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# Digital Literacy and Emotional Intelligence to Ibtidaiyah Madrasah Students' Learning Results

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ABSTRACT: This study aims to describe the effect of digital literacy and emotional intelligence on student learning outcomes of Madrasah Ibtidayah students. The problem of this research lies in the lack of enthusiasm for learning for Madrasah Ibtidaiyah students, which is characterized by their learning outcomes are not maximized. Students have not systematically studied with the material presented by the teacher. It is necessary to find a solution so that learning can improve student learning outcomes. One component that is believed to have an impact on learning is digital literacy and emotional intelligence. Digital literacy is very much in line with the development of learning technology that is affiliated with digital-based learning. This type of research is a quasi-experimental research that contains three variables, namely one independent variable and two dependent variables. The instruments used in this research are questionnaires and documentation. The data analysis technique used correlation coefficient analysis. The object of the study consisted of thirty-two people consisting of students from Madrasah Ibtidayah. The findings of the study indicate that there is an influence between digital literacy and emotional intelligence on the learning outcomes of Madrasah Ibtidayah students.

# 1. INTRODUCTION

The flow of learning technology development leads to independent student skills in accordance with the concept of an independent learning curriculum. One aspect that needs to be emphasized in learning is developing digital literacy. Digital literacy is defined as the ability to write and read, train thinking habits through the process of reading, writing or creating a work, and getting used to reading (Daghistani, 2017).

Literacy skills need to be possessed by students because literacy skills are competencies that consist of problem-solving techniques from various complex challenges, and the concept of how to deal with absolute changes that continue to occur (Hartati, 2016., Hidayat et al., 2018). Literacy skills can encourage students to be able to follow changes in science and technology that occur in the current information and communication era (Abidin, 2015).

Literacy skills must be mastered by students to take advantage of knowledge that continues to develop in the 21st century because through literacy activities students can improve critical thinking skills, creative thinking, collaborative thinking, and communicative thinking skills (Alalfi, 2015). On the other hand, literacy skills are used by a person to access information in various modes, select valid information, and use information for certain purposes (Li and Gloria, 2017).

In addition to digital literacy, the right variable to encourage student learning outcomes is emotional intelligence. According to Goleman (2002), emotional intelligence is a person's ability to regulate his emotional life with intelligence, maintain emotional harmony through expression of self-awareness skills, self-control, self-motivation, empathy and social skills. One of the factors of emotional intelligence from within students, environmental factors, heredity factors that also determine learning achievement is the aspect of human psychological emotional intelligence in the effective realm. This psychological aspect plays an important role in human life in general, and relates to other people (Bachri, 2013). Someone who is not able to control his emotions will have difficulty in overcoming the problems he faces, both problems related to learning, work.

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The problem found by researchers in the field is that students' emotional intelligence in learning is still lacking, such as the facts seen in the field that students cannot control emotions when there is a problem, cannot adjust to their friends. Therefore, emotional intelligence has a very important role in the educational environment, both formal and non-formal education environments in achieving student personal success. Low emotional intelligence will be difficult to focus on during the learning process, causing low student learning outcomes. So emotional intelligence in students should be a concern for educators in the learning process based on interviews with the teachers concerned.

# 2. LITERATURE REVIEW

## Digital Literacy at Madrasah Ibtidaiyah

Literacy is not just being able to read and write texts, but includes information literacy, statistical literacy, computer literacy depending on the social and cultural context (Budd & Lloyd, 2015). Literacy varies greatly in various social and cultural contexts. In a social and cultural perspective, literacy has shifted its meaning not only from the psychological aspect, but also from the cognitive aspect to the social and cultural aspect (Jemsy, 2018).

According to Borg (2010), literacy is the skill to access, understand, and use something carefully through various activities such as reading, observing, listening, writing, and speaking. Literacy can also be interpreted as the ability to read and write or can be called literacy or literacy (Ihsan, et al., 2018 and Gunawardena, et al., 2017).

Furthermore, Oghenekohwo (2017) notes that literacy is the key to social change and a practical tool for empowerment in each of the three main pillars of sustainable development, namely: human resource development, economic development, and social development. Sereliciouz (2021) reveals that the school literacy movement is a movement that aims to make schools a place of learning (learning to read and write activities) so that students become literate human beings. Husna & Supriyanto (2021) Literacy activities at the school education level are basically to develop students' interest and motivation in reading which aims to improve the ability to understand and use information. So that through the implementation of literacy activities from an early age in elementary schools, students will develop a habit of liking reading, both in the school environment and in the community such as at home, in the open, in public libraries, and so on.

In the Regulation of the Minister of Education and Culture of the Republic of Indonesia, the school literacy movement program is one of the efforts to increase students' reading interest. Literacy activities in schools consist of three general stages, namely the habituation stage, the development stage, and the application stage in the learning process. In line with the research results of Dharma et al (2022), the types of literacy applied at the madrasah ibtidaiyah level consist of reading literacy, scientific literacy and mathematical literacy. This type of literacy is applied in the blended based learning process in the pandemic.

