

The Influence of Web-Based Literacy on Increasing Reading Interest of Class X Students in Facing the Era of Society 5.0

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Abstract

The low interest in reading among students can have a wide range of negative impacts, affecting academic performance, cognitive skills, emotional well-being, and career readiness. Web-based literacy can strengthen reading interest by providing broader and more varied access, increasing interactivity and engagement, and helping students develop their ability to assess and select reading materials. Web-based literacy plays a crucial role in equipping students with the necessary skills to navigate a complex and fast-paced digital world. Additionally, reading habits built through digital platforms and the development of information-seeking skills support improvements in reading interest. Through the utilization of web-based literacy, participants find it easier to adapt to the information demands of the Society 5.0 era, strengthening their reading interest and developing a continuous reading habit. This study employs a quantitative method with an experimental design, specifically a true experimental design. The research results show that there is an influence of web-based literacy implementation on improving students' reading interest. This is evident in the pretest score, which was 51.62, and the post-test score, which increased to 82.81, with a significant value of $0.000 < 0.05$. The increase in reading interest through web-based literacy has a significant positive impact, especially in developing skills to face the Society 5.0 era. This not only enhances individual abilities to read and understand information but also prepares students to adapt to sophisticated technology, contributing creatively and participating actively in a digital society.

Keywords: Web-Based Literacy, Enhancement of Reading Interest, Class X Students, Society 5.0 Era.

Introduction

In today's digital era, reading interest among middle school students faces significant challenges. Based on a survey conducted by the Research Center for Education Policy and Development (Puslitjakdikbud), the reading interest among Class X students in Indonesia tends to be low. Data shows that only about 30% of Class X students read books regularly, while a larger portion chooses to consume digital media such as videos, social media, and online games.

In 2020, Indonesia ranked 39th out of 42 countries in terms of reading interest, showing that there is a significant challenge in building a strong literacy culture among society,

especially the younger generation (Manaf, 2021). Web-based literacy has become crucial because access to diverse online information sources continues to increase. Umar (2021) states that reading interest is a personal trend or strong desire accompanied by continuous effort from an individual to engage in reading activities, done consistently without coercion or external encouragement to understand what is being read. Data from the Human Development Index (HDI) shows that reading interest in Indonesia ranks low globally.

Various studies show a significant decline in reading interest among middle school students. According to a survey by the National Endowment for the Arts, only about 20% of teenagers reported reading books

regularly. This contrasts with previous trends, where printed books were the main source of information and entertainment. Nowadays, many students choose to spend their time using digital devices such as smartphones, tablets, and computers.

"Society 5.0" is a concept of a society that utilizes sophisticated technology and is human-focused, using robots and AI based on big data to replace or complement human power (Ridho, 2022). According to the World Economic Forum (2023) report on Future Jobs, digital skills are becoming very important in the Era of Society 5.0. Digital literacy skills and the ability to use technology effectively are key to adapting to rapid and complex technological changes.

A study by Nang Sagawah Win Bo (2024) shows that there is a significant gap in digital literacy between those who have access to technology and those who do not. This gap impacts individuals' ability to utilize technology optimally, including in the context of education and employment. In the Era of Society 5.0, much information and interaction happen online. Websites make it easier for students to learn teaching materials and update learning data on the relevant lesson pages. This makes it easier for students to read what they need to gain insights and enhance their learning at home.

Low interest in reading can have a negative impact on students' literacy skills and academic achievement. Good reading literacy is closely related to the ability to think critically and solve problems. In the rapidly developing era of Society 5.0, the role of information technology and digital media is becoming increasingly inseparable from everyday life. This transformation not only influences the way we interact but also creates a new paradigm in education.

This study explores the impact of web-based literacy on the reading interest of class X students, utilizing online platforms and digital media to enhance literacy and analytical skills. The goal is to create a learning environment that promotes reading exploration and skills in navigating online information, as well as to provide insights for more adaptive educational strategies in the era of Society 5.0.

