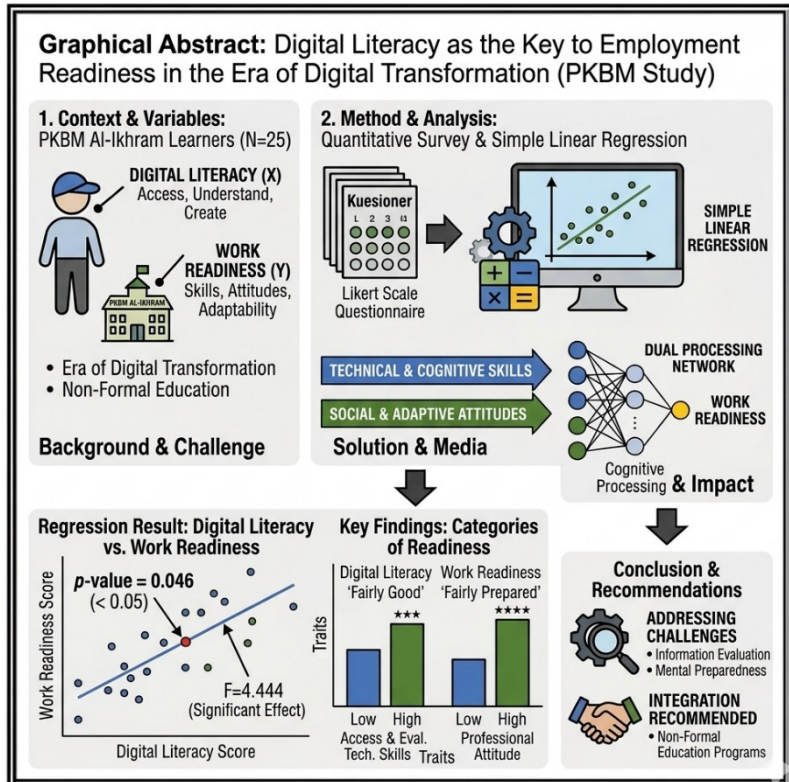


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Graphical Abstract



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Digital Literacy as the Key to Employment Readiness in the Era of Digital Transformation: A Study of Learners at the Al-Ikhram Community Learning Center

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ABSTRACT

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Keywords

1. digital literacy
2. work readiness
3. non-formal education
4. PKBM
5. digital transformation.

Background: The rapid development of digital technology has transformed the competency requirements in the workplace, which now demand not only technical skills but also strong digital literacy. In the context of non-formal education, learners at Community Learning Centers (PKBM) still face various challenges in adapting to these demands due to limited digital competencies. Therefore, digital literacy is a critical factor in enhancing work readiness in the era of digital transformation.

Method: This study employed a quantitative approach using a survey method. The research was conducted at PKBM Al-Ikhram, involving 25 students selected through purposive sampling. Data were collected using a Likert-scale questionnaire that measured digital literacy and work readiness. Data analysis was performed using simple linear regression to determine the effect of digital literacy on work readiness.

Results: The results of the study indicate that students' digital literacy levels fall into the "fairly good" category, while their work readiness falls into the "fairly prepared" category. The results of the regression analysis show that digital literacy has a significant effect on work readiness, with a p-value of 0.046 (< 0.05). This indicates that the higher the level of digital literacy, the higher the students' work readiness.

Conclusion: Digital literacy plays a significant role in enhancing students' employability in the era of digital transformation. Therefore, the development of digital literacy—both in technical and cognitive aspects—needs to be more comprehensively integrated into non-formal education programs to enhance students' competitiveness in the workforce.

Introduction

The rapid advancement of digital technology has brought about significant changes in various aspects of life, particularly in the workplace. Digital transformation is not only changing the types of jobs available but also the competencies required of the workforce. The World Economic Forum (2023) emphasizes that digital skills are among the key competencies individuals must possess to compete in the modern industrial era. This indicates that digital literacy is no longer merely an additional skill but has become a fundamental necessity in the workplace.

Digital literacy is defined by UNESCO (2021) as the ability to access, understand, evaluate, and create information through digital technology in a safe and responsible manner. Furthermore, Ellen van Laar et al. (2020) explain that digital literacy encompasses technical, cognitive, and social skills that enable individuals to actively participate in digital environments. In this context, digital literacy is not only related to the ability to use technology but also to the ability to think critically and adapt to change.

