to students only in the form of memorization, principles, and concepts. (4) Lack of student motivation to actively participate in the learning process. If this continues to be left with a state of student scores that are more dominant under the KKM, there will be no increase in student learning success during the learning process, the scores obtained by students will continue to get lower due to the lack of variation in teachers in teaching. The majority of teachers do not use models and media during the learning process, so students feel bored and less active when participating in the learning process. The right solution for this problem is to provide a Two Stay Two Stray (TSTS) learning model.

The Two Stay Two Stray (TSTS) learning model is a learning model that is more focused on learning groups of students so they can work together, be responsible, help each other solve problems, and motivate each other in a learning group to achieve learning achievement and gain meaningful learning (Harta et al., 2019; Karlina et al., 2017). Group discussions become more active because they are encouraged by their group friends to get results and goals from certain activities. The Two Stay Two Stray type of cooperative learning model is a learning model whose application is to provide opportunities for groups to share results and information with other groups. Learning type Two Stay Two Stray (TSTS) means two staying and two visiting, which means that each group consists of four people, two people are assigned to visit another group to find their answers and write them down, then two more people stay in the group to receive guests and share their answers. The TSTS learning model can encourage group members to obtain a concept or fact in depth through assigning roles from students to students. The use of the TSTS learning model will make students active, creative, both in discussing, listening, and also explaining the learning material presented by their friends. The advantages of the TSTS model according to stating that TSTS is easy to divide into several groups and can do more tasks, teachers are easier to monitor students, can be used at all class levels, are more focused on student activity, increase student cohesiveness, dare to express their

opinions, and help increase interest and learning achievement outcomes (Fitrianingrum, 2018; Karlina et al., 2017). The learning model is used to provide variations in the learning process to invite students to participate or participate so that student learning is not monotonous without activities that attract students to learn. Learning the TSTS model will make students active again when assisted by a learning medium.

Learning media is a tool or intermediary that can be used in delivering material during the learning process. Learning media is a tool or object that can be sensed, especially hearing, sight, both inside and outside the room as a supporting tool in the learning interaction process to increase the effectiveness of student learning outcomes (Mahnun, 2012; Megayani & Maulana, 2017; Nurmadiah, 2016). The use of learning media is considered to be sufficient to provide positive things if the teacher uses the right way it will affect student learning outcomes (Akbar & Tarman, 2018). Media that is suitable for the problems in fifth grade, namely with the assistance of concrete media. As the name implies, concrete media is a learning medium that comes from real tools or objects and is widely recognized by students and is easy to find.

Concrete media are objects that are real, tangible, visible, can be noticed by students through the senses and there is no imagination from students of what they learn (Dwipayanti et al., 2013; Suarjana et al., 2017). The advantages of concrete media are according to stating that concrete media can help teachers explain to their students, can train students' skills through sensory tools, increase student interest in the material given, students are allowed to learn real situations (Juniasih et al., 2013). Media plays a very important role in the learning process. Teaching aids is one way to produce effective learning outcomes in a shorter time, but what is received through the tools longer and is better remains in memory (Erowati, 2015). Current learning media that are considered attractive to students is to use concrete media. The acquisition of learning outcomes through the sense of sight is around 75%, through the sense of hearing about 13%, and through other senses around 12%.

TSTS learning model with the help of concrete media, the student learning outcomes will increase. TSTS type cooperative learning with the help of concrete media was chosen because it has advantages in the field of group discussions, in TSTS learning it is more concerned with group results than individuals. So that all students can get along with their friends and in a group, there will be different students or heterogeneous students. stated that the use of the TSTS model can lead students to be active, both in question and answer, discussing, explaining the material, and listening to the delivery of material from friends (Arthaningsih, 2018; Kadiriandi & Ruyadi, 2018). This study aimed to analyse the effect of the Two Stay Two Stray (TSTS) learning model assisted by concrete media on science learning outcomes in fifth-grade elementary school. With this research, it is hoped that a combination of learning models and learning media will be able to be innovative and reduce problems associated with the low learning outcomes of science learning.

