



## Application of Video Media to Increase Student Motivation and Learning Autcomes in Flat Sided Space (Prism) Material in Class VIII SMPN 2 Pasir Limau Kapas Odd Semester of The 2021-2022 Academic Year

**Erlina Siregar<sup>1</sup>**

Public Junior High School 2 Pasir Limau Kapas, Indonesia

Email: [erlinasiregar69@guru.smp.belajar.id](mailto:erlinasiregar69@guru.smp.belajar.id)

### ABSTRACT

This research aims to increase student motivation in the learning process of building flat-sided spaces about *Building Flat-sided Spaces (Prisma)* in class VIII students at SMP Negeri 2 Pasir Limau Kapas Semester I of the 2021/2022 academic year. This research was conducted because of student motivation in learning about flat-sided spatial construction about *flat-sided spatial construction (Prisma)* in class VIII students at SMP Negeri 2 Pasir Limau Kapas Semester I of the 2021/2022 academic year. still relatively lacking. The research subjects were 20 students in class VIII of SMP Negeri 2 Pasir Limau Kapas Semester I of the 2021/2022 academic year. The procedures for carrying out actions and implementation at the research location are divided into 2 cycles. Each cycle consists of four stages, namely: planning, acting, observing and reflecting and is carried out in 4 meetings. Data collection techniques use tests, observations, and documentation of learning activities. Analysis is carried out using techniques data analysis qualitative and technique analysis data qualitative. Results this research shows that the use of the PjBL learning model with video media in learning to build a flat-sided room, material on building a flat-sided room (Prism) capable improve skills students in making innovative works of prism nets in class VIII of SMP N 2 Pasir Limau Kapas Semester I Academic Year 2021/2022.

**Keywords :** Use Media Videos, Motivation, Results Study

### Introduction

Based on the results of initial student observations, it is known that learning about flat-sided shapes (prisms) in class VIII SMPN 2 Pasir Limau Kapas includes, among other things, the low interest that students have in learning Mathematics so that learning activities tend to be passive, students are not active so that learning objectives are not achieved properly. maximum when asked to analyze and identify flat-sided building materials (prisms). With these results, the researcher proposed a solution in the form of using video media, specifically videos Which related with *build a flat side space (prism)*. The researcher believes that by using video media , students will be more motivated and active in learning activities about flat-sided geometric shapes (prisms) in class VIII SMPN 2 Pasir Limau Kapas. This learning method invites students For understand material Alone with dig/solve problem in a way collaborative with other students. They will observe videos found on the internet. For example, students will observe the video shown on the ppt. Based on the description above, the author tried to conduct

research with the title "Improving Learning Ability Student With Use "Project Based Learning (PjBL) Method in Mathematics. Build a flat-sided space (prism) with Video Media for Class VIII SMPN 2 Pasir Limau Kapas Odd Semester 2021/2022 Academic Year "

### *Project Based Learning*

According to (S. Ida Kholida 2020), the Project Based Learning (PjBL) model is active learning that links technology with everyday life by carrying out project activities and producing work. In the PjBL model, students are involved independently in efforts to improve thinking power, critical thinking, things to do with problems found by students. According to (Handayani 2020), Project learning provides students with the opportunity to design tasks and retrieve information to be implemented in everyday life. Project learning helps students gain a variety of experiences, knowledge, skills and attitudes. Student motivation can be increased through project-based learning. On implementation PjBL, Teacher only role as facilitator. Although so Teacher must always monitoring development activity student And push them in order to achieve the targets to be achieved.

### *Excess Model Projects Based Learning (PjBL)*

The advantages of project based learning are reported from the book Project Based Learning (2022) by Sunismi and friends, namely

1. Motivate students by involving them in learning.
2. Providing learning opportunities in various disciplines
3. Helps connect with life outside of school
4. Provides unique opportunities as educators build relationships with students as facilitators
5. Provides opportunities to build relationships with a large community
6. Make students more active and successful in solving existing problems. Disadvantages of project based learning .

### *Lack Model Projects Based Learning (PjBL)*

The disadvantages of project based learning are reported in the book Project Based Learning (2022) by Sunismi and friends, namely:

1. It takes a lot of time to solve the problem
2. Requires quite a lot of money
3. Many educators feel comfortable with the traditional classroom, where the educator plays the main role in the classroom
4. A lot of equipment that must be purchased
5. Students who have weaknesses in experimenting and gathering information will experience difficulties
6. There is a possibility that some students are less active in group work, so it is feared that students will not be able to understand the topic as a whole.

