STRATEGIC MODEL FOR STRENGTHENING DIGITAL LITERACY AT UIN PONOROGO AND UIN KEDIRI: SYNERGY OF CURRICULUM AND EDUCATIONAL PROGRAMS

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Abstract

The rapid development of information requires synergy between the curriculum, the academic community, and institutional policies so that digital literacy is not only a technical skill, but also integrated with Islamic values, learning processes, and academic culture. This study aims to examine the strategy of strengthening digital literacy at the Ponorogo State Islamic University and Kediri through a collaborative approach to improve students' digital literacy competencies. Using qualitative descriptive methods with a comparative approach, through participatory observation, in-depth interviews, and documentation analysis. The results of the study show that the strategy of strengthening digital literacy in both institutions adopts the theory of Norhasni Zainal Abiddin, Gillian Hallam, and Maria Spante, which includes cognitive, emotional, and social aspects. UIN Ponorogo emphasizes strengthening the competence of reference management, technological understanding, and social interaction through social media promotion, as well as literacy class programs and special training for final year students. Meanwhile, UIN Kediri focuses on strengthening digital literacy strategies on improving scientific and popular article writing skills, as well as the use of the Maktabah Syamilah application for hadith search, which is realized through synergy between libraries and faculties. Both institutions showed significant progress in students' digital literacy, although they still faced challenges such as limited infrastructure and the absence of written institutional policies. As a recommendation, this study proposes the integration of digital literacy into the core curriculum, the implementation of periodic evaluations, adequate budget allocation, and the strengthening of infrastructure.

Abstrak

Pesatnya perkembangan informasi menuntut sinergi antara kurikulum, sivitas akademika, dan kebijakan institusi agar literasi digital tidak hanya menjadi keterampilan teknis, tetapi juga terintegrasi dengan nilai-nilai keislaman, proses pembelajaran, dan budaya akademik. Penelitian ini bertujuan mengkaji strategi penguatan literasi digital di Universitas Islam Negeri Ponorogo dan Kediri melalui pendekatan kolaboratif guna meningkatkan kompetensi literasi digital mahasiswa. Menggunakan metode deskriptif kualitatif dengan pendekatan komparatif, melalui observasi partisipatif, wawancara mendalam, dan analisis dokumentasi. Hasil penelitian menunjukkan bahwa strategi penguatan literasi digital di kedua institusi mengadopsi teori Norhasni Zainal Abiddin, Gillian Hallam, dan Maria Spante, yang mencakup aspek kognitif, emosional, dan sosial. UIN Ponorogo menitikberatkan penguatan kompetensi manajemen referensi, pemahaman teknologi, dan interaksi sosial melalui promosi media sosial, serta program kelas literasi dan pelatihan khusus bagi mahasiswa tingkat akhir. Sementara itu, UIN Kediri memfokuskan

strategi penguatan literasi digital pada peningkatan keterampilan penulisan artikel ilmiah dan populer, serta pemanfaatan aplikasi Maktabah Syamilah untuk penelusuran hadis, yang diwujudkan melalui sinergi antara perpustakaan dan fakultas. Kedua institusi menunjukkan perkembangan signifikan dalam literasi digital mahasiswa, meskipun masih menghadapi tantangan seperti keterbatasan infrastruktur dan belum adanya kebijakan institusional yang tertulis. Sebagai rekomendasi, penelitian ini mengusulkan integrasi literasi digital ke dalam kurikulum inti, pelaksanaan evaluasi berkala, alokasi anggaran yang memadai, serta penguatan infrastruktur.

Keywords: Digital Literacy; Islamic Higher Education; Academic Collaboration; Competency Strengthening.

INTRODUCTION

Digital literacy has become a very important competency for students in the era of globalization and the development of digital technology today.[1] The ability to utilize technology effectively, critically, and ethically not only supports academic success, but also prepares students for the challenges of an increasingly digital world of work.[2]

Within UIN Ponorogo and UIN Kediri, awareness of the importance of digital literacy has encouraged various initiatives and programs to strengthen the digital competence of students and lecturers. These two institutions actively integrate technology in the process of learning, research, and academic services. Various efforts have been made, such as providing adequate internet access, utilizing digital libraries, training in academic support applications, and improving technology skills for lecturers. All of this reflects the commitment of the two campuses in creating a learning environment that is adaptive to the dynamics of the digital era. Before elaborating further on the Strategic Model for Strengthening Digital Literacy at UIN Ponorogo and UIN Kediri, it is important to first examine the social and academic context that has been formed in the two institutions. The presentation of various programs and research that has been carried out will be a foothold to identify achievements, challenges, and gaps that still need to be strengthened. With this understanding base, the author can formulate a strategic model that is relevant to campus needs while answering the challenges of digital literacy in the current academic world.

Based on the facts at UIN Ponorogo, the HAZAROBY activity organized by HMJ Arabic Language Education UIN Ponorogo has succeeded in becoming an effective annual forum in honing and developing the talents and abilities of students and students in the field of Arabic, with wide participation from various institutions. Through a series of competitions and lively art performances, this event not only strengthens the appreciation and love for the Arabic language in the competitive era, but also encourages the exchange of knowledge and the expansion of horizons. The support from the department, committee, and sponsors is the key to the successful implementation of the event, which is expected to motivate the participants to continue to develop Arabic literacy skills so that they are ready to contribute to the needs of the global community.[3]

[1] Eny Supriati, "Peran Perpustakaan Dalam Meningkatkan Mutu Pendidikan Di Universitas Muhammadiyah (Unmuh) Ponorogo," *Muslim Heritage: Jurnal Dialog Islam dengan Realitas* Vol 2, no. No. 2 (2017): 18, https://doi.org/10.21154/muslimheritage.v2i2.1109.

[2] Mary R. Lea dan Sylvia Jones, "Digital Literacies in Higher Education: Exploring Textual and Technological Practice," *Studies in Higher Education* 36, no. 4 (Juni 2011): 377–93, https://doi.org/10.1080/03075071003664021.

[3] Admin Humas, "IAIN Ponorogo Perkuat kemampuan literasi Bahasa Arab, HMJ PBA selenggarakan Kegiatan 'HAZAROBY' (Haflah Khazanah Arabiyah) ke IV.," Nopember 2022, https://pba.iainponorogo.ac.id/iain-ponorogo-perkuat-kemampuan-literasi-bahasa-arab-hmj-pba-selenggarakan-kegiatan-hazaroby-haflah-khazanah-arabiyah-ke-iv/.

