

## Modification of Demonstrative Methods: Increased Understanding of the Value of Place in Children with Special Needs

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### ABSTRACT

Improving Students' Understanding of the Value of Places Through Demonstration Methods in Students of Class IV-C Sekolah Luar Biasa Negeri Doloksanggul School Year 2022/2023. The purpose of this study is to describe the improvement of students' understanding of the material of place values through the Demonstration method so as to improve student learning outcomes in Sekolah Luar Biasa Negeri Doloksanggul, Humbang Hasundutan Regency. This class Action Research was conducted in Sekolah Luar Biasa Negeri Doloksanggul Humbang Hasundutan Regency. The type of action in this study is in the form of concrete actions, namely guiding students in the implementation of learning activities through the Demonstration method. The research was conducted in semester I, precisely in September-November 2022. This classaction research sub j e k is students in Sekolah Luar Biasa Negeri Doloksanggul Humbang Hasundutan Regency with a total of 4 students. The results showed that students' understanding of the venue value material increased after applying the Demonstration method thereby improving student learning outcomes. The average student learning outcomes increased after applying the Demonstration method to the Place Value material, where the average student learning outcomes in the first cycle of 45.00 increased to 80.00 in cycle II.

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## 1. INTRODUCTION

One of the competencies that a teacher must and must have is professional competence. The demands of the world of education today are for teachers to improve their professional competence in carrying out their duties as teachers (Ariawan, 2022). Teachers should evaluate their performance by looking at the out put and even the out come whether it is as expected or not. The understanding of learners in each teaching material must be thoroughly considered and analyzed and evaluated. With their

professional competence, teachers must be able to teach and make their students fully understand every teaching material taught, but in fact it is not as desired or expected, because it is proven by the impact in the field, among others (Lestari, 2022):

1. Learners' interest and skills are still very low, especially about understanding the Value of Place.
2. Students' understanding and achievement in mathematics subjects is lower than in other subjects
3. The learning atmosphere is less pleasant, monotonous, and boring
4. The student's learning motivation is very low.

The above problems are caused by the dominance of teachers is still high, the role of teachers in the teaching and learning process as disseminators of knowledge does not play a role as a facilitator, teachers still rely a lot on books, teachers are still dominant in using lectures and taking notes, teachers do not optimize working together and students are considered to have passed the test or can do the test without paying attention to other aspects such as honesty, self-control, appreciation to others, and the ability to cooperate. This is an overview of the current learning situation that occurs in the field, especially learning at the Sekolah Luar Biasa Doloksanggul.

The quality of learning can be seen in terms of the learning process and in terms of results. The process never betrays the results. If the learning process is carried out properly and correctly, then the results that students learn that will be harvested will definitely not disappoint. In terms of the learning process, it is said to be successful if all or at least a large number (75%) of students are actively involved both physically, mentally and socially in the learning process in addition to showing high enthusiasm for learning, great enthusiasm for learning and high self-confidence. Meanwhile, in terms of results, the learning process is said to be successful if there are positive behavioral changes from students entirely or at least most (75%).

There are many types of teaching methods, caused by several factors, for example: objectives of various types and functions, different levels of student maturity, situations of various circumstances, personal teachers and different professional abilities. It is therefore difficult to give a single clear classification of the methods once known in teaching. Nevertheless there is a general nature by which it becomes possible to hold a clear but flexible classification. In reality, many factors that cause it cannot always be used the method that best suits the purpose, situation and others. Teachers are often forced to use the method of choice, so that educational efforts are not in vain (Pakpahan et al., 2021).

Based on the results of daily tests to I mathematics subjects with the basic competence "Determining the value of unit places, tens and hundreds," shows a low level of mastery of the material. Of the 4 students in class IV-C, only 1 student achieved a level of material mastery of 60% and above. Therefore, researchers turn to peers for help to identify deficiencies in learning. From the results of the discussion, it was revealed that the problem that occurred in learning, namely "Low level of student mastery of the material." After the author analyzes by conducting discussions and exchanging opinions with colleagues as observers, it is known that the factors causing students to not master the material taught are:

1. The delivery of the subject matter is less interesting to students.
2. Teachers dominate the learning process, involve their students less.

