EDUMASPUL
JURNAL PENDIDIKAN
Vol. 7 – No. 2, year (2023), page 3158-3169
| ISSN 2548-8201 (Print) | 2580-0469) (Online) |

The Effect of the Three-Dimensional Media-Assisted pair Check Type Cooperative Learning Model on the Understanding of Student Concepts in the Material the Properties of Building Space in Grade V Elementary School

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Receive: 11/08/2023	***Accepted: 18/09/2023***	***Published: 01/10/2023***

Abstrak

Tujuan penelitian ini untuk: 1) mendeskripsikan pemahaman peserta didik terhadap konsep pada kelas kontrol; 2) menginformasikan langkah-langkah penggunaan model pembelajaran kooperatif tipe *pair check;* 3) mendeskripsikan pemahaman peserta didik terhadap konsep pada kelas eksperimen; 4) menguji pengaruh yang signifikan terhadap pemahaman konsep peserta didik kelas eksperimen; 5) mengetahui seberapa besar pengaruh pemahaman konsep peserta didik kelas eksperimen. Penelitian ini merupakan penelitian kuantitatif dengan metode eksperimensemu dan menggunakan desain *non equivalent control group design*. Lokasi penelitian di SD Negeri 06 Pontianak Timur Tahun Ajaran 2022/2023. Populasi penelitian ini seluruh peserta didik kelas V yang berjumlah 56 orang. Sampel penelitian ini adalah peserta didik kelas V A sebagai kelas eksperimen dan kelas V B sebagai kelas kontrol. Teknik yang digunakan berupa observasi, tes, dan dokumentasi. Analisis data menggunakan analisis deskriptif dan analisis inferensial menggunakan uji *independent sample t-test*. Hasil penelitian ini menyimpulkan: 1) pemahaman peserta didik terhadap konsep pada kelas kontrol yaitu nilai *pre-test* 25,9 dan nilai *post-test* 63,6; 2) bekerja secara berpasangan, berbagi peran antara pelatih dan partner, pelatih memberi soal, sedangkan partner menjawab, mengecek jawaban, bertukar peran, penyimpulan, evaluasi, dan penutup 3) pemahaman peserta didik terhadap konsep pada kelas yaitu nilai *pre-test* 23,64 dan nilai *post-test* 75,42; 4) terdapat pengaruh yang signifikan penggunaan model pembelajaran kooperatif tipe *pair check*; 5) hasil perhitungan yang diperoleh yaitu dengan gain sebesar -0,167 dengan menggunakan model kooperatif tipe *pair check*.

Kata Kunci: Model Kooperatif Tipe Pair Check, Media Tiga Dimensi, Pemahaman Konsep, Sifat Bahan Bangunan

Abstract

The purpose of this research was to: 1) describe students' understanding of concepts in the control class; 2) inform the steps for using the pair check cooperative learning model; 3) describe students' understanding of concepts in the experimental class; 4) examine the significant effect on students' understanding of the experimental class concepts; 5) find out how much influence the students' conceptual understanding of the experimental class has. This research is quantitative research with a quasi-experimental method and uses a non-equivalent control group design. The research location is at State Elementary School 06 East Pontianak. The population of this research were all fifth-grade students, totaling 56 students. The samples of this research were students of class V A as the experimental class and class V B as the control class. The techniques used in the form of observation, tests and documentation. Data analysis used descriptive analysis and inferential analysis using independent sample t-test. The results of this research concluded: 1) students' understanding of concepts in the control class, namely the pre-test score of 25.9 and the post-test score of 63.6; 2) work in pairs, share roles between trainer and partner, trainer gives questions, while partner answers, checks answers, exchanges roles, inferences, evaluations, and closing 3) students' understanding of concepts in class, namely pre-test score 23.64 and post-test scores of 75.42; 4) there is a significant influence on the use of the pair check cooperative learning model; 5) the calculation results obtained are with a gain of -0.167 using the pair check type cooperative model.

