

The Influence of Digital Literacy on the National Character of Grade XI Accounting Students of SMK Negeri 1 Lamongan

*Muhammad Yunus Ridwan^{*1}, Abd. Ghofur², Ninies Eryadini³*

¹²³ Universitas PGRI Adi Buana Surabaya, Indonesia

 Author Corresponding: yunusridwan1303@gmail.com *

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Abstract. This study aims to determine the effect of digital literacy on the national character of Grade XI Accounting I students at SMK Negeri 1 Lamongan. Digital literacy refers to students' ability to use, understand, and wisely utilize digital media and technology. Meanwhile, national character includes values such as tolerance, patriotism, peace-loving, social care, and responsibility. This research uses a quantitative approach with a simple linear regression method. The research instrument was a questionnaire distributed to 35 students as respondents. The results showed a positive and significant effect of digital literacy on students' national character. These findings indicate that the higher the students' level of digital literacy, the better their national character. Therefore, enhancing digital literacy can be an effective strategy in developing a strong sense of national character among vocational high school students.

Keywords: Digital Literacy, National Character, Students

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INTRODUCTION

The development of digital technology has changed various aspects of life, including the world of education. In the digital era, teachers and students are required to have the ability to use media and technology effectively. One of the important abilities is digital literacy, which is the ability of individuals to access, understand, manage, and utilize digital technology safely and responsibly (Kominfo RI, 2021). In the context of education, digital literacy is not only technical ability to use digital devices, but also includes critical, social, and ethical thinking skills that play an important role in the learning process (Anjarwati & Pratiwi, 2022; Rahmawati & Hidayat, 2021). Therefore, digital literacy is a crucial skill for students to face the challenges of 21st century learning.

However, advances in digital technology also carry risks to students' character and morals if they are not balanced with good literacy. The use of technology without adequate digital literacy can have negative impacts such as the spread of hoaxes, declining morale, and misuse of digital media (Farid, 2023; Astuti & Fadilah, 2023). Therefore, digital literacy not only functions to improve academic competence, but also has a strategic role in shaping students' national character namely the values of love for the homeland, tolerance, responsibility, and social concern. This phenomenon shows the importance of examining how digital literacy can affect the formation of national character in the school environment.

Various previous studies have highlighted the importance of digital literacy in shaping students' character. Dewi dkk. (2021) stated that digital literacy plays a role in fostering positive character because students tend to be interested in digital media. Similarly, Suriani and Hadi (2022) found that digital literacy policies in schools are able to develop students' character. However, most of the research still focuses on the conceptual level and has not tested the direct influence of digital literacy on students' national character in the context of vocational education (SMK) (Prasetyo & Nugroho, 2022). This gap is an important basis for this research to be carried out.

This study specifically aims to analyze the influence of digital literacy on the national character of students at SMK Negeri 1 Lamongan, especially class XI Accounting I. This research is expected to provide an empirical picture of the extent to which digital literacy contributes to the formation of national character, as well as to be a complement to previous research which is generally only descriptive. The focus of the research is directed at two main variables: digital literacy as an independent variable and national character as a bound variable.

Thus, this study intends to test the hypothesis that digital literacy has a positive effect on the formation of students' national character. The results of the research are expected to contribute both theoretically in enriching the study of the relationship between digital literacy and national character and practically as a basis for schools and teachers to design digital literacy-based learning strategies that are able to strengthen students' character in the digital era.

METHOD

This study uses a quantitative approach with a type of associative descriptive research that aims to find out and analyze the influence of digital literacy on students' national character. The quantitative approach was chosen because this study seeks to test the relationship between variables through numerical data processed using statistical techniques so that the results are objective, measurable, and generalized. This method is considered valid and reliable in providing an empirical picture of the extent to which digital literacy affects students' national character, especially in the context of vocational education.

The research was carried out at SMK Negeri 1 Lamongan which is located on Jl. Jendral Sudirman No. 84, Lamongan District, Lamongan Regency, with the research subject being students of grade XI Accounting I in the second semester of the 2024/2025 academic year. This class was chosen because it has a fairly high level of exposure to the use of digital media in learning activities. The research population consisted of 35 students, all of whom were used as research samples using saturated sampling technique, because the population was relatively small and it was still possible to study as a whole. The use of the entire population as a sample ensures that the results of the study are more accurate and describes the actual conditions that occur in the group.

