



**Al Khawarizmi**  
**Jurnal Pendidikan dan Pembelajaran Matematika**

journal homepage: <https://jurnal.ar-raniry.ac.id/index.php/alkhawarizmi>



**IMPLEMENTATION OF MBKM TEACHING ASSISTANCE PROGRAM  
IN IMPROVING TEACHER DIGITAL LITERACY  
IN ACEH BESAR DISTRICT**

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**Artikel info**

**Artikel history:**

Received 20 July 2023

Received in revised form 5

December 2023

Accepted 07 February 2024

Available online 19 February

2023

**Keyword:**

Teaching Assistance, Improving  
Teacher, Digital Literacy.

**Abstrak**

The Teaching Assistance Program is a program initiated by the government through Kemendikbudristekdikti. This program aims to provide opportunities for students to sharpen competencies in the 21st century. The formulation of the problem in this research is, what is the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District? This research uses descriptive analysis method. The population of this study were 15 tutors spread across 14 schools in Aceh Besar. Data collection was carried out by distributing questionnaires to respondents, then the data were analyzed using simple statistical formulas. The results of the research on the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District, namely very high category 6.66%, high category 20%, medium category 60%, low category 6.66%, very low category 6.66% . In general, the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar is in the moderate category.

**INTRODUCTION**

Advances in technology demand that all fields including education, policies and improvements are always made to support better and more advanced Human Resources in the younger generation. With advances in technology, it is expected to provide benefits in the advancement of education, this requires support from various parties, especially

support from the government as a facilitator in improving technology in the education sector.

The field of education is one of the areas that cannot be avoided in the development of technology, technology really supports learning. The use of technology in learning makes learning more fun and attracts the attention of students, so that learning can be carried out properly (Anggraeny, 2020: 154)

The development of technology in the field of education does not immediately provide certainty about the smoothness of the learning process, because not all teachers have the knowledge and skills in using technology, both in the form of *mediawhatsapp*, *Google*, *E-mail*, *Website*, *E-Learning* and other media, the media should be able to provide convenience and attract the attention of students in the learning process. "The director of elementary schools at the Ministry of Education and Culture considers that many elementary school teachers in terms of digital literacy are in the low category" (Wahyuningsih in Inas & Hiru, 2021: 2).

Digital technology has become an inseparable part of human life, of course this event should be supported by the digital skills and skills of its users, especially educators who are indirectly required to use increasingly sophisticated and advanced technology, of course it must be accompanied by digital skills. creative and productive as well as wise in using it.

The government's efforts to improve understanding and skills in using technology for educators and the younger generation, one of which is by creating a superior program, namely the Teaching Assistance Program, this program has been formed starting in 2021, namely Teaching Assistance batch 1 until now continuing to enter Teaching Assistance batch 5. It is hoped that it can help and improve the digital literacy of educators/teachers. The director of elementary schools (kemendikbudristekdikti), hopes that the Teaching Assistance Program can increase the digital literacy of educators/teachers (Hendriyanto, 2021:1).

Sari (2022: 2) stated in his research that "the transformation of education and learning is urgently needed nowadays, so that educators really need new breakthroughs to facilitate learning, especially when implementing distance learning using digital technology". The presence of the MBKM Teaching Assistance Program can assist in providing knowledge, skills and in responding to technology when serving in placement schools, especially schools in the 3T (Foremost, Outermost and Disadvantaged) regions, so that later educators can adapt to digital technology, and can make the best use of it. Possible. Based on the explanation above, the writer intends conducted research with the title "Implementation of the MBKM Teaching Assistance Program in Improving Teacher Digital Literacy in Aceh Besar District".

## RESEARCH METHODS

The approach used in this study is a quantitative approach, namely an approach that allows recording and analysis of data, exact research results and data processing using calculations. the type of research used is a survey. Survey research is research with its application and method of collecting research data, using a questionnaire (Fraenkel & Wallen In Ni'mah, 2021:48).

Sugiyono (2012: 54) states that, "The data analysis method used in this study is a descriptive analysis method. Descriptive analysis method is an analytical method used to describe the data that has been collected." Descriptive analysis is used to describe the level of teacher literacy, with the presence of Teaching Assistant students in the school environment.

### Time and Place of Research

This research was carried out from January 2023 - April 2023 in 15 schools spread across Aceh Besar District which are partner schools of the Merdeka Campus Program.

