

Strategies for Strengthening Digital Literacy to Enhance Digital Literacy At the IAIN Ponorogo Library

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ABSTRACT: Digital literacy plays a significant role in enhancing students' competencies. Furthermore, digital literacy aids in understanding how technology operates and improves skills in using digital technology and information, such as searching, retrieving, and analyzing information. The IAIN Ponorogo library is one of the technical service units that focuses on developing activities to strengthen digital literacy among students through literacy classes in the library, seminars, workshops, and other training programs. The goal is for students to have strong competencies and the ability to complete tasks while researching and to succeed. As a result, it is expected that students can benefit themselves and the community after graduation. The strategies for enhancing digital literacy to improve student competency in the IAIN Ponorogo library are not aligned with the theory proposed by Norhasni Zainal Abiddin. This is due to several strategies that are not fully optimized in the IAIN Ponorogo library, namely, providing facilities and digital devices for underprivileged students, developing engaging activities and digital literacy learning modules, and the effective role of community leaders.

KEYWORDS: Literacy, Digital, Library, University

I. INTRODUCTION

Digital literacy plays a crucial role in enhancing students' competencies. Furthermore, digital literacy aids in understanding how technology operates and improves skills in using digital technology and information, such as searching, retrieving, and analyzing information. Therefore, it is crucial for universities to enhance their teaching strategies so that students acquire strong digital literacy skills. Digital literacy skills can make students more competitive in outcome online learning resources and solving problems during the learning process. Students are expected to understand and foster innovation, as well as develop excellent competencies in building skills to become successful professionals and contributors after graduating from university.

To achieve success and make a positive contribution to society, students need to possess strong competencies, including academic, professional, and socio-emotional skills. Academic competence helps in understanding and applying knowledge, professional competence prepares for competitiveness in the job market, and socio-emotional competence assists in interacting and building positive relationships. These competencies serve as the foundation for students to become successful individuals after completing their higher education. According to the survey by APJII (Indonesian Internet Service Providers Association), in 2021, the number of internet users in Indonesia reached 210 million people out of a total population of 272 million, representing a penetration rate of 77.02%. From 2018 to 2022, the number of internet users continued to increase. This indicates a part of the lifestyle of the population. As shown by the APJII survey, internet users can be classified based on factors such as gender, age range, monthly income, occupation, and education level. This demonstrates a diverse and extensive profile of internet users in Indonesia.

The high usage of the internet by the education community highlights the importance of educational institutions in providing digital literacy skills to students. Proficient information literacy skills will help reduce errors in searching for and selecting high-quality information. Consequently, students can effectively utilize valuable information sources to support their learning needs.

By understanding digital literacy, students will have the ability to effectively and efficiently utilize digital technology. This capability will assist them in outcome relevant and high-quality information, processing and presenting information effectively, as well as making sound and wise decisions. Ultimately, digital literacy can help students prepare themselves for a increasingly complex job market that requires adaptability to technological advancements.

The IAIN Ponorogo library is one of the technical service units that focuses on developing activities to strengthen digital literacy among students through literacy classes in the library, seminars, workshops, and other training programs. The goal is for students to have strong competencies and the ability to complete tasks while researching and to succeed. As a result, it is expected that students can benefit themselves and the community after graduation. Based on the facts and issues related to several literacy

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programs organized by the library of IAIN Ponorogo, researchers find it essential to conduct more in-depth research concerning strategies for enhancing digital literacy in the library as an effort to strengthen digital literacy in higher education. Together with the existing potential and challenges in the libraries of IAIN Ponorogo, the researchers aim to explore various strategies for enhancing digital literacy to improve the competency of students in both of these university libraries. The researchers selected the library of IAIN Ponorogo in East Java as the research subject because it is an institution transitioning from being an Islamic State Institute (IAIN) towards becoming a State Islamic University (UIN). This transition presents challenges in strengthening digital literacy to enhance student competence.