The data collection process is carried out through surveys, observations, and documentation. The survey technique was carried out using a Likert scale-based questionnaire which was distributed online to respondents. This questionnaire contains statements that represent two main variables, namely digital literacy as an independent variable (X) and national character as a dependent variable (Y). Digital literacy variables are measured through three main indicators, namely the ability to use digital media and technology, the ability to find and sort information, and

the ability to think critically. Meanwhile, the national character variable is measured through five indicators, namely tolerance, love for the homeland, love of peace, social care, and responsibility. Before use, the instrument is tested through validity and reliability tests to ensure that the question item is able to measure the construct in question consistently and accurately.

In addition to surveys, structured observations were also carried out to observe students' behavior and activities in the use of digital media during the learning process. This observation provides supporting data in the form of factual descriptions of the application of digital literacy and national character in the school environment. Documentation techniques are also applied by collecting photos and archives of relevant activities to strengthen field findings.

The data obtained from the questionnaire results were then analyzed using simple linear regression analysis with the help of SPSS software. This analysis aims to test the influence between one independent variable on one bound variable. Before the regression test is carried out, a classical assumption test, namely the normality test, is first carried out to ensure that the data distribution meets the prerequisites of parametric statistical analysis. After that, a t-test was carried out to determine the partial influence of digital literacy on national character, as well as the calculation of the determination coefficient (R^2) to see how much the digital literacy variable contributed in explaining the variation in students' nationality characters.

The research hypotheses tested are: (H_0) digital literacy does not have a significant effect on students' national character, and (H_1) digital literacy has a significant effect on students' national character. The test criteria were based on significance values (p-values) with a limit of $\alpha = 0.05$. If the p-value < 0.05 , H_0 is rejected, so it can be concluded that digital literacy has a significant influence on the national character of students. With these systematic designs, techniques, and instruments, this research method is expected to be able to produce valid, reliable findings, and make a scientific contribution to the development of digital literacy in the formation of national character in the vocational education environment.

RESULT AND DISCUSSION

Result

This research was carried out at SMK Negeri 1 Lamongan with 35 research subjects of class XI Accounting I. The entire population was used as a sample because the number was small so that it was possible to conduct a thorough study with a saturated sample technique. Data was collected using a Likert scale questionnaire to measure two main variables, namely digital literacy (X) and national character (Y).

Before data analysis, the instrument was tested for validity and reliability. Based on the results of the validity test, all statements have a significance value below 0.05 which means they are valid and suitable for use. The results of the reliability test showed that Cronbach's Alpha value was 0.756 for the digital literacy variable and 0.932 for the nationality character variable, which means that both instruments have high reliability and are consistent in measuring the research construct.

Tabel 1. Hasil Uji Validitas dan Reliabilitas

<i>Variabel</i>	<i>Cronbach's α</i>	<i>KMO</i>	<i>Sig.</i>	<i>r/itt</i>	<i>Keterangan</i>
<i>Literasi Digital (X)</i>	0,756	>0,5	<0,05	Valid	Reliabel
<i>Karakter Kebangsaan (Y)</i>	0,932	>0,5	<0,05	Valid	Sangat Reliabel

The results of the normality test using the Kolmogorov-Smirnov showed a significance value of 0.200 (>0.05), so that the data was normally distributed. Thus, classical assumptions are fulfilled and the data can be analyzed using simple linear regression. The results of a simple regression analysis yielded the following equation:

$$Y = 10,256 + 1,495X \quad Y = 10,256 + 1,495X \quad Y = 10,256 + 1,495X$$

This means that every one unit increase in the digital literacy variable will increase the national character by 1,495 units. The partial test (*t-test*) showed a calculated t-value = 6.725 with a significance of 0.000 ($p < 0.05$), which means that digital literacy has a significant effect on the national character of students. Meanwhile, the simultaneous test (*F test*) showed a calculated F-value = 45.223 with a significance of 0.000, which signifies an overall significant regression model. A determination coefficient value (R^2) of 0.571 showed that 57.1% of the variation in nationality character could be explained by digital literacy, while the remaining 42.9% were influenced by other factors outside of this study.