Literature Review

Djaali (2023) stated that interest is "a feeling of curiosity and attachment to something" that arises through experience without coercion, reflecting the connection between the individual and the object of interest. Meanwhile, Ibrohim (2020) explains that interest is "a deep tendency of the heart towards something, along with passion and desire," which reflects the psychological aspects of the individual.

According to the Big Indonesian Dictionary (KBBI), reading is the process of seeing and understanding the contents of what is written, both aloud (reading out loud) and silently (reading in one's heart). According to Mudjito (2001), quoted in Fitriyani, reading provides various benefits for both individuals and society. For individuals, the benefits include: (1) the ability to explore and understand problems in depth, enhancing knowledge and skills; (2) discovering significant educational values; (3) broadening perspectives on various topics; (4) filling free time with enjoyable literary works or fiction stories. For society, the benefits of reading include: (1) increasing general knowledge; (2) enhancing intelligence and self-ability; (3) serving as a means of information and education about societal progress; (4) developing a critical attitude to overcome problems; (5) delivering new ideas that encourage progress.

Samalinggai (2023) defines reading interest as the enthusiasm someone has for reading, which motivates them to continue reading and studying material without feeling bored. Reading interest can be understood as a deep tendency and inclination that emerges naturally in an individual towards reading activities, without any coercion. This interest reflects the emotional and psychological connection between the individual and reading, encouraging them to keep reading and understand the material with full passion and desire.

The reading process itself, which involves understanding written content, provides various benefits for individual development, such as the enhancement of knowledge and skills, as well as for societal progress, including the improvement of general

knowledge, intelligence, and critical thinking abilities. Web-based literacy refers to the literacy information system accessed through web technology. As explained by Firmansyah (2019), this technology is used to facilitate the literacy and reading process, with the objective of increasing students' reading interest and supporting literacy programs in schools.

According to Kurniawati (2018), literacy is the key for society to effectively and wisely take advantage of web technology. This literacy encompasses the ability to access, evaluate, use, and create digital content, which is crucial for solving social problems, making better decisions, and improving quality of life in the era of Society 5.0. In this context, as explained by Humaira and Aprison (2024), humans are placed at the center of creativity and innovation, with an emphasis on the ability to address social problems through the integration of physical and virtual spaces, as well as manufacturing and industry aspects. With the emergence of Society 5.0, various sectors, including education, face unique challenges. The education sector, in particular, is undergoing significant changes in line with the advancements of the industrial revolution 4.0. Therefore, the education system must adapt to the needs of web-based literacy, which supports new innovative learning patterns and ways of thinking.

Currently, the education sector needs a workforce that is not only skilled academically but also possesses strong digital literacy skills. This includes a deep understanding of information technology, critical thinking, the ability to communicate and collaborate, as well as the ability to innovate and solve problems. Within the framework of Society 5.0, web-based learning becomes key to preparing a competitive and empowered generation for global competitiveness. Therefore, Society 5.0 demands a creative and adaptive learning model to address diverse conditions and challenges of the times. This model must be capable of utilizing digital technology to create an effective learning environment, helping students become useful, intelligent, active, innovative, and creative individuals in line with the demands of the current industrial revolution.

Lokasari (2022) stated that in the era of Society 5.0, almost all activities are driven by digitalization and based on information, using

rapidly developing technologies such as gadgets and the internet among society. The advantages of gadget technology are that it captures the attention of teenagers and children, making them more interested in these devices. However, this technological progress may also lead to a decline in children's literacy skills, as they tend to show less interest in activities that do not involve technology.

Web-based literacy is very important in facing the era of Society 5.0, as this ability allows students to access, evaluate, and utilize digital information effectively. In the era of Society 5.0, which integrates the physical and digital worlds to create a smarter and more sustainable society, digital literacy becomes key to overcoming social problems and improving the quality of life. Web-based literacy supports students in navigating various sources of information, finding relevant readings, and enhancing their reading interest. Additionally, these skills help them adapt to technological advancements such as artificial intelligence, the Internet of Things (IoT), and big data, as well as utilize digital resources to strengthen their skills and innovation in facing the challenges of the times.

