

# IMPROVING LEARNING OUTCOMES OF CLASS II MI AL KAUTSAR STUDENTS USING JARIMATICS METHODS IN LESSONS MULTIPLICATION MATHEMATICS IN 2023/2024

Rabiah Adawiyah <sup>\*1</sup>  
Muhammad Ali Akbar <sup>2</sup>

<sup>1</sup> Student Of UT University, Indonesia

<sup>2</sup> STAI Of Tapaktuan South Aceh, Indonesia

\*e-mail: [rabiahadawiyah145@gmail.com](mailto:rabiahadawiyah145@gmail.com), [irali141214@gmail.com](mailto:irali141214@gmail.com)

## Abstract

*Rabiah Adawiyah NIM. 858412777, IMPROVING STUDENTS' MATHEMATICS LEARNING OUTCOMES ON MULTIPLICATION MATERIAL USING THE MATHEMATICS METHOD IN CLASS II MI AL KAUTSAR ACADEMIC YEAR 2023/2024. The low skills think creative students ' eyes lesson mathematics material multiplication class II MI Al Kautsar background back study This . Based on results interview with the class II teacher that learning mathematics during This seldom using learning media as tool help Study . So that researcher do repair learning with using concrete media . Study This own objective to : 1) know How use method Jarimatika to improve creative thinking skills on Multiplication material in IIMIS Al- Kautsar class. know How enhancement Skills think creative material Multiplication number round student class II MIS Al Kautsar use finger method .*

**Keywords :** *Jarimatics method , Skills Think Creative , on Multiplication Material .*

## INTRODUCTION

Counting is part base from math is not can separated from life daily bail rate age school base nor college tall even though . Many problems life in need ability counting . Therefore that's Study mathematics is a very fundamental need. This matter caused Because bejar mathematics practice student For think critical, systematic, logical and creative.

One of ability you have to count mastered by students school base or madrasah ibtida'iyah is multiplication base so that many school teachers base or madrasah ibtida'iyah which requires it his students For memorize it outside head . This matter is multiplication base always used so that to more schools tall. Children who haven't yet control multiplication basics in class low will become window in class next, cause material lesson mathematics always sustainable .

Participant educate Class II MI Al Kautsar on average doesn't understand multiplication base. This matter caused they not enough capable with method memorize. From the results evaluation test odd semester daily in 2023/2024 only 42.2% of students will get results learn the above KKM (Criteria Minimum Completeness) which has been has determined namely 65 and its liveliness only 38% below The specified indicator is 75%.

Problem description the showing that need for teachers to stage renewal in method learning To use increase results Study participant educate . One of renewal in method attempted learning For offered that is with change patterns long learning with pattern new learning value more effective and meaningful for student that is with apply method learning use method calculation fast that is use method Jarimatika.

From various possibility background behind problem the research mediadiagnosis that problem the caused that the teacher hasn't use technique calculate accordingly with characteristic participant educate. Methods counting is very diverse among them method cocking, method abacus, method kumon, method napier and method Jarimatika . There are trend learning counting with method Jarimatika This is inspiring researcher For try apply For frustrating problem on .

Researcher choose method Jarimatika This made very suitable with level development participant diti, as well For get motivation Study counting for the participants educate. Because too the complex background behind problems encountered teachers, temporary ability and time

researchers are very limited , so No possible for researcher For research everything .

Learning mathematics should adapted use draft or principal discussion and development student. Apart from that, the learning process mathematics must notice educational interactions between participant educate and teacher for get knowledge, skills as well as attitude that has formulated on purpose education (Astuti, 2013; Dewi, 2013; Umbara, 2017) This synchronized with opinion that learning is something arranged combination between elements Humane , material facilities, equipment and procedures are mutual hypnotizing in reach objective learning . Learning is teacher activities programmed into the design instructional for create participant educate Study active as well as critical that emphasizes provision source learning (Najwa et al, 2019; Nurhidayah , 2016).

## METHOD

In Language English , *method* means method . If We hook it up with learning , methods is methods used by teachers teach lessons to participants educate . Because of the method more emphasizes the role of the teacher, terms seing method coupled with the word teach, that is method Study.