The guest lecture themed "Strategies for Strengthening Literacy in Learning in Madrasas" organized by the PGMI UIN Ponorogo Study Program succeeded in providing in-depth insight into the importance of literacy which not only includes reading and writing skills, but also understanding, analysis, and application of information in daily life. Through the presentation of resource person Sada Sikana Maulida, participants obtained various practical strategies to strengthen literacy at the Madrasah Ibtidaiyah level, which is the main foundation for the formation of children's literacy skills. This activity is an important provision for prospective teacher students in facing future educational challenges with the ability to think critically, creatively, and positively contribute, while affirming PGMI UIN Ponorogo's commitment to preparing quality and adaptive educators.[4]

From the results of research that has been conducted on the strategic role in developing students' multiple intelligence abilities through the management of structured student organization programs, including planning, organizing, implementing, and supervising.[5] The next about strengthening Pancasila education as an identity, reflection, and challenge in limiting radicalism among Islamic university students in Ponorogo. Using a combined approach between research and development (R&D) and qualitative descriptive, this research was validated by three experts from the fields of religion, Pancasila education, and language. The limited trial data involved 100 students, including 25 from UIN Ponorogo. The results of the study show that the character control book entitled "Understanding Pancasila and Strengthening Pancasila as Student Identity, Reflection, and Challenge" is considered worthy by experts, well understood by students, and effective in increasing understanding and shaping student character in accordance with Pancasila values, as well as playing a role in limiting the spread of radicalism in the campus environment.[6]

The literacy seminar "Creative Writing in Digital Platforms for Students" organized by the UIN Kediri Library succeeded in equipping students with creative writing skills and strategies for disseminating works through digital media, as well as encouraging a culture of reading and writing among the academic community. The support from the Rector of UIN Kediri, Wahidul Anam, emphasized the importance of utilizing technology and virtual spaces as a flexible and effective means of learning, especially after the pandemic. This activity is expected to motivate students to actively increase literacy knowledge and productivity which is beneficial for the development of science and communication skills in the digital era.[7]

Various previous studies have confirmed that digital literacy plays a crucial role in strengthening students' core abilities, both from cognitive, social, and emotional aspects. One of them is Kyu Tae Kim's research in South Korea which shows that digital literacy not only shapes

[4] Admin Humas, "Guest Lecture 'Strategi Penguatan Literasi Dalam Pembelajaran Di Madrasah/Sekolah,'" 6 Maret 2024, https://pgmi.iainponorogo.ac.id/guest-lecture-strategi-penguatan-literasi-dalam-pembelajaran-di-madrasah-sekolah/.

[5] Yahya Fata Asyrofi dan Fery Diantoro, "Pengembangan Kemampuan Multiple Intelligencesmahasiswa Perguruan Tinggi Keagamaan Islam Melalui Organisasi Kemahasiswaan Intrakampus," *Muslim Heritage: Jurnal Dialog Islam dengan Realitas* 8, no. 2 (2023): 233–47, https://doi.org/10.21154/muslimheritage.v8i2.7293.

[6] Lukman Hakim dan Rahmi Faradisya Ekapti, "Penguatan Pendidikan Pancasila Sebagai Jatidiri, Refleksi, Dan Tantangan Dalam Membatasi Paham Radikalisme Mahasiswa Di Perguruan Tinggi Islam Ponorogo," *Muslim Heritage* 4, no. 2 (30 Desember 2019), https://doi.org/10.21154/muslimheritage.v4i2.1850.

[7] Zuhrufi dan Komarudin, "Dorong Kemampuan Menulis Kreatif Dalam Platform Digital, Perpustakaan Iain Kediri Adakan Seminar Literasi," Oktober 2023, https://webmaster.iainkediri.ac.id/news/read/dorong-kemampuan-menulis-kreatif-dalam-platform-digital-perpustakaan-iain-kediri-adakan-seminar-literasi.

students' core competencies, but also serves as a mediator in learning strategies. [8] Meanwhile, a study by Nurmala Berutu highlights the importance of library-based information literacy and digital resources as an effective strategy in increasing students' academic capacity, especially in supporting achievement in the university environment. [9]

In addition, Lilian Anthonysamy and her colleagues emphasized that motivation plays an important role in encouraging digital literacy while preparing students for an all-digital future.[10] In line with these findings, so Young Rieh and his team explained that students' adaptation to the digitalization process requires an effective approach in motivating them to be able to utilize information and communication technology (ICT) optimally and with quality.[11]

Based on the facts found at UIN Ponorogo and UIN Kediri as well as the results of literature reviews and findings from previous research, it can be seen that there is a gap in the implementation of digital literacy that not only involves mastering technology, but also motivational aspects, contextualization of learning, and strengthening multidimensional literacy which includes cognitive, social, and emotional aspects of students. Previous studies have emphasized the importance of digital literacy as a core competency that supports academic success and preparation for the challenges of the world of work, but there is still little attention to collaborative approaches that integrate various learning strategies and holistic literacy development in Islamic educational institutions. My study seeks to fill this gap by comparatively examining how strategies to strengthen digital literacy through cross-institutional collaboration (UIN Ponorogo and UIN Kediri) can motivate students more effectively and improve literacy skills not only in the academic context, but also in the development of critical, creative, and adaptive thinking skills in the face of the global digital era. Thus, this research makes a practical and conceptual contribution to broaden the understanding of strengthening digital literacy oriented to social needs and future learning.

Using a qualitative descriptive approach with a multisite design that focuses on strategies to strengthen digital literacy at UIN Ponorogo and UIN Kediri, this study aims to test the effectiveness of an integrated collaborative approach in improving the digital literacy competence of students in both institutions. In contrast to previous research, this study tries to answer the question of how collaborative approaches can strengthen digital literacy more effectively and how the difference in the implementation of strategies at UIN Ponorogo and UIN Kediri affects student competence. Using qualitative descriptive methods and comparative approaches, this study will examine in depth the impact of digital literacy strengthening strategies in both institutions, as well as provide practical recommendations to increase the effectiveness of digital literacy programs in higher education.

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[8] Kyu Tae Kim, "Hubungan Struktural antara Literasi Digital, Strategi Pembelajaran, dan Kompetensi Inti di antara Mahasiswa Korea Selatan," *Ilmu Pendidikan: Teori & Praktek*, 2019, https://doi.org/10.12738/estp.2019.2.001.

[9] Nurmala Berutu dkk., "The Strategy to Strengthen Information Literacy Based on Library and Digital Resources," dalam *Proceedings of the 1st International Conference on Social Sciences and Interdisciplinary Studies (ICSSIS 2018)* (Proceedings of the 1st International Conference on Social Sciences and Interdisciplinary Studies (ICSSIS 2018), Medan, Indonesia: Atlantis Press, 2019), https://doi.org/10.2991/icssis-18.2019.28.

[10] Lilian Anthonysamy, Ah Choo Koo, dan Soon Hin Hew, "Strategi Pembelajaran Mandiri di Pendidikan Tinggi: Membina Literasi Digital untuk Pembelajaran Sepanjang Hayat yang Berkelanjutan," *Pendidikan dan Teknologi Informasi* 25, no. 4 (Juli 2020): 2393–2414, https://doi.org/10.1007/s10639-020-10201-8.

[11] Soo Young Rieh dkk., "Assessing College Students' Information Literacy Competencies Using a Librarian Role-Playing Method," *Library & Information Science Research* 44, no. 1 (Januari 2022): 101143, https://doi.org/10.1016/j.lisr.2022.101143.

