

Digital Mading For Generation Alpha: Innovation of Literacy Learning in The Context of Independent Curriculum at SDN Cirebon District

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Abstract— This study aims to examine the application of digital literacy through the creation of digital wall magazines (digital mading) by 6th grade elementary school students in the context of the Merdeka Curriculum. Digital mading activities were chosen as a form of learning innovation that not only develops literacy skills, but also encourages collaboration, creativity, and educational use of technology by Generation Alpha a group of children who have grown up in a digital environment since an early age. This study uses a qualitative approach with a case study method. The subjects of the study consisted of 6th grade students at an elementary school based on the Merdeka Curriculum, class teachers, and principals. Data were collected through interviews, direct observation of the digital mading creation process, and documentation of student work. The data analysis technique used the Miles and Huberman model, which includes data reduction, data presentation, and drawing conclusions. The results of the study show that digital mading activities can improve students' digital literacy skills in three main aspects: the ability to search for and evaluate information, the skill of composing digital texts, and the ability to collaborate in teams. In addition, this media is also able to foster a sense of responsibility and creativity in students in producing original work. The implications of this study indicate that digital wall magazines can be an alternative literacy learning media that is in line with the spirit of the Independent Curriculum. Further research is recommended to explore the application of similar media in different grade levels and their integration with other subjects.

Keywords— Digital Literacy, Digital Wall Magazine, Generation Alpha, Independent Curriculum, Elementary School.

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I. INTRODUCTION

Generation Alpha, namely children born after 2010, grew up in a very dominant digital culture. They know smart devices, interactive applications, and communication based on digital means. This encourages the emergence of an urgent need to improve digital literacy skills from an early age, especially in elementary schools. Digital knowledge includes not only technical capacity in operating devices, but also critical thinking skills, digital ethics and responsible information filtering abilities. (Devi Widiyanti et al., 2024; Gunawan et al., 2024)

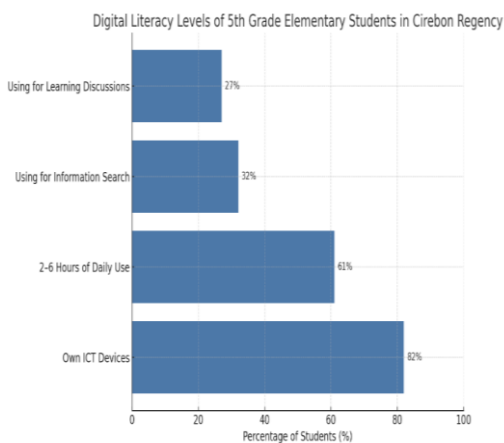
This study was conducted at SDN Kabuapten Cirebon, a public elementary school that has implemented an independent learning program since the 2022/2023 academic year in Cirebon Regency, West Java. The research documents include 28 year 6 students who actively participate in the Wall magazine project activities, a family teacher, and a supportive teacher, acting as a technology support person. The selection of this subject is based on the consideration that the class has been in a coherent project based on the project and has digital support for devices such as the Ministry of Education and Cultural Support and access to a simple IT room. The school is also registered as an active participant in the early mobilizer program to encourage technology

integration to improve illiteracy elimination. (Priyadi et al., 2024) https://kurikulum.kemdikbud.go.id/wp-content/uploads/2022/arsip/025_H_KR_2022-Salinan-Graph_1

Digital Literacy Level of 5th Grade Elementary Students in Cirebon District

According to data from the Cirebon Regency Education Office (2023), as many as 42% of elementary schools implementing the Merdeka Curriculum in this region have utilized a project-based approach, but only a small number have explicitly developed digital literacy projects. (Ayu et al., 2024)

Data from the Ministry of Communication and Information (Kemenkominfo) and Katadata Insight (KIC) show that Indonesia's Digital Knowledge Index in 2022 is 3.54 on a scale of 1-5, which means. Only 32% of students use computers to find information and 27% use them to discuss or communicate related to learning. (Peraturan Bupati Cirebon Nomor 53 Tahun 2018.Pdf, n.d.; Putriani et al., 2023)



The bar graph above illustrates the digital literacy level data of 5th grade elementary school students in Cirebon Regency, which can be described as in the following table one.

Table 1
Digital Literacy Level of 5th Grade Elementary Students in Cirebon District

| No | Digital Activity | Percentage of Students (%) |
|----|--------------------------------|----------------------------|
| 1 | Own ICT Devices | 82% |
| 2 | Usage of 2-6 Hours per Day | 61% |
| 3 | Using for Information Search | 32% |
| 4 | Using for Learning Discussions | 27% |

As an intuitive illustration that supports its context, the following image captures the atmosphere of practical activities in a modern private classroom in Cirebon Regency. Bringing 28 students -6 years in red and white uniforms working together to create a digital wall magazine in a class-based classroom, accompanied by a teacher. The digital newsletter was developed using Chromebook and tablet devices to support the school, featuring articles, posters, and infographics produced by students. This image not only illustrates the active participation of students in digital illiteracy activities, but also reflects the conversion of a common research space into a creative and digital collaborative space.

