

## Improving Digital Literacy of Elementary School Students with Matriks

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**Abstract:** The objectives of this writing are (1) to Outline a creative and comprehensive digital literacy program to develop ideas that are only limited to local ones to become more comprehensive. (2) Explain the steps for implementing the new program; with the existence of this new program, many things are targets and must be sought for success. (3) Describe the parties that can assist in supporting the success of this new program. This study uses a qualitative method using a descriptive approach. The matriks is a combination of five tricks used to improve digital literacy activities. These five tricks come from several ideas that have been reviewed regularly to become one complementary idea.

**Keywords:** Digital Literacy, Elementary School

### Introduction

Digital literacy can be used to hone students' skills in using technology. This is because when students get assignments from teachers related to the internet, they are required to operate computers or smartphones. So that over time, they will be fluent in using technology. Not only that, with digital literacy, students can have reading references. They can choose the reading they like and according to their age. This makes their knowledge increase and opens their horizons. The more literacy that is read, the more minor plagiarism of students will be. This is because they already have a large vocabulary so that when they are asked to write an essay, they are not confused about what to say. In addition, with digital literacy, education will be of high quality. This is because by utilizing digital literacy, students not only learn about the subject matter but can also learn about the use of technology.

In this millennial era, technology is increasingly rampant and enters every aspect of life. It can even be said that from the moment we wake up until we go to sleep, we always meet technology. One technology that often goes hand in hand with education is digital literacy. Digital Literacy activities are very often carried out by all elements of education, such as teachers, students, and parents of students. But unfortunately they often use digital literacy that is not in accordance with the procedure. Therefore, it will be hazardous if there is no ideal digital literacy as a rule so that its use does not negatively impact.

The danger if there is no ideal digital literacy is that first, we do not have the skills to use technology. We know that digital literacy is critical in the dissemination of universal information such as technological developments. If we do not know that information, then we will find it difficult to use technology. The second activity of plagiarism is the activity of acknowledging other people's work like ours; this is very common even in simple things such as school assignments taken from the web without any editing and name description. Knowledge will not develop and will also be out of date where others are already reliable in utilizing digital literacy ideally. We still have not followed that development.

Furthermore, the last one is education that lacks quality because education is very close to the world of digital literacy. Without ideal digital literacy, education will

feel empty and less alive. With digital literacy, the development of education will be easier to activate.

Research by the Program for International Student Assessment (PISA) shows that Indonesia is ranked 62 out of 70 countries globally. In 2015 Indonesia was still in the top 10 lowest rankings, namely 62 out of 72 countries with an average score of 395. The interesting thing is that the three aspects of literacy, namely reading, math skills, and science skills increased from the previous year, namely 2012. our literacy level, it can be seen from the PISA score which is still below the OECD average. Our PISA score even lost to Vietnam. Even though if you look at the education budget, they are both 20% of the state budget," explained Deputy Minister of Finance Marsadiasmo at the opening of the Literacy Festival on 4-5 September 2018 in order to welcome literacy day on 8 September. The cause of the low level of literacy in Indonesia is due to many things. One of them is the unwise use of technology. Many Indonesian people are lulled by the sophistication of today's technology. In fact, reading activities can also be carried out through gadgets with the existence of e-book technology. It can be seen that people tend to enjoy other things such as games, social media, music, or photography compared to reading (Damarjati, 2019).

## **Method**

This study uses a qualitative research method using a descriptive approach. This method is called qualitative because it is more based on the nature of logical phenomena that prioritize appreciation (*verstehen*). In the qualitative method, the researcher tries to understand and interpret the meaning of an event of human behavior interaction in certain situations according to the researcher's own perspective. Research that uses qualitative research aims to understand the object being studied in-depth (Aminah, Wijaya, and Yuspriyati 2018). Thus, this descriptive qualitative research aims to obtain more in-depth information by describing, analyzing, and interpreting.

## **Result and Discussion**

### **The Reality of Student Literacy Conditions**

In the current condition, children's interest in reading is greatly reduced. This can be caused by many factors. One of the factors is that reading is a boring activity. They will only interact with writing only. So it makes them sleepy. Students are more interested in playing online games than reading. This is because in online games, there are interesting pictures and challenges so that they are more challenged. In online games, they can also compete with their friends. The result of students' lack of interest in reading is a high level of plagiarism. This is because they do not have a vocabulary reference. So this causes them to take other people's writing.

