Journal of Social Research

P-ISSN: 2827-9832
E-ISSN: 2828-335x
http://ijsr.internationaljournallabs.com/index.php/ijsr

THE USE OF MEDIA AND DEMONSTRATION METHODS TO INCREASE UNDERSTANDING OF BUILDING SPACE IN THIRD GRADE STUDENTS MIN 3 EAST JAKARTA

Tuti Rohayati
Madrasah Ibtidaiyah Negeri 3 Jakarta
tutirohayati17@gmail.com

ABSTRACT

In the curriculum of the education unit, there are five subject families, namely religion and noble morals, citizenship and personality, science and technology, aesthetics, physical, sports, and health. To improve student achievement in mathematics lessons, especially increasing understanding of building space through the use of media and demonstration methods for third grade students (3) MIN 3 Cijantung Kopassus complex East Jakarta. This research uses two cycles, each cycle consists of three meetings, namely the implementation of class action research cycle I will be carried out on February 7, 8, and 24, 2023 while the second cycle will be carried out on February 21, 28, 2023. This type of research is classroom action research which is research that aims to improve the effectiveness and efficiency of the teaching and learning process. Research is carried out in the classroom. Research activities in cycle I, at the first meeting researchers began the activity by filling in student attendance, praying, preparing teaching materials, models, props, reminding how to sit well when writing and reading, singing together while clapping, and repeating and reminding past lessons. With media and demonstration methods, it can increase the understanding of building space in grade 3 MIN 3 Cijantung MIN 3 Cijantung students, with evidence of an increase in learning outcomes described as follows: the first cycle of 29 students, which is categorized either as many as 9 people or 27%, sufficient categories as many as 17 people or 58.6% and categories less than 4 people or 1.16%.

Keywords: *demonstration, teaching, building space*

INTRODUCTION

In the curriculum of the education unit, there are five subject families, namely religion and noble morals, citizenship and personality, science and technology, aesthetics, physical, sports, and health (Makhshun, 2018). Mathematics lessons are part of the science and technology family held at every level of education from elementary school to high school (Feisal, 1995). The course of history shows that mathematics in Indonesia is a subject that tends to be feared and even less desirable by students so student achievement every semester and even the final exam results show numbers are below other subjects.

The above, also happened at MIN 3 East Jakarta. Especially for class III for the 2022//2023 academic year, there are several problems similar to the phenomenon above, namely their weak mastery of basic competencies prepared in accordance with the annual program and semester program, the achievement of minimum completeness criteria (KKM) in the first semester only 30% of students reached the target, and the low interest in participating in mathematics learning which is indicated by the lack of questions asked, Low enthusiasm to follow lessons due to the saturating situation, and cooperation between students that has not been well developed.

The essential problem with the achievement of KKM above, allegedly due to weak understanding of the basics of mathematics subject matter, especially in the understanding of flat wake (Amir, 2014). As an effort to stimulate students in mathematics learning activities,

especially in grade 3 East Jakarta, optimal strategies and efforts are needed in learning interactions that can involve them actively in the use of media and demonstration methods so as to encourage their understanding of basic material that will have an impact on the understanding of the next material, because of students' understanding of space building operations.

To encourage fun learning interactions and facilitate students' understanding of the subject matter, especially about building space (Hung et al., 2017). So the learning process is carried out using the use of learning media that contains media and other objects such as cube-shaped objects, blocks, tubes and so on (Shadiev & Li, 2022).

A common problem that occurs in Madrasah Ibtidaiyah Negeri 3 Jakarta .Kopassus complex, Pasar Rebo district, East Jakarta is the low outcome of learning mathematics by observing students' ability to understand the properties of flat wakes. Through evaluation per subject always mathematics learning results are below the average of other subjects. Student mathematics learning outcomes are lower on the subject of building space.

Some possible causes of low student learning outcomes in the material of calculating space buildings are: (1). The material surface area of building space is abstract. Students find it difficult to distinguish between the side on a flat build and the side on a spatial building; (2) The use of inappropriate media or not using media at all that can improve student learning outcomes. Even though the media is very important in learning mathematics. Higgis in Ruseffendi (1993: 144) says that success is 60% versus 10% when using media compared to not using media.

