

# STUDENT LEARNING ACTIVITY ANALYSIS ON BUILDING SPACE MATERIALS

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## ABSTRACT

This study aims to analyze the activities of teachers, students' activities in mathematics learning outcomes in the material for building space for high-class students, especially for elementary school education. The subjects of this research are fifth grade students at SDN Kutabumi 1, which is a school located in one of the areas in Tangerang Regency, precisely in Kutabumi Village for the 2021-2022 academic year with a total of 24 students. The results showed that teacher activity increased with very good criteria and student activity with very active criteria. It can be concluded that the teacher's activities run smoothly, student activities and learning outcomes of Mathematics in Building Spaces material increase at each meeting. This research is a type of quantitative descriptive research. This study uses a problem-solving ability test sheet and student activity observation sheets as research instruments. Because each level requires a different absorption of learning, the higher the level of majority education, the more power needs to be spent to achieve something that is expected. This research uses the interview method to one of the teachers at SDN Kutabumi 1. The interviews were conducted directly/Offline by approaching the resource persons. Hopefully, after this research and interview, we and the team will get answers and solutions to the problem solving that we are researching and make learning which is much better than before this research and research was conducted.

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## 1. INTRODUCTION

SISDIKNAS Law Number 20 of 2003 Article 1 education is a conscious and planned effort to create a learning atmosphere and learning process in such a way that students are more active in developing their potential and can have self-control, intelligence, skills in society, religious-spiritual strength, personality, and noble character (Faradillah, 2018). Based on the above understanding, the purpose of education is to create a learning atmosphere and an active learning process so that students can develop the potential that exists within themselves (Demitriadou, Stavroulia, & Lanitis, 2020). The National Education System Law Number 20 of 2003 Article 12 explains that students in each academic unit have the right to receive educational services according to their abilities, talents, and interests. At each level of the education unit, students receive mathematics education (Tomasetto, Morsanyi, Guardabassi, & O'Connor, 2021). This is following the Regulation of the Minister of National Education of the Republic of Indonesia Number 22 of 2006 concerning content standards that mathematics subjects must be given to all students starting from the elementary school education level to equip students with logical thinking skills, analytical skills, systematic, critical, creative and collaborative

skills.

Thus, from the opinion above, it is hoped that learning mathematics can equip students who can think logically, analytically, systematically, critically, creatively, and have the ability to work together. However, in studying mathematics, some students experience difficulties and fear learning. According to NCTM (2000), the causes of difficulties and fears are due to the nature of mathematics, which is abstract, symbolic, hierarchically structured, and satisfactorily reasoning, so the learning process of mathematics requires a high mentality. For this reason, alternatives are needed in the learning process that can make students more active and have a high interest in learning mathematics. Based on the researchers' observations during the learning process in class V SDN Kutabumi 1 on mathematics subjects, when the learning process took place, the teacher delivered material without using learning media (Christopoulos, Kajasilta, Salakoski, & Laakso, 2020). Student activities are not involved in a learning activity because when the learning process takes place, the teacher only focuses on delivering the material, which causes a lack of student response, and the class becomes passive. In addition, students get types of routine questions so that when they receive non-routine questions, they have difficulty solving them, which impacts students' problem-solving abilities. The researcher also conducted interviews with the class teacher after completing the mathematics lesson (N. C. o. T. M. NCTM, 2000).

Mathematics is a basic science in everyday life that is useful for understanding the basics of science and technology developing today. It is undeniable that mathematics is indispensable for students as the younger generation to continue the nation's development. Because the role of mathematics is so significant in improving the quality of education, mathematics learning achievement needs to be improved (Oktasari, Kuswanto, Ismet, & M.S., 2018).

The education problem facing Indonesia today is how to improve the quality of education. The quality of education is inseparable from the results of student achievement and the quality of the learning process. A learning process can be said to be good if in the teaching and learning process students are active in an effort to improve their learning experience. In addition, if students show positive changes and produce higher learning achievements, the learning process can also be said to be good. To obtain a good quality of the learning process, one of the efforts that can be made by the teacher is to determine the appropriate learning method in the teaching and learning process (A. M. Mauliyda, Hidayati, Erfan, Umar, & Sutisna, 2020).