Method

This research took place in Gugus V Kecamatan Sukasada, Kabupaten Buleleng. This research is quasi-experimental (Quasi Experiment), with a non-equivalent post-test only control group design. After the equivalence test was carried out using the ANAVA formula, 211 students in Gugus V Kecamatan Sukasada were declared equal, so that the experimental group SD Negeri 1 Panji and SD Negeri 2 Panji control group were obtained. The experimental group was given treatment with the TSTS learning model assisted by concrete media and the control group was not given treatment with the TSTS learning model assisted by concrete media.

The data that will be collected in this study are student learning outcomes after being given a post-test at the end of learning using a multiple-choice test method in 25 items. Several tests were carried out to fulfill the requirements of a good instrument so that the validity test was carried out and the results were 27 valid and 3 invalid questions, then the test was carried out for the difference in test power, the difficulty level of the test and the test reliability test. Before going into the field, a content validity test must be carried out using the Gregory validity test based on the judgment of the experts. After getting the results of the content validity calculation, then the instrument can be tested in the field, and the trial results are further analyzed by testing the validity, reliability, difficulty level of the test, and the power of difference. The instrument used in the science learning outcome grid which can be seen in Table 1.

Table 1. Scince Learning Outcomes

Basic Competency	Indicator
3.7 Analyzing the effect of heat on changes in temperature and shape of objects in everyday life	Analyzing the effect of heat in everyday life
	Choose the properties of solid, liquid and gas
	Analyzing the effect of heat on changes in temperature of objects

	Analyze changes in the form of objects freezing, melting, and evaporating
	Find the benefits of changing objects in everyday life
	Analyze changes in the form of objects subliming, condensing, and crystallizing
	Clarify the changes in the form of objects in everyday life

In this study, according to the basic competency 3.7 to analyse the effect of heat on changes in temperature and the shape of objects in everyday life that are in the cognitive domain of C4, so that the indicators on the science learning outcomes grid are in the cognitive domain from C4 to C6. Thus the questions that are in that category are included in high-order thinking questions.

The data analysis technique used is descriptive statistics and inferential statistics. Descriptive analysis was performed to calculate the mean, median, mode, standard deviation, and variance for each study group. The results of the mean, median, and mode of student learning outcomes in science are then presented in a polygon graph. The high and low quality of the research variables can be determined from the average value of each variable which is converted into a five-scale category assessment. Inferential statistics aims to test the research hypothesis. Before testing the hypothesis, several prerequisite tests for data analysis were carried out, namely the normality test and the homogeneity of the variance. Hypothesis testing using an independent sample t-test correlates with the polled variance formula.

Result and Discussion

Based on the data analysis result on fifth grade science learning outcomes with Two Stay Two Stray (TSTS) learning model assisted by concrete media in the experimental group and the absence of the Two Stay Two Stray (TSTS) learning model assisted by concrete media in the control group. The results of the post-test given to the experimental group showed that the student's highest score was 96 and the student's lowest score was 68 which obtained mean was 83.09, median was 84.35, and mode was 85.35. Furthermore, the mean, median, and mode data are presented in a polygon graph whose purpose is to describe the distribution of science learning outcomes data in the experimental group. Data from experimental group post-test results can be seen in Figure 1.
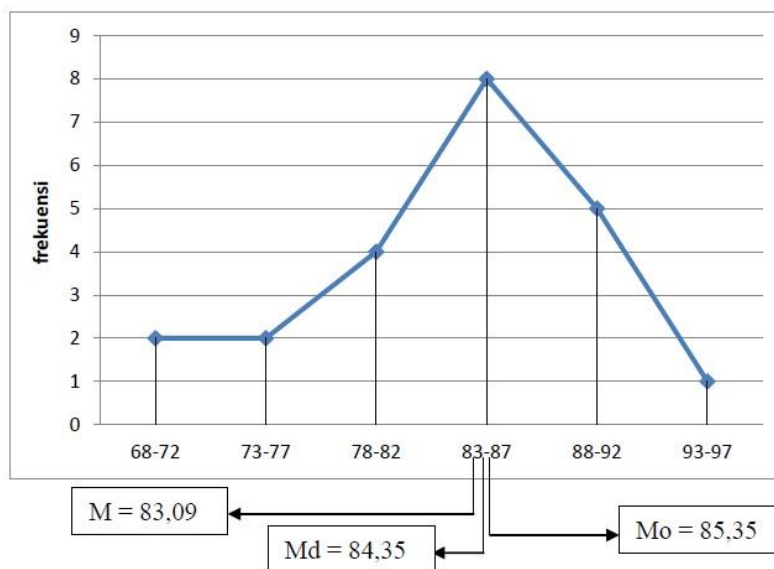