### **Research Methodology**

Study Action Class This held in SMPN 2 Pasir Limau Kapas . Reason election location research is as follows: (1) Researcher is power teacher in school the. Matter the will make it easier researchers to collect data needed for research and will not interfere with the activities and effectiveness of teaching and learning activities of students, other teachers or the researcher's duties as a teacher (2) Researchers found problems faced by class VIII students in learning Mathematics and there was motivation for researchers to solve problems faced by students in learning using video media . Research Time This research was carried out in the Odd Semester year teachings 2021/2022 , that is during three month started date November 16 to with January 25, 2022. To find out if it works PTK or not this, it is necessary to formulate a action hypothesis. The formulation of the Action Hypothesis in this research is: "If in the learning process using image media , students will be motivated and active in learning activities so as to improve Mathematics learning outcomes with *flat-sided geometric shapes (prisms) material*. According to *Intermediate* (2007: 8), Action research is the application of fact discovery to problem solving in social situations with a view to improving the quality of actions performed in them, which involves collaboration And cooperation para researcher, practitioner, And person lay. Study action The class consists of four stages, namely planning, implementation (action), observation (observation), and reflection (*Madya*, 2007: 59). Subject study of 20 students, study held in class VII SMPN 2 Pasir Limau Kapas Mathematics subject

### *Engineering Collection Data*

1. Observation

(Observation) *Ridwan* (2010:76) explains that observation is direct observation of an object study For

see from near activity Which done. Method This used to collect data through observation to subject, that is pay attention especially interest And change Which experienced student before And after given material for flat sided space shapes (prisms) using the PjBL model and video media. The role of the researcher in this research is as an observer as well as a teacher who teaches.

- a) Prepare video media ( videos related to learning material) as a means in give rise to understanding in self student to material learning Which served.
- b) Arrange and prepare instrument question And non-test. Instrument test containing questions that will be done by student And Also assessment format Which will filled with mark student. The non-test instrument contains observation sheets and documentation.
- c) Planning agreement with observer Which will help in process documentation during classroom action research.

2. Method test test ability

Test is collector information. In study This method test used as tool For obtain data with test ability student before given action by using models PBL with media videos. Method test the Also used For testing the extent to which students experience changes in behavior and achievement before being given action.

### *Procedure Study*

Here the steps for each action cycle will be explained. Each cycle will go through the stages of planning, action, observation and action, data analysis and reflection.

#### *Steps cycle 1*

1. Observation

Observation is activity observe results or impact from study Which has been carried out in Mathematics learning flat-sided shapes (prisms) using video media. Observations are used to determine student activities in class during the learning process. This is done to collect data about learning outcomes Which has done. Observation which is conducted is see students' motivation in learning Mathematics ,see students' activeness in the current learning process discussion/collaboration, seeing students' courage in presenting the results of the discussion.

2. Reflection

At the end of the activity, a reflection was held, namely re-evaluating all the steps and cycles that have been carried out. At this stage, evaluation is not only the results of the presentation, but also the learning steps in accordance with the PjBL model. Reflection is an activity of reviewing, viewing and considering the results of actions that have been taken to determine follow-up actions Which will decided. If in cycle I student Still behave passive on activity learning, so need exists repair action on cycle II.

3. Data source

- a) Data source: The data source for this research is the results of observations of students and teachers, results analysis of the use of the PjBL learning model whose learning process is centered on student projects and learning outcomes using video media .
- b) Type of data: The type of data obtained is qualitative and quantitative data consisting of: (1) Qualitative data in the form of: observation results regarding students' preparation for lessons, their activity in teaching and learning activities, teacher readiness to use the PjBL model (2) Quantitative data in the form of: results analysis presentation student And results Study.
- c) Method taking data: (1) Implementation data KBM taken with use observation sheet (2) Learning outcome data comes from student presentations taken individually (3) Data on the relationship between planning and implementation are taken from the Module Teach and sheet observation.
- d) Indicator Success Which become indicator success from PTK This is if 85 percent student can reach or surpass Criteria Completeness Minimal (KKM) 70, Mathematics at SMPN 2 Pasir Limau Kapas

#### *Cycle II steps*

1. Observation

Based on formulation hypothesis Which has made, researcher prepare and establish a Learning Improvement Plan along with scenario action. Scenario action includes the steps that will be done by teacher and student in activity related improvements with learning improvement plan, the researcher also prepared various materials needed according to the chosen hypothesis: student worksheets (LKPD), learning aids. Then together with Friend colleague (observer) agreed focus observation and

criteria which will be used at the first and second learning meetings, then the researcher together with the observer simulated the teaching module and demonstration to avoid failure in the process of implementing learning improvements.

