

PRACTICE PREPARATION FOR TEACHING MATHEMATICS SUBJECTS IN CLASS IV AT SDN 09 SUNGAI KELAMBU

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ABSTRACK

This study aims to determine what preparations are made by the teacher in the implementation of mathematics learning. The method used in this research is qualitative with descriptive analysis. Research subjects are informants who provide research data through interviews. The informants in this study were grade IV teachers of Sungai Kelambu State Elementary School 09. While the data analysis used in this study were data reduction, data presentation and verification. This research resulted in the findings of preparations made by the teacher in the implementation of mathematics learning, among others, which must be prepared are the learning objectives, learning materials, learning methods, learning media, evaluation of learning, students, teachers and the place of learning environment. The obstacles in the preparation are students who often talk to themselves and disturb other friends, then a weak internet connection that causes the process of finding learning resources to be difficult.

Keywords: Mathematics Learning Implementation, Teacher Preparation

Intriduction

Teachers are one of the determining factors for the success of educational goals, because teachers are in direct contact with students, to provide guidance that will produce the expected graduates. Teachers are human resources who are planners, actors and determinants of achieving educational goals. Teacher activities require a conducive school climate and good relationships between elements in the school, including the principal, teachers, administrative staff and students. As well as good relations between elements in the school and parents or the community.

The basic concept of preparation in carrying out the learning process is a good concept, but implementation in the preparation process takes quite a long time. Teacher preparation in teaching has seven factors according to Dewi and Sumardi (2017:359), namely: preparation for the situation, preparation for students, preparation for learning objectives, preparation for

the lesson to be taught, preparation for teaching methods, preparation for using learning media, and preparation in this type of evaluation technique. In this research, the teacher preparation factors that will be analyzed are preparation for the lessons to be taught, namely preparation for implementing mathematics learning.

Learning mathematics is one of the most important subjects in elementary school. This is because mathematics is a subject that will always be used in everyday life and other sciences. According to Susanto (2013: 186) mathematics learning is a teaching and learning process built by teachers to develop students' creative thinking which can improve their ability to construct new knowledge as an effort to improve good mastery of mathematical material. Students in elementary school are still in the concrete operational stage, where students learn with real things or objects around them. Subject matter in mathematics must also be related to the daily lives experienced by students.

One of the characteristics of mathematics is that it has abstract objects. This abstract nature causes many students to experience difficulties in learning mathematics. According to Abdurahman in Istofa and Marni (2018: 105), mathematics learning is learning that is able to develop students' potential because mathematics is a symbolic language whose function is to express quantitative and spatial relationships, while its theoretical function is to make thinking easier. To make thinking easier, the teacher can provide understanding.

Teaching preparation is a part of the teaching program that contains discussion units to be presented in several face-to-face meetings. Usman (1995: 59) stated that teaching preparation can be used as a basis for preparing learning plans and also as a reference for teachers in carrying out learning activities so that they are more focused and run efficiently and effectively. Poerwadaminta (Larlen, 2013:83) preparation is the act (of things, etc.) of getting ready or preparing a plan (action) for something.

Researchers conducted joint interviews with class IV teachers at SD Negeri 09 Sungai Kelambu. At that time the fourth grade teacher at SD Negeri 09 Sungai Kelambu was picketing at the school with two other teachers. So apart from the interview data obtained from the fourth grade teacher, there was also data obtained from two other teachers. Based on interviews conducted by researchers at SD Negeri 09 Sungai Kelambu, it is known that the preparations carried out by class IV teachers at SD Negeri 09 Sungai Kelambu can make the implementation of learning effective. With this, teachers are crowned as teachers who are disciplined in providing learning to students. Apart from that, the teacher also received good views from other teachers because the preparations for carrying out mathematics learning were prepared very carefully, starting from creating learning objectives, teaching materials, learning media and other learning tools. However, this

does not always run smoothly. Teachers often encounter obstacles that can hinder preparation for implementing learning. One of the obstacles that is often encountered is the lack of references in making learning plans.

Research Method

This research is a qualitative descriptive study. The research method is a method that places greater emphasis on the aspect of understanding in depth a problem rather than looking at a problem. Qualitative research methods are called new methods, because they have not been popular for a long time. Sugiyono (2017:7-9) states that this method is also called an artistic method, because the research process is more artistic (less patterned), and is called an interpretive method because research data is more concerned with the interpretation of data found in the field. Qualitative methods are used to obtain in-depth data, data that contains meaning.