In the field of education, particularly non-formal education, Community Learning Centers (PKBM) play a strategic role in improving the quality of human resources. PKBM serve as platforms for community empowerment through various training programs aimed at enhancing learners' skills and work readiness. However, in practice, various challenges remain, particularly regarding the low digital literacy of learners. Many training participants are still unable to utilize technology optimally—whether in accessing information, evaluating digital content, or applying it in a work context. This situation poses a serious challenge, given that today's workforce is heavily reliant on digital technology.

The changes that have occurred in the wake of the COVID-19 pandemic have further accelerated the adoption of digital technology across various sectors, including education and employment. Painem and Soetanto (2021) state that digital transformation has shifted learning systems and work patterns toward being more technology-driven. This underscores that digital literacy has become a critical competency that every individual must possess in order to adapt to the demands of the modern era.

Work readiness is a state in which an individual possesses the skills, attitudes, and mental preparedness to enter the workforce. The International Labour Organization (2020) explains that work readiness encompasses technical skills, social skills, and professional attitudes. Meanwhile, Jackson (2021) adds that work readiness is also

influenced by adaptability, communication skills, and self-confidence. In the digital age, work readiness cannot be separated from an individual's ability to utilize technology.

A number of previous studies have shown that digital literacy has a significant impact on employability. Kintoko and Mulianingsih (2022) found that individuals with strong digital literacy tend to be more adaptable, confident, and competitive in the job market. Furthermore, the Organisation for Economic Co-operation and Development (2021) also emphasizes that digital literacy is part of the 21st-century skills that are critically needed to navigate global transformation.

Nevertheless, most research on digital literacy and work readiness remains focused on formal educational contexts, such as schools and universities. For instance, research by Wibowo and Santoso (2023) primarily focuses on university students and formal learners. Meanwhile, studies specifically examining learners in non-formal educational institutions, such as Community-Based Learning Centers (PKBM), remain relatively limited. Furthermore, previous research has tended to view digital literacy solely from a technical perspective, without thoroughly examining the cognitive and social aspects that also play a role in enhancing work readiness. This situation indicates the existence of a research gap that needs to be addressed.

Based on this, this study offers a novel perspective by examining digital literacy as a multidimensional competency that encompasses technical, cognitive, and social aspects in relation to work readiness within the context of non-formal education. This study is specifically conducted among learners at PKBM Al-Ikhrum, thereby providing a more contextual and relevant empirical contribution to the development of community-based education tailored to the needs of the digital workplace.

Thus, this study aims to determine the level of digital literacy among learners, assess their level of work readiness, and analyze the influence of digital literacy on their work readiness as they navigate the workforce in the era of digital transformation, particularly within the training programs at PKBM Al-Ikhrum.

Research Methodology

This study employs a quantitative approach using a survey method to analyze the impact of digital literacy on the employability of adult learners. The study was conducted at the Al-Ikhrum Community Learning Center (PKBM) in Medan

Area District from March to April 2026. The study population consisted of all adult learners enrolled in the training program. Sampling was conducted using purposive sampling based on the criteria of active adult learners who had participated in the training for at least one month and were willing to serve as respondents, resulting in a sample of 25 individuals. The research variables consisted of digital literacy as the independent variable (X) and work readiness as the dependent variable (Y). Digital literacy was measured through indicators of technology use, access to and evaluation of information, digital communication, and digital ethics, while work readiness was measured through technical skills, communication, cooperation, professional attitude, and adaptability.

Data collection was conducted using a questionnaire with a five-point Likert scale as the primary instrument, supplemented by documentation as supporting data. The research instruments were first tested for validity and reliability to ensure the appropriateness and consistency of the measurements. The data obtained were then analyzed using simple linear regression techniques with the aid of statistical software to determine the relationship between digital literacy and work readiness. The analysis stages included data collection, scoring, data processing, hypothesis testing, and interpretation of results to draw research conclusions.