II. LITERATURE REVIEW

Digital literacy encompasses more than just the ability to use software or operate digital devices. Digital literacy comprises a wide range of complex cognitive, motor, sociological, and emotional skills that users need to function effectively in the digital environment. This includes the ability to read information from graphical displays, use digital reproduction to create new content, construct knowledge through hypertext navigation, evaluate information quality, and understand the rules applicable in the online world. Strengthening digital literacy should be incorporated into higher education programs. Information technology skills can be integrated into the curriculum, including information literacy, which encompasses various domain skills and knowledge necessary for locating, retrieving, and using information, particularly computer-based information. Digital literacy becomes crucial as it aids in understanding and effectively using information and communication technology (ICT). In specific fields such as journalism and internet search engines, digital literacy enables individuals to publish and access information online, ensuring they are not marginalized in society. However, those lacking digital literacy will become increasingly isolated from social life.

Yoram Eshet proposed a holistic and nuanced conceptual framework for digital literacy, encompassing several crucial aspects such as photo-visual literacy, reproductive literacy, branching literacy, information literacy, and socioemotional literacy. By reinforcing these skills, individuals can develop a broader and deeper understanding of the digital world, enabling them to participate actively and effectively in the ever-evolving digital society. Martin and Grudzicki developed three interrelated levels of digital literacy. The foundational level involves digital competencies encompassing skills, knowledge, attitudes, and awareness of technology. The second level is digital utilization, dependent on individual digital literacy, including the use of digital skills to access information and seek solutions. At the highest level, digital transformation occurs through the utilization of digital tools to create new knowledge, activities, or innovations. This model meets the requirements of digital literacy. Digital literacy plays a crucial role in individuals' ability to succeed in the digital workplace and an increasingly interconnected digital society. Digital literacy involves the development of skills and adaptation to interactive learning environments. Learning skills, learning styles, and learning systems are factors that influence the enhancement of digital literacy. Furthermore, high-quality infrastructure also serves as a determinant factor in promoting community participation in the digital world.

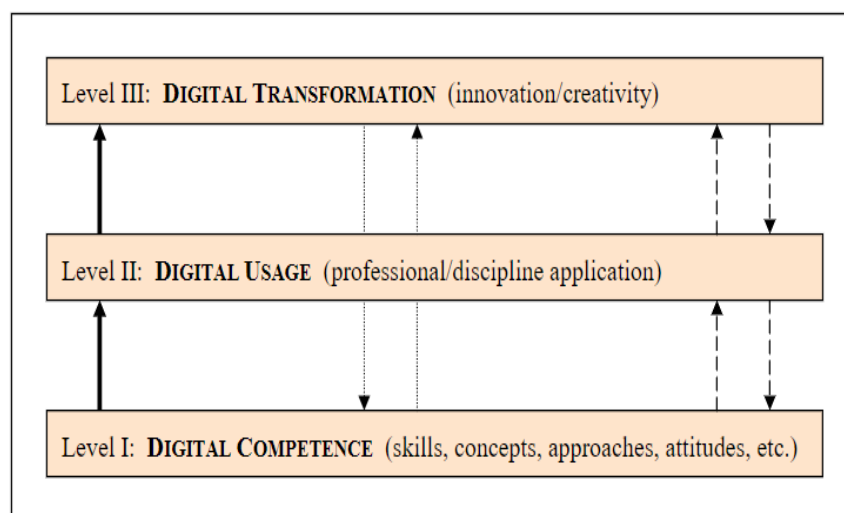


Figure 1. Digital Literacy Level

Source: DigEuLit: Concepts and Tools for Digital Literacy Development Martin dan Grudziecki, 2006

The practice of students' dependence on web-based technology can impact their academic literacy, with a focus on the institution's authority role in accessing and utilizing resources. Giving greater attention to textual practices in learning becomes crucial, not only in technology and its applications but also to comprehend changes in student behavior in higher education.

According to the theory proposed by Norhasni Zainal Abiddin, these strategies include the enhancement and optimization of digital infrastructure usage, provision of facilities and digital devices for underprivileged students, offering attractive incentives to

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boost participation, developing engaging activities and digital literacy learning modules, training teachers and instructors in digital literacy, and effective leadership within the community. The strategies for strengthening digital literacy in libraries can be translated into five principles to assist all stakeholders in higher education in understanding the strategic approach to developing information and digital literacy skills. Some of these principles are collaboration, alignment, innovation, sustainability, and evaluation.

Student competence is defined as the cognitive, affective, and social skills required by learners to ensure success and competitive excellence in their current or future educational and professional lives. Cognitive skills are related to the core knowledge base of universities and the ability for critical and creative thinking. Emotional skills pertain to the ability to understand and manage oneself, comprehend the emotions of others, and demonstrate empathy. Social skills include aspects of collaboration, communication, and participation.