To overcome the above problems, the steps that need to be implemented are to use the media. Improve Students' Ability to Understand the Properties of Flat Wake through Active and Creative Learning". The media is called media to build space that can teach students optimally.

The use of media can be manipulated, media is a learning environment that is very supportive to achieve optimization in learning, because media is a learning bridge that initially contains concrete objects such as children's experiences (Pura & Asnawati, 2019). On the next bridge there are semi-concrete like artificial objects (Anwar et al., 2016). Next there is semi-abstract in the form of pictures, and then there is abstract in the form of words.

Through the media of building material space that is abstract can become concrete. Students will know and see the components of building space with this media intermediary students can distinguish between the side on the flat build and the side on the building space. In addition, with the media, students can see directly the shape of the side shape and at the same time remember about the flat area. Furthermore, Rahmanelli (2005: 237) stated that if children are involved and experience themselves and participate in the learning process, student learning outcomes will be better, besides that lessons will be longer absorbed in students' memories.

One way to fix the wrong math teaching, is to make students learn math meaningful (Rushton, 2018). This understanding is formed not by accepting what is taught and memorizing the formulas and steps given, but by building the meaning of what is learned (Sumaji, et al, 1998: 235).

Learning math with meaning is one of the five formulas to be able to learn fun (Bernard et al., 2019). Why in the process of learning should be fun? Because that way, the learning

process will take place very effectively (Hernowo, 2005: 7). According to Dave Meier, in the book The Accelerated Learning Handbook (In Hernowo, 2005: 17), "Fun or making the learning atmosphere in a state of joy, does not mean creating an atmosphere of seize or chaos". If we examine further, pleasant according to Meier, we will get some of the components that make it up. First, the rise of interest. Second, there is involvement. Third, the creation of meaning. Fourth, there isnyes understanding or mastery of the material. Fifth, the emergence of happy values. If we combine the five forming components, then from the pleasant atmosphere something new will be born.

Slameto (1991: 29) the principles of learning in the context of interaction between teachers and students in teaching and learning activities are:

1. In learning, every student must strive for active participation.
2. Learning is a whole and the material must have a structure, simple presentation so that students easily grasp the understanding.
3. Learning must be able to cause strong reinforcement and motivation in students.
4. Learning is a continuous process, so there must be stages and stages according to development.
5. Learning is a process of organization, adaptation, exploration and discovery.
6. Learning requires sufficient facilities so that students can learn calmly.
7. Repitisi, in the learning process needs to be repeated many times so that the understanding / skills / attitudes are deep in students.

For this reason, as a professional teacher, must be able to make learning designs and develop teaching methods that are considered able to improve students' attitudes and interests in understanding mathematics lessons, actively creative so that the achievement of low learning outcomes can be improved.

The selection of the right strategy and approach in creative active learning is something that must be really considered by teachers so that the learning objectives that have been formulated can achieve the target (Bonwell & Eison, 1991). The selection of learning strategies should be based on considerations of: (1) placing students as active subjects; (2) placing students as human beings who naturally have experiences, knowledge, desires, and thoughts that can be utilized for learning, both individually and in groups; (3) make students believe that they are capable of learning; and (4) utilize the potential of students as widely as possible (Pratiwi in Zulaekha 2003: 5).

To overcome the above problems, the steps that need to be implemented are to use the media. The media is called media build space that can teach students actively, creatively and optimally.

As stated in the K-13 Curriculum which is active and creative in mathematics lessons aims to make students have the following abilities: (1) Understand mathematical concepts, explain the relationship between coneps and apply concepts or algorithms, flexibly, accurately, efficiently, and precisely, in problem solving; (2) Using reasoning on patterns and properties, performing mathematical manipulations in making generalizations, constructing proofs, or explaining mathematical ideas and statements; (3) Solving problems which include the ability to understand problems, design mathematical models, solve models and interpret the solutions obtained; (4) communicate ideas with symbols, tables, diagrams, or other media to clarify circumstances or problems; (5) have an attitude of appreciating the usefulness of

mathematics in life, namely having curiosity, attention, and interest in learning mathematics, as well as a tenacious and confident attitude in problem solving.

