IMPROVING THE ABILITY TO CALCULATE ADDITION AND SUBRACTION THROUGH THE JARIMATIKA METHOD IN GRADE 1 STUDENTS

Robiatul Adewiyah^{1*}, Agung Setyawan²

^{1,2} Elementary School Teacher Education, Faculty of education, Universitas Trunojoyo Madura, East Java, Indonesia

> correspondence e-mail: <u>190611100139@student.trunojoyo.ac.id</u> <u>agung.setyawan@trunojoyo.ac.id</u>²

ABSTRACT

To be able to achieve educational goals, the teacher must apply a good approach and in accordance with the characteristics and needs of students. The background of the problem in this study is the low ability to calculate addition and subtraction in grade 1 sdn Kamal 3. This study aims to determine the effectiveness of the Jarimatika method in learning addition and subtraction and is expected to improve student achievement and make it easier for teachers to convey material in order to create a learning atmosphere that is conducive to learning pleasant. The research method used is Classroom Action Research which is carried out in collaboration between teachers and researchers. The results showed that there was an increase in student learning outcomes in calculating addition and subtraction using arithmetic in mathematics. So it can be concluded that the arithmetic learning method increases the speed of working on questions and understanding the material.

ARTICLE INFO

Erticle History: Received 23 Jun 2022 Revised 25 Jun 2022 Accepted 30 Jun 2022 Available online 30 Jun 2022

Keyword :

Keywords 1, Counting Ability Keywords 2, Jarimatika Keywords 3, Addition and Subtraction

A. Introduction

Education is one of the most important needs in human life today. Considering that education is currently used as a measure of the level of human ability. Quality or not can be seen to what extent a person is on the quality of education achieved while in elementary school. Through education we can gain knowledge because in it we are processed to change attitudes and efforts to mature through lessons and training.

In learning mathematics in elementary schools requires teachers to be able to choose and use techniques that are able to involve students in learning. In learning activities should be able to optimize the senses of students. When learning mathematics, you don't have to use rote alone, but you need to go further. To achieve the goal, the teacher tries to help students understand the addition and subtraction material by giving a pretest. In increasing the ability to calculate logically, accurately, efficiently, rationally.

This problem is very appropriate to be solved, because it requires an appropriate technique such as learning while playing by using the limbs such as using a finger, so that it can improve the ability of addition and subtraction arithmetic operations. In realizing a quality education, of course, a good approach is needed, of course, it is driven by the ability to count itself, such as at the SDN Kamal 03 school which is occupied to make observations to improve the ability to count to students, in which the teacher must have appropriate learning strategies and skilled and creative teachers to present the best learning media for their students.

B. Method

This type of research is Classroom Action Research (CAR), this research refers to Kemmis and McTaggart (1990) in Wahyudi (2009: 58). In this PTK there are 4 stages carried out namely planning, implementation, observation, reflection. The methods used in this research are tests, interviews, and documentation. The collected data is then analyzed with qualitative description.

C. Result and Discussion

Mathematics is one of the objectives to provide an understanding of how to count using fingers to students. From the data obtained at SDN Kamal 3 teachers still use the lecture method and give assignments to students, where this method still refers to the teacher. This is evident from student learning outcomes which on average are below the KKM, while the success criteria for students are said to be successful if they have a value of 70. With problems like this, research action is needed to get satisfactory results or changes. One of the actions that will be given by the researcher is by trying to use a problem based learning model, this learning model can be interpreted as a model that is considered successful in achieving learning objectives. Because this model when used is student-oriented or focused. This is evidenced by the results of students before the action is taken where the average student score is below the KKM

Range	Pretest	Nilai Posttest
0 – 20	0	0
21 - 40	3	2
41 - 60	9	1
61 – 80	7	14
81 – 100	6	8
Total Students	25	25

 Tabel 1. Hasil Siswa Siklus Setelah Dilakukan Tindakan

So after the evaluation was carried out in class 1, the students of SDN Kamal 03 with a total of 25 students. It has shown changes or levels of learning outcomes compared to previous learning outcomes.

D. Conclusion

From the results of these studies in the research and discussion that has been described, it can be concluded that the Learning Based Learning model can improve student learning outcomes which are quite good at the first stage, obtained by grade 1 students with a total of 5 students having a score of less than 70 while 20 students have a value of more than 70 or it can be said to be above the average, then in the second experiment 23 students succeeded and 2 students were still below the KKM score.

References

- Azimah, A. (2021). Meningkatkan Kemampuan Berhitung dengan Menggunakan Media
- Abakus Pada Siswa Kelas 1 Sekolah Dasar Negri 65/IX Desa Baru. Indonesia Journal of Teacher Education, 2(1), 209-217.
- Muhlis, M. (2018). Peningkatan Kemampuan Mengerjakan Operasi Hitung Penjumlahan Dan Pengurangan Menggunakan Metode Demostrasi Dan Media Battu Krikil Kecil Pada Siswa Kelas 1 SD Negri AlKJA. Pendekar: Jurnal Pendidikan Berkarakter, 1(1), 110-113.
- Ratti, R. (2021). Penerapan Model PBL Un tuk Meningkatkan Kemampuan Operasi Hitung
- Penjumlahan Dan Pengurangan Siswa Kelas 1. Neraca: Jurnal Pendidikan Ekonomi, 6(2), 42-49.
- Utami, N.A., & Humaidi, H. (2019). Analisis Kemampuan Penjumlahan Dan Pengurangan
- Bilangan Pada Siswa SD. Jurnal Elementary: Kajian Teori dan Hasil Penelitian Pendidikan Sekolah Dasar, 2(2), 39-43.
- Widayanti, L. (2014). Peningkatan aktivitas belajar dan hasil belajar siswa dengan metode problem based learning pada siswa kelas viia mts negri donomulyo kulon progo tahun pelajaran 2012/2013. Jurnal Fisika Indonesia, 17(49).
- Wulandari, C. (2013). Pembelajaran Berhitung Penjumlahan dengan Jarimatika. BIOMA: Jurnal Keilmuan Dan Kependidikan MIPA, 8(1), 1-11



© 2022 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution ShareAlike (CC BY SA) license (https://creativecommons.org/licenses/by-sa/4.0/).