Figure 1. Experimental Group Learning Outcomes

Figure 1 shows that it is known that the mode is greater than the median and the median is greater than the mean (Mo> Md> M). Thus, the graph in Figure 1 is a negative squint curve, which means that most student scores tend to be high. Furthermore, the data were converted into a five-scale category assessment and received a very good predicate.

Unlike the case with the post-test results given to the control group, it shows that the students highest score is 76 and the lowest score is 48, which is obtained by a mean was 62.77, a median was 62.5, and a mode was 61.5. Furthermore, the mean, median, and mode data are presented in a polygon graph which aimed to describe the distribution of science learning outcomes data in the control group. Data from the control group post-test results can be seen in Figure 2.
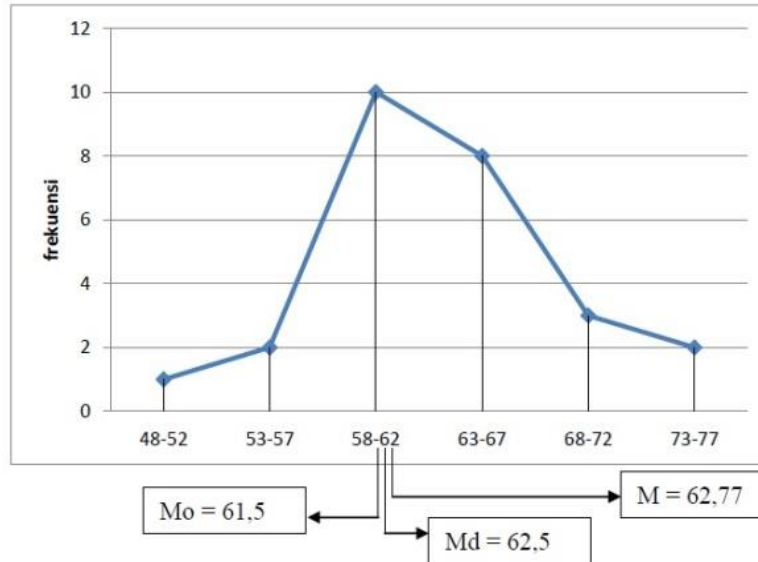

Figure 2. Polygon graph of the control group learning outcome data

Figure 2 shows that it is known that the mode is smaller than the median and the median is smaller than the mean (Mo <Md <M). Thus, the graph in Figure 2 is a positive squint curve, which means that most student scores tend to be low. Furthermore, the data were converted into a five scale category assessment and got a good predicate. Based on the results of the post-test given to the two groups, it was seen that there was a difference in the scores of learning outcomes in science between the experimental group and the control group.

Before testing the hypothesis, a prerequisite test is carried out on the data obtained by testing the normality of the data distribution and the homogeneity test of variance in Table 2.