Hosnan stated that learning activities in the classroom need to be student-centered, develop student creativity, create fun and challenging conditions, contain ethical, aesthetic, logical and kinesthetic values and provide diverse learning experiences (Van Der Horst & Albertyn, 2018). Mathematics is known as a subject related to abstract concepts, so that in the learning process, mathematics must be presented with various approaches or models and media to make it interesting and fun. It is intended that in the learning process students are more active and motivated in learning. Based on the description above, considering the importance of mathematics education as one of the subjects that must be studied and mastered by students since elementary school, it is necessary to find a way to manage the mathematics learning process in elementary school so that mathematics can be digested well by students. Learning mathematics basically helps train students' mindsets to be able to solve problems critically, logically, carefully and precisely. Success in learning is largely determined by the state of the applied learning process (Atmojo, Muhtarom, & Lukitoaji, 2020).

Student achievement is not only influenced by external factors such as the learning method chosen by the teacher. However, internal factors such as the level of motivation, level of intelligence (IQ) and student learning activities are also very influential. According to Rousseau in Tariq (2014), in teaching and learning activities all knowledge must be obtained by own observation, own experience and by own investigation. This shows that everyone who works must be active on their own, in other words the learning process cannot take place properly without activity. Therefore, learning activities are important factors that must exist in the teaching and learning process. In accordance with the material listed in the elementary school mathematics curriculum, one of the materials that students need to master is the subject of spatial structure.

Improving the quality of education is one of the government's efforts in advancing education and educating the nation's children. Various breakthroughs and policies and efforts have been made by the government to improve the quality of school education nationally. One of the efforts to improve the quality of education in schools is to improve student learning abilities and the quality of teachers in teaching.

Learning, development and education are symptoms related to learning. Learning is a process carried out by individual students to obtain a new behavior change against the results of experience in interacting with their environment (Erduran, Simon, & Osborne, 2018). According to Gagne says that learning is a change in human character and capacity that lasts for a certain period of time and does not just consider the process of

growth alone.

Student activity during the teaching and learning process is one of the most important indicators in the learning process. This is reinforced by the opinion of Maulyda et al. (2020), which says that learning is changing, changing to change behavior means there is no learning if there is no activity. Therefore, the existence of activities in learning activities indicates a student's desire to learn. These activities are all activities carried out in the process of teacher and student interaction in order to achieve learning goals so that an active learning atmosphere is created. Student learning activities can increase student learning motivation, this is because all forms of learning activities such as attitudes to pay attention to students, attitudes to respond, respect, perseverance and student activity in learning greatly determine student success in achieving the desired learning outcomes (Pham, Le, & Do, 2021).

The development and formation of character is a process experienced and internalized by individual students towards the level of maturity so that it requires the development of exemplary transmitted through the learning process, while education is an interaction activity. In interaction activities, educators act in educating students so that all actions can develop students' abilities and activities to become more independent. Based on the opinion of experts who define learning using the word "change" which means a person after learning will experience changes. These changes consist of changes in mindset, knowledge, paradigm, and behavior in the implementation of teaching and learning in the classroom so as to make learning more quality (Kamid, Rusdi, Fitaloka, Basuki, & Anwar, 2020). Based on observations made at SDN Kutabumi 1, it was found that the subject of spatial structure is one of the most difficult topics to understand. This difficulty can be seen when students do not understand the concept of spatial structure, have difficulty in designing and solving problems related to spatial structure, such as designing and showing geometrical webs and calculating the surface area and volume of the shapes.

Therefore, from the results of interviews with teachers, it was found that student activity in the learning process was still relatively low, so there were many students who still had low scores, especially in the material of building space. Another problem is the use of teaching methods by teachers that are not appropriate so that teachers are less varied in teaching mathematics in schools. Some of the teachers generally still use conventional methods in explaining the material and discussing sample questions with students. Conventional learning is learning that uses lecture and question and answer methods between students and teachers in one direction where the teacher acts as information and students as recipients of information.