### **Solutions Offered**

To improve digital literacy in students, various methods have emerged that aim to increase children's reading interest. These methods are digital literacy programs created by utilizing existing technological developments. In this case, there are nine methods that the authors take to create a new program, namely: (1) "Utilization of scribe-sparkol Video Media to Improve Teacher and Student Literacy Culture" (A. Zahra, Asnimar, Srirarasati, and Yenny L, 2017). (2) "Efforts to Improve Digital Literacy Skills for School Librarians and Teachers in the Central Jakarta Area Through Information Literacy Training" (Kurnianingsih, 2017). (3) "Utilization of Google Apps in the era of digital literacy for elementary school students" (Ulum, Fantiro, and Rifa'i, 2019). (4) "Digital Literacy Strengthening Model Through Utilization of e-learning" (Setyaningsih, Abdullah, Prihantoro, and

Hustinawaty, 2019). (5) "Communication Strategy in Disseminating Digital Literacy Program Through Instagram Social Media Ministry of Communication and Information Technology. e-Proceeding of Management" (Rahmaniar and Lestari, 2019). (6) "The influence of the internet-based group investigation model on learning outcomes and students' digital literacy skills" (Sai, 2017). (7) "Improving Literacy for Elementary School Teachers and Students Through Training on the Use of Children's Encyclopedia Applications" (Kristy, Hayatin, and Wahyuni, 2017). (8) "Development of a Literacy Study Center Model to Improve the Reading Culture of Semarang State University Students" (Siroj, 2017). (9) "Integrated Digital Media Literacy Improvement Program for Students Through Psychoeducation of Parents and Teachers at SD Negeri Tembalang Semarang" (Ediati, Rahmandani, Kahija, Sakti, and Kaloeti, 2018).

However, from the nine methods above, there are some drawbacks if only done individually, namely: lack of understanding of plagiarism, lack of a sense of family bonding, time to make digital books, media presentation requires good audio and visual quality, discussions usually run less effectively. Therefore, we have a new idea that combines the five ideas that we have chosen and are considered suitable for efforts to increase digital literacy in Indonesia into a new program. The five methods we chose were: information literacy training, psychoeducation, digital book creation, videoscribe-sparkol media, and group investigation. This program is carried out for a week and is carried out in elementary schools. With this program, it is hoped that the level of digital literacy in students will increase.

### **Matriks is an Effort to Improve Digital Literacy of Elementary School**

The matriks is a combination of five tricks used to improve digital literacy activities. These five tricks come from several ideas that have been reviewed regularly so that they can become one complementary idea. This Matriks Experiment is carried out in five days or a week.

The first day was filled with information literacy training to determine the extent of students' understanding of information literacy. This training is held on Monday 15 minutes before the first hour of class, because every morning it is customary to hold literacy. Early training was carried out by two students and accompanied by one class teacher. From this training, it is expected that students can understand the importance of information literacy to improve digital literacy.

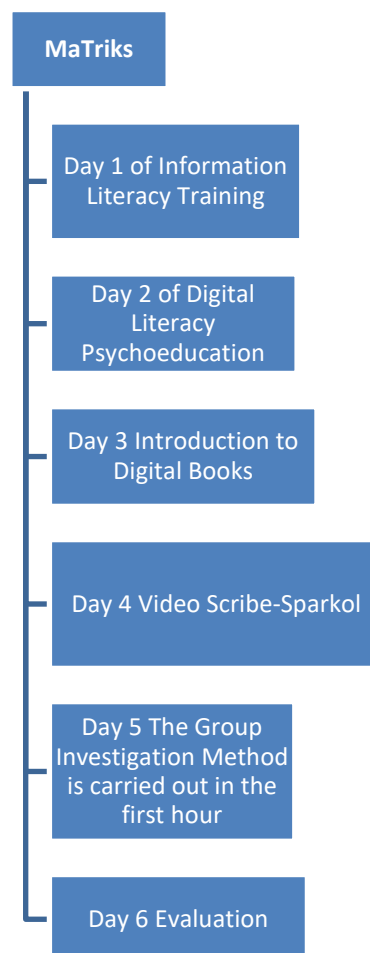
The second day will be filled with psychoeducational activities regarding digital literacy. This activity aims to provide education about digital literacy that is currently rife in the community. This activity is carried out on Tuesday after the first break around 10:30 am, by dividing students into groups, and each group gets 1 facilitator who will provide material in a fun and interesting way.

The third day was filled with the introduction of digital books as learning media. Digital books or often called digital modules are one of the uses of digital literacy in the field of education. In this case, digital books are introduced with an image that is friendly to students. In addition, the use of digital books also has a positive impact, such as saving paper and being easy to carry everywhere. The introduction of this digital book was held on Wednesday 30 minutes before the first break.