Method

Setting and Participant

The research method used in this study employs a quantitative approach with an experimental design to investigate the influence of web-based literacy implementation on improving reading interest among Class X students in the era of Society 5.0, particularly in the context of citizenship and mutual cooperation projects.

The quantitative approach was chosen because its characteristics allow researchers to measure and analyze the impact of interventions in a systematic and objective manner. This method enables the collection of numerical data that can be processed using statistics to test hypotheses and draw generalizable conclusions. Additionally, the quantitative approach helps to explain cause-and-effect relationships more clearly.

Experimental study is a research method that involves testing hypotheses by applying a

specific treatment to an experimental group and comparing it with a control group that does not receive the treatment (Jayantika, 2019). This aims to determine whether there is a significant difference between the two groups, allowing the researcher to control variables and directly measure the influence of the given interventions.

In this study, this experimental design will investigate the influence of implementing web-based literacy involving experimental and control groups. With this method, researchers can determine the specific effects of web-based literacy on reading interest by comparing the results between the intervention group and the non-intervention group.

The research background focuses on Class X participants at Al Ghozali Vocational School in the context of the citizenship mutual cooperation project, considering the importance of reading interest in the learning process in this digital era. This focus is chosen because web-based literacy is expected to enhance student engagement and reading interest, which are crucial aspects of project-based learning.

Data Collection

The data used in this study consists of both primary and secondary data. Primary data is collected through a designed questionnaire to measure reading interest before and after the interventions, as well as data from relevant citizenship project documentation. Secondary data includes information about web-based literacy and existing learning practices.

Data collection techniques involve distributing a questionnaire to participants to obtain quantitative information about their reading interest, as well as collecting documentation related to ongoing citizenship projects. Observations and interviews were also conducted to gain a deeper insight into the implementation of web-based literacy in practice.

Checking data validity is carried out through validity and reliability tests of the questionnaire used. Validity is tested by ensuring that the questionnaire measures relevant aspects of reading interest, while reliability is tested by measuring the

consistency of the questionnaire results over time.

Data analysis techniques include descriptive statistical analysis to describe the characteristics of the obtained data, as well as inferential statistics to test hypotheses about the influence of web-based literacy on reading interest. Normality and homogeneity tests are conducted to ensure that the data meet the statistical assumptions required before conducting a hypothesis test.

Result and Discussion

The paired sample T-test on SPSS version 16.0 was used by researchers to determine whether there are significant changes between two groups of paired data. The decision is based on the significance mark from the results of the calculation. If the significance value is greater than 0.05, then there is no significant difference between the two data groups. On the other hand, if the significance mark is less than 0.05, then there is a significant difference between the two data groups.

Table 1. Results of paired sample t test analysis

Pair 1	Pre-Test Eksperimen - Post-Test Eksperimen	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	Sig.
		-31.111	0.467	1.078	Lower	Upper		
					-33.299	-28.923		
							25	.000

Based on the output, pair 1 shows a significance value (2-tailed) of $0.000 < 0.05$. Therefore, it can be concluded that there is a significant difference in the average reading interest of participants between the pretest and posttest after the implementation of web-based literacy. This can be seen in the changes in the average values of the pretest and posttest as presented in the table of descriptive statistics below.

Based on the results from data pair 1, a significance value (2-tailed) of $0.001 < 0.05$ was obtained. Therefore, it can be concluded that there is a difference in the average reading interest of participants between before (pretest) and after (posttest) the implementation of web-based literacy. This change is reflected in the average pretest and

posttest scores listed in the following table of descriptive statistics.