Table 2. Normality and Homogeneity Test Results

Data Group Learning outcomes	x^2	F_{hitung}	Significance level 5%		Status	
			Normality	**Homogenity**	**Normality**	**Homogenity**
Experiment Group	5,46	1,31	7,81	4,05	Normal	Homogen
Control Group	3,99		7,81		Normal	

The normality test is carried out to determine the student learning outcome distribution data in each group that is normally distributed or not. The normality test was performed using the Chi-Square formula ($\chi 2$) in both groups. Based on the tests conducted, it was found that the chi-square count <chi square table ($\chi 2$hitung <2table) in the experimental group and also in the control group. The Chi-Square result formula ($\chi 2$) in the experimental group obtained $\chi 2$count = 5.46 and 2table = 7.81. This means that the science learning outcomes data in the experimental group are normally distributed. While the calculation results in the control group using the Chi-Square formula ($\chi 2$) obtained $\chi 2$count = 3.99 and 2table = 7.81. This means that the science learning outcomes data in the control group are also normally distributed. The homogeneity test was carried out to determine that the predetermined experimental class and control class had relatively the same or homogeneous mastery. The homogeneity test for both groups was used the F test. Based on the calculation results obtained Fhit = 1.31 and Ftab = 4.05 with 5% significance level. This means that Fcount = 1.31 < Ftable = 4.05. Thus, it can be stated that students' science learning outcomes have homogeneous variances.

After the data analysis prerequisite test was carried out, the experimental group and the control group student learning outcomes obtained in the data normality test was normal and the data homogeneity test was homogeneous. If the prerequisite analysis test has been carried out, the next research hypothesis testing will use the t-test with the polled variance formula. The hypothesis testing criterion is that H0 is rejected if tcount> ttable, where t table is obtained from the t distribution table at the 5% significance level with degrees of freedom db = n1 + n2 - 2. The results summary of the t-test analysis is presented in Table 3.

Table 3. Results of the t-test

Data	Group	N	**db**	$\overline{X}$	s^2	t_{hit}	t_{tab} (t.s.5%)
Science learning outcome	Exsperiment	22	46	83,09	112,36	6,16	1,68
	Control	26		62,77	147,38		

Based on t-test calculation, the t-test is 6.16, while the t-table with a 5% significance level is 1.68. This means that t is greater than t table (tt = 6.16> ttab = 1.68) so that H0 is rejected and H1 is accepted. Thus, it can be stated that there is a significant difference in science learning outcomes between students who are taught using the Two Stay Two Stray (TSTS) learning model assisted by concrete media and students who are not taught using the Two Stay Two Stray (TSTS) assisted learning model. concrete media. Students' science learning outcomes who are taught using the Two Stay Two Stray (TSTS) model assisted by concrete media are greater than the students learning outcomes who are not taught using the Two Stay Two Stray (TSTS) model assisted by concrete media, so learning using the Two Stay learning model Two Stray (TSTS) assisted by concrete media have an effect on science learning outcomes at fifth-grade students in Gugus V, Kecamatan Sukasada, Kabupaten Buleleng, Academic Year 2019/2020.