Qualitative research which is the research instrument or tool is the researcher himself. Researchers as instruments must also be "validated" to what extent qualitative researchers are ready to carry out research and then go into the field. In qualitative research, everything that will be sought from the research object is not yet clear and the problem, the source of the data, and the expected results are all unclear. Thus, in this qualitative research research instruments cannot be developed before the problem being studied is completely clear. Sugiyono (2017: 222-22) states that the main instrument for qualitative research is the researcher himself, but after the focus of the research becomes clear, it is possible that a simple research instrument will be developed, which is expected to be able to complete the data and compare it with the data that has been presented through interviews.

The data sources obtained in research at the 09 Sungai Kelambu State Elementary School were through observation, interviews and documentation. Sugiyono (2017: 227) states that in passive participatory observation the researcher comes to the location of the activity of the person being observed, but the researcher is not involved in the activity. This observation was carried out to obtain data regarding teacher preparation in implementing mathematics learning in class IV of SD Negeri 09 Sungai Kelambu. Data obtained from observation sheets taken from a sample of class IV teachers. Sugiyono (2017:233) states that this semistructured interview is more free in its implementation, where the party being interviewed is asked for their opinions and ideas. In conducting this interview the researcher must listen carefully and note down what needs to be noted. This interview requires an

interviewee. The participants interviewed in this research were class IV teachers at SD Negeri 09 Sungai Kelambu.

Result and Discussion

The learning process, of course, cannot be separated from learning preparation. Learning preparation is very important to do, because without preparation the teacher's teaching will be directionless. With this learning preparation, teachers will be directed in teaching according to existing plans. According to Usman (1995: 59) teaching preparation can be used as a basis for preparing learning plans and also as a reference for teachers in carrying out learning activities so that they are more focused and run efficiently and effectively. Below we will explain the teacher preparation carried out in implementing mathematics learning. The preparations made by the fourth grade teacher at SD Negeri 09 Sungai Kelambu include:

Learning objectives

Learning objectives are basically expectations, namely what is expected from students as learning outcomes. Learning objectives are basically expectations, namely what is expected from students as learning outcomes. The Ministry of Education and Culture (Fuadi, et al, 2016:47) revealed that the objectives of mathematics learning emphasize modern pedagogical dimensions in learning, namely using a scientific (scientific) approach. In learning mathematics, the activities carried out to make learning meaningful are observing, trying, asking, reasoning, presenting and creating.

In creating learning objectives, the class teacher first adjusts it to the material to be taught. The class teacher creates learning objectives along with a learning implementation plan. The class teacher makes learning objectives in accordance with the ABCD formula. A means student, B means behavior that can be observed as a result of learning, C means requirements that need to be understood so that the expected behavior can be achieved, and D means an acceptable level of performance. The results of the interview above are in accordance with Uno's opinion (Yanti, 2018:5-6) regarding the technicalities of preparing learning objectives in ABCD format. A = Audience (students, students, pupils, and other target students, are actors who are the target group of learning, namely students. B = Behavior, (behavior that can be observed as a result of learning) is a specific behavior that students are expected to carry out after completion of the learning process. C = Condition, (requirements that need to be met so that the expected behavior can be achieved) is a condition that is used as a condition or tool used when students

are tested on their learning performance. D = Degree, (acceptable level of performance) is The degree or level of success that students must achieve in demonstrating learning outcomes behavior can be seen in the documentation attached to the lesson plan. In the learning implementation plan there are learning objectives that will be used as a reference and benchmark for whether students in the learning process have achieved the learning objectives. or not. So that learning becomes focused because it has been planned beforehand.

Learning materials

Learning material is basically the content of the curriculum, namely in the form of subjects or fields of study with topics/sub-topics and details. Djamarah (Pane, 2017: 343) revealed that learning material is the substance that will be conveyed in the teaching and learning process. Without learning materials the teaching and learning process will not run. Therefore, teachers who will teach must have and master the subject matter that will be delivered to students.

Preparing the material to be taught, the teacher collects the material first before teaching. The teacher collects material from sources other than existing books as well as from Google. This is because there is only one source book/package book in the school, so teachers look for other materials so that the resources they get are not only from one source, but from other sources as well. The results of the interview are in accordance with the opinion of Dick and Carey (Zulkifli, 2017: 124) regarding the steps for collecting learning materials which include: a) selecting and collecting existing and relevant learning materials for use, b) Arranging materials according to the sequence of learning activities, c) Identifying materials obtained and not obtained from books, d) Developing a teaching program. However, class teachers do not look for relevant sources, but look for and collect those that match the required material.