STRATEGY TO STRENGTHEN DIGITAL LITERACY AT UIN PONOROGO THROUGH CURRICULUM SYNERGY AND INTEGRATED EDUCATION PROGRAMS

The implementation of the digital literacy program at the UIN Ponorogo library is designed with several strategies, including promotion through social media, cooperation and collaboration involving libraries, journal houses, faculties, and postgraduates. The purpose of the promotion through social media is to make it easier for students to access the registration link for digital literacy classes. Meanwhile, cooperation and collaboration with lecturers is so that this program is easier to convey to students.

Based on the results of the observation of the digital literacy class program, it was socialized to students through: UIN Ponorogo Library website, whatsapp group. IG, Facebook UIN Ponorogo. Socialization through the UIN Ponorogo library website with the https://library.UINponorogo.ac.id/ page, digital literacy class activities are announced through the library flayer.

The UIN Ponorogo Library is actively conducting socialization related to the implementation of their digital literacy program. The socialization of Digital Literacy classes was carried out in various locations, including the Central Library, the Postgraduate Library, and the UIN Ponorogo Campus 2 library, using flayers uploaded through various social media platforms such as Facebook, Instagram, and the official website of the UIN Ponorogo Library.

Cooperation and collaboration with several parties are also carried out in supporting the success of the digital literacy program.

"Alwan Wibawanto, S.Th.I., M.E. said that the library collaborated with the journal house. The implementation of the digital literacy strengthening program is carried out between the library and the journal house manager, namely to provide training to postgraduate program students. As for undergraduate students, it is carried out between the library and several managers of the faculty journal house and also includes lecturers."

The collaboration is carried out by the library with the UIN Ponorogo journal house, and also the faculty journal house. This is in line with the statement of one of the journal house managers.

"Khoirul Fathoni, M.E.Sy. explained that he had been invited to Pascaarjana to serve as a resource person for Zotero and Mendeley reference management training."

This shows that the library in carrying out this digital literacy strengthening program involves other units in the internal environment of UIN Ponorogo, namely the journal house. Thus, the program is expected to run more optimally, although there are still several obstacles.

"Dr. Muh. Tasrif, M.Ag. explained that in an effort to improve article writing skills in the postgraduate program, a collaboration has been carried out with the Journal House and the library, where participants are guided to produce articles according to international journal writing standards through a series of discussion sessions and sharing sessions. In addition, programs for students have also been implemented with a focus on strengthening information literacy, especially in reference management, which includes the development of an e-library, the use of tools such as Zotero for citations and references, as well as additional features such as summarization and translation. This

activity aims to ensure that students are able to write scientific papers more effectively and in accordance with the ever-changing development of reference management."

The program focuses on strengthening information literacy and reference management, including the use of e-libraries and tools such as Zotero, so that students can write scientific papers effectively and adaptively to the latest developments in reference management.

" Dr. Nur Kolis, M.Ag. said that there is a collaboration between the Postgraduate program, the Journal House, and the library to coordinate students learning reference management, with the guidance of librarians, as well as support from lecturers involved in library activities."

In addition to collaboration in the implementation of the digital literacy strengthening program at UIN Ponorogo, the next strategy is through Library User Education activities. This program is specifically intended for new students to help them understand and improve their skills in utilizing library facilities and resources. The skills taught include searching for information, using catalogs, accessing databases, and utilizing information technology available in the library. Thus, students can use library resources more effectively, which in turn will maximize their learning and writing outcomes.

"Dr. Sugiyar, M.Pd.I said that literacy programs in the library are carried out regularly, especially to introduce facilities to new students, so that they can understand how to obtain digital information more easily. In addition, literacy activities are also incidental through courses that provide assignments to students to access and seek information, allowing them to develop studies related to courses. For example, students are taught to look for journals, primary references from English-language books, or books that can help them find basic theories that are relevant to the material being presented"

The digital literacy strengthening program at the UIN Ponorogo library also involves collaboration with external institutions and organizational units that have expertise and experience in digital literacy. For example, collaborating with postgraduates, journal houses, postgraduates, and faculties. This collaboration can include knowledge, training, or joint curriculum development aimed at improving digital literacy among UIN Ponorogo students and staff.

Through observation in the field, there is a digital literacy training program intended for lecturers. The digital literacy strengthening program for lecturers is more directed to output in the form of Scopus indexed journals. This program is called "*One Month One Article* (OMOA) Digital Writing on Scopus Series.

"Dr. Muh. Tasrif, M.Ag said that so far, the structured literacy program has only been implemented through OMOA for lecturers, while literacy groups have not been formed organically, although there are initiatives from associations that may carry out these processes independently. The future plan is to repeat the OMOA activities, which are only carried out once due to the dense rhythm of activities in the Postgraduate program. The difficulty in finding free time for lecturers, who also teach in other faculties, is a challenge in itself. Therefore, it is possible that the implementation of literacy programs can be carried out in the period when lectures are off, such as in June, July, to August, which can be a good opportunity to carry out literacy activities again."

To facilitate communication between participants, a study group was formed in a WhatsApp group with the name "OMOA batch1". This study group consisted of several lecturers from various

faculties and several education staff. The material taught includes: how to easily translate English, Grammarly, Zotero, quilbot, scopus.

Observations show that the digital literacy program in the Postgraduate was attended by 18 participants, including lecturers and education staff, which was held in two locations: the Postgraduate Munaqosah room on the 1st floor and the Postgraduate Library on the 2nd floor. Although this program is not supported by a fixed budget and takes place incidentally, its implementation has succeeded in increasing participants' digital literacy. One example of this success is Dr. Luthfi Hadi Aminudin, who after attending a workshop in 2023, successfully submitted his article to the Scopus Q1 indexed journal.

"Dr. Luhur Prasetyo, also stated that strengthening digital literacy is considered very important and needs to be more coordinated. So far, the touches given in the classroom, except for those made by Mr. Kardi, are still limited and not comprehensive, so students may not be fully aware of the importance of using digital literacy. If the digital literacy program is carried out massively and coordinated, it is hoped that students' understanding of digital literacy will increase. In addition, observations show that in classroom activities, including thesis guidance, students' awareness of the importance of digital literacy is still relatively low."

"Dr. Sugiyar, M.Pd. When discussing literacy, it is important to interpret broadly, not only limited to the aspects mentioned earlier. The follow-up of the leadership policy should involve a collaborative form that creates a climate of cooperation between lecturers and students. This aims to build a community that involves all components, both leaders, lecturers, and students, in producing collaborative work. In this context, to write journals, they need to access references from reputable journals, such as those indexed by Scopus, which indirectly forces them to know and understand these sources. The collaboration between lecturers and students in producing works published in the journal Sinta 2 or Sinta 3 also encourages them to seek information from various sources in order to produce quality writing. Therefore, interpreting literacy in this context means utilizing digital technology for scientific purposes, both for lecturers and students. Each individual has different areas of expertise and goals, which also affects how they access information. This shows the importance of utilizing the digital era optimally for the benefit of various areas of life."