The fourth day will be filled by using video scribe-sparkol, after three days of dealing with digital literacy by reading or listening to writing, today the use of media uses audiovisual. With this media, learning will be much more interesting and fun because students can see moving pictures and writing. In addition, this media can also stimulate the artistic souls of students. This activity was carried out on Thursday one hour before going home from school, because it was the time to feel tired and wanted to sleep. However, with a video like this it will make students more excited.

The fifth day will be filled using the group investigation method. This method is used to determine the attitudes, interests, and potential of children. After four days of carrying out activities that have the potential to increase digital literacy in students, it can be said that this activity is the final result of this matrix. From here, we will find out what the interests and talents of the students are and what stage they have reached, whether special treatment is needed or not. This method is carried out on Friday morning during the first hour.

After carrying out the five tricks that have been designed, we will evaluate the activities that have been carried out for five days whether they have been effective or need further changes. But what is certain is that if this activity is carried out correctly and according to the structure, it will certainly increase the potential of ideal digital literacy.



**Chart 1. Program Order**

**How far can the originator of the idea be updated with other ideas**

Interest in reading is very important for students, various literacy activities can be pursued by teachers both in class and outside of class. Teachers play a very important role as a driver in promoting digital-based literacy, assisting and growing students' interest in reading. It takes cooperation from many parties; this collaboration can be carried out by school principals, classroom teachers, and subject teachers.

As we all know and understand, literacy is simply defined as the ability to read and write, or nowadays it is often referred to as literacy, literacy, or literacy. However, in the context of the 21st century, literacy has expanded its meaning beyond just being able to read and write. High literacy skills are abilities that allow people to read the world, not just words, sentences, paragraphs, or a discourse. Literacy involves the use of various forms of communication that provide us with further and greater opportunities to advance ourselves, our families, communities, and nations. Literacy helps us understand the world and express identities, ideas and cultures. In other words, literacy is no longer a single meaning but contains multiple meanings of multiliteracies. In multiliteracy, literacy can mean technological literacy, politics, critical thinking, and sensitivity to the surrounding environment. A person can only be said to be literate if he can understand something because he reads and does something based on understanding.

### **Parties Who Can Help Implement the Matriks**

As for the parties who can assist in implementing literacy or reading culture in children, these parties include: teachers, school principals, education offices, and no less important are the parents of the students themselves. Each party has its own contribution or role in helping to optimize the reading culture of students. (1) Within the scope of schools, teachers can be assisted by creating and implementing literacy programs for their students. (2) In addition, there is also the role of the principal by providing facilities for students to support literacy programs, these facilities may include libraries and computer labs. (3) The education office also has a very important contribution in realizing literacy in schools by socializing the importance of literacy to schools. So that schools can apply a reading culture to students. (4) The role of parents is also needed to assist and monitor children's reading interest when at home and facilitate media to support children's literacy programs.

This research is in line with what has been done by Kristy, Hayatin, and Wahyuni (2019) entitled "Improving Literacy for Elementary School Teachers and Students Through Training in Using the Children's Encyclopedia Application" which states that through literacy training activities involving teachers and students of SDN 2 Bandungrejosari Malang, it is proven that there is an influence positive impact on literacy awareness in the school environment. In another study conducted by Sai (2017) in his research entitled "The Effect of the Internet-Based Group Investigation Model on Learning Outcomes and Students' Digital Literacy Ability" states that the application of the internet-based group investigation learning model can improve students' digital literacy skills. Then in a journal written by A. Zahra, Asnimar, Srirarasati, and Yenny L (2017) entitled "Utilization of Videoscribe-Sparkol Media to Improve Literacy Culture of Teachers and Students" states that the use of videoscribe-sparkol media can improve the literacy culture of teachers and students, both as a generation of 'digital natives ' and the digital immigrant generation'.

### **Conclusion**

The matriks is a combination of five tricks used to improve digital literacy activities. These five tricks come from several ideas that have been reviewed regularly so that they can become one complementary idea.

Matriks experiments are carried out in five days or a week. The first day was filled with Information Literacy Training which was held 15 minutes before the first hour of the lesson. The second day was filled with Psychoeducational activities regarding digital literacy which were carried out after the break. The third day was filled with the introduction of digital books as learning media which was carried out 30 minutes before the break. The fourth day will be filled by using a scribe-sparkol video held one hour before going home from school. The fifth day will be filled

using the group investigation method, which was carried out in the first hour. Conduct an evaluation of the activities that have been carried out for five days. Parties who can assist in realizing this literacy program include: teachers, school principals, education offices, and no less important are the parents of students. Each party has its own contribution or role in helping to optimize the reading culture of students. Within the scope of the school can be assisted by teachers, principals, and the education office. While at home, parents can help by facilitating to support children's literacy programs.

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