Results and Discussion

Results

Table 1. Results of the Regression Analysis ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	384.063	1	384.063	4.444	.046 ^b
	Residual	1987.937	23	86.432		
	Total	2372.000	24			

a. Dependent Variable: Kesiapan Kerja

b. Predictors: (Constant), Literasi Digital

Based on the results of the simple linear regression test shown in the Table 1, a significance value of 0.046 was obtained. Since this value is less than 0.05, it can be concluded that there is a significant relationship between digital literacy and the work readiness of adult learners. Furthermore, the calculated F-value of 4.444 indicates that the regression model used in this study is suitable for explaining the relationship between the variables of digital literacy and work readiness. Thus, the

Based on the results of data collection through a survey distributed to 25 adult learners at PKBM Al-Ikhrum, an overview of their digital literacy and work readiness was obtained. In general, the digital literacy of the learners falls into the "fairly good" category. This is evident from the respondents' ability to use digital devices such as mobile phones and laptops, as well as to access information via the internet. Additionally, the majority of respondents are accustomed to using digital media for communication. However, there are still weaknesses in the area of information evaluation, as some respondents are not yet able to effectively filter and assess the accuracy of information obtained from digital sources.

Meanwhile, the students' work readiness is also in the "fairly ready" category. This is demonstrated by the respondents' ability to complete tasks, collaborate in teams, and exhibit discipline and a sense of responsibility. Some respondents also demonstrate a fair level of self-confidence in communication. However, there are still some challenges, particularly regarding self-confidence and mental preparedness for the real-world workplace.

To determine the effect of digital literacy on competitiveness in the labor market, a simple linear regression analysis was conducted. The results of the regression test are presented in Table 1. Analysis of Variance (ANOVA).

research hypothesis stating that digital literacy influences work readiness can be accepted.

Discussion

The research findings indicate that the digital literacy level of learners at PKBM Al-Ikhrum falls into the "fairly good" category. This finding indicates that most learners have been able to use digital technology in their daily lives, both for communication purposes and for accessing information. This is in line with the opinion of Ellen

van Laar et al. (2020), who state that digital literacy encompasses technical, cognitive, and social skills in utilizing technology effectively. However, the continued presence of weaknesses in the aspect of information evaluation suggests that learners' critical thinking skills regarding digital information still need to be improved. This is further supported by Siddiq (2021), who emphasizes that digital literacy is not merely about the ability to use technology but also encompasses the ability to critically evaluate and filter information.

Furthermore, the research findings indicate that the learners' employability falls into the "sufficiently prepared" category. The learners have acquired basic competencies such as technical skills, teamwork, as well as a disciplined and responsible attitude. These findings align with the concept of employability outlined by the International Labour Organization (2020), which states that employability encompasses technical skills, social skills, and professional attitudes. However, the remaining challenges regarding self-confidence and mental readiness indicate that strengthening soft skills still requires attention in training programs. This is also supported by Jackson (2021), who states that work readiness is determined not only by technical abilities but also by an individual's adaptability, communication skills, and self-confidence.

The results of the regression analysis indicate that digital literacy has a significant effect on learners' employability. A p-value of 0.046 (< 0.05) indicates that the research hypothesis is accepted. This means that the higher the level of digital literacy among learners, the higher their employability. This finding aligns with the research by Kintoko and Mulianingsih (2022), which states that digital literacy contributes to improving individuals' adaptability, self-confidence, and competitiveness in the workplace. Additionally, the World Economic Forum (2023) also emphasizes that digital skills are one of the key factors determining an individual's readiness to face changes in the workplace during the digital transformation era.

Overall, the results of this study indicate that digital literacy plays a crucial role in enhancing learners' employability, particularly within the context of non-formal education. Digital literacy not only helps individuals use technology but also enhances their critical thinking, communication, and adaptability to change. Therefore, training programs at PKBMs need to integrate the strengthening of digital literacy more comprehensively, both from technical and non-technical aspects, in order to produce graduates who are better prepared to face the challenges of the workforce in the digital age.

Conclusion

Based on the research findings and discussion, it can be concluded that the digital literacy level of learners at PKBM Al-Ikhrum falls into the "fairly good" category, as demonstrated by their ability to use technology, access information, and communicate digitally. However, there are still weaknesses in the area of information evaluation, particularly regarding critical thinking skills related to digital content. Meanwhile, the learners' work readiness is also in the fairly ready category, as reflected in their technical skills, ability to collaborate, and attitudes of discipline and responsibility, although there are still challenges regarding self-confidence and mental readiness.

The results of the analysis indicate that digital literacy has a significant impact on learners' employability; in other words, the higher the level of digital literacy, the greater an individual's readiness to enter the workforce. Thus, digital literacy can be a key factor in enhancing work readiness in the era of digital transformation. Therefore, comprehensive efforts to strengthen digital literacy are needed in training programs at PKBMs, not only in technical aspects but also in critical thinking skills and soft skills, to enhance learners' competitiveness in the workforce.

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