

Digital Literacy of Islamic Boarding School Students in Facing Religious Misinformation on Social Media

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ABSTRACT

The development of digital technology has brought significant changes in the patterns of access to and dissemination of religious information among Muslim communities. Social media platforms such as YouTube, TikTok, and Instagram have become new spaces for Islamic boarding school students to acquire religious knowledge, but at the same time, they have opened up opportunities for the spread of misinformation that can undermine the authority of Islamic scholarship. This study aims to explore santri's digital literacy in responding to and filtering religious information circulating on social media. A qualitative approach using a phenomenological study method was used to understand the santri's direct experiences in dealing with digital religious content. Data were obtained through in-depth interviews and observations of the santri's online activities at several Islamic boarding schools in Kediri. Thematic analysis was then conducted to identify the strategies, obstacles, and critical thinking patterns of santri in assessing the accuracy of information. The results of the study show that santri generally have an initial awareness of the dangers of misinformation, but their skills in verifying sources and using digital literacy tools are still limited. The roles of teachers, pesantren culture, and access to authoritative sources have a strong influence on the ability of santri to manage the flow of information. This study emphasises the importance of strengthening Islamic-based digital literacy in the pesantren curriculum as an effort to equip santri to face an increasingly complex information ecosystem. These findings are expected to contribute to the development of Islamic education strategies that are adaptive to the challenges of the digital era and to strengthen information resilience among the young Muslim generation.

Keywords: Digital literacy, santri, misinformation, social media, Islamic education.

Introduction

The development of information and communication technology in the 21st century has fundamentally changed the way humans obtain, process, and disseminate information. The emergence of social media as a digital public space not only facilitates social interaction but also shapes new ways of understanding and interpreting reality, including in the field of religion. In Indonesia, social media platforms such as YouTube, TikTok, Instagram, and X (Twitter) have become the primary sources of religious knowledge for most of the younger generation. This phenomenon shows a shift in religious authority from formal institutions such as Islamic boarding schools and majelis taklim (religious gatherings) to new figures emerging in the virtual world. However, behind the ease of access to information, there are also serious challenges in the form of a flood of misinformation and disinformation that has the potential to mislead the public's understanding of religion.

Religious misinformation on social media can be understood as the dissemination of information or knowledge that appears to be religious in nature but lacks a valid scientific basis, whether in terms of textual sources, interpretation methodology, or the legitimacy of its authority. In the digital age, the line between religious authority and personal opinion has become blurred because every individual has the same opportunity to become a 'preacher' through social media. Much of the religious content that goes viral is created without academic or scientific verification, and is often provocative and reductive. This leads to a distortion of the meaning of Islamic teachings, which can lead to narrow fanaticism, intolerance, and polarisation in the digital space.

This phenomenon has a significant impact on santri, a group traditionally known as the guardians of Islamic scholarship in Indonesia. Santri live in a scholarly culture based on sanad (chain of scholarly transmission) and methodological discipline in understanding religious texts. However, when they interact with social media, they are also exposed to a wide variety of religious information that is often unverified. In this context, the ability of santri to sort, assess, and verify information becomes very important. This competency is known as digital literacy, which is the ability to access, evaluate, use, and create information critically and ethically in the digital space.

Digital literacy is not merely a technical skill in using technological devices, but also encompasses cognitive, ethical, and cultural dimensions. A digital media user with high literacy is expected to be able to understand the context, purpose, and social impact of the information they consume. In a religious context, digital literacy also requires epistemological awareness, namely an understanding of how religious truths are formed, tested, and accounted for. Thus, digital literacy for santri does not only mean the ability to operate social media, but also the ability to assess the validity of sources, distinguish between scientific interpretations and popular opinions, and maintain the integrity of Islamic values in the digital space. In Indonesia, the urgency of strengthening digital literacy in Islamic education is even greater given the high penetration of the internet among teenagers and santri (Eraku et al., 2021). Based on data from We Are Social in 2024, more than

77% of Indonesians actively use social media, with an average usage time of 3 hours and 18 minutes per day. Meanwhile, a survey by the Ministry of Communication and Information Technology (Kominfo) shows that the digital literacy level of Indonesians is still in the 'moderate' category, with an index score of 3.64 out of 5. This means that most internet users in Indonesia still face difficulties in verifying information, especially regarding religious and social issues.