Learning methods

A learning method is a way of carrying out or presenting, explaining and giving practice to students about lesson content to achieve certain goals. Depdikbud (Maesaroh, 2013: 155) method is a tool in the implementation of education, namely what is used in delivering the material. Even easy subject matter is sometimes difficult to develop and difficult for students to accept, because the methods or methods used are not appropriate. However, on the contrary, a difficult lesson will be easily accepted by students, because the delivery and methods used are easy to understand, precise and interesting.

Choosing a teacher's learning method adapts to the learning objectives and material to be achieved. The aim of using this learning method is for students to have a high absorption capacity, so that students are more enthusiastic in participating in the ongoing learning process. The results of the interview are in accordance with Ibid's opinion (Ulfa and Saifuddin, 2018:41) in choosing a learning method you must pay attention to the goals to be achieved in learning, students' abilities and background, teacher's abilities and background, available tools or facilities.

Instructional Media

Learning media is something interesting in learning. Gagne (Mahnun, 2012: 28) learning media are various types of components in a student's environment that can stimulate them to learn. In this case, it is the process of stimulating students' thoughts, feelings, attention, interests and attention so that the learning process can be established. Based on this statement, it can be concluded that learning media are tools used by teachers as teaching aids.

The use of learning media is very important. By using this learning media the learning process will become more interesting. Learning media enables students to think concretely compared to without learning media. Learning mathematics using learning media will make students understand what the teacher is saying. The results of the interview are in accordance with the opinion. Kemp and Dayton (Purwono, et al, 2014: 129) state the benefits of using media in learning, namely that the learning process becomes clearer and more interesting, the learning process becomes more interactive and improves the quality of student learning outcomes.

Learning Evaluation

Evaluation is one component in the learning system. Slameto (Riadi, 2017:3) said that learning evaluation is an activity to collect data as widely as possible, in depth, relating to student capabilities, in order to determine cause and effect and student learning outcomes that can encourage and develop learning abilities.

At the end of every meeting the teacher always conducts an evaluation. This evaluation aims to measure the extent to which students are able to understand the mathematics material presented by the teacher. The results of the interview are in accordance with the opinion of Sumiati and Asra (2009: 200) that the results of tests administered by teachers are useful for students, namely knowing whether students have mastered the learning

material presented by the teacher. The evaluation questions used by teachers are questions that were developed so that in their application the teacher refers to existing rules. So the creation of these evaluation questions is a collaboration between the development of the LKPD and references to existing regulations from the government so that the questions can be given during the evaluation at the end of the lesson.

Learning Environment

The environment is all the situations that exist around us. Munib (Pantiwati, 2015:1) defines the environment as the spatial unity of objects, forces, conditions and living creatures, including humans, and their behavior which influences the continuity of life and welfare of humans and other living creatures. The environment consists of the external environment and the internal environment. The external environment is defined as a combination of geographic and socio-economic factors that influence the school's relationship with its community.

The study room is the responsibility of the teacher and the students in the classroom. To create a clean learning environment, there needs to be cooperation between teachers and students. Teachers provide good examples, so that it can be ensured that by providing these examples students can follow their teachers. So that in the end teachers and students can work together to create a comfortable learning environment. So a comfortable environment is created by the occupants of the room, not by other people.

In doing anything, there are always obstacles to be faced, whether they are small obstacles or large obstacles. The ongoing learning process is always intertwined with existing obstacles. These obstacles can be big obstacles and they can be small obstacles. However, teachers must always be ready to face these obstacles. The obstacles faced in implementing mathematics learning are lack of references, making it difficult for teachers to prepare learning materials/learning resources and students talking to themselves and disturbing other friends.

Every obstacle will definitely have a solution. The solution to overcome the obstacles encountered in preparing for the implementation of learning is to deal with students who disrupt the learning process, you need to be patient. Because students should not be given harsh warnings. Teachers must be able to give warnings to students subtly, so that students are not afraid of threats given by the teacher and will instead listen to what the teacher warns. This means that when dealing with students, teachers need to have infinite

patience, so that when a student makes a mistake, the teacher does not immediately scold the student, but the teacher will speak kindly to the student who committed the violation. So students will listen more carefully to the teacher's conversation compared to talking but by scolding, students will automatically be afraid and will not listen. Apart from that, to overcome the lack of references, namely by searching the internet and old books in preparing for learning, teachers anticipate this by preparing everything related to preparing for mathematics learning at home where there is a strong internet network. So that when it comes to teaching, the teacher is ready and doesn't need to search for material to be taught on the internet. Therefore, everything that is needed in preparation for implementing mathematics learning is carefully prepared by the teacher at home.