Keywords: *Pair Check Type Cooperative Model, Three-Dimensional Media, Concept Understanding, Material Building Properties*

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Introduction

Mathematics is a very important subject in education. Mathematics is considered one of the basic subjects given to students for all levels of education, from elementary school and even kindergarten to college (Ayuwanti et al., 2021). Learning mathematics can improve the ability of students to think logically, critically, creatively, and systematically so that it can support other learning materials. Along with the growth of the era and the demand for learning to display abstract analytical objects become clearer so that this learning can use the help of three-dimensional media. Learning mathematics with the material of the properties of building space requires students to think and describe the form and elements of building space assisted by this three-dimensional media.

Mathematics learning in schools is important to improve the intelligence of students and realize a more meaningful mathematics learning process to produce higher student learning outcomes, as well as teachers must be more creative and innovative in developing learning strategies or models that facilitate students in the teaching and learning process.

Mathematics as one of the subjects has an important role in achieving educational goals in general, because mathematics is a means of logical, critical, creative and systematic thinking so that it can support other learning materials. Considering that mathematics subjects are very important, the children of this nation should have been trained from an early age to know mathematical concepts and be happy with these subjects. But in fact, not a few students lack interest in mathematics subjects, in his mind mathematics is a difficult and boring subject (Yuliananingsih, 2020).

Based on the explanation above, it can be concluded that mathematics is a very important subject at the educational level, by learning mathematics can improve students to think logically, critically, creatively and systematically so that it can support other learning materials. However, mathematics is still considered a difficult and boring subject, for that there needs to be a learning strategy or model that makes it easier for students in the teaching and learning process. The problem that is always the reason why they don't like mathematics subjects is because many have less understanding because mathematics is related to calculation numbers so that it becomes a scary lesson for students. Actually, mathematics is not difficult if you know the path or formula on the material.

One of the goals to be achieved in learning mathematics is the understanding of concepts. Concept understanding consists of two syllables, namely understanding and concept. Understanding is a person's ability to be able to understand, infer, and be able to express what will be conveyed or heard to him. While a concept is an idea or image in the form of a word that abstracts an object, be it an opinion, state or process to classify and complex reality until it can be understood (Pittariawati, 2020).

Understanding concepts is an important thing, can be used by students to solve mathematical problems themselves or problems that will be faced later. Understanding of concepts is also needed in students to master various other subject areas (Radiusman, 2020).

Understanding mathematical concepts is the ability of students to translate, interpret, and conclude a mathematical concept based on their own knowledge rather than just memorizing. In addition, students can also explain the relationship of concepts to one another. Understanding concepts or comprehension criteria consists of: a) explaining, b) grouping, c) giving examples, d) interpreting, e) comparing, and f) concluding (Suhyanto &; Musyrifah, 2016).

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Based on the explanation above, understanding concepts is the ability of students to solve problems in mathematics. In addition, students can also provide ideas or opinions about what students listen to and can explain the relationship of concepts to one another.

Cooperative learning is a learning model using a small grouping / team system, which is between four to six people who have academic ability backgrounds and gender. The assessment system is carried out on the group, each group will get an award if the group is able to show the achievements obtained (Lukman, 2019). The cooperative learning model is seen as an active learning process because students share responsibility with other students including with teachers to create learning conditions and strive together to fulfill the task of developing skills and mastering the competencies being learned (Budiharti &; Jailani, 2014).

Cooperative learning is more than just group learning, because learning in a *cooperative learning* model there must be a structure of encouragement and tasks that are cooperative. This allows for open interaction and effective interdependence among group members. In addition, such a pattern of working relationships allows for a positive perception of what they can do to succeed based on their individual abilities and the contributions of other members as they learn together in groups.