### Research Subjects / Population and Sample

The population in this study were MBKM tutors for the Campus Teaching Program in 14 schools in the Aceh Besar district, totaling 15 tutors. Sampling in this study used the Total Sampling technique, while the sample in the study consisted of 15 tutors who had guided Geography Education Teaching Assistance students in Aceh Besar District

Research targets/subjects (for qualitative research) or sample-population (for quantitative research) need to be explained clearly in this section. It is also necessary to write down the technique of obtaining subjects (qualitative research) and/or the sampling technique (quantitative research).

### Procedure

The data collection technique used in this research is *not* *test* using a data collection instrument in the form of a questionnaire. Questionnaires are a number of written questions that are used to obtain information from respondents in the sense of reports about their personalities or things that they (respondents) know (Arikunto, 2013: 151)

The research instruments that have been compiled must first be tested for validity and reliability in order to determine the valid and reliable level of an instrument so that it meets the requirements to provide perfect measurement results.

#### 1. Instrument Validity Test

The validity test is intended to show and measure the level of reliability or validity of a measuring instrument, a measuring instrument that is less valid means it has low validity and conversely a valid measuring instrument has high validity. Test the validity of the instrument in this study using the formula *Person Product Moment*, as follows:

$$r_{hitung} = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{(n \cdot \sum X^2 - (\sum X)^2)(n \cdot \sum Y^2 - (\sum Y)^2)}} \quad (\text{Siregar, 2018 : 77})$$

Information:

$r_{count}$  = correlation coefficient

$\sum X$  = Sum of item scores

$\sum Y$  = Sum of total scores (All items)

$n$  = Number of respondents

Then make a decision, namely comparing the value of  $r$  with the correlation coefficient, Sugiyono (2012: 188) states that the minimum requirement to be considered eligible is if  $r = 0.3$ . So any question item that has an  $r$  value above or equal to 0.3 then the question item is said to be valid.

## 2. Instrument Reliability Test

Activities test the reliability of the instrument, this study uses the method *Alpha Cronbach*, with the stages of calculating the reliability test as follows:

- a. Determine the variant value of each question item

$$\sigma_i^2 = \frac{\sum X_i^2 - \frac{(\sum X_i)^2}{n}}{n}$$

- b. Determines the total

$$\sigma_t^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{n}}{n}$$

- c. Determine the reliability  $r_{11} = \left[ \frac{k}{k-1} \right] \left[ 1 - \frac{\sigma_b^2}{\sigma_t^2} \right]$

information:

$X_i$  = the number of respondents' answers to each question item

$\sum X$  = total number of respondents' answers to each question

$\sigma_b^2$  = varian total

$\sigma_t^2$  = number of question item variants

$k$  = number of questions

$r_{11}$  = instrument reliability coefficient (Ferry & Kristiadi, 2021:67)

The instrument is said to be reliable if  $r_{\text{count}} \geq 0.6$  at a significance level of 5% and vice versa if  $r_{\text{count}} \leq 0.6$  then the instrument is said to be unreliable (Siregar, 2018:90).

The data analysis technique in this study used descriptive statistical analysis techniques, in this study to determine the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District, the data is presented in the form of a frequency table and is categorized and presented in the form of diagrams. Categorization is using very high, high, medium, low and very low category techniques (Arikunto, 2013: 241)

- a. Calculating Average (*Mean*)

$$\bar{x} = \frac{\sum xi}{n}$$

Information :

$\bar{x}$  = Mean (Rate-rate)

$$\sum xi = \text{Sum of values } x \text{ to } i \text{ to } n$$

$$n = \text{number of individuals}$$

b. Calculating Standard Deviation (Standard Deviation)

$$S = \sqrt{\frac{\sum (xi - \bar{x})^2}{n-1}}$$

Information :

s = Standard deviation of the sample

xi = measurement data

$\bar{x}$  = Average value

n-1 = Number of samples

**Table 1. Reference Classification Category Answers**

Interval	Kategori
$X \geq \bar{x} + 1,5 \text{ SD}$	Sangat Tinggi
$\bar{x} + 0,5 \text{ SD} \leq X < \bar{x} + 1,5 \text{ SD}$	Tinggi
$\bar{x} - 0,5 \text{ SD} \leq X < \bar{x} + 0,5 \text{ SD}$	Sedang
$\bar{x} - 1,5 \text{ SD} \leq X < \bar{x} - 0,5 \text{ SD}$	Rendah
$X \leq \bar{x} - 1,5 \text{ SD}$	Sangat Rendah