Table 2 Statistical Results Descriptive

Paired Samples Statistics					
Pair 1		Mean	N	Std. Deviation	Std. Error Mean
	Pre-Test Eksperimen	51.69	36	7.794	1.292
	Post-Test Eksperimen	82.81	36	6.131	1.022

The average pretest value was 51.69, while the posttest showed an improvement with an average value of 82.81. Based on this data, it can be concluded that H₀ is rejected and H_a is accepted. This means that there is an influence from the implementation of web-based literacy on the improvement of reading interest among Class X participants in the citizenship mutual cooperation project material.

The implementation of effective web-based literacy is used in the learning process. This is evident from the research results obtained based on the distribution of questionnaires filled out by students and observations made by researchers during the research process, with a T count value of 28.867 > T table 2.032 and a significance level of 0.000 < 0.05. This means that the effective implementation of web-based literacy in the learning process helps to increase the reading interest of Class X participants in the citizenship mutual cooperation project material.

This discussion underscores the importance of web-based literacy in Pancasila and Citizenship Education (PPKN) materials, especially the concept of mutual cooperation, in developing awareness and responsibility as citizens in the era of Society 5.0. In this era, the integration of advanced technology plays a crucial role, and web-based literacy becomes a very effective tool in preparing the younger generation. Technology not only makes it easier to access information about the values of mutual cooperation but also enhances active participation in the development of an inclusive and sustainable society.

This study aims to evaluate the influence of web-based literacy on the reading interest of class X students as preparation for facing the era of Society 5.0. Data were obtained through a pretest questionnaire that measures reading interest before the application of web-based literacy media, and a

posttest questionnaire that measures the impact of the media after it has been applied in learning with civic mutual cooperation material.

The research results show that the implementation of web-based literacy significantly increases students' reading interest. The initial pretest scores increased from 51.69 to 82.82 in the posttest after the use of web-based media. These findings indicate that web-based literacy is effective in stimulating students' reading interest and preparing them for facing the era of Society 5.0.

The limitations of the conventional teaching approach, which relies heavily on lectures and writing on the board, often result in students being less actively engaged and not developing 21st-century skills adequately. This was reinforced by interviews with class guardians and subject teachers. According to Wena in Yuliza (2023), the use of information technology in learning can help overcome these weaknesses, although the role of teachers remains very important for guidance and contextual assessment.

The use of gadgets by students to access online references and information has proven to be beneficial in the learning process. Research by Kiili and Braten (2020) shows that students prefer online information sources over printed sources. Additionally, Hayadi (2018) states that reading interest is influenced by habits and physical conditions.

Evaluation of the web-based learning media shows its effectiveness in increasing students' reading interest in the material on mutual cooperation in citizenship education. Verification by five experts, with values ranging from 0.65 to 0.95 and a confidence level of 0.80, indicates that the media is very feasible (Uno, 2016).

Testing the hypothesis also supports these findings, with an r-count of 28.867, which far exceeds the r-table value of 2.032, and a p-value smaller than 0.05 (0.000 < 0.05). Therefore, H_a is accepted, and H₀ is rejected. Thus, the data results show that web-based literacy is effective in increasing the reading interest of class X students, preparing them to face the challenges and opportunities in the era of Society 5.0.

Conclusion

Based on the results of the research, it can be concluded that the implementation of web-based literacy significantly increases the reading interest of class X students. The data shows a clear improvement, with the pretest value rising from 51.69 to 82.82 after the use of web-based media in learning the material on mutual cooperation in citizenship. This result underscores the influence of web-based literacy in stimulating students' reading interest, as well as their readiness to face the challenges and opportunities in the era of Society 5.0.

Therefore, the integration of information technology in learning has proven to be an effective strategy for preparing the younger generation with the 21st-century skills needed in an increasingly digital society. Thus, the implementation of web-based literacy not only increases students' reading interest but also strengthens their readiness to participate actively in this digital society. The integration of technology in the learning process has proven to be a successful strategy for enhancing students' skills and participation in contemporary learning contexts.

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