

INCREASING THE RESULTS OF LEARNING DISTRIBUTION TWO NUMBERS WITH CLASS II SD

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ABSTRACT

This research is motivated by the fact that in the field there are many learning to divide two-digit numbers with teaching aids, especially by means of repetitive reduction which is converse. Learning is still teacher-centered, so learning becomes boring and consequently student learning outcomes are not yet established with KKM, which is 65. One solution to overcome this problem is by using a props approach. Thus the purpose of this study was to describe the form of planning, implementation in improving the learning outcomes of class II SD Negeri 20 Dadok Tunggul black, Koto Tangah Subdistrict, Padang on the material distribution of two-digit numbers resulting from repeated reduction using props. This research was conducted at SD Negeri 20 Dadok Tunggul Hitam, Koto Tangah District, Padang, with 30 students. This type of research is PTK using qualitative and quantitative. The research plan includes planning, implementation, observation, and reflection. This research was carried out two cycles with the material sharing two numbers by means of props.

Keywords: Increased Learning Outcomes Sharing Numbers, Two Numbers With, Teaching Aids in Elementary Class

INTRODUCTION

The concept of division must be taught to elementary school students as a basis for continuing learning at a higher level and helping students learn other subjects. Akbar surawidjaja, et al (1991/1992: 142) " Division can be defined as a recurring subscription, for example, the quotient of 8 and 4 is 2 which is a lot of times we subtract 4 from 8 so the result is zero ($8 - 4 - 4 = 0$). In learning mathematics, especially in the low class there are many things or factors that influence student learning success and things that often hinder the achievement of learning goals. Because basically every child

is not the same way of learning, so also in understanding abstract concepts. One of the learning methods that are expected to be able to provide problem solving assistance in an effort to improve student learning achievement is by applying a learning system that uses teaching aids especially in the field of mathematics studies.

According to Wijaya and Rusyan (1994) media acts as a stimulus for learning and can foster motivation to learn so students do not become bored in achieving learning goals. According to Wijaya and Rusyan (1994) media act as a stimulus to motivate learning and learning so that students do not become bored in achieving learning goals. The application of learning methods using teaching aids, especially in the field of mathematical studies, is based on the fact that in the field of mathematical studies there are many subjects that need tools to describe them, including material in the distribution of two-digit numbers.

Therefore, learning using teaching aids in the subject matter is considered very appropriate to help facilitate students to understand the material. On the other hand the atmosphere of learning will be more alive, and communication between teachers and students can be well established. It is suspected that it can also help students in an effort to improve their learning achievement in the field of mathematics studies.

Based on the researcher teaching in class II SD 20 Dadok Tunggul Hitam Kec. Koto Tangah in the second semester of the 2010/2011 school year, student learning outcomes were unsatisfactory. It is known that the average daily test score of students is 6.5 while the KKM for mathematics subjects is 7.0. In addition, student motivation in learning is low, this is because class II students are still in the stage of playing and learning mathematics must use concrete objects.

METHOD

The study was conducted in class II SDN 20 Dadok Tunggul Hitam Kec. Koto Tangah Padang. The reason researchers conducted the study at SDN 20 Dadok Tunggul Hitam was the consideration that this school was the place where researchers were on duty. So researchers are easy to do research and the school is also far from the highway so researchers are not disturbed by noise from motor vehicles. This research was conducted on class II students and teachers SDN 20 Dadok Tunggul Hitam Kec. Koto

Tengah with one researcher and one observer. This type of research is classroom action research. Classroom action research is research conducted by teachers in its class by designing, implementing, and reflecting actions in a collaborative and participatory manner with the aim of improving their performance as teachers so that student learning outcomes can be increased (Rustam, 2004). According to Raoport *in* Rochiati, (2008) interpreting classroom action research to help someone in overcoming practical problems faced in an emergency situation and helping the delivery of social science goals with cooperation in a mutually agreed ethical framework.