Type cooperative learning model *pair check* is a cooperative learning model that educators can use to teach sharing skills. This learning model requires students to be independent and can solve problems in student learning by pairing with each other. In the type cooperative learning model *pair check*, the teacher acts as a motivator and facilitator of learners. This learning model of cooperation plays an important role, because each other directs each other and listens to the work of their partners and vice versa. This model trains learners to be responsible, cooperative and able to give judgments (Auliah et al., 2020).

Application of type cooperative learning model *pair check* Serves to improve the quality of student learning, because this learning model can train students' social skills to get used to communication between peers in class and can apply the theories that have been taught when the teacher provides material in class. This learning model has stages that correspond to the sequence (Aris, 2016). In general, learning *pair check* are 1) working in pairs, 2) sharing roles between trainers and partners, 3) coaches give questions, while partners answer, 4) check answers, 5) exchange roles, 6) conclude, 7) evaluate, and 8) reflect (Ermavianti &; Sulistyorini, 2016).

The use of three-dimensional media is one of the teacher's methods in delivering material or learning materials. The use of this media is an effort to make it easier for students to absorb the material taught (Sari et al., 2019). Three-dimensional media is an original or artificial tool used by teachers to provide direct experience to students so that they can produce good learning outcomes in the teaching and learning process (Yuliananingsih, 2020). The three-dimensional medium that is usually used is a model object, the model can be an imitation of a real object that can be displayed in the classroom. These counterfeits may be large or small or may be too expensive and not generally tradable.

In general, it can be concluded that three-dimensional media is a group of media that aims to convey material directly and provide experience to students.

Every child has the ability to absorb knowledge with various capacities and different ways. In elementary school children, he prefers to play, likes to work with groups and likes to do things directly, such as the model to be used in this study is a *pair check type* cooperative learning

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model with the help of media. This learning model trains students to solve problems in pairs and form patterns of cooperation in groups so that students can play an active role in the teaching and learning process, because it consists of 2 people in pairs, students will learn more actively and cooperate in solving problems and providing new knowledge, not only using models but with 5 media-assisted students will also more easily understand concepts problems in mathematics subjects.

The characteristic of learners in elementary school is that they love to play. This characteristic requires teachers to carry out learning that is loaded / nuanced with games. Then enjoy doing activities that are full of movement. Adults can stay sitting for hours, while students in elementary school can sit quietly for at most 30 minutes. Therefore, teachers must have the right learning strategy or model in teaching and learning activities that allow children to move or move around. Furthermore, students like to socialize with their classmates so that students like to work in groups.

This characteristic leads the teacher that, in teaching and learning activities, he must design a learning model that allows learners to learn in groups. Teachers can ask students to form small groups with 3-4 members to learn and solve problems given by the teacher. Determining how to deliver material by paying attention to student characteristics is very important to note, especially during elementary school age because it is during this time that children for the first time receive formal education (Astini &; Purwati, 2020).

Based on the description above, the researcher is interested in conducting a study entitled "The Effect of the Three-Dimensional Media-Assisted Pair Check Type Cooperative Learning Model on the Understanding of Student Concepts on the Material Properties of Building Space in Class V SD Negeri 06 East Pontianak".

Method

This research is an experimental study. Experimental research is used to determine the symptoms that occur after treatment of students. Every research definitely requires research methods and data collection techniques that are appropriate and in accordance with the problem to be researched. In this study, researchers used a quantitative research approach. Quantitative research is research in which the data obtained is in the form of numbers and analyzed by statistical analysis.

In this study using design *Non-Equivalent Control Group Design*. In this design, researchers used an experimental group with a comparison group that began with an initial test (*Pre-test*) given to both groups, after which treatment was given (*Treatment*). Then the study ended with a final test (*post-test*) given to both groups.

This research was conducted at Sekolah Dasar Negeri 06 Pontianak Timur located on Jl. H. M. Yusuf Karim, Saigon, East Pontianak District, Pontianak City, West Kalimantan Province, Indonesia. The location was chosen because it is located in a strategic location and easy to reach. The population in this study is people/subjects. The population subjects in this study were all students in grade V SD Negeri 06 East Pontianak consisting of 2 classes, namely VA and VB classes, totaling 56 students. The sampling technique in this study used Random Sampling. Random sampling is a sample that provides an equal opportunity to be taken by each population. The sample of this study was class V A students, namely experimental class and class V B control class totaling 56 people.