Given that the problem is a problem that stems from and is felt by the class teacher, the researcher seeks to try the most effective way of introducing concepts to students looking for the easiest, closest to themselves so that mathematics lessons become fun.

Many learning methods can be applied in teaching students. All of these methods have their own advantages and disadvantages. Therefore, teachers must selectively choose the method to be used to suit the topic of the material to be taught as well as according to the characteristics of their students. To improve students' understanding of the value of places, researchers argue that the Demonstration Method is the right method to implement.

### **Definition of Demonstration Method**

Many experts give their opinions on the Demonstration Method. As Djamarah (2002) stated that "The demonstration method is a way of presenting lessons or materials by demonstrating or showing students

a certain process, situation or object that is being studied both actually and imitation, which is also not spared accompanied by oral explanations or in other words lecture methods so as to strengthen students' understanding of the material. The Demonstration Method is a presentation that is carefully prepared to perform and perform, namely an action or posedur used. This method is accompanied by explanations, illustrations, and oral statements or demonstrations (visuals) appropriately (in Canei, 1986:38). Winarno suggests that the method of demonstration is the presence of a teacher, an outsider being asked, or a student showing a process to the whole class (Winarno, 1980:87). The limitation that Winarno put forward gives us, that to demonstrate or demonstrate does not have to be done by the teacher himself and what is demonstrated is a process (Yufrizal, Sari, & Aziz, 2019).

### **Purpose of Application of Demonstration Method**

The application of the demonstration method aims to teach this hand skill in which physical movements and movements in holding an object will be learned, or to teach routine things (Sulastri, Ratnawati, & Radhiyani, 2021). In other words, the demonstration method aims to teach physical skills rather than intellectual skills. Ahbatul, et al., on the other hand, suggests that demonstration methods can be used to: (a) Teach students how to perform an action or use a new procedure or product; (b) Increase confidence that a procedure allows for students to do so; (c) Increased attention in learning and use of procedures (Ahbatul, Qonita, Mukaromah, & Syamsiyah, 2021).

Meanwhile, Bistara stated that the purpose of applying the demonstration method is: (a) Teaching a process, for example the regulatory process, the manufacturing process, the work process, the process of working and using; (b) Inform about the materials required to make a particular product; (c) Highlight how things work (Bistara, 2021).

Based on the above opinion, the purpose of applying the demonstration method proposed by Staton, Cardille, and Winarno, can be identified the purpose of applying the demonstration method which includes: (i) Teaching students about an action, process or procedure of physical / motor skills; (ii) Develop the students' hearing and vision observation skills together; (iii) Concrete the information presented to the students.

### **Advantages of Demonstration Methods**

Many education experts have given their responses about the advantages of this method of Demonstrating. According to Zhao, et al., states that the advantage of the demonstration method is that students' attention will be able to be fully centered on the subject to be demonstrated, provide practical experience that can form strong memories and skills in doing, avoiding student mistakes in drawing conclusions, because students observe firsthand the course of the demonstrations carried out (Zhao, Li, Zhang, & Zhang, 2019).

According to Maricic, et al., stated that the advantage of the demonstration method is to help students clearly understand the course of a process or work of a learning activity, facilitate various types of explanations, errors that occur from the results of lectures can be corrected through observation and concrete examples by presenting the real object (Maricic, Cvjeticanin, & Andic, 2019).

Based on the views of the experts above, the use of the demonstration method is expected to increase students' understanding of the subject matter of place values of hundreds, tens and units.