RESULTS AND DISCUSSION

The plan for implementing deep learning is a plan that describes the procedures and organization of learning to achieve a basic competency specified in the content standard and described in the syllabus. In summary, RPP is an operational plan for learning activities for each or several KDs in each face-to-face class. The broadest scope of RPP covers 1 (one) basic competency consisting of 1 (one) indicator consisting of Cognitive, Affective, Psychomotor or several indicators for one or more meetings. The planned implementation of learning is an illustration of the activities to be carried out. Through the implementation plan designed to know what activities will be carried out by students. In addition, with the implementation of learning plans, the learning that will be carried out is structured systematically so that learning becomes effective and efficient.

According to Supriyadi *in* Henda (2008) before carrying out the action, as the teacher the writer is required to make a plan because what will be faced in the implementation of the action is a human who is ready to grow and develop reasoning, attitudes, and behavior. Planning is absolutely necessary so that teacher offerings do not deviate from the objectives outlined.

The planning prepared by the teacher in the study consisted of several components, namely, (1) standard content, (2) basic components, (3) indicators, (4) subject matter, (5) learning steps, (6) sources, media, methods, models, tools, and (7) evaluation. Competency standards and basic competencies are taken from the class II

mathematics education unit curriculum. The basic competency taken is 3.2 by dividing two numbers.

Based on the planning that was prepared, implementing learning was carried out in accordance with what had been planned, which in the first cycle of learning was conducted twice. The initial activity raises the student's schematics through singing, then the teacher conveys the learning objectives so that students know the direction of learning that will be done. By knowing the direction of students will follow learning with better motivation and direction. At the core activity the teacher explains the material about learning a two digit number division operation. After that the teacher demonstrates the method of distribution by using props in front of the class that division is a repetitive reduction.

When the teacher explains the operation of dividing the two numbers in front of the class using props such as marbles, not all students listen /pay attention to the teacher, some students play, and talk to their friends. During the learning process students have not yet been active, this can be seen when working on LKS sheets found only a few people working on LKS. The next activity is students are asked to streamline their work in front of the class. But only a few students want to agree to work in front of the class. After students agree on their work in front of the class the teacher asks the other students to give a response, but none of the students responds.

After that the students match the results of their work with the LKS answer sheet and complete it if there are still mistakes and students are directed to conclude the subject matter. In the final activity followed by evaluation / assessment activities and follow-up such as giving assignments at home. In the clarity of the learning process the steps of learning have used teaching aids. But there is one thing that has not been fulfilled, that is, in learning the teacher has not used the media / teaching aids in students, only the teacher practices in front of the class so that the students do not listen to the teacher explaining in front of their class just talking to their friends behind.

The implementation of learning operations in the distribution of two-digit numbers using props in the first cycle has been going quite well. The implementation of learning has used teaching aids but, it is still not maximal where students should also have teaching aids not only teachers who have teaching aids so that students can also

work in their respective seats using props. Based on the results of observations obtained from the first cycle, it is planned for cycle II. In order for the implementation of learning in accordance with the achievement to be addressed.

From the results of the first cycle of research, the average grade of student learning outcomes reached 59% of learning completeness only reached 59%, of which 30 students were only 23 students who completed while 7 students were not yet complete learning. Then the percentage of affective results of students in the first meeting of cycle I reached 65% and psychomotor reached 65.9% while in the second meeting the first cycle the percentage of affective results reached 66% and psychomotor reached 73.9%.

Based on the results of observations of the first cycle obtained, it is planned to carry out the second cycle. Researchers must improve learning and drilling the right time with pay attention to the differences that exist in each student because each individual has different potential.