The scope of mathematics in elementary school education units includes aspects: numbers, geometry and measurement, and data processing. Of the three aspects that are the focus of this study, namely getting to know some of the building spaces contained in each aspect, the competency standards and basic competencies to be achieved in odd semesters for first grade (I) elementary school students are as follows:

1. Numbers

a. Perform addition and subtraction of numbers to 20

1) Numerating multiple objects
2) Sort multiple objects
3) Perform addition and subtraction of numbers to 20
4) Solve problems related to addition and subtraction to 20

2. Geometry and Measurement

a. Use time and length measurements

1) Determine the time (morning, afternoon, night), day and hour (roundly)
2) Determine the length of time an event lasts
3) Recognize the length of an object through everyday sentences (short, long) and compare them
4) Resolve issues related to time and length

b. Get to know some of the building spaces

1) Grouping various simple space shapes(beams, prisms, tubes, spheres, cones)
2) Determine the order of similar space objects according to magnitude

Thus, it is clear that the ability to build space in mathematics lessons for grade 3 MIN 3 Cijantung students, Pasar Rebo Kopassus complex, East Jakarta is one of the skills that students must master. In order for students to really have an understanding of the shape of building space, teachers are required to know more and master how to convey techniques for solving appropriate mathematical problems.

In this case, the author hopes that the results of this research can provide input, especially to mathematics teachers. So that it can carry out tasks by achieving the expected goals.

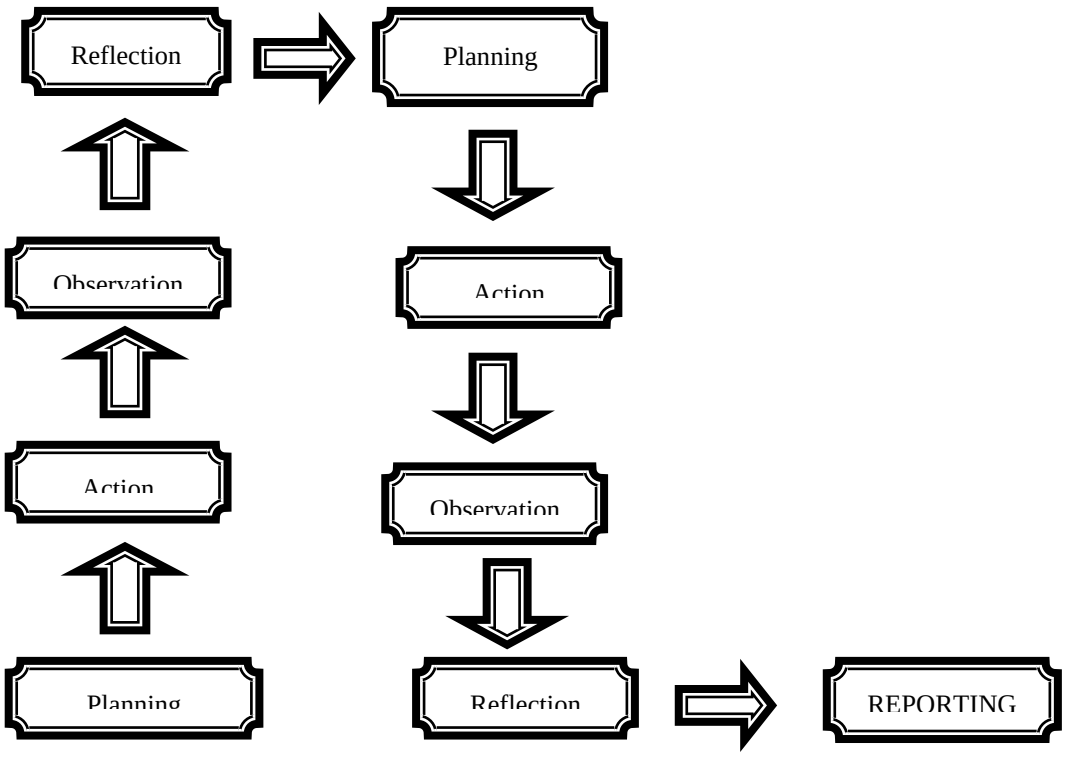
METHOD

This type of research is classroom action research which is research that aims to improve the effectiveness and efficiency of the teaching and learning process. Research is carried out in the classroom.