However, in the implementation of the digital literacy program at UIN Ponorogo, there is no digital literacy learning module. In fact, this module has a very important role in improving students' understanding and skills in facing the challenges of the digital era. In a context that is increasingly connected and dominated by digital technology, the digital literacy learning module is an effective instrument to equip students with knowledge about the safe and wise use of digital technology.

"Dr. Muh. Tasrif, M.Ag. stated that until now, there has been no module design independently developed by the Postgraduate program. The modules used still refer to the material developed by IA Scholar and Rumah Scopus, which consists of two materials that are considered relevant for the benefit of OMOA. In the meantime, the library plans to create its own modules."

"Intan also said that until now, there are no modules available. In the previous activity, students were only guided through the stages of the process without any written modules. They were asked to open the laptop and immediately taught the installation steps manually, with explanations given directly, without being compiled in the form of a book or structured guide."

Digital literacy training for both students and lecturers is carried out on an ongoing basis.

"Alwan Wibawanto, M.E. said that this activity will be carried out on an ongoing basis. In the future, all materials will be available on the library website, so students can choose the day and schedule according to their wishes. Nonetheless, sometimes students spontaneously ask for additional teaching, and as long as they don't interfere, we will remain ready to help them. This learning process will not stop after one meeting, but it is planned to be held two or more meetings, so that students' understanding is deeper."

In addition, the UIN Ponorogo library can also build a digital literacy resource center that provides access to the necessary hardware and software, such as computers, laptops, and a stable internet connection. This resource center can be a place for students and faculty members to improve their digital literacy skills through independent activities, such as online learning, accessing electronic resources, or developing digital projects. Digital literacy resource centers can also provide technical support and guidance to assist individuals in overcoming obstacles or difficulties in using digital technology.

"Dr. Luhur Prasetyo, M.E. said that so far, the use of reference management in courses is often carried out informally. Lecturers usually assign assignments to create papers or articles, where they direct students to take advantage of reference management, although the explanations are not always in-depth. When there is a presentation, the lecturer will ask if the student has used reference management; if they haven't, they are directed to use it. However, often students just pull sources from Google without checking the metadata carefully. Although some lecturers also teach how to use reference management more appropriately, discussions on this topic are still inclusive and often integrated into class discussions without specific sessions that discuss them in detail."

Based on the findings above, the digital literacy program implemented by the UIN Ponorogo Library has run well through active promotion strategies, internal collaboration, and practical training targeting students and lecturers. Although still facing challenges such as the absence of learning modules, this program is able to improve the information skills of the academic community, especially in the use of digital references and scientific writing. In the future, strengthening facilities, preparing modules, and expanding independent access to training materials will be strategic steps to ensure the sustainability and wider impact of this digital literacy program.

STRATEGY TO STRENGTHEN DIGITAL LITERACY AT UIN KEDIRI THROUGH THE USE OF DIGITAL PLATFORMS AND THE DEVELOPMENT OF ACADEMIC LITERACY CULTURE.

The strategies to strengthen digital literacy carried out by the UIN Kediri library is to form a literacy group "Syakal". This writing class is one of the prominent activities aimed at providing writing skills to students.

"Komarudin, S.Ag., SS., M. Hum explained that Syakal is a digital portal that started from a WhatsApp group called "UIN Kediri Menulis". Previously, the group was a special group of UIN Kediri students who participated in the workshop "Tricks and Tips for Writing" held by the UIN Kediri Library. Although initially only intended for coordination during the workshop, this group attracted the attention of Dr. Limas Dodi, M. Hum and the library, with the hope that the group could become a forum for UIN Kediri students who are interested in writing."

To realize this hope, after a week has passed since the workshop, the UIN Kediri Library, represented by Evi Rahmawati, S. IKom., held a meeting with 10 students. The meeting resulted in a writing forum called "Pustaka Merdeka". However, Pustaka Merdeka did not run for several reasons.

Even so, the UIN Kediri Writing group still survives and is sometimes used to interact around the UIN Kediri Library. In May 2020, Dr. Limas Dodi, M.Hum. proposed the idea of creating a digital portal. This proposal was welcomed by the UIN Kediri Library and the students involved. After several discussions, Komarudin, S.Ag., SS., M.Hum. as the Head of the UIN Kediri Library came up with the name "Syiar Karya Literasi" which is abbreviated as SYAKAL. The Syakal digital portal under the auspices of the UIN Kediri Library, was officially formed on May 18, 2020 with Dr. Limas Dodi, M. Hum. as its founder. Then, Muhammad Hamim, S. Kom., M.Pd. put Syakal into the sub-menu library.UINkediri.ac.id and finally Syakal has its own domain. The initial members who joined Syakal were 4 UIN Kediri students, namely Moch. Hendra Irawan, Endang Sulistyowati, Anik Mupianti, and Wiwit Khusnul Khotimah.

"Muhammad Hamim, S. Kom., M.Pd explained that in the context of shakal, writers can come from various circles, including lecturers, students, employees, librarians, or the general public. Meanwhile, militancy is more focused on developing writing competence, especially for librarians."

Then based on the results of the documentation on June 8, 2023, it shows that the UIN Kediri Library is promoting Digital Literacy Strengthening activities. As the next strategic step, the library expanded its promotion by creating flayers and posters which were then uploaded through various social media platforms, including WhatsApp groups, websites, Facebook, and the official Instagram of the UIN Kediri Library.

Thus, the strategy to strengthen digital literacy at the UIN Kediri Library is realized through the formation of the literacy community "Syakal" (Syiar Karya Literasi), a digital portal that started from the WhatsApp group "UIN Kediri Menulis" as a result of a writing workshop. This initiative demonstrates the library's commitment to facilitating and developing students' writing skills in an ongoing manner, with active support from leaders, librarians, and lecturers. Although the initial forum "Pustaka Merdeka" was not realized, the spirit of literacy was maintained through Syakal which was officially established on May 18, 2020 and became a forum for the publication of works from the academic community to the general public. In order to expand its impact, the UIN Kediri Library is also actively promoting Syakal and digital literacy activities through social media and various digital platforms, as part of a strategic effort to support literacy culture in the era of digital transformation.

FINDINGS OF STRATEGIES TO STRENGTHEN DIGITAL LITERACY AT UIN PONOROGO AND UIN KEDIRI

Before presenting the results of the research in detail, the author first presents the main findings related to the strategy of strengthening digital literacy implemented by libraries at UIN Ponorogo and UIN Kediri. These findings provide a comprehensive overview of how each institution responds to the dynamics and challenges of the digital age through various strategic initiatives, ranging from programs, policies, to innovative service approaches. To facilitate understanding and analysis, the findings are presented systematically in three tables, namely: a table of strategies for

strengthening digital literacy implemented in each institution, a table of strategy similarities between the two, and a table of strategy differences that reflect the characteristics and local context of each campus.