Data collection techniques in this study used observation, tests, and documentation. Observation is a way of collecting data, the researcher only sees the subject of research but the subject does not know that he is being observed. The results of this study directly observe the teaching and learning process with the aim of

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obtaining information in the study. This test is used to measure the success rate of subjects in research. This test is carried out using tools in the form of *Pre-test* and *Post-test* in writing in class. Documentation was used to obtain school data in the form of the number of students, school profiles and data in the form of images at the time of the study.

Data collection tools use observation sheets, test questions and documentation. The observation sheet contains the activities of students in the learning process when using the pair check type cooperative learning model. Test questions are used as a way to collect data through question sheets to research subjects. While the ocumentation was used to obtain school data in the form of the number of students, school profiles and data in the form of images at the time of the study

Results and Discussion

Result

The subjects of this study were students of grades V A and V B at SD Negeri 06 East Pontianak. The details of the number of students in both classes are as follows.

Table 1 Distribution of Research Subjects

No	class	Man	Woman	Sum
1	V A	17	11	28
2	V B	14	14	28
Sum		31	25	56

Source: School Data SD Negeri 06 Pontianak Timur

This research is an experimental research and uses a *quasi-experimental* method that uses two classes, namely the experimental class and the control class. The learning model for the experimental class uses a pair check type cooperative learning model, *while the control class does not use* a pair check type cooperative learning model, but uses a direct learning model. The material given in both experimental and control classes is the same, namely the material of the properties of building space.

1. Control Class

Research in the control class uses the Direct Learning Model during teaching and learning activities (KBM). At the beginning and at the end of the meeting, students are given pre-test and post-test *to find out the understanding of student concepts from the results of the* pre-test and post-test *students.*

Table 2 Pre-Test *and* Post-Test *Concept Understanding Values*
Control Class

Statistics	The Value of Understanding Pre-Test *Concept*	The Value of Understanding *Post-Test Concept*
Average	25,89	63,61
maximum	53	85
Minimum	3	28
Variances	197,877	261,210
Standard deviation	14,0669	16,1620

Source: SPSS Version 18

Based on Table 2 above, the understanding of the concept of students before and after being given treatment there is a difference in the highest and lowest scores. This shows that there are differences in students' understanding of concepts before and after the treatment during learning. Furthermore, to facilitate assessment, measurement criteria are needed to find out the category of understanding the concepts of students. The average value of students' understanding of concepts in the control class obtained was 63.61 compared to the range value was in the range of 56-70 with sufficient categories.

2. Experimental Class

Research in experimental classes uses *a pair check type cooperative learning model* during teaching and learning activities (KBM). At the beginning and at the end of the meeting, students are given

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pre-test and post-test *to find out the understanding of student concepts from the results of the* pre-test and post-test *students.*

Table 3 Pre-Test *and* Post-Test *Concept Understanding Values*
Experimental Class

Statistics	**The Value of Understanding Pre-Test Concept**	**The Value of Understanding Post-Test Concept**
Average	23,61	75,54
maximum	57	92
Minimum	3	46
Variance	202, 766	125,369
Standard deviation	14, 2396	11,1968

No.	**Data**	**Kolmogorov-Smirnov**			**Information**
		Statistics	**Df**	**Sig.**	
1.	*Pre-Test* Experiments	0,129	28	0,741	Normal distributed data
	Pre-Test Control	0,172	28	0,381	Distributed data Usual
2.	*Post-Test* Experiments	0,127	28	0,756	Distributed data Usual
	Post-Test Control	0,190	28	0,263	Distributed data Usual

Source: SPSS Version 18

Based on Table 3 understanding the concept of students before and after being given treatment, there are differences in the highest and lowest scores. This shows that there are differences in students' understanding of concepts before and after the treatment during learning. Meanwhile, to find out the category of understanding the concepts of experimental class students, there is an average value of understanding the concepts of students obtained of 75.54 compared to the range values in the range of 71-85 with good categories.