According to Morphew, et al. (2020), the learning process through the conventional approach is dominated by the teacher as a transfer of knowledge while students are more passive as recipients of knowledge so that the teacher only teaches mastery of concepts without paying attention to students' abilities. In practice, students only memorize the concepts and principles of the elements contained in the concept so that it is possible for students to make mistakes in understanding the lesson. This condition resulted in less responsiveness of students in participating in learning activities and also resulted in reduced stimulation of student learning activities so that the learning process using this method was less effective. Student learning outcomes are a performance that is indicated as an ability that has been obtained after receiving the learning experience. According to Wilujeng, et al. (2020), low student learning outcomes are not only caused by student learning weaknesses but also caused by a less efficient, less effective teaching system and less motivating students in learning.

Based on this opinion, student learning outcomes are not only determined from student learning abilities but also the teaching methods applied by the teacher. Therefore, variations of learning methods/strategies are carried out so that variations can attract students to pay attention to learning and motivate students to achieve the desired learning outcomes. To overcome the problems that have been stated above, one of them is by applying learning methods that can form problem solving abilities in students in a democratic learning atmosphere so that they can increase student activity and learning outcomes, namely by applying a combination of Problem Based Learning (PBL), Think Pair and Share (TPS) and Teams Games Tournaments (TGT).

The formulation of the problem in this study is how the teacher's activities when applying a combination of Problem Based Learning (PBL), Think Pair and Share (TPS), and Teams Games Tournament (TGT) models, how are student activities when participating in learning using a combination of Problem Based Learning (PBL) models. , Think Pair and Share (TPS) and Teams Games Tournament (TGT) and whether there is an increase in mathematics learning outcomes in the Building Space material using a combination of Problem Based Learning (PBL), Think Pair and Share (TPS), and Teams Games Tournament (TGT) models in class VB SDN Kutabumi 1.

The purpose of this study is to describe teacher activities in implementing a combination of Problem Based Learning (PBL), Think Pair and Share (TPS), and Teams Games Tournament (TGT) models. Think Pair and Share (TPS) and Teams Games Tournament (TGT) and Analyzing the improvement of mathematics learning outcomes in Building Spaces using a combination of Problem Based Learning (PBL), Think Pair and Share (TPS), and Teams Games Tournament (TGT) models for student's class VB SDN Kutabumi 1.

This research is intended to support previous research. Elementary school-age is the final childhood that lasts from six years to approximately eleven or twelve years (Sudarto2018). It is at this age that children experience formal education for the first time, and it can also be said that this age is a mature age to receive lessons which are the first level in education as a provision in the future to pursue a higher level of education (Wu & Shang, 2014). Learning is a process of a person's mental activity in interacting with their environment, resulting in positive behavioral changes in aspects of knowledge, affection, and psychomotor. Learning is said to be positive. There is a behavior change caused by the addition of previous behavior that tends to be permanent (durable and not easily forgotten) (Nugroho, 2017).

Competencies that an educator must possess include personal competence, social competence, and professional competence (Repanovici, 2010). Personal competence will appear in physical and psychological appearance, social competence will appear in social relationships, and professional competence will appear in ten aspects of the ability of the teaching profession (Uyen, Tong, & Tram, 2020). Every teacher must have a desire to improve the learning outcomes of the students he guides. Therefore, teachers must have a relationship with students through the teaching and learning process. Each teaching and learning process's success is measured by assessing how far students achieve the learning outcomes.

In simple terms, what is meant by student learning outcomes is the ability obtained by children after going through learning activities (Kim, McKenna, & Park, 2017). Nawawi in Susanto stated that learning outcomes could be interpreted as the level of student success in learning subject matter at school, which is expressed in scores obtained from test results to recognize certain subjects. The learning model is defined as a pattern or steps of learning that is applied so that learning objectives based on the curriculum can be achieved optimally.