III. METHODOLOGY

A. Type of Research

This research employs a qualitative descriptive method using a field research design. In this case, the researcher serves as the primary instrument for collecting descriptive data, which includes speech, writing, and behavior, from the subjects through inductive analysis. The research is conducted at IAIN Ponorogo, and the main informants are human beings. The research aims to describe the variables or conditions related to the exploration of digital literacy reinforcement strategies at both universities.

In this research, the researcher plays the primary role as the instrument for gathering descriptive data, such as speech, writing, and behavior, from the research subjects. The analysis is conducted inductively with the aim of describing variables or conditions in exploring digital literacy reinforcement strategies at two universities, namely IAIN Ponorogo.

B. Data and Data Sources

The researcher collected data in the form of words, actions, and documents that are relevant to the research focus, which is related to strategies for enhancing digital literacy to improve the competencies of students at IAIN Ponorogo and IAIN Kediri. The selection of data sources involved determining informants through *purposive sampling and snowball sampling*, which are data collection techniques where key informants point to individuals who have knowledge about the research issue under investigation to supplement information and so forth.

C. Data Collection Techniques

Data collection is a systematic and standardized procedure for acquiring data. This research employs three data collection techniques, as proposed by Bogdan and Biklen, namely: participatory observation, in-depth interviews, and documentation. In the context of determining digital literacy policies and implementing programs, the researcher conducted interviews with professors, librarians, and students who participated in the program. Additionally, the researcher also gathered secondary data in the form of written documents and photos as supplementary sources to reinforce the observational outcomes.

D. Data Analysis

The data analysis technique in this research is conducted in two stages, namely: Data analysis within a Single Case. The researcher conducts data analysis on the research subject, which is IAIN Ponorogo, using a qualitative descriptive analysis method involving the steps of data reduction, data presentation, and drawing conclusions.

E. Data Validity Check

In the data validation process, researchers employ triangulation as a technique for examining data from various sources using different methods and timeframes. In the context of this research, triangulation consists of three methods: Source Triangulation, which involves comparing and verifying the reliability of information from multiple sources, such as interviews with professors, librarians, and students. Method Triangulation, which tests the credibility of data by cross-checking data from the same source using different methods, such as comparing interview results with observations of the informants. Theory Triangulation, which utilizes various perspectives to interpret the same data.

IV. RESULT

The implications of the digital literacy strengthening strategy for enhancing students' competence at IAIN Ponorogo Library, based on the model developed by Martin and Grodzicki at the second level, involve the use of digital technologies that rely on individual digital competence. In this context, individuals employ their digital skills to locate information, process it, and seek solutions to problems. This is because students are expected to learn reference management at the library as a routine practice, which is beneficial for academic writing in the form of papers, theses, and articles. This is supported by the results of interviews with the Vice Director of Postgraduate Studies at IAIN Ponorogo, Dr. Nur Kolis, M.Ag. He explained that the Postgraduate Program collaborates with the house of journals and the library. Therefore, the faculty for all courses coordinate students to learn reference management in the postgraduate library. They are guided by librarians such as Mr. Kardi, Ms. Dwi, and the assisting

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faculty members, who are usually fully committed to supporting activities in the library. The outcome of this training activity is that students are able to write their theses using reference management that aligns with the thesis and article writing guidelines.

The digital literacy strengthening strategy for enhancing students' competence at the IAIN Ponorogo Library is not in line with the theory proposed by Norhasni Zainal Abiddin. This is because there are several strategies that have not been maximized at the IAIN Ponorogo Library, namely: providing facilities and digital devices for less privileged students; developing engaging activities and digital literacy learning modules; and the effective role of community leaders. This is supported by data from interviews with several sources:

Intan, a postgraduate student at IAIN Ponorogo, stated that there are currently no modules available for students; they are guided through the various stages without the presence of formal modules. Students open their laptops and are immediately taught how to install the necessary links, with subsequent steps being guided by library staff. As Tasrif Parasetyo inquired, he mentioned that the postgraduate program lacks a dedicated budget, and the funding for digitalization services is under the purview of the library and the TIPD (Technical Implementation and Planning Unit), which is the most suitable entity for managing the digitalization process, especially in the context of literacy. Dwi Eliyana, who manages the library at the Postgraduate level in IAIN Ponorogo, stated that there is currently no written policy in place. The central library is responsible for the planning, but it has not been maximally organized as it lacks a well-programmed structure, clear delineation of activities, system implementation, and evaluation procedures. All of these aspects need to be clearly defined to make it easier for the implementation and support of library services..