The intervention design in this research cycle is the method used in Classroom Action Research is the Kemmis and Mc Taggart Model method which includes three stages, namely:

1. Planning
2. Implementation of class actions and observations
3. Reflect and proceed with planning for the next cycle.

Figure 3. 1
Research Cycle Design



In detail the procedure for implementing the class action research design for each cycle can be described as follows:

1. **Planning At the planning stage, researchers plan activities to be carried out in** Classroom Action Research, while the activities to be carried out in planning are as follows:

a. Create a lesson plan

b. Create an evaluation tool

c. Create an observation sheet

2. Action

At the stage of action implementation, the activities carried out are to carry out planned learning scenarios, who act as teachers and as observators in this study are researchers, the implementation of classroom action research is carried out in two cycles. Each cycle is carried out learning outcomes tests.

3. **Observation**

In observation, researchers make observations of actions that are being carried out by students in the classroom. By using observation sheets to observe student learning outcomes.

4. **Reflection**

The activity at this stage is that researchers reflect on it by looking at observational data whether the use of media and demonstration methods can increase understanding of money building. And revise the next learning scenario if in the previous cycle there were things that needed to be improved.

This Class Action Research will run well, hereby explained the research procedure as follows:

1. Researchers draw up lesson plans.
2. Researchers prepare questions for students to use research related to building space.
3. Researchers prepare tools that support the implementation of Classroom Action Research.
4. Preliminary or appreciation action to find out the extent to which students have understood the material that hasbeen studiedbefore.
5. The process of implementing learning begins with the problem observed by the teacher.
6. Step at the beginning of this research by looking at student learning outcomes in learning, then formulating problems, followed by analyzing problems, then planning learning carried out in the second cycle. If the two cycles have not worked, then the third cycle learning plan is reformulated.

A. Research Interval Stage

1. Research Steps in Cycle I

a. Planning:

Steps:

1) Conduct consultations with school principals in order to prepare for research.
2) Topic selection
3) Review the syllabus to get clarity on learning objectives for the topic and look for ideas from the material in the textbook.
4) Develop a Learning Implementation Plan
5) Plan learning deployments
6) Determine the indicators to be used as a reference
7) Preparing learning media.
8) Create an evaluation format
9) Creating an Observation Format

b. Action:

At the stage of implementation of actions, the activities carried out are to carry out planned learning scenarios and use media and demonstration methods.

1) First Meeting

The first meeting in cycle I was held on Selas Day on February 6, 20 23

a) Initial Activities

- Filling student attendance, praying, preparing teaching materials, models, teaching aids.
- Warn how to sit well when writing and reading.
- Classically, students sing while clapping their hands
- Repeating and recalling past lessons.

b) Core Activities

Exploration

In exploration activities:

- Students observe media props build space
- Students listen to the lamp's explanation of building space

Elaboration

In elaboration activities:

- Student frequently asked questions about wake up room at tool Display
- Some students showed the building of the room as mentioned by the researcher
- Students draw build space

Confirmation

In the confirmation activity:

- Researchers help students have difficulties
- Researchers and students ask questions and answers to correct misunderstandings, provide reinforcement and conclusions.

c) Cover

Making conclusions from the material presented

2) Second Meeting

The second meeting in the first cycle was held on Thursday, February 6, 20, 23

a) Initial Activities

- Filling student attendance, praying, preparing teaching materials, models, teaching aids.
- Warn how to sit well when writing and reading.
- Classically, students sing while clapping their hands
- Repeating and recalling past lessons.

b) Core Activities

Exploration

In exploration activities:

- Students observe props about building space

Elaboration

In elaboration activities:

- Students draw a building room and write the name of the building space
- Students color each room according to the researcher's instructions

Confirmation

In the confirmation activity:

- Researchers help students who are experiencing difficulties
- Researchers and students ask questions and answers to correct misunderstandings, provide reinforcement and conclusions.

c) Cover

- Making conclusions from the material presented

3) Third Woman

The third meeting in the first cycle will be held on Tuesday, February 6, 2023. At the third meeting carried outan evaluation.

c. Observation

During the implementation of the action, the observer observes the activities of the students. On observations, researchers use observation sheets.

d. Reflection

1) Reflection activities are carried out as soon as possible after the learning implementation activities.
2) Conclusions and suggestions for improvement at a later stage.