Problem Based Learning (PBL) learning model is one of the innovative learning models that can provide active learning conditions for students, involving students to solve a problem through the stages of the scientific method so that students can learn knowledge related to the problem, as well as have the skills to solve problems (Amelia, 2018b). The Think Pair and Share learning model is a simple cooperative learning model which means thinking in pairs and sharing.

The cooperative learning model of Think Pair and Share type, which means think-in-pair-share, was originally developed by Frank Lyman, also by Spencer Kagan and Jack Hassard. This model by Johnson and Johnson calls it look at your partner (Turn to Your Partner). The Teams Games Tournament (TGT) learning model is a learning model developed by David de Vries & Keath Edward (1995). In this model students play games with other team members to gain additional points for their team score (Badar, n.d.). This model contains elements of the game so that it can create fun learning. This model can also make learning challenging because in this model activity there is an academic tournament, where each student competes on behalf of his team to achieve an achievement. The three models that I use in this study are to support previous research, namely (de Aguilera & Mendiz, 2003; Uricchio, 2018; Valencia-Vallejo, López-Vargas, & Sanabria-Rodríguez, 2019).

## 2. RESEARCH METHOD

The research was conducted in 4 meetings. Each meeting is taken for 2 hours of lessons and lesson hours consist of 35 minutes. The type of research used is Classroom Action Research (CAR). CAR is a research in the field of education by making the class as an object of research to improve learning activities, processes, and learning outcomes. In the classroom action research process, it is divided into 4 meetings, namely based on the process of planning, implementing, observing and evaluating and reflecting (Perera, Miskitha, Jayasekera, Pathirana, & Weerasekera, 2016). Qualitative data analysis was used to analyze data from observations of teacher activities in managing learning and student activities in the learning process. In the teacher activity observation data, there are 11 activities observed during the learning process, the Student Activity Observation data there are 7 activities which are divided into group discussion activities and class discussions.

Teacher activity in the classroom can be said to be successful if the teacher's achievement criteria increase between scores of 38-46 with a very good predicate, student activities in class can be said to be successful

if 82% of the total number of students have obtained the very active predicate and individual completeness if students scored 60 and classically the percentage of students who scored 60 reached 80% of the total number of students. At the planning stage, what will be carried out is compiling a schedule for implementing learning activities, making Learning Implementation Plans (RPP) using a combination of models, making observation sheets and assessment rubrics that are used to assess teacher activities and student activities during learning, Making evaluation tools in the form of LKK and The worksheets used to measure student learning outcomes are in the form of tests, compiling rubrics for assessing spiritual attitudes, social attitudes, and skills, making an attitude assessment assessment format, assessing knowledge/learning outcomes, and assessing skills, preparing teaching media in the form of images related to spatial construction materials. and preparing other teaching aids in order to optimize the implementation of learning.

In the implementation stage, the implementation of these learning activities is the teacher makes an explanation to the students about the lessons to be taught, applies a combination of learning models, and the implementation is held in 4 meetings. At the observation stage or observation of student learning activities and teacher activities in the application of the model using the observation sheet that has been made. The researcher observed the student activities, while the teacher's activity was observed by an observer recommended by the principal. In the reflection stage, reviewing, viewing and reflecting on the results and impacts of the action activities that have been recorded in the observations. Furthermore, the results are analyzed, interpreted and concluded. The researcher concludes is the basis for revising the plan for the next action so that improvements can be made to the obstacles that occur and find the best solution for improving the next learning steps.

This classroom action research activity was carried out in class VB SDN Kutabumi 1 semester II for the 2021/2022 academic year with a total of 24 students consisting of 13 male students and 11 female students and the researcher acted as a teacher. Teacher activity data is taken through observation sheets by observing the learning steps carried out by the teacher using a combination of models that are carried out during learning, student activity data is taken from data from direct observations of students conducted by researchers through student activity observation sheets at each meeting in following learning using a combination of models and student learning outcomes data obtained from the assessment of the evaluation task at the end of the learning process. Assessment is carried out at each meeting about what has been learned. This evaluation question is used as an assessment in the cognitive and psychomotor domains. While the affective assessment is based on observations of student behavior during the learning process.