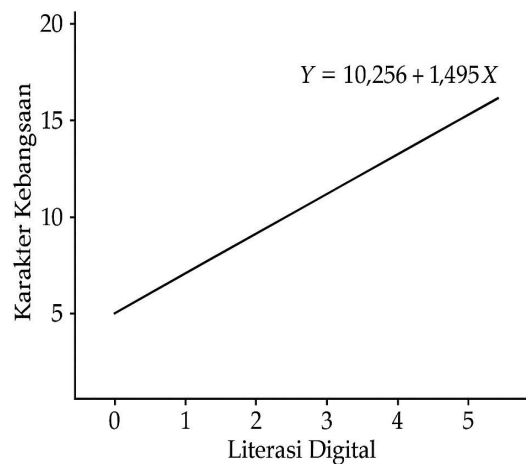


Figure 1. Hubungan antara literasi digital dengan karakter kebangsaan siswa

These findings show that digital literacy has a positive and significant influence on the formation of students' national character. The higher the level of digital literacy that students have, the higher their awareness of national values such as responsibility, tolerance, and social care.

Discussion

The results of the study show that the level of digital literacy of grade XI Accounting I students of SMK Negeri 1 Lamongan is relatively high. Most students have good skills in using digital media for learning activities, searching and selecting information, and thinking critically about the content they encounter on the internet. This is in line with the opinion of Anjarwati and Pratiwi (2022) who stated that digital literacy does not only include technical skills, but also cognitive and ethical abilities in utilizing technology for educational purposes. In addition, the national character of students also showed positive results on five main indicators, namely tolerance, love for the homeland, love of peace, social care, and responsibility. The students showed an attitude of respect for differences, the spirit of nationalism, and awareness to maintain harmony and help others. These results reinforce the findings of Dewi et al. (2021) and Suriani & Hadi (2022) who stated that digital literacy policies in schools play an important role in strengthening students' character.

Regression analysis which produced a significance value of $0.000 < 0.05$ and R^2 of 0.571 showed that digital literacy had a strong effect on national character. Students who have high digital literacy skills tend to be more selective in receiving information and are able to use digital media responsibly. This helps them form positive character values, such as honesty, discipline, and nationalism. This finding is in line with Gilster (1997) who emphasized that digital literacy includes the ability to think critically and evaluatively in understanding and using information from various digital sources. In addition, Mudra (2020) and Setiawan & Putri (2023) emphasized that digital literacy helps students foster moral and social awareness in cyberspace, so that they can become wise digital citizens. Thus, the results of this study prove that digital literacy plays an important role

in shaping students' national character in the digital era. Digital literacy-based learning needs to continue to be developed in schools, not only as a means of mastering technology, but also as a medium for the formation of national values, social ethics, and citizen responsibility.

CONCLUSION

Based on the results of the research and data analysis that has been carried out, it can be concluded that digital literacy has a positive and significant influence on the national character of grade XI Accounting I students of SMK Negeri 1 Lamongan. Students show a high level of digital literacy, as can be seen from their ability to use digital media productively and responsibly, as well as the ability to think critically in sorting out relevant information. This is in line with the development of the world of education in the digital era which requires students to be not only technically capable, but also have ethical awareness in using information technology. In addition, the results of the study also show that the nationality character of students is relatively good. Values such as tolerance, love of the homeland, love of peace, social care, and responsibility are firmly embedded, both in their daily lives and digital activities. Through the wise application of digital literacy, students are able to show behaviors that reflect the spirit of nationality and responsibility as citizens.

Regression analysis showed an equation of $Y = 10.256 + 1.495X$, with a significance value of $p = 0.000$ ($p < 0.05$) and a coefficient of determination (R^2) of 0.571, which means that 57.1% of the variation in nationality character was influenced by digital literacy, while the remaining 42.9% was influenced by other factors outside of this study. These results prove that increasing digital literacy plays an important role in strengthening students' national character. The results of this study provide practical implications for the world of education, especially for schools and teachers in integrating digital literacy into characterful learning. Digital literacy programs can be developed as a means of instilling national values through technology-based activities, such as online learning, the Pancasila Student Profile project, and extracurricular activities that prioritize media ethics.

In the future, this research can be developed by adding other variables such as the influence of the family environment, peers, and social media on the formation of national character. In addition, a qualitative approach can also be used to dig deeper into how the character formation process takes place through students' digital interactions. Thus, the results of this study not only answer the formulation of the problem and the purpose of the research, but also open up opportunities for further research that can enrich the study of the relationship between digital literacy and the formation of national character in the era of digital transformation.

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