In the first cycle of research researchers carried out for three meetings, in the first cycle most students understood building space, even could not distinguish the building of spherical space, blocks, cubes, cones and tubes. When questioning about pictures and grouping different types of build space.

Researchers observed that there are still many students who are restless and not focused, even many students do not listen to it and are more interested in playing stationery, barking, joking. So when researchers asked about building space, they couldn't answer correctly. Especially when assigned to show the building of space, no student dared to show their hands. In the results of the evaluation carried out, the value is still a lot that is not satisfactory or less than KKM.

Thus, the actions taken in the first cycle can be seen and it is known that the results of student learning achievement are less satisfactory. Then the researcher must carry out actions in the next cycle, namely cycle II, so that learning outcomes reach the targeted value.

2. Research Steps in Cycle II

a. Planning

1) Revise the next learning scenario
2) Prepare media to be used in learning.
3) Create evaluation tools and create observation sheets

b. Action

At the stage of implementation of actions, the activities carried out are to carry out planned learning scenarios and use media and demonstration methods.

1) First Meeting

The first meeting in cycle II will be held on Monday, February 21, 2023.

a) Initial Activities

- Filling student attendance, praying, preparing teaching materials, models, teaching aids.
- Warn how to sit well when writing and reading.
- Classically, students sing while clapping their hands
- Repeating and recalling past lessons.

b) Core Activities

- Students observe media props build space
- Students listen to the lamp's explanation of building space

Elaboration

In elaboration activities:

- Student frequently asked questions about wake up room at tool Display
- Some students showed the building of the room as mentioned by the researcher
- Students draw build space

Confirmation

In the confirmation activity:

- Researchers help students who are less able to retell the stories they hear.
- Researchers and students ask questions and answers to correct misunderstandings, provide reinforcement and conclusions.

c) Cover

- Making conclusions from the material presented

2) Second Meeting

The second meeting in the second cycle will be held on Tuesday, February 21, 2023

a) Initial Activities

- Filling student attendance, praying, and preparing teaching materials, models, teaching aids.
- Warn how to sit well when writing and reading.
- Classically, students sing while clapping their hands
- Repeating and recalling past lessons

b) Core Activities

Exploration

In exploration activities:

- Students observe props about building space

Elaboration

In elaboration activities:

- Students draw a building room and write the name of the building space
- Students color each room according to the researcher's instructions

Confirmation

In the confirmation activity:

- Researchers help students who are experiencing difficulties
- Researchers and students ask questions and answers to correct misunderstandings, provide reinforcement and conclusions.

c) Cover

- Making conclusions from the material presented

3) Third Meeting

The third meeting in cycle II will be held on Thursday, February 23, 2023. At the third meeting carried outan evaluation.

c. Observation

During the implementation of the action, the observer observes the activities of the students. On observations using observation sheets.

d. Reflection

1). Reflection activities are carried out as soon as possible after the learning implementation activities.

2). Conclusions and suggestions for improvement at the next stage.

In the second cycle of research, researchers observed that students showed improvement, they were able to answer questions about building space, when questioning and answering, students loudly and boldly answered questions correctly.

In terms of students' sincerity in carrying out tasks, students are brave and not ashamed to show build space in front of the class. The enthusiasm and enthusiasm of students in learning

to build space using media, researchers observed that many students understand building space so that they can distinguish each building space quickly and correctly.

Thus, the results of data analysis in cycle I and cycle II can be known as changes in increasing understanding using media and demonstration methods.

B. Data Collection Techniques

In accordance with the purpose of the study, the data collection is obtained through:

1. Observations are made at the planning stage and during the learning activities of each cycle.
2. Tests are carried out in each cycle to see the understanding of building space.
3. Value documentation, namely test score data given to learning, is used as a comparison with learning outcome tests at the end of cycle I and cycle II.
4. The source of the data is data taken from observations and from the test results of fifth grade students of MIN 3 Cijantung Kopassus complex East Jakarta .