The data normality test is performed with the help of the *SPSS Version 18* program. This test uses the *kolmogorof smirnov test*, the data of the normality test results are presented as follows.

Table 4 Normality Test of Experimental Class and Control Class

Source: SPSS Version 18

Based on the data in Table 4, it can be concluded that the *experimental pre-test* data is P or Sig. = 0.741>0.05, so it is stated that the data is normally distributed. The *control pre-test* data is P or Sig. = 0.381>0.05 then it is stated that the data is normally distributed. *Post-test* experimental data is P or Sig. = 0.756>0.05 then it is considered normal distributed data.

Post-test control data valued at P or Sig. = 0.263>0.05 then declared normal distributed data so that it can proceed to the homogeneity test.

To test homogeneity in this study using *the homogeneity of variances* test in the *SPSS Version 18* program with a significant level of 5% or 0.05. The homogeneity test result data is as follows.

Table 5 Test of Homogeneity of Experimental and Control Classes

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Source: SPSS Version 18

Based on the data of Table 5 experimental and control pre-test data valued at P or Sig. = 0.357>0.05 and *experimental and control post-test* data valued at P or Sig. = 0.128>0.05, it can be concluded that Ha is accepted or there is a noticeable difference.

To find out the pre-test difference test *on the initial understanding of students' concepts in the control class and this experiment uses* an independent sample t-test *in the* SPSS Version 18 program*, the data of this test results are as follows.*

	Control Class	Experimental Class
Average	0,50	0,67
At least	0,07	0,44
Maximum	0,83	0,9

		Levene's Test for Equality of Variances			
		F	**Sig. (2-tailed)**	**Tcalculate**	**Ttabel**
Results Understanding the concept	Equal variances assumed	0,195	0,549	0,603	0,2632
	Equal variances not assumed		0,549	0,603	0,2632

Table 6 Test Results *Independent Sample T-Test Pre-test* Control class and Experiments

Source: SPSS Version 18

Table 6 shows that the results of the t test on *the experimental and control class pre-test question data before being given the pair check type cooperative learning model treatment* are *accepted if they are in accordance with the criteria, namely the Ttabel value is smaller or less than the calculated value, P value or Sig*. 2-tailed = 0.549>0.05, it can be concluded that there are differences in students' initial concept understanding in the control class and experimental class.

No.	**Data**	**Test F** / **Sig.**	**Information**
1.	*Pre-Test* Experiments and Controls	0,357	Homogeneous
2.	*Post-Test* Experiments and Controls	0,128	Homogeneous

After conducting a *pre-test difference test* on the understanding of students' initial concepts, this shows that there are differences in students' initial concept understanding between the control class and the experimental class, therefore to see the influence can calculate the gain of the two classes. The N-gain data of the control class and experiments are as follows.

Table 7
N-Gain
Control and Experiment Classes

Source: processed data 2022

Table 8
Test Results *Independent Sample T-Test*
Control and Experiment Classes

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Source: SPSS Version 18

Table 8 shows the results of the t test on the N-Gain data of the control class and experiments with P values or Sig.2-tailed = 0.00<0.05 so that it is stated that there is a difference in students' understanding of concepts between the control class and the experiment.

Table 9
The Great Influence of the Experimental Class Learning Model

		Levene's Test for Equality of Variances		
		F	**Sig. (2-tailed)**	**Tcalculate**
Results Understanding the concept	Equal variances assumed	4,201	0,00	3,930
	Equal variances not assumed		0,00	3,930

Average	*Mean Difference*
0,67	-0,167

Source: SPSS Version 18

Based on the calculations obtained from table 9, the overall test results clearly show that the average influence of the experimental class is -0.167. Therefore, there is a significant difference, this shows that the pair check type cooperative learning model can provide better results and there is an influence on the understanding of student concepts.