Source: Saifuddin (2010:113) in Sari (2022:19)

After the data is grouped into each category, then find the percentage of each category using the following formula:

$$P = \frac{f}{n} \times 100\%$$

Information:

P = Percentage sought

f = Frequency of answers

N = Number of subjects studied

100% = Constant fixed value

## RESEARCH RESULTS AND DISCUSSION

### Research result

Aceh Besar District is one of the regencies in Aceh Province, Indonesia. Aceh Besar district is an autonomous region with the capital city located in Jantho. Aceh Besar District has an area of  $\pm 2,903.50 \text{ KM}^2$ , Administratively, Aceh Besar District consists of 23 Districts, 599 Villages and 5 Villages. Based on the projection results in 2022, Aceh Besar District has a population of 414,490 people, consisting of 209,017 men and 205,473 women. Astronomically, Aceh Besar district is located at  $5^\circ 34' 38'' \text{N} - 5^\circ 37' 13'' \text{N}$  and  $95^\circ 21' 20'' \text{E} - 95^\circ 24' 43'' \text{E}$ . The boundaries delineated based on the boundaries of Aceh Besar district are as follows:

To the north: Malacca Strait/Banda Aceh City

To the south: Aceh Jaya district

To the east: Pidie district

West side: Indonesian Ocean (BPS, 2023: 3-49)

Administrative area boundaries and research locations for more clarity can be seen in Figure 1 and Figure 2 as follows