Table 1 Results of Findings of Digital Literacy Strengthening Strategies at UIN Ponorogo and UIN Kediri

Activities	UIN Ponorogo	UIN Kediri
Digital Literacy Strengthening Strategy	1. Human resource improvement is carried out both for librarians and lecturers through workshops and training activities; 2. Integrating in classroom learning by lecturers, especially Indonesian courses; 3. Collaboration and cooperation are carried out between the library and the journal house, and the faculty; 4. Provision of various digital-based references in the library and also links for searching for e-books and e-journals that can be easily accessed on the library website; 5. Provision of smooth internet access in the campus area so that students can access various sources of information online; 6. Provision of e-journal collections and digital books "kubuku", "digital jatim" and repositories of lecturers' works and etheses from students' works; 7. Promote library literacy class activities by creating flayers and posters which are then uploaded through various social media platforms, such as WhatsApp groups, websites, Facebook, and the Library's official Instagram; 8. The digital literacy class program is carried out on an ongoing basis; 9. There is no official policy from the leadership regarding the obligation of students to participate in digital literacy programs;	1. Human resource improvement is carried out both for librarians and lecturers through workshops and training activities; 2. Cooperation and collaboration with fiqh and hadith lecturers in the use of Al maktabah Asy Syamilah in the library; 3. Promoting library literacy clinic activities through flayers and posters which are then uploaded through various social media platforms, such as WhatsApp groups, websites, Facebook, and the Library's official Instagram; 4. Providing smooth internet access in the campus area so that students can access various sources of information online; 5. There is no learning module related to literacy clinics yet; 6. There is not enough infrastructure to support the limitations of students who do not have laptops and android cellphones; 7. The literacy clinic program has not been implemented on a sustainable basis, and is only implemented incidentally according to the annual budget program; 8. Provision of e-journal collections and digital books "kubuku" and repositories of lecturers' works and etheses from students' works; 9. Provision of e-journal collections, *including* Cambridge Core, Gale, and ProQuest;

	10. There are no learning modules related to digital literacy yet; 11. The existing infrastructure is not enough to support the number of students who do not have laptops and android cellphones; 12. Providing the publication of the scientific journal "PUSTAKALOKA" to support the creativity of librarians in writing; 13. Melanggan e journal the 2022 Oxford Academic.	
Implications of Digital Literacy Strengthening Strategies in Improving Student Competence	1. Students can use Zotero reference management; 2. Students can independently search for online references such as: online journals, e-books, 3. Students can use the library's Online Public Access catalog (OPAC) database, and extensive digital repositories; 4. Students are able to utilize digital reference sources to support writing, learning, and knowledge development, including using in writing scientific papers; 5. Students can submit scientific papers in accredited journals.	1. Students are able to pour their ideas and ideas into written works, both popular and scientific articles; 2. Students can independently search for online references such as: online journals, e-books; 3. Students can use the library's Online Public Access catalog (OPAC) database, and extensive digital repositories; 4. Students are able to write both novels and scientific papers.

Source. Author's Review, 2025

Table 2 Similarity of Results of Findings of Digital Literacy Strengthening Strategies at UIN Ponorogo and UIN Kediri

Activity	Information
Digital Literacy Strengthening Strategy	1. There is human resource development for both librarians and lecturers; 2. The provision of infrastructure is still inadequate to accommodate students with a large capacity; 3. There is no policy from the institute related to increasing digital literacy programs; 4. There is no special module for digital literacy classes, but only in the form of short material in the form of power points; 5. There has been no evaluation of activities in a structured manner, related to the development of students' digital literacy skills; 6. Promote library literacy class activities by creating flayers and posters which are then uploaded through various social media platforms, such as WhatsApp groups, websites, Facebook, and the Library's official Instagram.
Implications of Digital Literacy Strengthening	1. Students have quite good knowledge in determining digital references for writing scientific papers and lectures;

Strategies in Improving Student Competence	2. Students have quite good skills in independently searching for digital references, e-books and e-journals independently;
	3. Students can use the references found for the purpose of compiling their scientific papers and coursework;
	4. Students can use Zotero and Mendeley reference management in compiling scientific papers.

Source. Author's Review, 2025

Table 3 Differences in the Results of Digital Literacy Strengthening Strategies at UIN Ponorogo and UIN Kediri

Activity	UIN Ponorogo	UIN Kediri
Digital Literacy Strengthening Strategy	1. Integrating in classroom learning by lecturers, especially Indonesian courses; 2. Cooperation and collaboration between libraries, journal houses and faculties; 3. Providing the publication of scientific journals "PUSTAKALOKA" to accommodate librarians' writing creativity; 4. Opening routine digital literacy training according to the library's schedule; 5. There is digital literacy training for lecturers, namely the *One Month One Article* (OMOA) program.	1. Integrating in classroom learning by lecturers, especially hadith, fiqh, and Writing Methodology courses; 2. Cooperation and collaboration with fiqh and hadith lecturers in the use of Al maktabah Asy Syamilah in the library; 3. There is a study group in the form of a SYAKAl group that provides access to writing novels and scientific papers for students and there is a MILLITANSI magazine to increase librarians' writing creativity.

Source. Author's Review, 2025

Based on the analysis above, the strategy of strengthening digital literacy at UIN Ponorogo and UIN Kediri shows similarities in terms of human resource development through training and workshops, as well as efforts to provide internet access facilities and digital collections. However, there are significant differences in the approach and focus of the program carried out. UIN Ponorogo emphasizes the integration of digital literacy in learning Indonesian courses and collaboration between libraries, journal houses, and faculties. In addition, UIN Ponorogo provides the publication of the scientific journal "PUSTAKALOKA" to support the creativity of librarians and carry out digital literacy training on a regular basis, including special programs for lecturers such as One Month One Article (OMOA). Meanwhile, UIN Kediri integrates digital literacy into special courses such as hadith, fiqh, and writing methodology, as well as establishing close cooperation with lecturers in the field of Islam in the use of Al Maktabah Asia Syamilah digital resources. UIN Kediri also has a SYAKAL study group that focuses on writing novels and scientific papers for students and publishes the magazine "MILLITANSI" as a forum for librarians' creativity. This approach shows that UIN Ponorogo focuses more on strengthening general-based digital literacy and scientific journals, while UIN Kediri focuses on digital literacy in the context of Islam and writing creativity.

The strategy of strengthening digital literacy at UIN Ponorogo and UIN Kediri plays a strategic role in supporting the development of digital skills for students and academic staff. Digital literacy includes the ability to critically access, evaluate, understand, and produce digital information, a much-needed competency in the midst of today's digital transformation flow.[12] This approach is in line with Garry Falloon's view[13] that emphasizes the importance of creating an academic community that is adaptive to technological developments and able to integrate technology effectively in academic activities. This analysis is also in line with the theory of digital literacy put forward by Lea and Jones[14], which emphasizes the importance of connectivity between institutional strategies and digital literacy practices. Through this framework, the strategies implemented in the two institutions will be analyzed to show how these efforts are implemented to improve the quality of digital literacy in the university environment.