Whereas according to Ahmad Sabri in Istarani, Learning methods is ways or technique presentation material lesson, okay individually or in a way group . In order to achieve it objective learning that has been done formulated, as a teacher should manage various method. With own knowledge about characteristic various method so as a teacher would more easy set the most suitable method with situation and condition .

With thereby in a way concise can We say that method learning is method recital material teaching materials to participants education carried out by teachers in the learning process teach to achieve it desired goal.

## JARIMATICS METHOD

Jarimatics method is something method counting operation times, share add , and subtract / KaBaTaKu ) mathematics with use tool help finger. Whereas according to Wulandari said that Jarimatika is something method counting with use fingers and segments fingers hand . However thereby according to Trivia Astuti stated that Jarimatika is something method count Easy and fun math with use finger hand we alone. Compared to with method others , Jarimatika more emphasizes mastery draft moreover formerly Then with method fast, so participant educate control knowledge in a way ripe . Besides that method This be delivered in a way pleasant so that participant educate will feel happy and easy accept it.

Like case in operation addition and subtraction, in operation multiplication This can done calculation with easy and fast only with using 10 fingers just . Counting method with finger called finger math.

## RESEARCH IMPLEMENTATION

### 1. Research Subject / Class

Study This carried out at MI Al Kautsar Linggang Purwodadi in class II (Two) with amount participant educate boys 12 and girls 10, learning year 2023/2024

### 2. Research sites

MI Al Kautsar Linggang purwodadi Subdistrict Linggang Confused Regency West Kutai Province East Kalimantan

### 3. Research implementation time

Study held Monday 6 November 2023, Thursday 9 November 2023, Monday 27 November 2023 and Saturday 2 December 2023

### Cycle I

#### a. Planning

Planning action in cycle first based on results observation activity pre-action .

Design action This arranged with a number of coverage , including :

1. Drawing up a plan implementation (RPP) regarding material to be taught in

- accordance with method learning mathematics .
2. Prepare tools and materials will be used For do an experiment .
  3. Prepare sheet Work student that is sheet Work groups and sheets End of Cycle I Test work .
  4. Organize and prepare sheet observation activity researchers and sheets observation activity student .
  5. Group formation .
- b. Implementation
1. Carry out learning use Jarimatics engineering
  2. Carry out learning in accordance with RPP
    - a) Lesson 1 ( Multiplication as repeated addition )
    - b) Lesson 2 (jarimatics 6-10)
    - c) Lesson 3 (jarimatics 11-20)
    - d) Lesson 4 (jarimatics21-30)
3. Give test end cycle I
- c. Observation Stage
- Stage This taking place simultaneously with stage implementation Where researcher observe activity Study students and teachers during the learning process
- d. Stage Reflection
1. Write problems in cycle I later determine level success .
  2. Determine step For cycle next based on results learning in cycle I.

## RESEARCH RESULTS AND DISCUSSION

### a. Research result

From the data obtained before This emphasis on results learning seen from aspect cognitive refers to indicators learning that has been done set . Instruments used on the eye lesson mathematics at the level elementary school or Madrasah Ibtidaiyah, standard competency in learning This is do operation count until three numbers and competencies basically is do multiplication is the result number three number. Grille instrument cycle I can be seen in the data below This :

No	Indicator	Aspect Measured cognition		
		C1	C3	Amount
1.	Write multiplication as repeated addition	1, 2a, 2b, 2c, 3d, 2e		6
2.	Elaborate operation count multiplication 1-10		3a, 3b, 3c	3
3.	Reduce operation count multiplication 11-20		3d, 3e, 3f	3
4.	Elaborate operation count multiplication 21-20		3g,3h, 3i	3
Amount		6	9	15

In cycle I ability measured cognitive abilities only at level C1 (understanding), because

learning in cycle I not yet entering at level C3 ( application ), level C3 ( application ) will carried out in cycles II.