Learning with the Two Stay Two Stray (TSTS) learning model assisted by concrete media used in the experimental group and conventional learning used in the control group showed differences in science learning outcomes in fifth-grade students. After going through descriptive analysis, student learning outcomes in the two groups were very different. This happens because the student learning outcomes average score in the experimental group was obtained at 83.09 which was in the very good category, and the average score of the students learning outcomes in the control group was obtained at 62.77 which was in the good category. Furthermore, based on data analysis using the t-test, it was obtained t of 6.16 and t at db = 46 at the 5% significance level was 1.68. The results of the t-test calculation of this study are significant, because the results are in the criteria t count is greater than t table (6.16> 1.68). That is, there is a significant difference in science learning outcomes between groups of students who are taught using the TSTS learning model assisted by concrete media and groups of students who are not taught using the TSTS learning model assisted by concrete media. Science learning outcomes of students who are taught using the Two Stay Two Stray (TSTS) model assisted by concrete media are greater than the learning outcomes of students who are not taught using the Two Stay Two Stray (TSTS) model assisted by concrete media, so learning using the Two Stay learning model Two Stray (TSTS) assisted by concrete media have an effect on science learning outcomes of fifth-grade students in Gugus V, Kecamatan Sukasada, Kabupaten Buleleng, Academic Year 2019/2020. The difference in science learning outcomes between groups is caused by the treatment given both in the delivery of material, the steps of learning activities, and the different learning processes. The learning outcomes of the experimental group students were classified as high because they were given a TSTS learning model treatment assisted by concrete media which provided more opportunities for students to work together, interact and socialize with other groups without any embarrassment that made them dare to issue their ideas or opinions. In addition to this, students are also more enthusiastic about participating in the learning process because it contains scenes of visiting or visiting other groups. Learning outcomes that tend to be low will result in the inability of students to analyse the problems raised in the school test and student learning outcomes. Students often have problems dealing with easy problems with a few cheaters. This fact shows that in solving a students' problem still use rote only and are independent of higher thinking processes. Therefore, student learning outcomes need to be improved to make it even better. (Lie, 2002) states that the two-by-two-guest structure provides an opportunity for groups to share results and information with other groups. This is done because many learning activities are characterized by individual activities. In reality outside of school, human life and work depend on each other. This method provides more opportunities for students to ask questions, answer, and help each other or interact with friends. By asking their friends or other groups, they will get more complete information than just what they know. Through smaller communities, students are freer to express their opinions and ask questions they don't understand. They visits to other groups so they have the opportunity to share information between groups (Wijana et al., 2014).

The TSTS learning model used during the learning process makes students feel closer, familiar, comfortable, confident, and responsible for each task in the group. Students also have the opportunity to ask questions and receive information obtained when visiting other groups. This is in line with the opinion of

(Rachmawati & Ernawati, 2018) which states that students are more active and focused in the learning process because they have the opportunity to work together in groups and interact with friends from their home group and other groups so that students are not easily bored or bored. Thus, learning will be more meaningful and fun for students. Things like that will foster student interest and motivation to be more active, increase teamwork, and study hard, so that student learning outcomes are better. The involvement of the teacher as a motivator and facilitator in the learning process will make the learning atmosphere more lively, harmonious and enjoyable. Teachers no longer bother using the lecture method to explain learning material, because using this model the teacher will be more practical when providing material. A professional teacher is required to be able to display his skills as a teacher in front of the class. The component that must be mastered is to use a variety of learning models that can attract learning interest. It is not enough for teachers to just give lectures in front of the class. This does not mean that the lecture method is not good, but that at some point students will become bored if only the teacher himself speaks, while they sit quietly listening. In the process of education in schools, learning activities are the most basic activities. The success of achieving educational goals depends a lot on how the learning process is experienced by students. Teachers can apply learning methods that make students active, and an energetic learning atmosphere. One of these methods is through the two stay two stray method, this method can make the learning process easier, more interesting and fun and makes students more active in the learning process. The advantages of the TSTS model according to stating that TSTS is easy to divide into several groups and can do more tasks, teachers are easier to monitor students, can be used at all class levels, are more focused on student activity, increase student cohesiveness, dare to express their opinions, and help increase interest and learning achievement outcomes (Fitrianingrum, 2018; Karlina et al., 2017). This method also has learning steps that are easy for students to understand. So, this method is expected to increase student learning outcomes. Teachers and students also feel mutually beneficial, especially with the concrete media that students usually find in their daily lives. Because the media used is concrete media or real media, students will no longer imagine what the teacher explains and can represent what the teacher says and help the teacher explain teaching materials. According to (Kurniasari, et al., 2019) concrete media helps students in learning and trains their memory about the material given through real objects that are easily found and recognized by students. The teacher also gave awards in the form of applause and praise so that students felt proud and had high enthusiasm and enthusiasm if the group dared to come forward to read the results of their visit. The results were seen when discussing students with their groups and conveying the results of their visits in front of the class properly and correctly which made students remember what they had done while experimenting in the learning.