Figure 1. The atmosphere of digital literacy activities through digital wall magazines in class 6 of private elementary schools in Cirebon Regency (Researcher Documentation, 2025).



Figure. 1

Previous research was conducted by Wardana et al. . In addition, Rini et al. (2021) Prove that the use of digital methods such as simple design operations and applications can encourage creative manifestations and increase interest in reading. Digital literacy in elementary schools is currently developing in more multimedia, with the use of digital media as a means of self-discovery and information discovery. (Bahasa et al., 2024; Muslihudin, 2019,; 2021)

Although digital knowledge has become an important topic in various elementary education studies, most studies are still described or limited in the technical aspects of media use. A number of studies have studied in -Depth How to use digital bulletins to support learning for contextual digital knowledge within the framework of the Merdeka program, especially in areas such as Ciirebon Regency. In fact, the local context has interesting motivations to be studied. Therefore, this study will focus on issues related to the implementation of digital bulletins in improving the reading and writing skills of digital writing of 6 elementary school students in Cirebon Regency? And what are the challenges and solutions in the implementation of Digital Babillard in the field based on the Merdeka program? Therefore, the objectives of this study are (1) to describe the process of creating digital bulletins for students from Elementary School Year 6 in Ciirebon Regency; And (2) to identify challenges and solutions in the implementation of Digital Babak in schools based on independent research programs.

This study fills the gap by combining the PJBL method and crazy digital media to improve the reading and writing skills of elementary school students based on the Merdeka program. The unique contribution of this study is to provide a model for conducting direct student experience, accompanied by visual evidence and qualitative analysis, which can be used as a practical reference for political and decision-making teachers in the field of elementary education. Therefore, this study will provide a practical image in developing digital knowledge through creative media and is suitable for the characteristics of the alpha generation in elementary schools in Cirebon district.

II. METHOD

Explain This study uses a descriptive qualitative approach with subjects of 6th grade students of private elementary schools in Cirebon Regency to examine the effectiveness of digital wall magazines in improving digital literacy in the context of the Merdeka Curriculum.

This study uses a qualitative approach to the concept of description to examine the phenomenon of applying digital knowledge thanks to the creation of a digital wall magazine (digital bulletin) of elementary students. This concept has been chosen because it can be in-depth in the process, interaction and impact of the application of its based activities on digital literacy skills. This study was conducted in a real context without changing the manipulation, to gain a contextual understanding and discovery of the implementation of an independent program, which emphasizes creativity and digital collaboration. (Naimah et al., 2024)

This study was conducted in one of the modern private schools in Cirebon Regency, a province of West Java, has implemented an independent program. The research documents consisted of 28 students in year -6 and Indonesian and IT teachers. This school was chosen for the purpose because it facilitates a digital magazine program based on Chromebooks and tablets. The characteristics of the school that is open to digital learning innovation make this position ideal for observing the integration of digital knowledge in practical learning. Teknik Pengumpulan Data

Data were analyzed using the Miles, Huberman and Saldana (2018) model which includes three main steps: data reduction, data presentation and drawing and concluding. Reduction was made in the arrangement and encryption of raw data based on relevant topics such as digital creation, collaboration and understanding of technology. Data presentation used a theme matrix and direct quotes from the research problem, while verification was carried out continuously by the triangle between techniques and data sources to ensure the validity of the results. (Hasanah & Zakly, 2021; Machin et al., 2023; Sustiyo Wandi & Tri Nurharsono, 2013)

The main variable of this study is digital knowledge, which is defined as students' ability to access, evaluate, create and communicate information through digital means in meaningful and creative ways (NG, 2012; UNESCO, 2021). The application of a large number of digital is defined as the process of students' collaboration in composing, designing and publishing educational content through digital means using IT tools. Support variables such as digital creation and collaboration are determined by operational indicators such as task division, digital discussion and multimedia features. (Cynthia & Sihotang, 2023; Suganda, 2022).

