EXAMPLE NON-EXAMPLE METHODE: STUDENTS' LEARNING OUTCOMES IMPROVEMENT REGARDING ADDING AND SUBTRACTING TWO FRACTIONS WITH DIFFERENT DENOUNCORS IN MATHEMATICS SUBJECTS

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Abstract.

This research departed from the phenomenon that occurs in the classroom, namely the low understanding and learning outcomes of students in mathematics learning about adding and subtracting two fractions with different denominators using the example non example learning model. Therefore, a teacher needs to consider learning strategies so that they can improve student learning outcomes. This research aims (1) to find out that the example non example learning model can improve students' learning outcomes regarding addition and subtraction of two fractions with different denominators in sixth grader of elementary school. (2) to describe the process of improving student learning outcomes regarding addition and subtraction of two fractions with different denominators before and after using the example non example learning model in sixth grader of elementary school. (3) to measure the magnitude of the increase in students' learning outcomes regarding addition and subtraction of two fractions with different denominators after using the example non example learning model in sixth grader of elementary school. The results of this research show that using the example non-example learning model can be a fun learning variation for students so that it is proven to improve students' learning outcomes. Before using the example non example learning model, student learning outcomes only reached an average score of 64.10, then there was an increase after using the example non example learning model to 73.08 in cycle 1 and 81.28 in second cycle. From the description above, the researcher concludes that the use of the example non example learning model which is adapted to the learning material can create a pleasant learning situation resulting in an increase in student learning outcomes. Therefore, researchers suggests that the use of the example non-example learning model be socialized and used as an alternative in mathematics learning in schools.

Kata Kunci: Example non-example learning model; Student learning outcomes; Mathematics subjects.

METODE EXAMPLE NON-EXAMPLE: PENINGKATAN HASIL BELAJAR SISWA PADA MATERI PENJUMLAHAN DAN PENGURANGAN DUA PECAHAN BERPENYEBUT BERBEDA PADA MATA PELAJARAN MATEMATIKA

Abstract. Penelitian ini beranjak dari fenomena yang terjadi di kelas bahwa rendahnya pemahaman dan hasil belajar peserta didik pada pembelajaran matematika Tentang penjumlahan dan pengurangan dua pecahan dengan penyebut berbeda dengan menggunakan model pembelajaran example non example. Oleh karena itu seorang guru perlu mempertimbangkan strategi pembelajaran sehingga dapat meningkatkan hasil belajar peserta didik. Penelitian ini bertujuan (1) Untuk mengetahui model pembelajaran example non example dapat meningkatkan hasil belajar peserta didik tentang penjumlahan dan pengurangan dua pecahan dengan penyebut berbeda di kelas VI SD Negeri Cibuluh 3 Kecamatan Bogor Utara Kota Bogor semester 1 Tahun Pelajaran 2023-2024. (2) Untuk menggambarkan proses peningkatan hasil belajar peserta didik tentang penjumlahan dan pengurangan dua pecahan dengan penyebut berbeda sebelum dan sesudah menggunakan model pembelajaran example non example di kelas VI SD Negeri Cibuluh 3 Kecamatan Bogor Utara Kota Bogor semester 1 Tahun Pelajaran 2023-2024. (3) Untuk mengukur besarnya peningkatan hasil belajar peserta didik tentang penjumlahan dan pengurangan dua pecahan dengan penyebut berbeda setelah menggunakan model pembelajaran example non example di kelas VI SD Negeri Cibuluh 3 Kecamatan Bogor Utara Kota Bogor semester 1 Tahun Pelajaran 2023-2024. Hasil penelitian ini menunjukkan bahwa dengan menggunakan model pembelajaran example non example dapat menjadi variasi pembelajaran yang menyenangkan bagi peserta didik sehingga terbukti meningkatkan hasil belajar peserta didik di Kelas VI SD Negeri Cibuluh 3 Kecamatan Bogor Utara Kota Bogor. Sebelum menggunakan model pembelajaran example non example hasil belajar peserta didik hanya mencapai nilai rata-rata 64,10 kemudian terjadi peningkatan setelah menggunakan model pembelajaran example non example menjadi 73,08 pada siklus 1 dan 81,28 pada siklus 2. Dari uraian di atas peneliti menyimpulkan bahwa penggunaan model pembelajaran example non example yang disesuaikan dengan materi pembelajaran dapat menciptakan situasi belajar yang menyenangkan sehingga terjadi peningkatan hasil belajar peserta didik. Oleh karena itu peneliti menyarankan agar penggunaan model pembelajaran example non example disosialisasikan dan digunakan sebagai alternatif dalam pembelajaran matematika di sekolah-sekolah di lingkungan Dinas Pendidikan Kota Bogor.