There are 3 factors examined in this study, namely teacher activity, student activity and student learning outcomes in the mathematics subject matter of Building Space using a combination of Problem Based Learning (PBL), Think Pair and Share (TPS) and Teams Games Tournament (TGT) models. ) in Class VB SDN Kutabumi 1. Based on this, the research results are also divided into 3, namely Teacher Activity Recapitulation, Student Activity Recapitulation and Student Learning Outcomes Activity Recapitulation. Here the researchers present the researchers present table 1 relating to the teacher's activity score.

Table 1. Teacher Activity Recapitulation

Class	Score	Percentage	Criteria
1	26	59%	Not Good
2	36	81%	Well
3	39	88%	Very Good
4	44	100%	Very Good

The maximum score for teacher activity is 44. The score is also made in percent, so that all aspects will be later. At meeting 1 the teacher got a score of 26 with poor criteria, the teacher had carried out activities in accordance with the provisions, although in some aspects it was still not optimal and improvements were needed at subsequent meetings, besides that the teacher also needed to adjust the conditions and the classroom environment. Then at the second meeting the teacher got a score of 36 with good criteria, at this meeting the teacher made adjustments and the score also increased. Next, at meeting 3, the teacher was able to achieve a score of 39 with very good criteria, then increased again to 44, of course with very easy criteria juxtaposed with aspects of student activity and student learning outcomes on a good trend graph. Based on these findings, it can be said that the use of a combination of Problem Base Learning (PBL), Think Pair and Share (TPS) and Teams Games Tournament (TGT) models in the Mathematics subject of Building Spaces can increase teacher activity in classroom learning. The next area is the results of research from student activities in participating in the

implementation of learning using the three combinations of models. The following table shows a recapitulation of the results of observations on student activities from meetings 1 to 4.

Table 2. Recapitulation of Student Activities

Meeting	Inactive		Less Active		Active		Very Active	
	F	%	F	%	F	%	F	%
Meeting 1	0	0	5	21	8	33	11	46
Meeting 2	0	0	2	8	9	38	13	54
Meeting 3	0	0	0	0	4	29	17	71
Meeting 4	0	0	0	0	7	17	20	83

The success indicator for the aspect of student activity is if students who enter the very active + active criteria reach 80% or more of the number of students in the class. At meeting 1 the percentage of students who entered the criteria for being very active was 46%, at this meeting there were several students who were categorized as less active, which was 21%. At meeting 2 the frequency of very active students increased, but there were still 2 students who were categorized as less active or as much as 8%. Furthermore, at meeting 3, the frequency of students who were very active increased. This happens because there is no frequency of students who are categorized as less active.

Finally, at meeting 4, the frequency of students who were very active again increased, because the frequency of active students also decreased to 4 people. Based on these findings, it can be said that the use of a combination of PBL, TPS, and TGT models in class VB at SDN Kutabumi 1, especially in the Mathematics subject matter of Building Spaces can increase student activity in classroom learning. The last aspect is the aspect of student learning outcomes, it can be seen in table 3 below:

Table 3. Recapitulation of Student Learning Results

Meeting	Classical Achievement (%)	Category
1	75	Haven't reached category yet
2	100	Reach category
3	100	Reach category
4	100	Reach category

In Table 3, it can be seen that classical student learning outcomes always increase in every meeting. At the first meeting, students' classical completeness only reached 75%, meaning that they were still below the improvement to 100% or perfect, which meant that they were in accordance with the success indicators determined by the researcher. Based on these findings, it can be said that the use of the PBL, TPS and TGT models in class VB at SDN Kutabumi 1, especially in the Mathematics subject for Building Spaces, has an indicator of success set by the researchers, namely 80% or more students who complete (achieve KKM 60 or more) of all students in the class. Then, there are meetings 2, 3, and 4, classically, student learning outcomes improve student learning outcomes in classroom learning. Thus, the exposure of the data and the findings of the 3 aspects that have been studied. To make it clearer, the researcher entered data from these 3 aspects into the following graph:

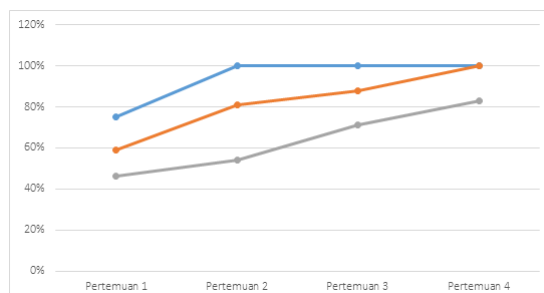


Figure 1. Trend Graph of All Aspects

### 3. RESULT AND DISCUSSION

This research focuses on direct/offline learning after the Covid-19 outbreak as a learning strategy and learning outcomes. Researchers have conducted observations, and interviews to obtain information data from research sources.

#### 3.0.1. Observation Report Results

Direct/Offline learning as a learning strategy and learning outcomes for the rest of the VB class at SDN Kutabumi 1. In direct / offline learning at school. Learning that is carried out after the arrival of the pandemic is very different, students can study at school and teachers can directly convey subject matter to students.

#### 3.0.2. Interview Report Results

Interviews were carried out in stages, in this study the author involved 1 resource person, including the Class VB teacher and 3 people from our group, namely Lois Mustafa, Gilamg Ramadhan, and Tiara Nur Cahyani. relaxed but very conducive, 2 people from our group asked several questions including:

1. Does the lesson of building space have a learning practice?
2. In your opinion, what activities are most related to building a room that the students do?
3. Are there games or games that are done by the teacher to introduce the shape of space.
4. In the opinion of the mother, students are more enthusiastic about building space with what type of learning method?

From the questions above, we and the resource persons, namely the elementary school teacher, conducted a dialogue that was recorded and written as a result of the answers from our interview, after asking a lot of explanations we got from the teacher such as the condition of the students in teaching techniques, and tips and tricks in dealing with the rest. in SD directly. Therefore, according to the results of our opinion and analysis, interview activities like this are very good for increasing the experience and knowledge of prospective teachers in the world of teaching children, especially elementary school children.

This classroom action research activity was carried out in class VB at SDN Kutabumi 1 semester II for the 2021/2022 academic year with a total of 24 students consisting of 24 students consisting of 13 male students and 11 female students. The discussion that was studied was based on the formulation of the problem that had been determined by the researcher. Researchers teach mathematics in class V. The success of learning is largely determined by the teacher. Mathematics learning is very important and needs to be given to every school because mathematics is one of the disciplines that can improve thinking and argumentation skills, contribute to solving everyday problems and the world of work, and provide support in the development of science and technology. In addition, mathematics is also a human activity that must be associated with reality. The process of developing mathematical concepts and ideas starts from real life.

Based on the results of observations of teacher activities, student activities, and student learning outcomes, towards teaching and learning activities using a combination of Problem Based Learning, Think Pair and Share and Teams Games Tournament models in order to increase learning activities for building space materials in class VB at SDN Kutabumi 1, it can be seen the description is as follows.

#### 3.0.3. Teacher Activities

Teacher activities in teaching activities using a combination of Problem Based Learning, Think Pair and Share and Teams Games Tournament models can be seen that there is always an increase in each meeting. This condition indicates the success of teaching and learning activities. Based on the increase that occurred in meetings I, II, III, and IV to reach the success criteria, it shows that the approach and model used by the teacher during learning can determine the achievement of learning success.

Before determining the steps of activities in the learning process to achieve the expected goals, as a qualified teacher it is necessary to understand the characteristics of students in order to take the right steps in creating an effective teaching and learning process in the classroom. According to Aslamiah, when a teacher is faced with student learning problems, the teacher can take steps to solve it by referring to the characteristics of students according to their age.