The demonstration procedure that will be carried out by researchers in learning with the aim of increasing students' understanding of the subject matter of Place Value is as follows:

1. Prepare tools to be used in learning.
2. Provide an explanation of the topic to be demonstrated.
3. The implementation of the demonstration coincided with the attention and encouragement of the students.
4. Reinforcement (discussions, Q&A, and exercises) to demonstrations.
5. Conclusion.

By demonstrating or demonstrating the learning process of Place Value, it is expected:

1. Students are more active because they are involved in demonstrations, so it is impossible for students to be sleepy in a loud room.
2. Increase student accuracy when compared to students only reading or hearing explanations, because demonstrations provide concrete images that clarify students' learning gains from their observations.
3. The students were directly involved in the demonstration activities, giving the students a great possibility of gaining hands-on experience. Student involvement in demonstrating learning materials provides an opportunity for students to develop their skills and gain recognition and appreciation from their peers.
4. The attention and concentration of the students is centered on the demonstrated material, so the students will really pay special attention to it. Students' concentration and attention are easier to focus on the learning process and not on others.
5. Learning takes place in sequence, where students can ask questions about things they don't know during the demonstration, and the teacher answers them immediately during the demonstration.

## 2. METHODS

Research that emphasizes actions and reflections based on rational and logical considerations to make improvements to a real condition for the improvement of learning at the Sekolah Luar Biasa Doloksanggul. This research was carried out at the Sekolah Luar Biasa Doloksanggul on 4 students about the use of the Demonstration Method on the Place Value material to improve student learning achievement. The design in this study is the Action Research Design (Arikunto, 2018).

## 3. FINDINGS AND DISCUSSION

From the actions that have been implemented, it can be reported that there is an increase in teaching ability to teachers and an increase in understanding of the value of places through a demonstration method for class IV-C students of Sekolah Luar Biasa Doloksanggul, Doloksanggul District, Humbang Hasundutan Regency. The improvement of teaching ability includes:

1. The teacher becomes a facilitator, no longer a learning center, but a student who is the center of learning.
2. The habits of students who are usually passive, turn into active in identifying problems.
3. At the end of each lesson, students derive learning outcomes (products) from the learning process that students follow and evaluate.
4. At the time of learning, the teacher always pays attention to:
  - Differences in the individual characteristics of students, especially children with special needs.
  - Organizing classes according to the conditions of children with special needs
  - Assessment of students' basic abilities
  - The content of the teaching material is adjusted to the conditions of children with special needs
  - A joyful, fun and not boring variety of learning.

The results of the research in the data analysis process are in the form of increasing understanding of the value of places through a demonstration method in class IV-C students of Sekolah Luar Biasa Doloksanggul, Doloksanggul District, Humbang Hasundutan Regency in the form of a written test. The process of analyzing such data is presented in 2 cycles as follows:

### Cycle I

Based on the results of the data analysis on the understanding of place values, the acquisition of student scores on the understanding of place values of class IV-C students of Sekolah Luar Biasa Doloksanggul, Doloksanggul District, Humbang Hasundutan Regency is as follows:

1. Students who scored 30 as many as 1 child
2. Students who scored 40 as many as 1 child

3. Students who scored 50 as many as 1 child
4. Students who scored 60 as many as 1 child

For more details, the results of data analysis of understanding the value of places in cycle 1, are presented below.