Increasing the role of community and collaboration, in line with the collaboration theory proposed by Gillian Hallam, Amberyn Thomas, dan Bill Beach[15] collaboration is the main element in the strategy of strengthening digital literacy in both institutions. UIN Ponorogo and UIN Kediri involve active collaboration between libraries, faculties, journal houses, and lecturers in the implementation of digital literacy programs. Libraries not only function as information providers, but also as strategic partners in the development of digital literacy skills through cross-sector collaboration. This emphasizes that collaboration between various parties is an essential step in building a strong and sustainable literacy program.

According to the theory of collaboration and professionalism expressed by Maria Spante, the involvement of professional communities that use digital technology for communication, self-development, and cooperation is an effective way to improve digital literacy[16] This is reflected in the library's efforts in building the "Friends of the Library" community and the involvement of librarians such as Veriza Aulia Adhani who is active as a resource person in various activities in the faculty. Collaboration between librarians, lecturers, and students facilitates the flow of information and knowledge transfer more effectively.

Human resource training, both librarians and lecturers, is an important component in digital literacy strategies in both libraries. In this context, training is provided through various activities such as workshops and seminars related to digital literacy. The theory of continuous professional education emphasizes that digital literacy requires continuous efforts in the training and development of new skills[17] Librarians and lecturers need to be equipped with technical skills in

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[12] María Soledad Ibarra-Sáiz, Gregorio Rodríguez-Gómez, dan David Boud, "Mengembangkan Kompetensi Siswa melalui Penilaian Sebaya: Peran Umpan Balik, Pengaturan Diri, dan Penilaian Evaluatif," *Pendidikan Tinggi* 80, no. 1 (Juli 2020): 137–56, https://doi.org/10.1007/s10734-019-00469-2.

[13] Garry Falloon, "From Digital Literacy to Digital Competence: A Teacher Digital Competency Framework (TDC)," *Educational Technology Research and Development* 68, no. 5 (October 2020): 2449–72, https://doi.org/10.1007/s11423-020-09767-4.

[14] Lea and Jones, "Digital Literacy in Higher Education."

[15] Gillian Hallam, Amberyn Thomas, dan Bill Beach, "Creating a Connected Future Through Information and Digital Literacy: Strategic Directions at The University of Queensland Library," *Journal of the Australian Library and Information Association* 67, no. 1 (2 Januari 2018): 42–54, https://doi.org/10.1080/24750158.2018.1426365.

[16] Maria Spante dkk., "Digital Competence and Digital Literacy in Higher Education Research: Systematic Review of Concept Use," ed. oleh Shuyan Wang, *Cogent Education* 5, no. 1 (1 Januari 2018): 1519143, https://doi.org/10.1080/2331186X.2018.1519143.

[17] Ibarra-Sáiz, Rodríguez-Gómez, dan Boud, "Developing Student Competence through Peer Assessment."

using reference software such as Zotero, Mendeley, and other applications used in academic research.

This training is important so that lecturers can support students in using these tools in their academic assignments, which is in accordance with the theory of learning by doing which emphasizes learning through hands-on practice. This can be seen from the integration of digital literacy with courses such as research methodologies and marketing seminars at UIN Kediri, where students are taught the use of reference management software directly.

The provision of digital facilities and devices, where these facilities and digital devices are an important aspect of digital literacy, especially for students with economic limitations. The provision of access to computers, laptops, and stable internet networks in the UIN Ponorogo and UIN Kediri libraries reflects an inclusive strategy that supports digital literacy as a whole. Warschauer's theory of digital access highlights the importance of adequate digital infrastructure in overcoming the digital divide, especially for economically disadvantaged groups. By providing these facilities, the library ensures that students can access the digital resources necessary for academic activities and the development of their digital literacy skills.

However, the challenges faced at UIN Kediri related to limited infrastructure and participant interest show that there is a need to improve facilities and more attractive promotions so that digital literacy programs are more effective. This can be done by adopting gamification strategies in digital literacy training to increase student interest and participation.

The promotion of digital literacy programs through social media is part of a strategy to increase student participation in library activities. In line with Wahfiuddin Rahmad Harahap's theory, the digital promotion of libraries uses social media such as Facebook, Instagram, and official websites to disseminate information about digital literacy programs. The use of social media allows for wider and faster dissemination of information, which can increase student participation in various digital literacy training programs and workshops.[18]

Strengthening the website through the SYAKAL (Syiar Literasi) digital portal and MILLITANSI at UIN Kediri also shows innovative strategies in supporting writing culture and digital literacy in academic circles. According to the digital strategy theory proposed by Hallam, the use of digital technology to improve access to information and writing skills is very important in creating a dynamic learning environment and supporting the development of students' digital skills.

Evaluation is one of the key principles in the strategy to strengthen digital literacy as stated by Hallam, Thomas, and Beach. [19] In this context, the libraries of UIN Ponorogo and UIN Kediri need to implement continuous evaluations to assess the effectiveness of the digital literacy programs that have been implemented. The evaluation was conducted through the collection of feedback from workshop participants and library service users to gauge the extent to which the program achieved the expected goals. Referring to Obinna Nwokike and Vincent Unegbu's theory that formative and summative evaluation, the evaluation process not only functions as a measuring tool

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[18] Wahfiuddin Rahmad Harahap, "Penerapan Strategi Promosi Perpustakaan," *JIPI (Jurnal Ilmu Perpustakaan dan Informasi)* 6, no. 1 (2021): 14, http://dx.doi.org/10.30829/jipi.v6i1.9314.

[19] Hallam, Thomas, dan Beach, "Menciptakan Masa Depan yang Terhubung Melalui Informasi dan Literasi Digital."

for the final result, but also as a guide to make adjustments during the implementation of the program so that its sustainability can be maintained optimally. [20]

The sustainability of the digital literacy program is a key element in the strategy to strengthen digital competencies at UIN Ponorogo and UIN Kediri. At UIN Ponorogo, various initiatives such as digital literacy classes, the One Month One Article (OMOA) program that encourages lecturers to write scientific articles regularly, and the publication of Pustakaloka as a forum for developing librarians' writing creativity show a real commitment to building a digital literacy culture. Meanwhile, UIN Kediri integrates digital literacy into learning, especially in the Hadith, Fiqh, and Writing Methodology courses, as well as establishing active collaboration between libraries, lecturers, and scientific journal managers. The use of Al-Maktabah Ash-Syamilah with Fiqh and Hadith lecturers enriches access to digital sources, while the existence of the SYAKAL study group and MILLITANSI magazine also encourages students and librarians to be productive in writing scientific and creative works. The two institutions also routinely hold digital literacy training based on library schedules. As a long-term strategic step, the development of comprehensive digital literacy modules and the adjustment of programs to technological developments are important so that digital literacy remains relevant to the needs of the academic community in facing the challenges of the digital era.[21]

Based on the analysis that has been presented, the author formulates a comprehensive strategic design in strengthening digital literacy at UIN Ponorogo and UIN Kediri. This design not only reflects the best practices that have been implemented in both universities, but can also be developed as a theoretical contribution in building a Strategic Model for Strengthening Digital Literacy in Higher Education. The strategic model is described as follows:

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[20] Obinna Nwokike dan Vincent Unegbu, *Mengevaluasi Kinerja Kerja Pustakawan di Universitas di Tenggara, Nigeria.* (Nebraska-Lincoln: Filsafat dan Praktek Perpustakaan Universitas Nebraska-Lincoln, 2019).

