Empowering Digital Technologies: Students' Literacy Ability

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ABSTRACT

The ability of literacy and numeracy in this digital era is indispensable in increasing global competitiveness. Digital literacy with critical thinking and higher thinking makes students' ability to understand science and numeracy concepts better. Digital literacy capabilities carried out with a national assessment carried out in 2021 will become a reference for teachers later to be able to teach students better digital literacy skills and technology. This research was conducted using a descriptive method through literature review and data on student literacy scores at the high school level in Jakarta when the Ministry of Education and Culture 2022 national assessment was carried out. The literacy skills of students who were still lacking, especially because they were not familiar with presenting questions with various forms of questions, had to be introduced to the concept of good reading, so that the students are not misunderstandings the context of questions for empowering digital literacy and technology

Keywords: literacy, national assessment, empowering digital

INTRODUCTION

Literacy and numeracy skills are needed in today's modern era. Global progress of the world makes the competitive ability of the Indonesian people to be improved. The very advanced digital era coupled with the state of the world during the corona pandemic made world policies change rapidly to participate in school activities from face-to-face to distance learning. Students' ability to access and understand technology such as the use of social media for distance learning is also required. Many social platforms are used to facilitate learning and other meeting activities.

The presence of increasingly advanced technology indicates the progress of internet access in Indonesia. In fact, a large number of Internet users in Indonesia, as well as the high frequency of accessing information content and social networks, do not necessarily guarantee the "maturity" of Indonesian Internet users in using the Internet. Many cases of internet

abuse are also rampant, ranging from fraud, internet addiction or addiction, invasion of privacy, factual bias, and most recently the rise of scam bluffs. If traced, some of these cases lead to one thing, namely the low digital literacy of the Indonesian people. Based on these observations, a number of parties have made various efforts to increase digital literacy in the community. This effort, which had actually been started many years ago, was carried out by using various approaches to solve various problems related to numerical problems.

Some use a general approach, including providing a general summary of digital literacy. There are also people who take a thematic approach, either targeting specific content such as "safe internet", or focusing on specific groups such as teenagers and children or targeting multiple segments such as teachers, and housewives. Raising the level of the community or making everyone digitally literate is not a task that can be achieved with one or two approaches. But it must be done by others. However, there is a risk that the digital literacy movement becomes fragmented and seems to have a clear "without" agenda. All activities appear reactive, in the sense that they are carried out as a temporary response to certain situations. Therefore, it is difficult to assess how the digital literacy movement in Indonesia has developed. It is equally difficult to assess whether the digital literacy movement is really effective in solving problems. To go further in finding the right formula, model, or approach according to the current situation, it is necessary to study and map the digital literacy movement in Indonesia, both in terms of concepts, issues/topics, content, goals, and approaches to action.

However, the growth of media and its phenomena is no longer enough to solve the problem of media education. A new perspective is needed to not see media literacy only as a matter of building life skills. The Life Skills approach solves technical problems. But in practice, this approach also requires intense media consumption so it is difficult to control and tends to be excessive. In a virtual world where the Internet is a new medium that is very important in daily life, user understanding and authority are very necessary, because technology is only a tool that does not determine how we should act, how to act (Koltay, 2011). Various insights and actions are needed by applying various new media skills, aka digital literacy. The importance of digital literacy is not only due to high media exposure, but also a number of other factors. First, is the important role of information in the democratic process. Second, is the importance of the role of cultural participation and citizenship. Third, the growth of popular culture makes children and adolescents more and more accessible to digital media (Koltay, 2011). In a new media landscape characterized by media convergence and interaction, literacy is not only related to the digestion of media content but also to the production of multimedia texts, media, and even interactive texts in hypermedia contexts. In digital media, there is a shift in the position of the audience from a passive audience to an audience who has the freedom

to reproduce text independently through several media owned by the internet.

METHOD

This research was conducted using a descriptive method through literature review and data on student literacy scores at the high school level in Jakarta when the Ministry of Education and Culture national assessment.

FINDINGS AND DISCUSSION

Based on the results of the APJII survey, Indonesia has 196.71 million Internet users, which is equivalent to a total population of 73.7. In addition to the increase in digital literacy rankings, the 2020 National Digital Literacy Survey shows that the Digital Literacy Index is already above the average for all Indonesian states. Indonesia is currently ranked 56th out of 63 countries surveyed. It's a bit late, but Indonesia is ranked 111 from the previous 115, as measured by the ITU (International Telecommunication Union). This shows that Indonesian Internet and social media users have made a leap forward. This means that Indonesia is increasingly taking advantage of the existing digital space. The 2021 Digital Literacy Index is measured by a personal survey of 10,000 respondents from 514 districts and cities in Indonesia. Respondents are characterized by Internet users aged 1370 years. Compared to the Digital Literacy Index 2020, the index has increased (from 3.46 to 3.49). The pillars of "digital culture" and "digital skills" have increased, but the pillars of "digital ethics" and "digital security" have declined. In addition to measuring literacy rates, a survey conducted by Kominfo using the Katadata Insight Center also analyzed the behavior of internet users in Indonesia. Through this research, we also see that communities improve their fake news resolution skills. This is indicated by the increasing number of people who are enthusiastic about browsing the virtual world with search engines to find the authenticity of the information. Analysis of the index results also shows that efforts are needed to increase the literacy rate of women, low-income groups, low education, and the elderly.