Instruments used on the eye lesson mathematics at the level elementary school or Madrasah Ibtidaiyah , standard competency in learning This is do operation count reach three numbers and competencies basically is do multiplication is the result number three numbers and division three number. Grille instrument test cycle II can seen in the data below This :

No.	Indicator	Aspect measured cognitive abilities			
		C1	C2	C3	Amount
1.	Write traits operation multiplication	1			1
2.	Elaborate operation count multiplication using characteristic commutative		2a 2b 2c		3
3.	Elaborate operation count multiplication use characteristic associative		2d 2e 2f		3
4.	Describes arithmetic operations use it distributive nature		2g 2h 2i		3
5.	Apply operational properties multiplication into the story matter			3a 3b 3c 3d 3e	5
Amount		11	99	55	15

## DISCUSSION

At stage pre action seen student feel difficulty moment finish question multiplication. This is also visible from results Study mathematics student class II MI Al Kautsar in condition pre action, on learning mathematics many eleven participant students (40.74%) get the value is at the KKM level, meanwhile six mercy participant students (59.26%) got it mark not enough from KKM. Researcher start with the teacher designing activity action For increase results student learning .

Cycle I was implemented with analyze the data obtained previously. With analyze the data. Researchers and teachers started designing activities and preparations For action.on activity action cycle I occurs enhancement results Study participant educate on lessons mathematics from the average value in pre action

is 63 increased to 73, a total of 15 participants educate get score above the KKM, while 12 participants educate get mark not enough from KKM, though experience increase , during the activity process action cycle I takes place Still found participant educate those who haven't yet

fully follow learning with Good .

## CONCLUSIONS AND RECOMMENDATIONS

### a. Conclusion

Based on results research and discussion above can concluded that :

1) That use method Jarimatika can increase performance Study Mathematics on material multiplication, division, subtraction and additions .

2) Use method Jarimatika this can also be done increase performance Study Mathematics participant educate class II MI Al Kautsar Linggang Purwodadi .

Average performance Study participant educate on stage precycle is 67.96. Then after held action cycle I average achievement to 69,814. And in cycle II achievement learn it increase to 70,407.

3) Apart from achievements participant educate increase use Jarmatics can do it too improve activity participant students in the learning process in class . This matter can seen from activity participant students who experience it increase in the previous cycle I and cycle II achievement 69% to 77%.

### b. Suggestion

Some possible suggestions be delivered from results study is :

1) For Teachers

Teachers can use method Mathematics in learning mathematics next, as well for class teachers others can try use method Jarimatika as one saty alternative in implementation learning mathematics .

2) For Students

Participant educate must often train do operation multiplication with use method Jarimatika .

3) For Researchers

Interested and willing researchers do study with method Jarimatika expected can continue study This with principal different and productive materials useful findings for development science.

## BIBLIOGRAPHY

Ardani, A., & Purwaningsih, D. (2019). Analisis Pengaruh Gaya Belajar Mata Kuliah Aritmatika (Jarimatika).

D Afriani, A Fardila, GD Septian...- Journal of..., 2019-  
journal.ikipsiliwangi.ac.id

Dan Sempo) Terhadap Kemampuan Komunikasi Matematis. PRISMA, *Prosiding Seminar Nasional Matematika*, 2, 490-497. Di ambil dari :  
<https://joirnal.unnes.ac.id/sju/index.php/prisma/article/view/290>

F Yudha- Biormatika: Jurnal ilmiah fakultas keguruan dan ilmu ..., 2020 - ejournal.unsub.ac.id

Fajriah, N., & Asikawati, E. (2015). Kemampuan Berfikir Kreatif Siswa Dalam Pembelajaran Pendekatan Pendidikan Matematika Realistik Di SMP. *EDU-MAT: Jurnal Pendidikan Matematika*, 3 (2). Di ambil dari : <http://dx.doi.org/10.20527/edumat.v3i2.643>

HS Bintoro- 2015 - publikasiilmiah.ums.ac.id. Di ambil dari : Google Scholar T Indiasuti - ISEJ: Indonesian Science Education Journal, 2021 - siducat.org

R Nurjuliani, MJ Putra, A Dedy- Journal on..., 2022-  
journal.universitaspahlawan.ac.id