#### Digital Learning Platform

The level of student literacy affects psychological changes and adds insight to students so that they are more ready to take part in learning at school. Literacy skills affect thinking and writing skills because literacy activities can open one's horizons to know various things and master various things based on information obtained through various sources. Literacy skills can encourage students to be able to follow changes in science and technology that occur in the current information and communication era. Furthermore, Kahneman (2011) notes that literacy is the key to social change and a practical tool for empowerment in each of the three main pillars of sustainable development, namely human resource development, economic development, and social development. With expertise and experience, teachers can develop speed reading skills in various situations (Berliner, 2004). Schools can generate and develop patterns and behaviors with stimulation (Hattie & Yates, 2014). To integrate digital technology in classroom learning, many teachers feel disturbed by routines that cause teachers to feel uncomfortable, and tired (Somekh, 2007).

Literacy ability can also be interpreted as a person's ability to find various information needed to communicate using tools (Sun et al., 2012). The importance of having literacy skills as one of the competencies to face the era of disruption, so literacy programs must be implemented since

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elementary school education. This activity is carried out through the stages of habituation, development, and application in learning in order to foster students' interest and literacy skills. For this reason, formal and non-formal education interventions should be prioritized to improve student literacy competence since elementary school because this will be able to support the quality of education itself and the progress of a nation (Jude et al., 2014).

Sebastian et al. (2012) mentions digital learning as the fastest growing learning mode according to the mainstream of technology-based learning. In addition, digital learning is growing rapidly because it presents various advantages over conventional learning. A digital learning platform is a platform used in online learning in all forms of media that are used to convey messages or information from the source to the recipient.

A combination consisting of human elements, materials, facilities, and plans that influence each other to achieve a goal that contains a series of events designed, arranged in such a way as to influence and support the student learning process (Chou and Jessness, 2012). Learning media are tools that are physically used to convey the contents of learning materials, which consist of books, cassettes, cassettes, video cameras, recorders, films, slides, photos, pictures, graphics, television and computers. In other words, the media is a component of learning resources or physical objects that contain teaching materials in the student environment that can stimulate students to learn.

#### **Research Methods**

This research was conducted at Madrasah Ibtidaiyah Negeri Parannapan Jae which is located at Parannapa Jae Village, Barumun Tengah District, Padang Lawas Regency, North Sumatra Province, Indonesia. This type of research is a quantitative experimental design research. The sample of this study were all students of class VI MIN Parannapa Jae where the number of students was 32 students consisting of one class and the population was 100 people. The sample used is 32 people. The instrument in data collection is through a questionnaire and a descriptive study. Data analysis techniques to provide an overview of digital literacy, students' emotional intelligence and learning outcomes, were carried out by descriptive analysis. The research design is as follows.

## 3. RESULT AND DISCUSSIONS

Data Description Emotional Intelligence



In this research, there are two types of data taken, namely digital literacy, students' emotional intelligence and student learning outcomes. This research was conducted at MIN Parannapa Jae with a sample of 32 students. To describe the results of this study, each of the variables studied will be described as follows. The results of this study consisted of 20 statements whose validity had been tested which were given to 32 student respondents (research samples), so that the highest score was 80 and the lowest score was 50. From the largest score, it was processed into group data with a total of 5 classes. class and class intervals throughout. The results of grouping respondents' answer scores can be seen in this table.

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Γ <b>able 1</b> Μe	easures	of Distribution	and Concen	itration o	f Emotional	Intelligence Da	ata

N	Statistics	Variable
0		
1	Lowest Score	50
2	Highest Score	80
3	Mean	65,77
4	Median	86
5	Modus	73
6	Standart Deviation	8,710
7	Variance	75.859

From the table above, the average value (mean) of emotional intelligence is 65.77. And say good. The median value (median) is 86, this shows the student's mean score is good. The value that occurs frequently (mode) is 73, the standard deviation is 8.710, and the variance is 75,859.

#### **Digital Literacy**

The results of the documentation study carried out by researchers were taken from the grades of student report cards in class VI MIN Parannapa Jae, the highest score was 96 and the lowest score was 78. From the report card scores obtained, they were processed into grouped data of 5 classes and class intervals of 4. The results of grouping scores Respondents' answers can be seen in the table below.

Table 2 Measures of Dissemination and Concentration of Digital Literacy Data

No	Statistics	Variable
1	Lowest Score	78
2	Highest Score	96
3	Mean	84,46
4	Median	85
5	Modus	80
6	Standart Deviastion	5.753
7	Variance	33.103

From the table data above, it can be concluded that the grade VI student learning outcomes of MIN Parannapa Jae with an average of 84.46 are in the Very Good category.

#### **Hypothesis Testing**

After giving questionnaires to students to obtain students' emotional intelligence (variable X), then perform data analysis in the form of testing data normality, homogeneity test and product moment correlation test and coefficient of determination. The results of the test carried out for the first time before knowing the relationship with the correlation test, it must first be seen that the data is normally distributed or not. The results of the normality test of the data are obtained as follows.