Keywords: Model Pembelajaran Example Non-Example; Hasil Belajar Peserta Didik; Mata Pelajaran Matematika

I. INTRODUCTION

Mathematics is a universal science that underlies the development of modern technology, has an important role in various disciplines and advances human thinking power (Whitehead, 2017). Developments in the field of information and communication technology today are based on

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developments in mathematics. To master and create technology in the future, strong mathematics is needed from an early age.

Mathematics subjects need to be given to all students through the learning process starting from elementary school, to equip students with the ability to think logically, critically and creatively and have the ability to work together (Ernest, *et al.,* 2016). This is necessary so that students can have the ability to obtain, manage and utilize information to survive in conditions that are always changing and uncertain.

Based on the results of observations in sixth grader of the Elementary School, in mathematics subjects, especially about adding and subtracting two fractions with different denominators has been determined for passing grade is 75, but the students' scores are always below this passing grade. Based on the daily quiz that have been implemented, the average score is 64.10. of the 39 students, only 12 students or 30.77% had scores above the passing grade and 27 students or 69.23% had scores below the passing grade. This is because teachers in teaching and learning activities still use conventional learning models.

From these data, it is clear that the mathematics learning objectives of adding and subtracting two fractions with different denominators have not been achieved. So, it is necessary to change the teaching and learning process by using a more appropriate learning model. Despite the learning model has been implemented to improve students learning outcome in mathematics such as problem solving and cooperative learning (Phonapichat, *et al*., 2014; Hendrycks, *et al*., 2021; Razak, *et al.,* 2016). Even developing the media, for example augmented reality to improve students learning outcome in mathematics (Cai, *et al*., 2023; Ahmad & Junaini, 2020; Chao & Chang, 2018). But we tried to use the Example Non-Example learning model. Consider choosing the Example Non-Example model because this learning model focuses on the interactive learning process between group members in completing learning tasks together.

II. RESEARCH METHOD

This research was carried out with class action research classroom method with 39 students of sixth grader of elementary school, consisting of 20 boys and 19 girls. This research was implemented the addition and subtraction of two fractions with different denominators materials. The classroom action procedure is an assessment process through a system that recycles various learning activities which consist of four interrelated and continuous stages. These stages are (1) planning, (2) implementation, 3 (observation, and (4) reflection.

In this classroom action research, qualitative descriptive analysis was used, namely a research method that describes reality or facts in accordance with the data obtained with the aim of knowing the learning outcomes achieved by students, as well as knowing students' responses to learning activities and students' activities during the learning process takes place. To analyze the level of success or percentage of students' learning completeness after the teaching and learning process takes place in each cycle, this is done by

providing an evaluation in the form of written test questions at the end of each cycle.

III. RESULTS AND DISCUSSION

Before taking action in the research, the researcher made initial observations in the classroom. The results of observations show that when teachers teach about adding and subtracting two fractions with different denominators, the average score is 64.10. Of the 39 students, only 12 students or 30.77% have a score above the specified passing grade and 27 students or 69.23% had scores below the passing grade as shown in figure 2. Even though the material on adding and subtracting two fractions with different denominators is covered quite a lot/widely, it was decided to use the example non example learning model in mathematics subjects in the material on adding and subtracting two fractions with different denominators.

Learning begins by holding an initial test in class VI to determine students' initial abilities in adding and subtracting two fractions with different denominators. The initial test scores are used as a reference to determine the learning outcomes of class VI students after using the example non example learning model. The initial test questions consist of material related to the material to be taught, namely addition and subtraction of two fractions with different denominators. The test scores obtained will be used as a reference to determine the increase in student learning outcomes after using the example non example learning model.