#### 3.0.4. Student Activities

Students as students are as students' subjects, not objects filled with knowledge from the teacher's brain. Learners are community members who try to develop their potential through a learning process that is available at certain paths, levels, and types of education. Therefore, education should not only be in the form of

learning by transferring knowledge from teachers to students. However, the learning provided should be able to increase student activity in order to develop students' potential.

Efforts to improve student learning activities are challenges that are always faced by everyone in the teaching and education profession. The learning process is said to take place, if there are student activities in it.

### 3.0.5. Learning outcomes

Based on the learning objectives set by the teacher in learning activities or instructional activities, this is the reference for students to be successful or not in learning. The score is also not an absolute benchmark for students to succeed in learning or mastering science, but also attitudes and skills. To find out the changes that occur, it is necessary to conduct an assessment. Assessment in the learning process serves as a tool to detect learning difficulties and as a function as a tool to detect learning difficulties and as a tool to measure achievement in the learning process.

Assessment of learning outcomes in the cognitive aspect is done by measuring the mastery of students which includes factual, conceptual, and procedural knowledge in various levels of thinking processes. According to Anderson's taxonomy which is an improvement of Bloom's taxonomy, the levels of cognitive thinking are remembering, understanding, applying, analyzing, judging, and creating. To determine the mastery of learning and identify the weaknesses and strengths of the learning process in the cognitive aspect, various assessment techniques are used according to the competencies to be assessed, namely written, oral, and assignment tests.

To find out whether the learning objectives are achieved or not, an evaluation is carried out. Evaluation is an ID activity to see whether a program that has been planned has been achieved or not, the price or not, and can also see the level of efficiency. In addition, this evaluation can be used as feedback or follow-up, or even a way to measure the level of student mastery. The progress of student achievement is not only measured by the level of mastery of science, but also from skills. Thus, student learning outcomes include everything that is learned at school, whether it concerns knowledge, attitudes, and skills related to the subjects given to students. Researches on related models are as follows:

1. Ainawati's research (2018) with the title of increasing mathematics learning in data processing materials using problem-based learning models (PBL), Think Pair and Share (TPS), and Teams Games Tournament (TGT) in class VB SDN Kutabumi 1.
2. Aprina Mariani's research (2018) with the title "Improving Mathematics Learning Outcomes in Addition and Subtraction of Fractions Through Combination of Problem Based Learning (PBL) Learning Models, Realistic Mathematics Education (RME), and Teams Games Tournament (TGT) in grade IV SDN Tatah Pemangkih Laut 2 Banjar Regency".
3. Researcher Alfiya Fajar Maghfirah (2013) with the title "Improving Student Learning Outcomes in Addition and Subtraction of Fractions Through the Team Games Tournament (TGT) Cooperative Model in Grade IV SDN Sungai Pitung, Barito Kuala Regency".

## 4. CONCLUSION

Based on the results of the research on Analysis of Student Learning Activities in Building Space Materials for class VB SDN Kutabumi 1 Problem Based Learning, Think Pair and Share and Teams Games Tournament models can be concluded as follows:

1. The teacher's activities in the implementation of learning on the Building Space material using a combination of Problem Based Learning, Think Pair and Share and Teams Games Tournament models can be carried out well in each meeting so that they get a very good category and have achieved the indicators determined by the researcher.
2. Student activities in the implementation of learning material properties of wakes using a combination of Problem Based Learning, Think Pair and Share and Teams Games Tournament models can be carried out well in each meeting so that they get a very active category and have achieved the indicators determined by the researcher.
3. The use of a combination of Problem Based Learning, Think Pair and Share and Teams Games Tournemanet models can improve student learning outcomes in the block volume math subject in class VB SDN Teluk Tiram 1 Banjar at each meeting and have succeeded in achieving the indicators set by researchers, both in terms of classic or individual.



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