C. Data Analysis Techniques

The data analysis technique used descriptively is only collecting data obtained through observation and learning outcomes tests in the arrangement, explained, and finallyrnyes analyzed in two stages, namely:

1. Data Reduction

Data reduction is a process of selecting, centralizing and improving data simplification. At the stage of reducing observational data, observations of the learning process build space.

2. Presenting Data

Data obtained through observation and learning outcomes tests are in the form of tables and simple sentences each round. While quantitative data analysis uses averages, and percentages.

D. Research Instruments

The instruments used in research, both cycle I and cycle II are as follows:

1. Syllabus
2. RPP Cycle I
3. RPP Cycle II
4. Test Questions
5. LKS
6. Student Outcomes
7. Attendance List
8. Activity Photos
9. Grille
    a. **Build Space Understanding Grid**

1). Theory

The form of the test is to determine the understanding of building space, then a test is held consisting of 10 questions with objective fills and descriptions containing space building (balls, blocks, cubes, cones, and tubes)

2). Student Attitude

This test is carried out during the KBM process, and an observation sheet is used. The aspects assessed in the KBM process are as follows: Paying attention to the teacher's explanation, courage shows building space in front of the class, dare to ask the teacher, courage

and enthusiasm to learn, studying seriously, use effective communication, developing skills possessed, do questions seriously, confidently, and disciplined.

b. **Scoring Technique**:

1) Theory :

The score that describes that students have an understanding of building space is the number of correct answers. This test is planned in a study of 10 questions, then the lowest score is equal to 0 and the highest score is 10. The value used is the value of tens.

2) Shiva's Attitude

To assess the attitude of students during the process of learning activities used observation sheets.

E. Yield Indicators

If the use of media and demonstration methods is maximized, it can improve the ability of first grade students of MIN 3 Cijantung East Jakarta Kopassus complex, the first cycle of the number of students 29 people, which is categorized either as many as 9 people or 31.0%, enough categories as many as 10 people or 34.4% and categories less 9 people or 31.0%. While the results in the second cycle of the number of 29 people who categorized either as many as 25 people or 8.62%, enough categories as many as 4 people or 13.7% and less 0 people or 0%. This illustrates that there is an increased understanding of building space. The average score of students increased from cycle I amounted to 65.4% and cycle II 86.2%, meaning there was an increase of 20.8%.

RESULTS AND DISCUSSION

In this chapter, the results of Classroom Action Research related to the problem of "The Use of Media and Demonstration Methods to Increase Understanding of Building Space in Grade 3 MIN 3 Cijantung Students of the East Jakarta Kopassus Complex"

Initial Description

This research place was carried out at MIN 3 Cijantung, Kopassus complex, Pasar Rebo, East Jakarta. And the students who were the sample of this study were grade 3 students. With a total of 29 students consisting of 1 9 girls and 9 men.

The subject of this study is a first-grade student of MIN 3 Cijantung who is in the East Jakarta Kopassus complex for the 2022/2023 learning year

The condition of the students before the research was conducted, from the number of 29 students, most of the students still did not understand the various forms of building space, let alone grouping objects around which included space objects, when answering questions about what the teacher said, most of the children answered incorrectly. This proves that students do not understand building space, about 10% of students know how to build space, and students know enough about 50% and 40% do not know how to build space.

With conditions like this, researchers finally made the decision to conduct research in order to improve the understanding of building space in grade 3 MIN 3 Cijantung students, in East Jakarta.

Research activities in cycle I, at the first meeting researchers began the activity by filling in student attendance, praying, preparing teaching materials, models, and props, reminding how to sit well when writing and reading, singing together while clapping, and repeating and reminding past lessons. Thecore activity at the first meeting was to observe the tools of the

space building media and listen to the explanation of the lamp about building space. Then there was a question and answer about building space on props, there were several students assigned to show the building of space mentioned by the researcher, followed by drawing building space.

In the second meeting after the initial activity as usual, there are props about building space, then students draw a room building and write the name of the room building, and give color to each room building according to the researcher's instructions.

The third meeting after the initial KBM activity, followed by evaluation, students filled out the question sheets distributed by the researcher.