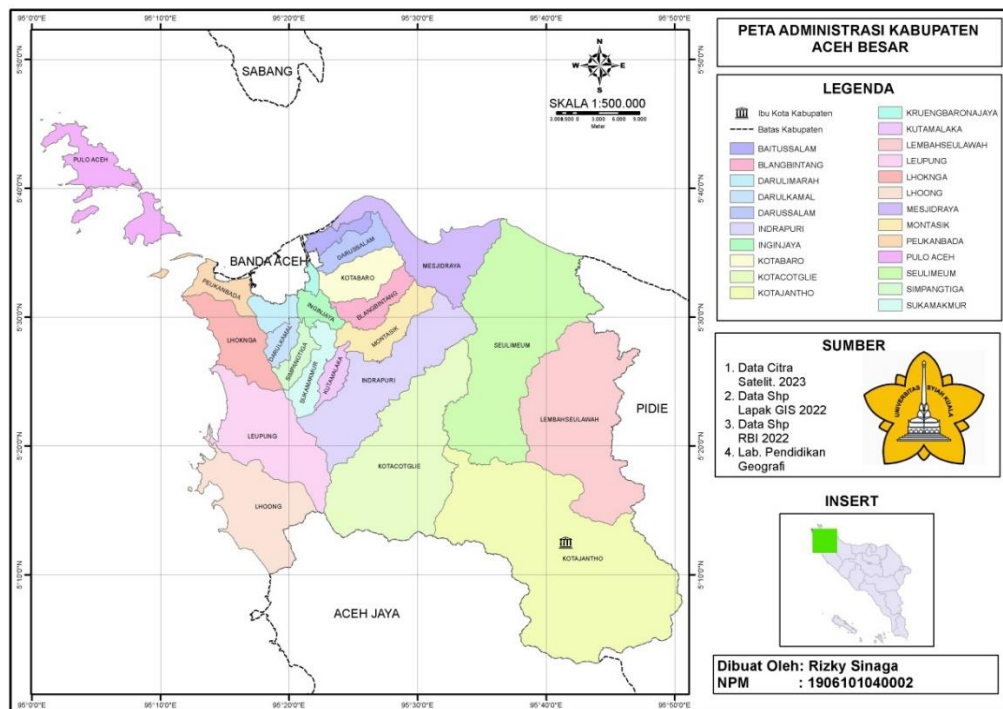


Figure 1. Aceh Besar District Administrative Map

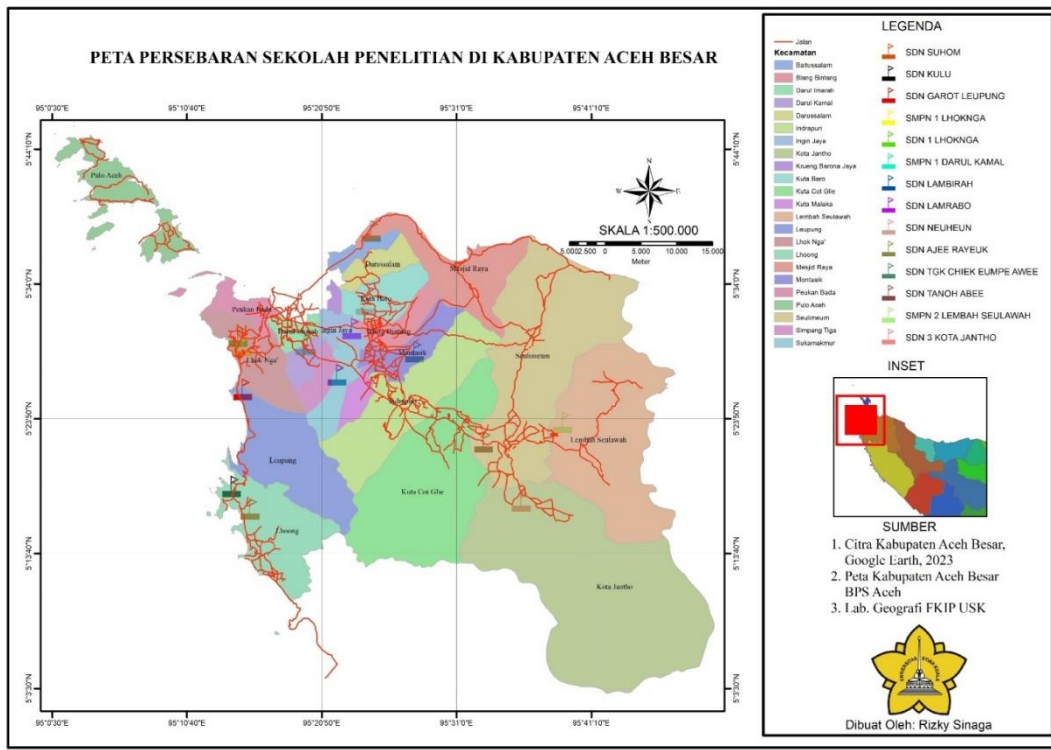


Figure 2. Map of the distribution of research schools in Aceh Besar District

**Digital literacy of MBKM teachers for the Teaching Assistance Program in Aceh**

**Besar District** The data processing process from the digital literacy questionnaire for MBKM teachers for the Teaching Assistance Program in Aceh Besar district, can be seen as follows:

a. Calculating Average (*Mean*)

$$\bar{x} = \frac{\sum xi}{n} = \frac{1152}{15} = 76$$

## b. Calculating Standard Deviation (Standard Deviation)

$$S = \sqrt{\frac{\sum (xi - \bar{x})^2}{n-1}} = \sqrt{\frac{936}{15-1}} = \sqrt{\frac{936}{14}} = \sqrt{66,85} = 8,1$$

Data on the distribution of the average value and standard deviation of teachers' digital literacy levels in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District can be seen in Table 3.

**Facingbel 3. Data Distributioni The Average Standard Deviation Value**

Responden	Xi	Xi- $\bar{x}$	(Xi- $\bar{x}$ ) <sup>2</sup>
1	85	9	81
2	70	-6	36
3	73	-3	9
4	85	9	81
5	96	20	400
6	76	0	0
7	75	-1	1
8	76	0	0
9	77	1	1
10	59	-17	289
11	77	1	1
12	72	-4	16
13	80	4	16
14	74	-2	4
15	77	1	1
<b>Jumlah</b>	<b>1152</b>		<b>936</b>

Source: Data Processing (2023)

Based on the results of calculating the average value and standard deviation, then determine the reference for answer classification as presented in Table 4.