This condition shows a gap between technological access and critical thinking skills regarding digital content. In many Islamic boarding schools, the use of the internet and social media by students is still strictly monitored, but this is not accompanied by systematic digital literacy education (Nurfazri et al., 2024). Some Islamic boarding schools even still view the digital world as a moral threat, rather than a new learning space. In fact, in this era of information disruption, closing access is not always the solution. What is more urgent is to equip students with critical and ethical skills so that they can interact productively with the digital world without losing Islamic values.

Previous studies have generally focused on digital literacy among public school students or university students, while the context of Islamic boarding schools has rarely been explored in depth. For example, (Hasanah, 2021) study shows that high school students have moderate awareness of the dangers of fake news, but are not yet able to consistently verify sources. Meanwhile, a study by (Marganingrum & Shahib, 2023) emphasises that Islamic education teachers play an important role in instilling ethical digital literacy values in public schools. However, there have not been many studies exploring how santri with a strong religious background but high media exposure deal with the phenomenon of religious misinformation on social media. In fact, santri occupy a unique position: they are not only consumers of information but also potential disseminators of religious teachings in the digital space.

This study attempts to describe in depth how santri manage religious information on social media, the forms of misinformation they encounter, and how Islamic boarding schools can play a role in strengthening their digital literacy capacity. Using a qualitative approach, this study attempts to capture the social reality and personal experiences of santri in depth. Data was obtained through interviews, observations, and reviews of digital content frequently accessed by santri. Through thematic analysis, this study aims to identify patterns of thinking, values, and digital literacy practices that are unique to the pesantren environment.

In practical terms, the results of this study are expected to provide input for the development of an Islamic values-based digital literacy curriculum in religious educational institutions (Hamdi & Jumrodah, 2023). Digital literacy should not only be taught as a technical skill, but also as part of Islamic scientific ethics that emphasise truth, prudence, and social responsibility. Thus, strengthening the digital literacy of santri can be an important foundation for the creation of a healthy, moderate digital space that is oriented towards the benefit of the ummah.

Method

This study employs a qualitative approach with a phenomenological study type. The qualitative approach was chosen because it allows researchers to gain an in-depth understanding of the subjective experiences, meanings, and perspectives of santri in dealing with the phenomenon of religious misinformation on social media (Zulyadi et al., 2024). The main objective of this study is not to measure the level of digital literacy among santri quantitatively, but rather to explore how they interpret, interpret, and respond to the flow of religious information they encounter in the digital space.

The phenomenological approach, as explained by Creswell (2018), aims to reveal the essential meaning of an experience experienced by an individual or group. In the context of this study, the phenomenon being examined is the experience of santri when confronted with invalid, provocative, or misleading religious content on social media. With this approach, the researcher seeks to explore the world of santri, namely how they think, feel, and act in assessing religious information circulating online.

This research was conducted in three Islamic boarding schools located in Kediri, as they represent a variety of boarding schools with different characteristics: salafiyah (traditional) boarding schools, khalafiyah (modern) boarding schools, and integrated boarding schools that already utilise digital technology in their teaching and learning activities. The selection of these locations allowed the researchers to compare patterns of santri interaction with digital media in various Islamic educational contexts.

The research subjects were students who had access to social media and regularly consumed religious content online. The number of research participants was determined based on the principle of data saturation, whereby data collection was stopped when no new information emerged from additional participants. In general, this study involved around 10 to 15 students, ranging in age from 16 to 23 years old.

Participants were selected using purposive sampling, which is the deliberate selection of informants based on specific criteria. The criteria for participants in this study were:

1. Active santri at Islamic boarding schools who have been using social media for at least two years.
2. Have accessed or interacted with religious content on social media (e.g., religious videos, short lectures, or Islamic content).
3. Are willing to be informants and provide information honestly and openly.
4. Have a basic understanding of the use of digital media (smartphones, messaging applications, and social media platforms).

In addition to students, this study also involved two teachers or ustadz (religious teachers) from each pesantren to obtain a contextual view of how pesantren view digital literacy and their efforts in guiding students so that they do not fall prey to religious misinformation.