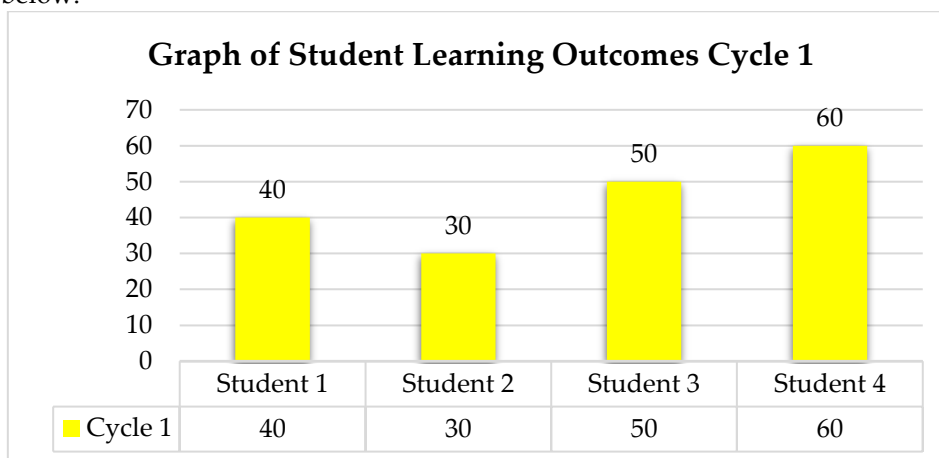


Figure 1 The Results of the First Cycle

From the results of obtaining student scores in this first cycle, it can be seen that none of the students are complete in learning the place value material. After the data analysis is carried out in cycle I, it is necessary to continue in cycle II with the application of the Demonstration Method by making improvements and strengthening that have been carried out in cycle I.

### Cycle II

The implementation of the learning process cycle 2, in class IV-C students of the Doloksanggul State Extraordinary School, Doloksanggul District, Humbang Hasundutan Regency by applying the Demonstration Method with improvement and strengthening and sharpening motivation, the following student test results were obtained:

1. Students who scored 75 as many as 2 children
2. Students who scored 80 as many as 1 child
3. Students who scored 90 as many as 1 child

For more details, the results of data analysis of understanding place values in cycle 2, are presented below.

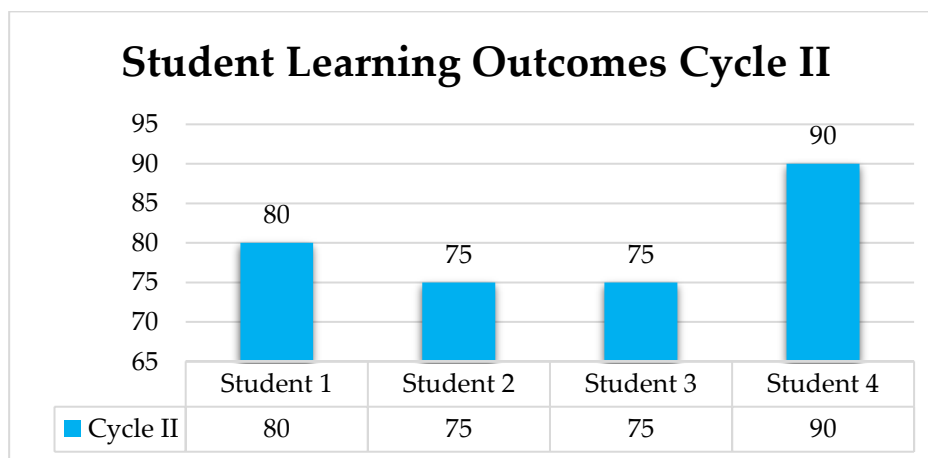
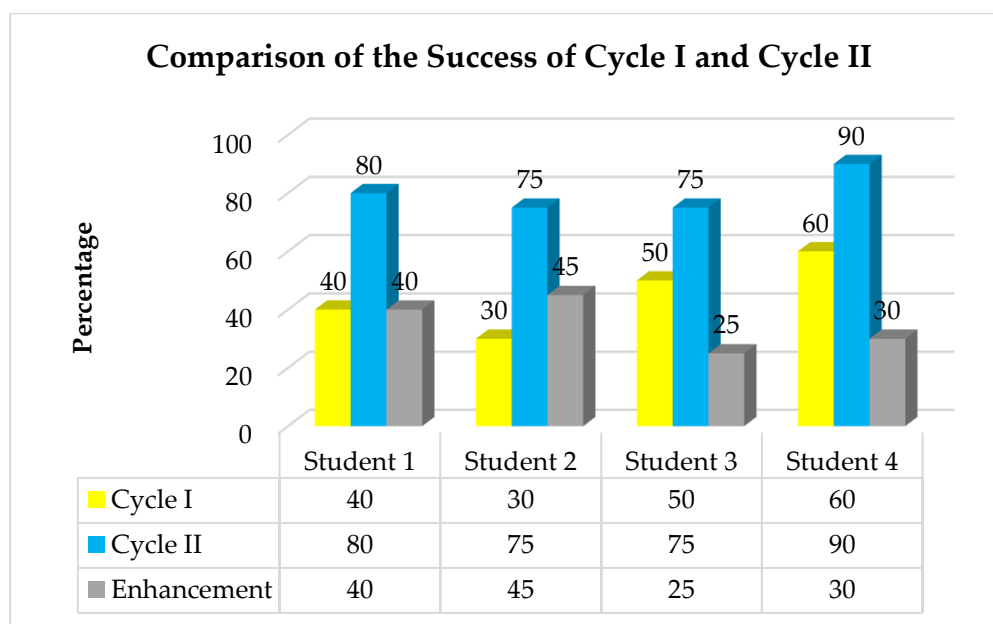