**Tabel 4. Acuan Klasifikasi Kategori Jawaban**

Interval	Kategori
$X \geq (76) + 1,5 (8,1)$	Sangat Tinggi
$(76) + 0,5 (8,1) \leq X < (76) + 1,5 (8,1)$	Tinggi
$(76) - 0,5 (8,1) \leq X < (76) + 0,5 (8,1)$	Sedang
$(76) - 1,5 (8,1) \leq X < (76) - 0,5 (8,1)$	Rendah
$X \leq (76) - 1,5 (8,1)$	Sangat Rendah

Source: Data Processing (2023)

Based on Table 4.6. The reference for the classification of answer categories from the digital literacy level of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District is determined based on Table 4. Enter the average value data and standard deviation, so the reference for classifying categories of teachers' digital literacy levels in schools implementing MBKM can be seen in Table 5.

**Tabel 5. Answer Category Referencen**

Interval	Frekuensi	Kategori
$88 \leq X < 100$	1	Sangat Tinggi
$80 \leq X < 88$	3	Tinggi
$71 \leq X < 80$	9	Sedang
$64 \leq X < 71$	1	Rendah
$X \leq 64$	1	Sangat Rendah
<b>Jumlah</b>	<b>15</b>	

Source: Research Results (2023)

Based on Table 5, the frequency in the very high category is in the 88-100 interval for 1 respondent, while the high category is in the 80-87 interval for 3 respondents, the medium category is in the 71-79 interval for 9 respondents, the low category is in the 64 interval -70 as many as 1 respondent, while the very low category is in the interval 0-63 as many as 1 respondent.

So to find out the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District, percentage calculations are carried out based on the following categories:

1. Very High Category

$$P = \frac{f}{n} \times 100\% = \frac{1}{15} \times 100\% = 6,66\%$$

2. High Category

$$P = \frac{f}{n} \times 100\% = \frac{3}{15} \times 100\% = 20\%$$

3. Moderate Category

$$P = \frac{f}{n} \times 100\% = \frac{9}{15} \times 100\% = 60\%$$

4. Low Category

$$P = \frac{f}{n} \times 100\% = \frac{1}{15} \times 100\% = 6,66\%$$

5. Very Low Category

$$P = \frac{f}{n} \times 100\% = \frac{1}{15} \times 100\% = 6,66\%$$

The results of the calculation above are then tabulated with frequency distribution data, percentages and the results of categorizing the digital literacy level of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District can be seen in Table 6.



**Table 6.**Teacher Digital Literacy Level in Schools Implementation of the MBKM Assistance Program Mteaching in Aceh Besar District .

No	Nilai Indeks	Jumlah	Persentase	Tingkat Literasi
1	88 – 100	1	6,66%	Sangat Tinggi
2	80 – 88	3	20%	Tinggi
3	71 – 80	9	60%	Sedang
4	64 – 71	1	6,66%	Rendah
5	0 – 64	1	6,66%	Sangat Rendah
<b>Jumlah</b>		<b>15 Guru Pamong</b>	<b>100%</b>	

Source: Data Processing (2023)

Based on Table 6, it can be seen that the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District is very high 6.66%, high category 20%, medium category 60%, low category 6.66%, very low category 6.66%. Thus, the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District is dominated by the medium category, because it has the highest percentage among the other categories.

Based on the results of data processing, it shows that the level of digital literacy of teachers in schools implementing the MBKM Teaching Assistance Program in Aceh Besar District is dominated by the medium category, namely 60%. This means that with the presence of Teaching Assistance students, educators / tutors can be assisted in adapting with increasingly advanced digital technology. This is of course in line with the expectations of the director of elementary schools at the Ministry of Education and Culture, who stated that the Teaching Assistance Program is expected to increase the digital literacy of educators/teachers (Hendriyanto, 2021: 1).

The government's efforts to improve the quality of education are of course many processes that students/prospective teaching staff and teaching staff must go through to have the ability as a professional teacher in their field. As in Yuswardi's research (2021: 328) states that "There is a simultaneous influence in the world of education, namely work experience, level of education and teacher self-development on teacher abilities". These efforts must of course be heeded by students by serving/apprenticing at school, and improving and practicing their knowledge in order to become a professional teacher in their field

## CONCLUSION

The results of this study note that the implementation of the MBKM Teaching Assistance Program, it can be concluded that the percentage of teachers' digital literacy level as many as 9 respondents (60%) out of 15 respondents is in the medium category. It is hoped that every government stakeholder can see and pay special attention so that the implementation of the MBKM Teaching Assistance Program can run smoothly and well in supporting increased digital literacy

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