Based on observations and interviews, it is evident that the digital literacy strengthening strategy at IAIN Ponorogo Library is implemented using the principles of collaboration and sustainability. The implementation of the digital literacy program at IAIN Ponorogo Library is designed with several strategies, including promotion through social media, cooperation, and collaboration involving the library, journal houses, faculties, and postgraduate programs. The goal of promoting through social media is to make it easier for students to access the registration link for digital literacy classes. Meanwhile, cooperation and collaboration with faculty members are aimed at ensuring that this program is effectively communicated to students. This is supported by the interview outcomes with Alwan Wibawanto, S.Th.I., M.E., the Head of IAIN Ponorogo Library, who mentioned that the library collaborates with journal houses. The implementation of the digital literacy strengthening program is carried out through training sessions between the library and the journal house administrators, specifically for postgraduate students. For undergraduate students, the collaboration involves the library and various journal house administrators within the faculties, as well as faculty members.

The implications of the digital literacy strengthening strategy in enhancing the competencies of students at IAIN Ponorogo align with the theory of Robert J. Emmerling, Richard E. Boyatzis, and ed. Robert Emmerling, as it fulfills students' competencies in the form of cognitive skills, emotional skills, and social skills.

The cognitive skills resulting from the implications of the digital literacy strengthening strategy in enhancing the competencies of students at IAIN Ponorogo Library are as follows: 1) Students are capable of using Zotero reference management. 2) Students are capable of independently searching for online references such as online journals and ebooks. 3) Students are capable of utilizing digital reference sources to support research, learning, and knowledge development, including using them in the writing of academic works, such as theses, dissertations, and journal articles.

The emotional skills resulting from the implications of the digital literacy strengthening strategy in enhancing the competencies of students at IAIN Ponorogo Library are as follows: 1) Providing self-awareness to students to continually evolve in keeping up with technology from a positive perspective. 2) Motivating students to achieve goals (such as independently researching references, writing using reference management, and producing scholarly work). 3) Students actively play a role in communicating their digital literacy needs through the digital literacy class and indicating what themes they want to learn.

The social skills resulting from the implications of the digital literacy strengthening strategy in enhancing the competencies of students at IAIN Ponorogo Library are as follows: 1) Students are capable of socializing within the digital literacy class. 2) Students are capable of collaborating with professors, library staff, and fellow students. 3) Students are capable of following instructions from professors and instructors in the digital literacy class.

V. CONCLUSIONS

The implications of the digital literacy strengthening strategy in enhancing students' competencies at the IAIN Ponorogo Library, based on the model developed by Martin and Grodzicki at the second level, involve the use of digital tools that depend on individual digital competence. In this context, individuals utilize their digital skills to locate information, process it, and find solutions to problems. This is because students are expected to learn reference management at the library on a regular basis, which is beneficial for academic writing such as theses, dissertations, and articles.

The digital literacy strengthening strategy in enhancing students' competencies at the IAIN Ponorogo Library is not yet in line with the theories proposed by Norhasni Zainal Abiddin. This is because there are several strategies that have not been optimized at

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the IAIN Ponorogo Library, namely, providing facilities and digital devices for less privileged students, developing engaging activities and digital literacy learning modules, and ensuring an effective role of community leaders.

Based on observations and interviews, it is evident that the digital literacy strengthening strategy at the IAIN Ponorogo Library employs the principles of collaboration and sustainability. The implementation of the digital literacy program at the IAIN Ponorogo Library is designed with several strategies, including promotion through social media and collaborative efforts involving the library, academic journals, faculties, and postgraduate programs. The objective of promoting through social media is to facilitate students' access to the digital literacy class registration link. The implication of the Digital Literacy strengthening strategy in enhancing students' competencies at the IAIN Ponorogo Library aligns with the theories of Robert J. Emmerling, Richard E. Boyatzis, and ed. Robert Emmerling, as it fulfills students' competencies in the form of cognitive skills, emotional skills, and social skills.

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