Figure 2 The Results of the Second Cycle



**Figure 3** Graph Comparison of Student Learning Outcomes Cycle I with Cycle II

From the results of obtaining student scores in this second cycle, we can see that all students have completed the learning of the Place Value material by applying a fun and motivating demonstration method for students. By sharpening and strengthening and providing motivation for students, the results of obtaining student scores increase from cycle I to cycle II, namely Student 1 in cycle I with a score of 40 increases to a value of 80 in cycle II with a significant increase of 40. Student 2 in cycle I with a score of 30 increased to a score of 75 in cycle II with a significant increase of 45. Student 3 in cycle I with a score of 50 increased to a score of 75 in cycle II with a significant increase of 25. Student 4 in cycle I with a score of 60 increased to a score of 90 in cycle II with a significant increase of 30.

Increasing students' understanding of the Material of Place Value by applying the Demonstration method is in accordance with the views of experts as said by Syaiful Bahri Djamar (2000:56) states that the advantage of the demonstration method is to help students clearly understand the course of a process or work of a learning activity, facilitate various types of explanations, errors that occur from the results of lectures can be corrected through observation and a concrete example by presenting the actual object. This is also in accordance with what the results of the research that has been carried out by previous researchers, namely Siti Hawa et al, with the research title "Increasing Understanding of the Concept of Liquid Object Properties Using Demonstration Methods in Science Learning for Grade IV Students of SD Inpres 2 Sienjo," with the conclusion that using the demonstration method can increase students' understanding of the properties of liquid objects in science learning in grade IV SD Inpres 2 Sienjo (Hawa, Ramadhan, & Ratman, 2021). It is very true according to our observations in the field, by applying this method of Demonstration, students are happy and excited and more quickly understand the subject matter.

#### 4. CONCLUSION

Based on the results of data analysis and discussion in this study, several conclusions were put forward as follows:

1. Student Learning Outcomes improved from cycle I with an average of 45.00 to 80.00 in cycle II.
2. The application of the Demonstration Method to the Value of Place material can increase student learning motivation.
3. The application of the Demonstration Method to the Place Value material can improve student Understanding and Learning Outcomes.

Based on the conclusions of the research above, the Application of the Demonstration Method to the Place Value material can improve student Learning Outcomes, for that the researcher suggests several things as follows:

1. In order for teachers to implement the Application of Demonstration Methods to the Place Value material to improve student Learning Outcomes.
2. In order for the Education Unit to facilitate the learning of the Demonstration method.
3. Researchers advise readers and education practitioners to be able to conduct similar research, both at the same and different levels of educational units.

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