2. Action.

In summary, it can be explained that the teacher held a question and answer session with students about the learning material in cycle I, namely about analyzing and creating innovative work on flat-sided spatial shapes (prisms) by explaining the learning objectives and abilities needed. Students must have after learning is over. Ask and answer questions about students' experiences in working on the given LKPD. Ask students to state the definition of a flat-sided shape (prism) based on media videos. Wrong One representative in every group read out the results it works in front class. Teacher respond results discussion each group, ask answer things that students don't know, and ask and answer together with students to straighten out errors in understanding, provide reinforcement and conclusions. At the end of the activity the students and teacher carry out reflection on the learning activities that have been done passed with carry out formative test, followed by the teacher providing reinforcement for student assignments, and providing comments on student work results.

3. Observation

Observation held by researcher And observer (Friend colleague) on moment carry out teaching and learning activities using prepared observation sheets. The observation results show that the implementation of learning has run optimally, however there are still some students who have not been active in group discussion activities, and students have capable analyze and create innovation work This caused student perception has begun good mem. The explanation regarding the aspect of learning activities observed is the student's response to statements, feelings of desire know, and activity in implementation activity discussion experience enhancement. Activity this observation is carried out by the observer during the learning activity using a prepared observation format. Observation results on the implementation of learning improvements in cycle I as Result Observation of Student Activities on Cycle II is: Students got scores got score 60; (3 students), got score 75 ; ( 5 student ) get score 80 ; ( 7 students ) got a score of 85 (5 students) . It was found that the average score was 77 . By score the lowest score is 60 and the highest score is 85. Percentage completeness is 85 % (17 students ) Complete And 15% ( 3 students) No Complete. From data in on can be concluded that from 20 student there is 17 person or 85 % Which complete learning outcomes . See results in on, so researcher together with The observer concluded that the results of observations regarding the increase in learning activities had reached a figure above 8.5 % , so that the learning improvement process was declared successful and complete in cycle II .

4. Reflection

Based on observation from two meeting Which held as well as implementation results formative tests cycle II, it turns out already reach criteria completeness Which has set. After researchers And Friend colleague discussing.

## Results and Discussion

On cycle I This in stage implementation Not yet show exists enhancement learning outcomes student. Matter the can seen on on Results Study Student on Cycle I following: 9 students get score 50; 5 student get score 60; 6 student get score 75 The average score was 60. The lowest score was 50 and the highest score was 75. Meanwhile, the percentage of completeness is pre is 45% (9 student Completed ) and 55 % (11 students did not complete). From the results as stated above, it can be concluded that results mark test formative experience A little one upgrade from condition beginning, However not yet fulfilled criteria success Which set, that is The number of students who have completed is not yet sufficient criteria minimum that is 85 % . On cycle 1 This writer assume that student Not yet accustomed to the PjBL learning model where the main focus of learning is centered on student projects . Habit student in accept direct material from explanation teachers make them unfamiliar with this new PjBL learning model where students are required to be active in it search for information and create projects related to material independently. Explanation about aspect activity Study Which observed is response student to the statement, flavor want to know, And activity in implementation activity discussion. Activity observation This done by observer during activity learning taking place with use format observation Which has prepared. Results observation on implementation of learning on cycles I as follows: 10 % (2 students) enter Very Good criteria; 35 % (7 students) enter criteria Good; 30 % (6 student) enter criteria Enough; And 25 % (5 student) enter criteria Not enough. So the criteria for students who complete is 45% (9 students), students who do not complete 55% (11 students). See the