Figure 1
Regions with Highest Literacy Rate
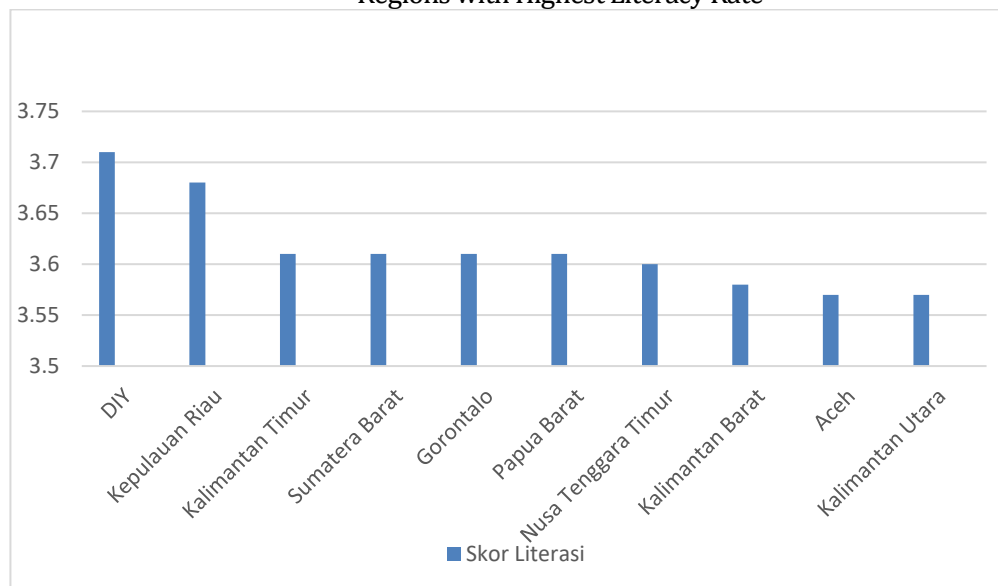
Source by Digital Literacy Index 2020

To improve the quality of the education system, the government carries out a national assessment (AN). To see the results of the AN, his party will provide an Education Report Card platform. The results of the AN will later be returned to the Education Report Card platform which is given to the principal and the Education office. Through this education report card, school principals and education offices can plan follow-up actions to improve the quality of education in their respective areas. The literacy ability of the equivalent high school level in DKI Jakarta reaches minimum competence, most students have reached the minimum competency limit for reading literacy but efforts are needed to encourage more students to become proficient. The character index cultivates students proactively and consistently applying the character values of Pancasila students who have a noble character, mutual cooperation, independence, creative and critical reasoning, and global diversity in everyday life. However, the distribution of student learning outcomes based on urban-rural areas of literacy, there is a difference in literacy achievement between urban and rural areas. Equitable distribution of student learning outcomes based on socioeconomic groups; equalization of literacy, there is no difference in literacy achievement based on socio-economic groups. The quality of the learning process of students. The index of quality of learning directed at learning leads to quality improvement as indicated by the conducive classroom atmosphere and the presence of affective support and cognitive activation from the teacher. Reflection index of active teachers. Learning quality development activities carried out have not been structured. Teachers have not been consistent in reflecting on learning, exploring new teaching references, and sparking new innovations (Rapor Pendidikan Public, 2022).

Meanwhile, eastern regions such as West Papua which are included in the 10 regions with the highest literacy scores in Indonesia based on the digital literacy index 2020 in education report cards still need to be addressed. The achievement of learning outcomes for literacy skills is below the minimum competency, less

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than 50% of students have reached the minimum competency limit for reading literacy. There is no difference in literacy achievement between urban and rural areas. Equitable literacy, there is no difference in literacy achievement based on socioeconomic groups. As for the quality index of directed learning, learning leads to quality improvement as indicated by the conducive classroom atmosphere and the presence of effective support and cognitive activation from the teacher. The passive teacher reflection index efforts to improve the quality of learning are sporadic just to complete assignments. The teacher uses an iterative method to carry out learning and does not appear to be a reflective process. The school security climate at the alert level, the education unit began to develop a security climate in aspects of psychological well-being, bullying, physical punishment, sexual violence, and drug abuse in the school environment (rapor Pendidikan public, 2022). Therefore, the education unit can continue the intervention by increasing the ability to prevent and handle cases in the school environment.

In general, the achievement of learning outcomes in education report cards in all provinces in Indonesia has the literacy ability to reach the minimum competency, most students have reached the minimum competency limit for reading literacy but efforts are needed to encourage more students to become proficient. Equitable Literacy There is a difference in literacy achievement between urban and rural areas. Even in distribution literacy, there is no difference in literacy achievement based on socioeconomic groups. The Learning Quality Index has been directed, learning leads to quality improvement as indicated by a conducive classroom atmosphere and affective support and cognitive activation from the teacher. The Teacher Reflection Index is active, and the learning quality development activities carried out are not structured. Teachers have not been consistent in reflecting on learning, exploring new teaching references, and sparking new innovations (rapor Pendidikan public, 2022). Therefore, it can be seen that although the Indonesian Literacy Score has increased but is not significant, there is still a need for development in improving the quality of students in understanding of reading literacy and also the active role of teachers and schools to educate students to be more active in reflecting on learning, exploring new teaching references, and sparking new innovation. Improving the Quality of Student Learning Processes based on Education report cards also needs to be done in order to create students who are digitally active and understand the digital context they are reading so that they can contribute significantly to society.

CONCLUSION

Indonesia's literacy ability has increased, but the literacy skills of students in Indonesia still need to be improved significantly. In the areas of Jakarta and West Papua, there is an even distribution of student learning outcomes based on urban-rural areas. There is a difference in literacy achievement between urban and rural areas. Meanwhile, based on socioeconomic conditions there is no difference. The ability of students to understand fictional texts and informative

texts is needed to improve the digital skills needed today so that they can later contribute significantly to society in Indonesia's development.

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