The results in the first cycle of research researchers observed that most students in drawing space wake difficulty, in grouping space buildings are still confused to distinguish blocks from cubes, the names of space buildings are still wrong. Learning concentration is lacking, the atmosphere is less conducive because there are still many students joking and chatting. So when researchers asked about building space, they couldn't answer correctly. In addition, from the results of the evaluation carried out, there are still many unsatisfactory values or less than KKM.

Thus, the actions taken in the first cycle can be seen and it is known that the results of student learning achievement are less satisfactory. The increase was very small, students who understood building space well were around 31.0%, who understood enough about 65.4% and those who did not understand building space around 31.0%. Then the researcher must carry out actions in the next cycle, namely cycle II, so that learning outcomes reach the targeted value

Research activities in cycle II, at the first meeting researchers, began the activity by filling in student attendance, praying, preparing teaching materials, models, and teaching aids, reminding how to sit well when writing and reading, and singing together while clapping and repeating and reminding past lessons. The core activity at the first meeting was to observe the tools of the space-building media and listen to the polite explanation about building space. Then there was a question and answer about building space on props, there were several students assigned to show the building of space mentioned by the researcher, followed by drawing building space.

In the second meeting after the usual initial activity, students observed props about building space, then students drew a room building and wrote the name of the room building, and gave color to each room building according to the researcher's instructions.

In the third meeting after the initial KBM activity, followed by evaluation, students filled out the question sheets distributed by the researcher.

In the second cycle of the study, researchers observed that students showed improved results, they understood and could distinguish between different spatial structures, they were able to answer questions about building ruling, and even when questioning, students loudly and boldly answered questions correctly.

In terms of students' sincerity in carrying out tasks, students are brave and not ashamed to ask questions and point to the space that the researcher mentioned. The evaluation results also increased the average grade point of the class.

Thus, the results of data analysis in cycle I and cycle II can be seen changes in the improvement of understanding space building using media and demonstration methods. The increase occurred in students who were quite good, students who understood building space well around 27%, who understood enough about 58.6%, and those who did not understand

building space around 1.16%. The average number of students increased from cycle I amounted to 63.9% and cycle II 96.2 meaning there was an increase of 48.6%.

During the study, researchers observed the attitude of students in following the learning process, from a total of 29 students, there were students who stood out compared to other students, the child's response to building space very quickly proved to be able to answer questions correctly, including the students named Aufan, Zahra, and Alfian While the students who were slow in understanding the building of space were Zahra and Moza. But at the end of the second cycle of the study, researchers analyzed almost all of the student's improvements.

Research Results and Discussion

This research uses two cycles, each cycle consists of three meetings, namely the implementation of class action research cycle I will be carried out from 06 to 15 February 2023 while the second cycle will be held from 16 to 23 February 2023

The questions that the researchers presented to respondents as many as 29 people, namely questions in the form of fill-ins and descriptions of building space.

The results of the research on understanding building space in MIN 3 Cijantung students, East Jakarta are as follows.

Table 4.1

Research Results of Understanding Build Space

Cycle I and Cycle II

Value	Cycle I			Cycle II		
	Number of Students	Percentage	Categories	Number of Students	Percentage	Categories
80 – 100	9	27	Good	26	96,2	Good
60 – 79	17	5,86	Enough	4	1,16	Enough
10 – 59	4	1,16	Less	0	0	Less
Sum	29	100%		29	100 %	

Information:

Good = 80 – 100

Enough= 60 – 79

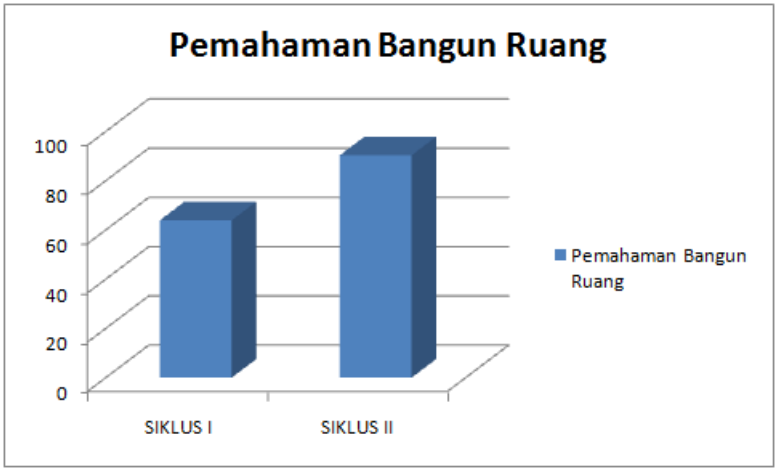
Less = 10 – 59

In the research carried out, researchers observed that the results of the students' ability test in listening to stories, as in the table above in the first cycle of the number of 29 students, were categorized either as many as 9 people or 27%, enough categories as many as 17 people or 58.6% and categories less than 4 people or 16.6%. While the results in the second cycle of the number of 29 people in the category were either 26 people or 96.2%, the category was enough as many as 4 people or 16.6% and less than people or 0%. This illustrates that there is an increased understanding of building space. The average score of students increased from cycle I amounted to 63.9 and cycle II 96.2%, meaning there was an increase of 48.6%.

The results of the study can be seen in the comparison diagram of the results of the first and second cycle research as follows:

Figure 4.1

Comparison Graph of Research Results of Cycle I and Cycle II



In the graph above illustrates the results of research in cycle I and cycle II there was an increase, the average number of students increased from cycle I amounted to 6 3.9, and cycle II 96.2 meaning there was an increase of 48.6%. This shows that using media and demonstration methods can improve understanding of building space.

CONCLUSION

With media and demonstration methods, it can increase understanding of building space in grade 3 MIN 3 Cijantung MIN 3 Cijantung students, with evidence of an increase in learning outcomes which are explained as follows: the first cycle of the number of students was 29 people, which was categorized either as many as 9 people or 27%, the sufficient category as many as 17 people or 58.6% and the category less 4 people or 1.16%. While the results in the second cycle of the number of 29 people in the good category were 26 people or 96.2%, the category was enough as many as 4 people or 1.16% and less than people or 0%. This illustrates that there is an increased understanding of building space. The average score of students increased from cycle I amounted to 6 3.9 and cycle II to 96.2 meaning there was an increase of 48.6 %.

Thus using media and demonstration methods, students better understand various spatial structures. The enthusiasm of students can be seen, so what was originally passive in learning, it turns out that students show enthusiasm and actively complete students build space.

REFERENCES

Amir, A. (2014). Pembelajaran matematika SD dengan menggunakan media manipulatif. *Forum Paedagogik*, *6*(01).

Anwar, R., Abidin, S. Z., & Hassan, O. H. (2016). In-vitro design protocol: Artificial situation strategy uses to comprehend designers' thought. *MATEC Web of Conferences*, *52*, 03002.

Bernard, M., Sumarna, A., Rolina, R., & Akbar, P. (2019). Development of high school student work sheets using VBA for microsoft word trigonometry materials. *Journal of Physics: Conference Series*, *1315*(1), 012031.

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom. 1991 ASHE-ERIC higher education reports.* ERIC.

Feisal, J. A. (1995). *Reorientasi Pendidikan Islam*. Gema Insani.

Hung, Y., Chen, C., & Huang, S. (2017). Applying augmented reality to enhance learning: a study of different teaching materials. *Journal of Computer Assisted Learning*, *33*(3), 252–266.

Makhshun, T. (2018). Model Pengembangan Kurikulum PAI SMP di Kota Semarang. *Al-Fikri: Jurnal Studi Dan Penelitian Pendidikan Islam*, *1*(1), 97–114.

Pura, D. N., & Asnawati, A. (2019). Perkembangan Motorik Halus Anak Usia Dini Melalui Kolase Media Serutan Pensil. *Jurnal Ilmiah Potensia*, *4*(2), 131–140.

Rushton, S. J. (2018). Teaching and learning mathematics through error analysis. *Fields Mathematics Education Journal*, *3*(1), 1–12.

Shadiev, R., & Li, D. (2022). A review study on eye-tracking technology usage in immersive virtual reality learning environments. *Computers & Education*, 104681.