Table 3 Data Normality Test				
Variabel Statistic Sig.				
Digital Literacy (X1)	.187	.200 <sup>*</sup>		
Emotional Intelligence (X2)	.256	.059		
Learning Outcomes (Y)	.190	.200		

Based on table 3, it is obtained that the three variables in digital literacy are normal because they are significantly greater than 0.05, namely 0.200, then emotional intelligence is 0.059 and learning outcomes are 0.200. Then, the homogeneity test of digital literacy was carried out on student learning outcomes. Researchers conducted a homogeneity test on the data group where the first thing to do was to see how the data was whether digital literacy was homogeneous on learning outcomes. The results are obtained as follows.

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Levene Statistic	Sig.
.800	.538

Based on Table 4, it is found that if the significance is greater than 0.05 then the two groups of data are homogeneous. From the data obtained, the significant value is 0.538 > 0.005, so it is said that the two groups of data are homogeneous.

 Table 5 Emotional Intelligence Homogeneity Test on Learning Outcomes

Levene Statistic	Sig.
1.780	.251

Based on Table 5, it is found that if the significance is greater than 0.05 then the two groups of data are homogeneous. From the data obtained, the significant value is 0.251 > 0.005 so it is said that the two groups of data are homogeneous.

## **Product Moment Correlation**

The correlation matrix is to determine the relationship between digital literacy on learning outcomes and emotional intelligence on learning outcomes as shown in the following table.

Table 6 Correlation Matrix				
Component	Variable	Learning Outcomes		
Pearson Correlation	Learning Outcomes	1.000		
	Digital Literacy	.495		
	Emotional Intteligence	.619		
Sig. (1-tailed)	Learning Outcomes			
	Digital Literacy	.04		
	Emotional Intteligence	.016		

Based on the table above, the digital test variable is obtained with r = 0.495 with a significance of 0.04 which is smaller than 0.05 indicating that there is an influence between digital literacy on learning outcomes. Then the variable emotional intelligence on learning outcomes obtained r = 0.619 with a significant 0.016 which indicates an influence on emotional intelligence on learning outcomes which shows the higher emotional intelligence, the higher learning outcomes. The coefficient of determination is obtained as shown in the following table.

# Table 7 Coefficients a and b Coefficients<sup>a</sup>

	oberneients						
			Koef	Stand Koef			
Mo	odel	В	Std. Error	Beta	t	Sig.	
1	(Constant )	40.746	17.084		2.385	.038	
	Emotional Intelligenc e	.601	.241	.619	2.492	.032	
2	(Constant )	51.237	22.565		2.271	.049	

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Emotional Intelligenc e	1.024	.625	1.054	1.638	.136
Digital Literacy	525	.713	474	736	.481

## Excluded Variables<sup>b</sup>

Model		Beta In	t	Sig.	Partial Correlation
1	Digital Literac y	474 <sup>a</sup>	736	.04 8	238

Based on the data obtained in Table 7, it is based on emotional intelligence with t count = 2.492 with a significant 0.032 which means there is a significant effect and for digital literacy t count = 0.736 with a significant = 0.48 which means there is an influence on digital literacy. The relationship between the three variables is as follows.

 Table 8 Relationship between Digital Literacy and Emotional Intelligence on Learning Outcomes

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619 <sup>ª</sup>	.383	.321	6.25832
2	.647 <sup>b</sup>	.418	.289	6.40695

a. Predictors: (Constant), Kecerdasan\_Emosional

b. Predictors: (Constant), Kecerdasan\_Emosional,

Literasi\_Digital

c. Dependent Variable: Hasil\_Belajar

Table 8 explains that in number 1 shows that the variable Emotional intelligence on learning outcomes with a value of R = 0.619 with a value of determination R2 that is 0.383 which indicates that emotional intelligence on learning outcomes is 38.3% then in model 2 shows the value of digital literacy scores (X1) and emotional intelligence (X2) on learning outcomes with a correlation value of 0.647 with a percentage of 41.8% so that the value of digital literacy on learning outcomes is (41.8% - 38.3% = 3.5%).

Based on the research, the data obtained means that there is a relationship between emotional intelligence and learning outcomes. This is reinforced by previous research, namely research conducted by Yuslina Rizki Harahap (2016) whose results show that the variable level of emotional intelligence with mathematics learning outcomes where the test is 7.387 with t table 2.018 so tcount> ttable. Research conducted by Sumanti (2014) whose results show that there is a significant influence between interest in learning mathematics on learning outcomes with a number of 0.5 at a constant 31.4. In addition, digital literacy has an influence on learning outcomes because with digital literacy in this pandemic period students are more active in the use of digital literacy technology which will produce more accurate and effective results.

## 4. CONCLUSION

Based on the results of the research and discussion described above, the researcher describes the conclusions and suggestions in this study. First, there is a significant relationship between digital literacy and learning outcomes at the Class VI Parannapa Jae State Islamic Madrasah, Padanglawas

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Regency, North Sumatra, Indonesia. Second, there is a relationship between digital literacy and emotional intelligence on learning outcomes at the Class VI Parannapa Jae State Islamic Madrasah, Padanglawas Regency, North Sumatra, Indonesia.

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