[21] Anna Sánchez-Caballé, Mercè Gisbert-Cervera, dan Francesc Esteve-Mon, "The Digital Competence of University Students: A Systematic Literature Review," *Aloma: Revista de Psicologia, Ciències de l'Educació i de l'Esport* 38, no. 1 (19 Mei 2020): 63–74, https://doi.org/10.51698/aloma.2020.38.1.63-74.
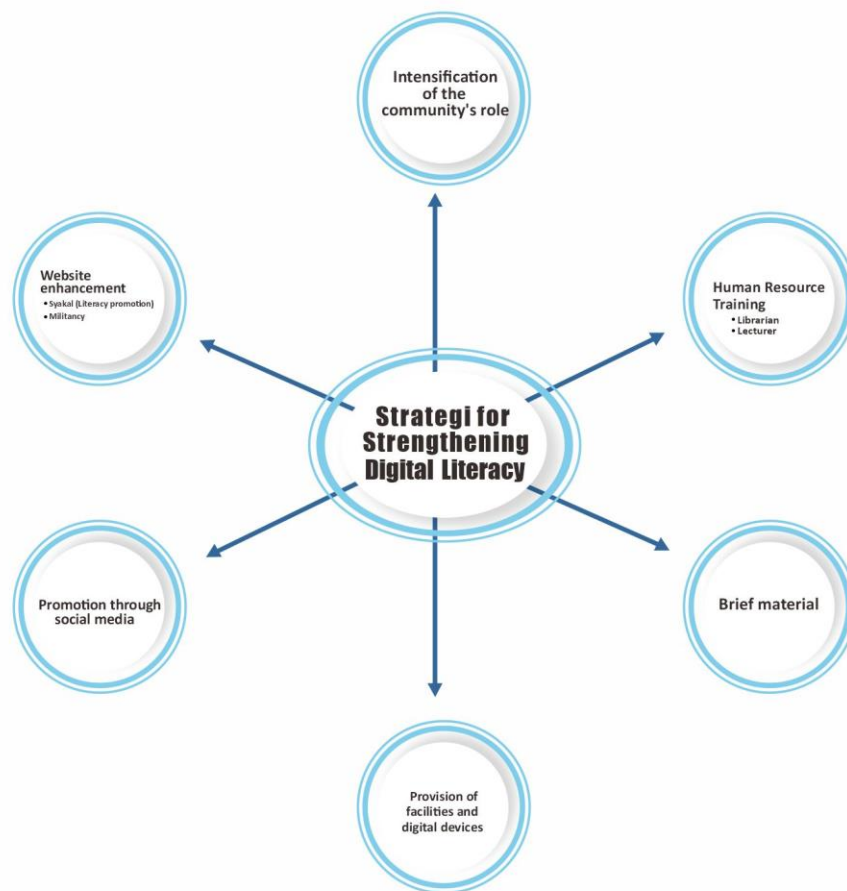
Figure 1 Strategic Model for Strengthening Digital Literacy in Higher Education
Source. Author's Review, 2025

This figure shows that the strategy of strengthening digital literacy involves various aspects, ranging from strengthening the community to providing effective facilities and promotions through social media and the development of training materials. All of these aspects support each other to create a strong digital literacy ecosystem.

The impact of the implementation of the strategy to strengthen digital literacy at UIN Ponorogo and UIN Kediri is in line with the model developed by Allan Martin and Jan Grudziecki regarding the level of digital competence, [22] and strengthened by the theory of digital literacy put forward by Scholastica C. Ukwoma, Nkiruka E. Iwundu, and Ifeanyichukwu Emmanuel Iwundu.[23] This view quotes Paul Gilster who defines digital literacy as the ability to understand and use information in various formats from digital sources. This theory emphasizes that digital literacy is not just about mastering technology, but also includes the ability to think critically in evaluating

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[22] Allan Martin dan Jan Grudziecki, "DigEuLit: Konsep dan Alat untuk Pengembangan Literasi Digital," *Inovasi dalam Pengajaran dan Pembelajaran dalam Ilmu Informasi dan Komputer* 5, no. 4 (Desember 2006): 249–67, https://doi.org/10.11120/ital.2006.05040249.

[23] Scholastica C. Ukwoma, Nkiruka E. Iwundu, dan Ifeanyichukwu Emmanuel Iwundu, "Keterampilan Literasi Digital yang Dimiliki oleh Mahasiswa UNN, Implikasi untuk Pembelajaran dan Kinerja yang Efektif: Studi Perpustakaan MTN Universities Connect," *New Library World* 117, no. 11/12 (14 November 2016): 702–20, https://doi.org/10.1108/NLW-08-2016-0061.

digital information. In this context, the approach applied at UIN Ponorogo and UIN Kediri through workshops, training, and the use of reference management tools such as Zotero is very relevant, because it equips students with skills in accessing, managing, and critically assessing digital information, thereby supporting the improvement of their critical thinking skills and information literacy in the digital era

The competency model according to Richard E. Boyattis, [24] which divides competencies into three main dimensions, namely cognitive skills, emotional skills, and social skills, supports this analysis. At the cognitive level, strengthening digital literacy at UIN Ponorogo has helped students develop the ability to use digital references and academic tools such as Zotero, which supports the writing of scientific papers. In the affective dimension, digital literacy programs increase students' motivation to achieve academic goals by utilizing technology. Meanwhile, in the social dimension, cooperation between students, lecturers, and libraries strengthens collaborative skills, although UIN Kediri still needs to improve this aspect to achieve perfection in collaborative learning.

In addition, technology-based learning theory also supports an integrative approach in digital literacy strategies in both institutions, emphasizing that effective teaching must combine technology with pedagogy and content in a balanced manner.[25] By integrating digital literacy into the curriculum through courses such as Indonesian at UIN Ponorogo and Hadith at UIN Kediri, libraries in these two institutions play an active role in connecting technology with learning content. It not only supports the development of technical skills, but also allows students to develop broader intellectual and academic competencies.

In this context, social learning theory is also relevant, because the digital literacy strategies applied in libraries involve observational learning, where students learn from interactions with lecturers, librarians, and fellow students.[26] They observed how digital technology could be used to improve academic outcomes, which were then applied in their own academic activities. This collaborative and integrative strategy encourages active learning, where students are not only recipients of information, but also learning agents who are active in the digital literacy process.