Discussion

This study used a type cooperative learning model *pair check* assisted by three-dimensional media towards understanding concepts in the material properties of building space in class V, where this class is divided into 2 classes, namely the experimental class (class V A) and the control class (class V B).

1. Students' understanding of the concept of control class on the material of the properties of building space in grade V SD Negeri 06 East Pontianak.

This research is a pseudo-research with a type of *Quasi-experimental design* research. This design uses *pre-test before* treatment and post-test after treatment, so that the results of treatment can be known and more accurate. Time

The study was conducted for 2 days, where the first day the researcher conducted research in the control class (V B), on the second day the researcher conducted research in the experimental class (V A).

In the implementation stage, two phases are pre-treatment and treatment. Pre-treatment is given a brief explanation of class V students with the material to be studied. This brief explanation is given before the initial test (*pre-test*). Furthermore, an initial test was given using test instruments to find out the understanding of the concepts of students in the control class of 28 students.

Based on the results of data analysis that has been carried out using the *SPSS Version 18* application, the value of understanding the concepts of students in the control class was obtained with their respective values, namely *the pre-test value of 25.9* and the post-test value of 63.6 obtained from the average number of pre-tets *and post-test* concept understanding scoreson the control class. However, the acquisition of these scores does not fully meet the minimum completeness criteria (KKM) at SD Negeri 06 East Pontianak of 70, so as to increase students' understanding of concepts by maximizing the results of as much knowledge as possible.

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2. The steps for using the pair check *type cooperative learning model* assisted by three-dimensional media to understand the concepts of students in the material of the properties of building space in grade V SD Negeri 06 East Pontianak.

The use of a three-dimensional media-assisted pair check *type cooperative learning model* on the material of the properties of building space in grade V SD Negeri 06 East Pontianak has several steps in use as follows. Introduction (initial activity), at the first meeting the teacher says a greeting and opens the lesson with prayer. The teacher checks the presence of students and conveys the learning objectives to be achieved, namely students can explain the subject matter, namely about the properties of building space. The teacher motivates students by telling about the picture of what the space looks like and the teacher also gives examples using three-dimensional media.

Furthermore, the teacher provides information about the activities that will be carried out at the time of learning. In the core activities, teachers carry out learning activities through several stages, including; (1) Before pairing with the *pair check* cooperative model, students observe the forms of building space with the media provided, this aims to direct students in making understanding the form of building space; (2) The teacher explains the subject matter, then guides the learners to ask about examples of daily life by building space; (3) The teacher divides the learners into groups, and in pairs.

Each partner is free to choose whether to become a coach or partner first; (4) Furthermore, students who are in charge of being trainers who get the first opportunity to ask questions which will later be answered by partners; (5) students who act as partners answer questions given by the trainer, followed by the trainer correcting the correct answers; (6) Next, the couple swaps roles; (7) After all pairs in the group complete their work in question and answer, the teacher gives points in the form of grades to students and the most who get points will give *rewards*. Followed by an evaluation of the activities that have been carried out and the achievement of learning materials at this meeting. After finishing the lesson, the teacher conducts closing activities by discussing and concluding the activities that have been carried out.

Based on the explanation above, it can be concluded that the use of *a three-dimensional media-assisted pair check* type cooperative model is very helpful to be applied in schools to help or facilitate educators in delivering learning material in the teaching and learning process so as to increase understanding of concepts with learning objectives to be achieved.

3. Students' understanding of the concept of experimental class on the material of the properties of building space in class V SD Negeri 06 East Pontianak.

Research in the experimental class (V A) was carried out on the second day by giving pre-test questions *at the beginning of learning, then given treatment using a pair check type cooperative learning model assisted by three-dimensional media, and ended by giving* post-test questions . At the age of elementary school children, children prefer to learn while in groups, prefer to play and do things directly. Therefore, it is necessary when doing learning in elementary school children that use strategies or learning models that are different from others or create a learning that makes children happy
will learn.