III. RESULT AND DISCUSSION

General Description of Digital Wall Magazine Activities

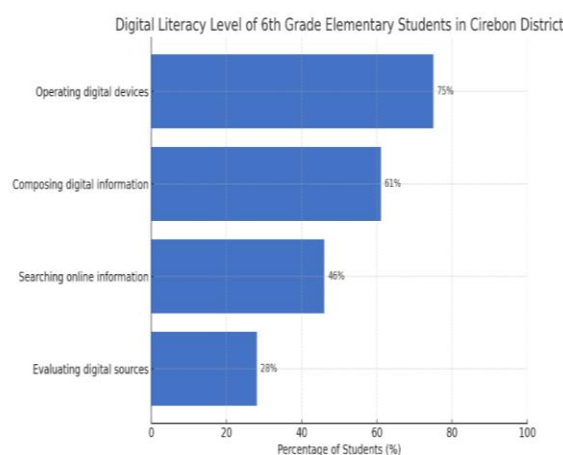
Based on the results of three weeks of observation at Cirebon Regency Primary School, the operation of the

digital wall magazine was produced in a cooperative and enthusiastic atmosphere. Students were divided into five groups, each group was responsible for summarizing various contents such as articles about comments, poems, infographic posters and reports on school activities. This project uses Chromebooks and tablets to form a magnetic field, as well as the use of applications presented based on presentations such as Google Slides and Canva. The teacher acts as a support person, providing technical orientation and combining gross deletion content according to the academic achievements of the independent program.

Findings on Digital Literacy

According to the results of documents and interviews, it was found that up to 75% of students have basic capacity in accessing and exploiting digital devices. Up to 61% of students can organize digital information in a structured way and 46% can search for online information independently. However, only 28% of students are important in assessing the accuracy of digital sources. These results strengthen previous data along with the level of digital literacy of basic students in Cirebon at an early stage (level 1 UNESCO scale). This is as seen in the following graph.

Graph 2
Digital Literacy Level of 5th Grade Elementary Students in Cirebon District



The horizontal bar chart above is an objective image of the results of the study on the digital literacy level of 6 students from elementary schools in Cirebon Regency, showing the percentage of students who are proficient in various aspects of digital knowledge, without subjective analysis or analysis. Student participation in groups is classified as an activity, with 82% of students participating in group discussions, sharing roles and contributing to product content. Digital collaboration seems to be evident by using comments, short video chat features, and general modifications in online documents. This activity confirms that the integration of digital-based projects can improve social interaction and collaboration skills among elementary school students. The following is

a visualization of student products in the form of digital bulletins made at Cirebon Regency Elementary School.

Figure 1 Visualization of digital bulletin board



The digital bulletin image above shows various forms and contents. Some of the contents display infographics with mini surveys collected by colleagues, while others are poems with the themes of "healthy internet" and "social media knowledge". Design elements such as color, arrangement, and transition animations show a basic understanding of digital aesthetics. This reflects the relationship between visual knowledge, communication knowledge and digital expression in developing multimodal knowledge as observed in the study of (Lohr, 2008)

Student activities and participation cannot be separated from the role of teachers as support persons. Indeed, teachers play a central role in supporting students, not only from technical aspects, but also to guide critical thinking about online information. Teachers also instruct students to use Indonesian standards in the content of the bulletin, depending on the purpose of strengthening language reading and writing skills. This is consistent with the concept of teachers as digital guides in the 21st century (Burns, 2021), where teachers are no longer the only source of knowledge, but help students access and explain digital information. This observation is in line with research (2012) and Yunus et al. (2021) emphasizing the importance of introducing digital knowledge from elementary education. They said that creative activity-based activities, such as digital littering, not only improve students' digital skills, but also encourage the development of confidence in expression in a responsible manner in the digital space. (Istiningsih et al., 2018), However, compared to studies in countries such as South Korea and Finland, the level of critical and evaluative thinking of Indonesian students in filtering digital information still needs to be improved. (Permata et al., 2019)

There are a number of challenges and limitations identified in the study, including school internet restrictions, differences in the speed of adaptation between students and the need for additional training for

teachers. In addition, technical constraints such as not all students previously experienced online collaborative tools in their own barriers. These limitations indicate that the infrastructure and formation of digital knowledge must operate, so that the implementation of free program-based programs can be optimally implemented at the elementary level. The meaning of this study shows that digital bulletins can be used as a good practical model for studying free research programs. This activity not only increases digital knowledge, but also forms cooperation and creativity characters of students. This study recommends the development of digital knowledge for elementary school teachers, as well as the integration of digital digital projects as part of the student profile. Additional research is to find long-term effects on the ability to think about important ethics and digital students

IV. CONCLUSION

Based on the results and discussions, we can conclude that the application of digital knowledge through the creation of the Digital Wall magazine (Digital Crazy) of 6 elementary school students in Cirebon Regency has proven effective in developing basic digital literacy skills, visual knowledge and students' collaboration capacity. The results show that most students can operate digital devices and compile information, but there are still challenges in evaluating important sources of information. This project also encourages creative expression and uses method formats such as infographics and digital poetry, which reflect the integration of technology, communication, and aesthetic knowledge. The actual participation of this study is the importance of learning based on digital projects to support students' Pancasila records in the Merdeka program. In terms of policy, these results emphasize the need to support infrastructure and train teachers to optimize digital literacy eradication programs in elementary schools. The main contribution of this article is to provide experimental evidence that digital media such as digital bulletins can be an educational strategy, context, creativity, and appropriate to improve the quality of the 21st century.

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