Thus, the digital literacy strengthening strategy implemented at the UIN Ponorogo and UIN Kediri Libraries not only has an impact on the development of technical skills, but also strengthens students' cognitive, affective, and social competencies, in accordance with digital literacy theories and technology-based learning. This strategy also expands the scope of digital literacy from just technology use skills to critical thinking, collaboration, and innovation in the learning and scientific writing process.

This research reveals various strategies implemented by UIN Ponorogo and UIN Kediri in strengthening digital literacy in their respective academic environments. In terms of collaboration, UIN Ponorogo builds synergy between libraries, journal houses, and faculties to support digital literacy at large. Meanwhile, UIN Kediri focuses on collaborating with lecturers in the field of Islam, especially fiqh and hadith, in the use of digital collections such as Al Maktabah Asia Syamilah. Both

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[24] Richard E. Boyatzis, "Competence as a Behavioral Approach to Emotional Intelligence," ed. by Richard Boyatzis, *Journal of Management Development* 28, no. 9 (September 18, 2009): 749–70, https://doi.org/10.1108/02621710910987647.

[25] Ali Muhson, "The Development of Information Technology-Based Learning Media," *Indonesian Journal of Accounting Education* 8, no. 2 (December 1, 2010), https://doi.org/10.21831/jpai.v8i2.949.

[26] Kim, "The Structural Relationship between Digital Literacy, Learning Strategies, and Core Competencies among South Korean Students."

institutions actively promote digital literacy activities through various social media platforms such as WhatsApp, websites, Facebook, and Instagram to reach students effectively.

In terms of training and human resource development, the two campuses routinely hold digital literacy workshops and training for librarians and lecturers. However, UIN Ponorogo stands out for the implementation of continuous training programs, including a special program for lecturers called One Month One Article (OMOA), while UIN Kediri implements a digital literacy clinic program that is incidental and unsustainable. This is an important differentiator in strengthening the capacity of human resources in both institutions.

Support for digital facilities and infrastructure is another important aspect that was found. Both campuses have provided smooth internet access in the campus area to make it easier for students to access digital resources, as well as digital collections that include electronic journals, e-books, and repositories by lecturers and students. However, both institutions still face obstacles in terms of supporting infrastructure, especially in meeting the needs of students who do not have devices such as laptops or smartphones.

In the development and provision of learning media, the two institutions do not yet have official digital literacy learning modules, with the available materials still limited to short presentations. However, each institution has creative initiatives to support the development of literacy, where UIN Ponorogo publishes the scientific journal "PUSTAKALOKA" as a forum for librarians' creativity, while UIN Kediri has a SYAKAL study group and a magazine "MILLITANSI" that encourages the creativity of students and librarians to write.

In terms of evaluation and program continuity, UIN Ponorogo shows a more structured and sustainable implementation of digital literacy programs, in contrast to UIN Kediri which runs the program by chance depending on the annual budget. In addition, the two institutions do not yet have official policies from the leadership that require or strengthen digital literacy programs institutionally.

The implications of the strategy implemented can be seen from the competence of students on both campuses. Students are able to search and use digital references independently and master reference management such as Zotero and Mendeley to compile scientific papers. In particular, UIN Kediri students are also encouraged to pour ideas in the form of popular writings and novels, while UIN Ponorogo emphasizes more on writing scientific articles. Thus, although there are similarities in efforts to strengthen digital literacy, the difference in focus and program continuity provides unique characteristics for each institution in responding to the challenges of the digital era in the academic world.

The different approaches applied by UIN Ponorogo and UIN Kediri have a significant impact on the effectiveness of digital literacy strengthening programs in each institution. UIN Ponorogo implements a more structured and sustainable strategy, with regular training for both librarians and lecturers, as well as the integration of digital literacy programs in formal learning, especially in Indonesian language courses. This approach allows students to get digital literacy briefings consistently, thereby improving their ability to find, manage, and use digital information sources effectively. In addition, the publication of internal scientific journals and special training programs for lecturers strengthens the academic culture that supports the development of digital literacy.

UIN Kediri runs a digital literacy program with a more incidental approach and focuses on collaboration with Islamic lecturers, such as fiqh and hadith, which provides distinctiveness in the use of special digital collections. However, irregularities in the implementation of training and the lack of sustainable programs are the main challenges that hinder the optimization of digital literacy among students. The limited supporting facilities and the absence of integrated learning modules also narrow the effectiveness of the program. However, the existence of study groups and internal magazines provides creative space for students and librarians to develop their literacy skills.

Thus, UIN Ponorogo has an advantage in continuity and an integrated program structure, which has the potential to produce a greater positive impact in strengthening digital literacy. Meanwhile, UIN Kediri faces challenges related to program and infrastructure consistency, despite having a specific collaborative approach and high creativity potential. Understanding these differences is important for readers to see that the effectiveness of digital literacy programs largely depends on how strategies are implemented comprehensively, supported by policies, resources, and innovations that are in accordance with the characteristics of each institution.

In the future, the findings of this research need to be developed by linking strategies to strengthen digital literacy in the Islamic context, considering that digitalization also affects the social and religious dynamics of the ummah. Digital literacy not only includes technical skills, but also the wise use of technology in accordance with sharia principles, maintaining media ethics, preventing hoaxes, and strengthening digital da'wah and access to Islamic knowledge. Strengthening digital literacy on Islamic campuses such as UIN Ponorogo and UIN Kediri is an important part of forming a Muslim society that is moderate, tolerant, and adaptive to the times.

CONCLUSION

The conclusion of this study shows that the strategy of strengthening digital literacy at UIN Ponorogo and UIN Kediri includes the principle of collaboration between units, human resource training, provision of digital facilities and infrastructure, and promotion of literacy activities through various social media platforms. This approach is in line with the theories of experts such as Hallam, Norhasni Zainal Abiddin, and Maria Spante, who emphasize the importance of integrating digital literacy in higher education to prepare students and academic staff to face the challenges of the digital age. Although both institutions have implemented such strategies, there are significant differences in terms of program implementation and sustainability. UIN Ponorogo shows consistency and regularity in training and development of learning media, while UIN Kediri still runs programs incidentally and is limited by the annual budget. Both face obstacles in the form of limited student devices, the unavailability of official learning modules, and the absence of comprehensive institutional policies to support digital literacy as a whole.

The recommendation that can be given is that the two institutions immediately develop comprehensive and official digital literacy learning modules, as well as pursue institutional policies that require student participation in digital literacy programs. In addition, it is necessary to increase facility support in the form of providing adequate equipment and access to technology for all students. Strengthening more intensive collaboration between academic units and libraries also needs to be continued and developed, accompanied by regular evaluations to ensure the effectiveness of the program. With these steps, it is hoped that students' digital literacy

competencies will increase and be able to face challenges and opportunities in the era of digital transformation in the world of Islamic higher education.

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