When this learning process uses a *pair check* type cooperative learning model, which is learning in pairs. This learning model trains students to solve a problem in groups or in pairs so that students can play an active role in the teaching and learning process. This

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learning process also consists of 4 students in 1 team, 1 team into 2 pairs, each pair in 1 team is burdened with each one different role, namely coach and partner. The task of the trainer here is to check the answers from partners, while the task of partners is as a person who answers or solves questions or problems given by the teacher. If the partner's answer is correct, the coach must give points to the partner. After that they switch roles, coach becomes partner, partner becomes coach. After they perform in pairs, each pair returns to the initial team and matches the answers to each other.

This research not only uses a learning model, but also uses media as a complement and has a fairly important meaning, because in this activity the vagueness of the material at the time of learning delivered can be helped by using media as an intermediary. The media used in this study is three-dimensional media, namely three-dimensional visual objects that are tangible as original objects or imitations that represent the original. This media is used as a picture of students how the shape or appearance of the material taught. After students know the shape and picture, it makes it easier for children to understand the material taught. Understanding the concepts of learners using the type cooperative learning model *pair check* With the help of three-dimensional media, a problem was held *post-test*. Based on the results of the analysis obtained the scores of each experimental class on the questions *Pre-test* 23.62 and questions *post-test* 75,42.

Based on these data, it can be concluded that the understanding of concepts in students in the *post-test* or after being treated using a *three-dimensional media-assisted pair check* type cooperative learning model shows a change in the value of students who are categorized as good, which is 75.42 out of 28
Learners.

Thus, understanding the concept of students using *a three-dimensional media-assisted pair check* type cooperative learning model is very helpful to be applied to learning or 79 in schools to help or facilitate educators in delivering material.

4. Is there a significant influence on the understanding of the concepts of experimental class students on the material of the properties of building space in grade V SD Negeri 06 East Pontianak.

Based on the analysis of the research results, there is a significant influence on the understanding of student concepts with the pair check type cooperative learning model. This influence can be seen from table 16 which shows that the results of the t test on the pre-test questions in *both classes are accepted if they are in accordance with the criteria, namely the Ttabel value is smaller or less than the calculated value, P value or Sig. 2-tailed* = 0.549>0.05, it can be concluded that there are differences in the initial concept understanding of control and experimental class students. Based on table 17, the results of the control class average N-gain of 0.50 and the experiment of 0.67 with a difference of 0.17. Thus we can know that the understanding of the concepts of students in this experimental class can be said to be successful or can be applied to the learning.

5. How much influence the understanding of students' concepts on the experimental class on the material of the properties of building space in class V SD Negeri 06 East Pontianak

This learning model requires students to be independent and can solve problems in student learning by pairing with each other, in the pair check type cooperative learning model, the teacher acts as a motivator and facilitator of students. Based on the results of the T test analysis, *independent sample t-test influences the understanding of students'*

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concepts using a three-dimensional media-assisted *pair check* type cooperative learning model. The calculation obtained from table 18 of the test results as a whole clearly shows that the magnitude of the average influence of the experimental class was - 0.167. Therefore, there is a significant difference, this shows that the pair check type cooperative learning model can provide better results and there is an influence on the understanding of student concepts.

Thus, we can know that understanding the concept of students using *a pair check type cooperative learning model* assisted by three-dimensional media on the material, the properties of building this space can be said to be successful or can be applied to the learning and have an influence.

Conclusion

From the results of the research that has been done, it can be concluded that the results of the analysis of the influence of the *three-dimensional media-assisted pair check* type cooperative learning model on the understanding of students' concepts on the material of the properties of building space in grade V SD Negeri 06 East Pontianak can be applied to learning so that it can provide better results in understanding the concepts of students.

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