Unlike the case with control group students who were taught conventionally without the existence of various learning models and media and attracting students' interest in learning. In this study, students were less active because they only obeyed what the teacher ordered and gave, the teacher dominated learning activities through the lecture method, and in giving assignments the teacher only gave assignments in the theme books and LKS. Students tend not to pay attention to the teacher in the learning process, they joke around with their classmates because learning does not attract students' interest and motivation in learning. Students cannot solve problems experienced during the learning process, due to a lack of understanding, knowledge, and direct practice using a learning medium. Apart from this, in conventional learning, students rarely interact with their friends during the learning process which makes them less motivated to learn. Students just sit there listening and doing what the teacher gives. According to (Kristin, 2016), learning using conventional learning models is still monotonous, because the teacher only applies the lecture and question and answer method when teaching which makes students bored in learning so that no increase in learning outcomes is achieved. Learning like this can be said to lack training students in working together when solving a problem and causes student learning outcomes to be low. Learning that is still often used is the conventional learning model, which is learning that is commonly applied in everyday learning (Octari, 2011). As in the learning process that occurs in schools where the research is conducted, teachers are more likely to direct students as passive recipients of information and learn by rote. Students are rarely allowed to experience and apply concepts directly to deep understanding. This is thought to be a contributing factor to the low quality and quantity of science learning, especially in learning outcomes. Lack of instruments in learning that require students to improve learning outcomes is also one of the causes of low student learning outcomes. This can be seen from the test questions or general tests that emphasize more on understanding or memorizing questions (Wijana et al., 2014).

The difference between learning with the Two Stay Two Stray (TSTS) learning model assisted by concrete media and learning that does not use the Two Stay Two Stray (TSTS) learning model assisted by concrete media certainly has a different impact on the understanding and knowledge obtained by students, so that will affect student learning outcomes itself. In the implementation of this study, it was found that the implementation of the TSTS model assisted by concrete media can provide meaningful and enjoyable learning for students so that it can improve science learning outcomes. The application of the TSTS model assisted by concrete media makes students trained to use their process skills when participating in experimental learning activities. In certain materials

students are directed to be more active in working together, socializing, sharing information, and developing concepts that are assisted by using concrete media in the form of real objects in the student's environment. This makes learning interesting, fun and makes students focus on the material to be studied, to create an active, creative, fun, meaningful learning atmosphere, and improve student science learning outcomes. This research is supported by the results of (Prasatya's, 2017) research which states that there are significant differences in science learning outcomes between groups of students who are taught using the TSTS model and groups of students who are taught using conventional models. This can be seen from the activeness of students when solving problems, by working together with friends and providing information obtained so that motivation for students to learn increases.

The implication of this research is the consequences resulting from learning with the TSTS learning model assisted by concrete media on science learning outcomes of fifth-grade students in Gugus V, Kecamatan Sukasada, which gives a positive implication that can improve student learning outcomes. It is empirically proven that learning using the TSTS learning model is superior to learning activities that do not use the TSTS learning model. This means that the TSTS learning model is effectively applied in learning compared to the learning model that does not use the TSTS learning model in achieving fifth-grade students' science learning outcomes. The average value of student group science learning outcomes taught using the TSTS learning model was greater than the average value of student group science learning outcomes not taught using the TSTS learning model. Therefore, all elementary schools in Gugus V Kecamatan Sukasada can apply this learning model to improve student learning outcomes by adjusting the material being taught. Students are also quicker to interpret science teaching materials during the learning process because of their real attitude, students become more enthusiastic in learning, collaborate in groups, and dare to express opinions with the implementation of the TSTS learning model assisted by concrete media.

Conclusion

Based on the findings and discussion in this study, it can be concluded that there is a significant difference in science learning outcomes between groups of students who are taught using the Two Stay Two Stray (TSTS) learning model assisted by concrete media and groups of students who are not taught using the Two Stay learning model. Two Stray (TSTS) assisted by concrete media.

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