Based on the results of research during two cycles which aims to improve student learning outcomes in the material of adding and subtracting two fractions with different denominators, it can be seen that the implementation of the first and second cycles has shown an improvement in the mathematics learning process. In learning using the example non example learning model, the interaction between students and teachers at the beginning of the lesson begins with the teacher with examples of spatial objects so that students can learn happily. Then the teacher directs and explains how students learn well. During the learning process, the teacher manages the class interactively, guides students, and motivates students to actively participate in learning activities. At the end of the lesson, the teacher and students conclude the lesson that has been carried out. Then the teacher evaluates students by giving questions that are relevant to the concept. Based on this, it can be concluded that there has been an increase in student activity in learning mathematics. It can be seen from the development of students' score in each cycle, from pre-cycle, cycle I and cycle II which are presented in figure 1 below:
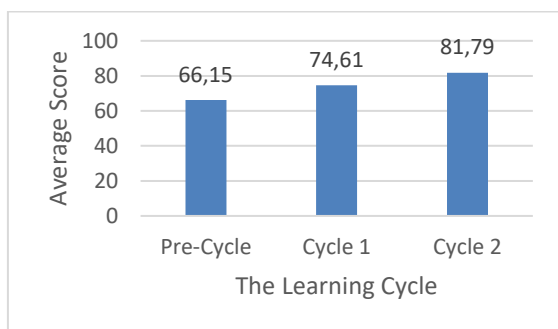
Figure 1. Students' Average Score in Each Cycle

The lowest score in the pre-cycle was 50, then increased to 60 in cycle I and increased again to 75 in cycle II. Furthermore, the highest score in the pre-cycle was 80, then increased to 90 in cycle I and increased again to 100 in cycle II. This proves that the use of the example non example learning model is suitable to be applied to the material of adding and subtracting two fractions with different denominators in elementary school students. Apart from increasing the average score of students, the application of the example non example learning model can also increase the percentage of students' learning completion as presented in figure 2 below:
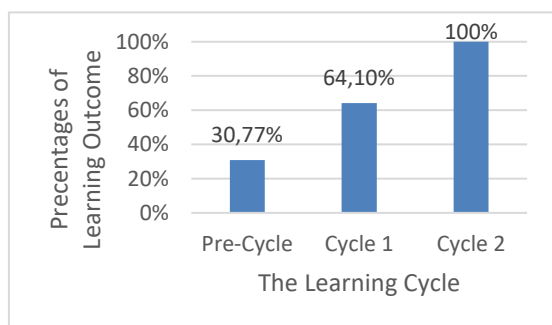

Figure 2. Percentage of Student Learning Completeness from Each Cycle

Data on student activity shows that in cycle I there were 64.10% or 25 students who were active, 20.52% or 8 students who were quite active, and 15.38% or 6 students who were less active during learning. After the teacher improved the reflection results in cycle I, in cycle II it was found that 87.18% or 34 students were active during learning and 12.82% or 5 students were quite active during learning and 0.00% or not. there are students who are not active during learning. The large number of students who are active during learning shows that the teacher when explaining the material using the example non example learning model has succeeded in involving students in learning.

Those data shown above, has influenced by the teacher activity in each cycle. For instance, in cycle I, based on the observation results, teacher still lack to give motivation to the students. So that, students have lack motivation in their learning. It is impacted to their learning results that lower than cycle II. After receive the advice from learning cycle I, teacher improve their teaching activity. They tried to more motivate students in mathematics learning. So, the learning outcome of students are also increased. It could be described

that, motivation from teachers is very impactful to students' motivation and it influence to students' learning outcome (Filgona, *et al.,* 2020; Keller, *et al.,* 2017; Fauth, *et al.,* 2019).

Learning using the example non example learning model can improve student learning outcomes because learning using the example non example learning model makes students more active, creative and enjoyable in learning. Apart from that, learning using the example non example learning model becomes more effective. As a result, the information received by students will be remembered longer. It is in a line with the results that appropriate learning model which involving students to be active in classroom could improve students learning outcomes, especially in mathematics (Marcos, *et al.,* 2020; Fernandez-Ri, *et al.,* 2017; esionkowska, *et al.,* 2020). Because the active learning could be activated by active learning (Lombardi, *et al.,* 2021).

There is a significant increase in learning outcomes between before and after learning using the example non example learning model because in learning using the example non example learning model, students feel they are not learning because the learning is fun for them. This makes the lesson stick for longer and, both directly and indirectly, makes students understand the material of adding and subtracting two fractions with different denominators.

IV. CONCLUSION

Based on the results of research the learning outcomes of students after using the example non example learning model showed satisfactory results. The example non example learning model can increase students' learning activities and learning outcomes regarding addition and subtraction of two fractions with different denominators (mathematics material) in sixth grader of elementary school. learning makes students not bored and fed up, instead they feel happy so that their learning activities increase. They are motivated by the implementation of learning model.

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