The implementation of the two-digit number pembagin operation learning using props, the KD selected and determined is 3.2. do a two digit number division. From the results of the assessment of RPP by the observer, the RPP that was made was good. RPP has used props. Learning objectives that researchers formulate are complete and clear. The formulation of learning goals has a logical succession from easy results to difficult things. In the selection of teaching material, RPP that researchers make is in accordance with the learning objectives, student characteristics, available environment and materials that the researcher will teach. In organizing teaching materials, teaching materials have been systematic, wide-ranging, and are in accordance with the time allocation. The media used is in accordance with the learning process. In organizing teaching materials, teaching materials have been systematic, wide-ranging, and are in accordance with the time allocation. In the clarity of the learning process the learning steps are in accordance with the use of teaching aids.

The implementation of learning operations in the distribution of two-digit numbers using props in cycle II is good. In this initial stage of activities which have been carried out pray, check the attendance of students, motivate students to learn, question and answer about the material preconditions, convey the purpose of learning so

students see and understand what is at the core of the learning done. In core activities, learning is adjusted to the steps of using teaching aids. The steps in the core activities include Exploration, Elaboration, and Confirmation. These steps are described as follows: First phase of exploration. In this exploration step the teacher involves students seeking information, using learning approaches, using media, and learning resources, facilitating students to interact, actively involve students, and facilitate students everywhere.

The teacher gives a problem related to the operation of dividing one number by one number. For example, Andi has 12 marbles. He will give the marbles to 3 of his friends Rudi, Randi and Roni. How many of each of his friends are Rudi, Randi and Roni gets marbles? To solve this problem, first state the mathematical sentence, namely; $12: 3 = x$. After that the teacher can use teaching aids in the form of 12 marbles and 3 boxes in the name of Rudi, Randi and Roni. Each marble is inserted into the box so that each box gets 4 marbles. The second stage of Elaboration. This elaboration stage is more focused on student activities where students look for their own ideas, read on their own, familiarize students with healthy competence, facilitate students in all activities. In this activity the students demonstrate the operation of dividing one-digit numbers by one number using props. The teacher guides students to look for a problem related to the operation of dividing one number numbers by one number. Students express their ideas related to the division of one number with one number. Students make mathematical sentences from the problems presented. Students use models / props to solve the problem of division operations.

Third step Confirmation. This confirmation phase gives the teacher positive feedback, gives confirmation of a problem, overcomes the difficulties of students who have difficulty answering questions, provides opportunities for students to ask questions about unknown material, helps in solving problems, and provides motivation.

The final activity of students and teachers together concludes the learning conclusions, and follows up such as giving evaluation assignments.. Learning Outcomes Division of Two Numbers by Using Props From the results of the second cycle research, the average grade of student learning outcomes was obtained: 84% cognitive learning reached 84% where 28 students completed while 2 students were less complete.

Then the percentage of affective results of students in the second cycle reached 71% and psychomotor results reached 90%. Thus it can be concluded that the use of teaching aids can improve the learning of the two digit number distribution operations in class II SDN 20 Dadok Tunggul Hitam Kec. Koto Tangah.

CONCLUSION

Based on the results of research and discussion, the researcher can conclude as follows: Learning planning is based on the education unit level curriculum (KTSP) and is contained in a set of lesson plans. RPP contains 1) Identity, 2) Competency Standards, 3) Basic Competencies, 4) Indicators, 5) Learning objectives, 6) Learning Methods, 7) Learning Materials, 8) Learning Steps, 9) Approaches, Resources, Tools and media, and 10) Assessment. The standard of competence used is 3. Multiplying and dividing numbers to two numbers. The basic competencies used are 3.1 Perform division of two numbers. 2. The implementation of learning using teaching aids is carried out in two cycles. The first cycle was held in 2 meetings and the second cycle was held in 1 meeting. Learning by using teaching aids that develop three cognitive, affective, and psychomotor domains. 3. Improvement can be seen in the first cycle of meeting I an average of 60% Improvement of learning outcomes cycle I to cycle II is from the class average obtained from the cognitive, affective, and psychomotor domains, from 72.6% to 84.3%. This shows that the learning outcomes of cycle I to cycle II have increased.

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