Conclusion

The preparations made by teachers in implementing mathematics learning include, firstly, namely the learning objectives. Learning objectives are a very important component, so that ongoing learning can be directed. The second is learning material. Learning material does not only come from books, but there are many sources that can be accessed, such as from Google. The third is the learning method. The learning methods used must be adapted to the mathematics material being taught. The fourth is learning media. Learning media is synonymous with interesting things in learning so it really needs to be used. The fifth is learning evaluation. Learning evaluation is very important to measure students' abilities after being given learning. The last one is the learning environment. The learning environment must be comfortable, because if the learning environment is comfortable, students will also enjoy learning. The obstacles encountered by teachers in preparing to implement mathematics learning are (1) there are students who always talk to themselves when the teacher explains the material, (2) there are students who disturb other friends who are paying attention to the teacher's explanation.

References

Dewi, N. P., & Sumardi, S. (2017). Kontribusi Persiapan Guru Mengajar Terhadap Hasil Belajar Matematika Siswa SMP. Konferensi Nasional Penelitian Matematika dan Pembelajarannya II (KNPMP II), 18 Maret 2017, Universitas Muhammadiyah Surakarta.

- Fuadi, R, dkk. (2016). Peningkatan Kemampuan Pemahaman dan Penalaran Matematis melalui Pendekatan Kontekstual. *Jurnal Didaktika Matematika*.Vol. 3. No. 1:47-54.
- Istofa, D.N & Marni Z. (2018). Perencanaan Guru Madrasah Aliyah Jambi dalam Pembelajaran Matematika pada Kurikulum Tingkat Satuan Pendidikan. *Jurnal Ilmiah Pendidikan Matematika*. Vol. 1. No. 2: 1-7.
- Larlen. (2013). Persiapan Guru Bagi Proses Belajar Mengajar. *Pena*. Vol. 3. No. 1: 81-91.
- Maesaroh, Siti. (2013). Peranan Metode Pembelajaran Terhadap Minat dan Prestasi Belajar Pendidikan Agama Islam. *Jurnal Kependidikan*. Vol. 1. No. 1:150-168.
- Mahnun, Nunu. (2012). Kajian terhadap Langkah-langkah Pemilihan Media dan Implementasinya dalam Pembelajaran. *Jurnal Pemikiran Islam*. Vol. 37. No. 01 :27-33.
- Pane, Aprida. dkk. (2017). Belajar dan Pembelajaran. *Jurnal Kajian Ilmu-Ilmu Keislaman*. Vol. 3. No. 2: 333-352.
- Purwono, Joni. dkk. (2014). Penggunaan Media Audio-Visual pada Mata Pelajaran Ilmu Pengetahuan Alam di Sekolah Menengah Pertama Negeri 1 Pacitan. *Jurnal Teknologi Pendidikan dan Pembelajaran*. Vol. 2. No. 2:127-144.
- Riadi, Akhmad. (2017). Problematika Sistem Evaluasi Pembelajaran. *Jurnal Kopertais Wilayah XI Kalimantan*. Vol. 15. No. 27: 1-12.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Sumiati & Asra. (2009). *Metode Pembelajaran*. Bandung: CV Wacana Prima.
- Ulfa, Maria dan Saifuddin. (2018). Terampil Memilih dan Menggunakan Metode Pembelajaran. *SUHUF*. Vol. 30. No. 1:35-56.
- Usman, Moh Uzer. (1995). *Menjadi Guru Profesional*. Bandung : PT Remadja Rosdakarya.
- Yanti, Amanda Yuli. (2018). Kemampuan Guru dalam Merumuskan Tujuan Pembelajaran PPKN di Sekolah Menengah Kejuruan Negeri 1 Sukoharjo. *Prosiding Seminar Nasional, 7 Juli 2018, Laboratorium PPKn FKIP UNS*.
- Zulkifli. (2017). Profesionalisme Guru dalam Mengembangkan Materi Ajar Bahasa Arab di MIN 1 Palembang. *Jurnal Ilmiah PGMI*. Vol. 3. No. 2: 120-133.