results above so researcher together with observer agreed to carry out learning improvements in cycle II with expectations in cycle II activity Study students can reach in on 85 % in accordance with the criteria success Which has been established. Observation results on the implementation of learning improvements in cycle as per the results Observation of Student Activities on Cycle II is: Students got scores got score 60; (3 students), got score 75 ; ( 5 student ) get score 80 ; ( 7 students ) got a score of 85 (5 students) . It was found that the average score was 77 . By score the lowest score is 60 and the highest score is 85. Percentage completeness is 85 % (17 students ) Complete And 15% (3 students) No Complete. From data in on can be concluded that from 20 student there is 17 person or 85 % Which complete learning outcomes. See results in on, so researcher together with The observer concluded that the results of observations regarding the increase in learning activities had reached a figure above 8.5 %, so that the learning improvement process was declared successful and complete in cycle II. Based on observation from two meeting Which held as well as implementation results formative tests cycle II, it turns out already reach criteria completeness Which has set. After researchers And Friend colleague discussing.

**Table 1. Evaluation Formative Participant educate**

No	Name Student	Mark	T completed /T not completed
1	Ade Syahputra	60	Not Completed
2	Alfan Herfinza	75	Completed
3	Bagus Amansyah	75	Completed
4	Celsi Olivia	80	Completed
5	Cika Yusliani Putri	75	Completed
6	Fazar	80	Completed
7	Juliani Saputri	80	Completed
8	Juniarti Br Tamba	60	Not Completed
9	Kasih Hani	75	Completed
10	Meili Cantika	80	Completed
11	Muhammad Aidil Prayoga	80	Completed
12	Nabila Kasih	60	Not Completed
13	Nazwa	85	Completed
14	Neza Mahita Karin	75	Completed
15	Nurbaiti	80	Completed
16	Riki Sandika	85	Completed
17	Riska Aprilina	85	Completed
18	Sri Wulandari	80	Completed
19	Tika Faisah	85	Completed
20	Titin Tri Wijaya	85	Completed

## Conclusion

Planning learning Indonesian material human life needs using media videos are organized by problems found in the field, some of these plans are: (1) Drafting plan activity Which will held in KBM (2) Determination model learning Which demand student active in every process learning (3) Determination video media (4) Determination form evaluation Which consists from evaluation process And results. The action planning that researchers have prepared turns out to be effective in increasing students' activities and learning outcomes in Mathematics learning about flat-sided shapes (Prisma) (5) learning outcomes material for flat-sided shapes (prisms) with application use media videos happen on cycle One until cycle these two can improve learning outcomes and activities student, courage submit question, learning Which more effective, And develop activity and results student learning. The above can be proven by an increase in the average value of student learning outcomes, that is on on cycle I become 45% , on cycle II become 85%. From these results it can be concluded that the value results Study Already meet the standards criteria completeness minimum (KKM) with standard values 70. Enhancement learning completeness increased from 9 student or 45 % on cycle I, on cycle II become 17 students or 85%.

## References

- Arikunto, Suharsimi. 2007. *The Basics Evaluation Education*. Jakarta: PT Earth Script.
- Arsyad, Azhar. 2009. *Media Learning*. Jakarta: Rajawali Pers.
- Asra, Sumiati. 2007. *Method Learning*. Bandung: CV. Discourse Prime. Ministry of National Education. 2004  
Approach Contextual. Jakarta: Ministry of National Education.
- Baker, Joanna dan Westrup, Heather (2003). *The English language Teacher's Handbook*. London: Continuum.
- Djamarah, Saiful Bahri. 2010. *Strategy Study Teach*. Jakarta: Rineka Create.
- Hidayat Samuel. 2020. *Journal Reflection education: Use Media Picture InLearning*. Bondowoso: Media Press
- Madya, Suwarsih. 2007. *Theory and Practice of Educational Research (ActionResearch)*. Bandung: Alphabeta
- Munandar. 2010. *Easy steps for PTK as development Teaching Profession*. Jakarta: RajawaliPers.
- Reinhart and Winston. Kemmis and Taggart. 1988. *The Action Research Planers*. Victoria Dearcin University Press.
- Riduwan., 2010, *Scale Measurement Variables Study*, Bandung: Alphabetical
- Sardiman, Arief S, Rahardjo, Anung Haryaono, and Rahardjito. 2009. *Educational Media: Understanding, Development and Utilization*. Jakarta: Rajawali Press.
- Uno, B. Hamza. 2008. *Model Learner aran, Create Process Study Teach Creative and Effective*. Jakarta: Bumi Aksar