The data used in this study consists of primary data obtained directly from in-depth interviews with students and supervising teachers, as well as from observations of students' digital behaviour in the pesantren environment and

secondary data obtained through document studies, such as guidelines for internet use in pesantren, internal pesantren policies on social media, and scientific literature related to digital literacy, religious misinformation, and Islamic education in the digital age. This study uses three main data collection techniques, namely: In-depth Interviews, Participatory Observation Documentation, and Archival Studies.

Through a phenomenological approach and thematic analysis techniques, this study seeks to understand the dynamics of santri digital literacy in depth, including their awareness of the dangers of misinformation, the verification strategies they use, and the role of the pesantren environment in shaping critical attitudes towards religious information. With this methodology, the study is expected to not only produce empirical descriptions but also provide a conceptual basis for strengthening Islamic education that is adaptive to the challenges of the digital era.

Results

Patterns of Social Media Use Among Islamic Boarding School Students

The interviews revealed that the majority of students use social media as their main source of religious information, aside from religious lectures and classical Islamic texts. The most frequently used platforms are YouTube, TikTok, and Instagram, followed by WhatsApp and Telegram as a means of sharing religious content among friends or boarding school groups.

Their main motivation for accessing religious content is to increase their Islamic knowledge, find quick answers to fiqh issues, and follow lectures by popular ustaz. However, some santri admit that they often do not check the validity of the content sources. Santri rely on the popularity of the speaker or the number of followers of an account as a measure of credibility.

Some santri also admit to feeling confused or anxious when they encounter differences of opinion between ustadz on social media, especially on controversial issues such as qunut, tahlilan, or the use of modern technology in worship. This shows that santri still face the problem of information overload, namely a flood of information that is difficult to filter between what is valid and what is not.

Level of Awareness of Religious Misinformation

Most santri are already aware that not all religious information on social media can be trusted. This awareness arises from personal experience after encountering news or sermons that turn out to be inconsistent with the teachings they have learned at the pesantren.

From the interview results, at least three patterns of santri awareness of misinformation emerged:

- a. Reactive awareness, which is awareness that arises after they are exposed to content that causes controversy or debate.
- b. Reflective awareness, which is awareness that arises from formal learning at the pesantren, especially from ustaz who emphasise the

importance of tabayyun (clarification) before disseminating information.

- c. Preventive awareness, which is proactive awareness to always verify information sources by comparing content with religious texts or teachers.

However, it was also found that some santri still have low digital literacy. They often repost unverified religious content because they consider it useful or have 'good intentions'. This pattern shows that morality and good intentions often blur the line between valid information and misinformation.

Santri Strategies for Dealing with Misinformation

From the analysis results, the researchers found four main strategies used by santri in dealing with religious misinformation on social media:

- a. Digital Tabayyun (Source Verification)

Some santri practise the principle of tabayyun by seeking additional information from official sources such as the Ministry of Religious Affairs website, MUI fatwas, or YouTube channels of ustaz who are known to be credible.

- b. Collective Discussion in the Pesantren Environment

When encountering questionable content, santri often discuss it with their friends at the pesantren or ask their ustaz directly. This process demonstrates the important role of peer learning and teacher guidance in building critical awareness.

- c. Personal Filtering Based on the Credibility of the Ustaz:

Santri tend to rely on the reputation of ustaz in the real world as the basis for their trust in digital content. They trust ustadz who are known through direct teaching more than figures who are only popular in the virtual world.

- d. Selectivity in Sharing Information:

Some students who are more digitally literate have begun to apply the principle of caution before reposting or forwarding content. They assess the content, style of delivery, and source of evidence before sharing it with the pesantren group.

These findings show that the digital literacy of santri is not only related to technical skills (such as using social media), but also concerns the moral values and Islamic ethics instilled in them through pesantren education.

The Role of Islamic Boarding Schools in Improving Digital Literacy

Islamic boarding schools, as traditional Islamic educational institutions, have begun to show concern for the importance of digital literacy. Based on interviews with supervising teachers, several boarding schools have held thematic studies on social media ethics, digital journalism training, and mentoring students to create positive religious content.

However, not all Islamic boarding schools have official policies regarding the use of digital media. Some Islamic boarding schools still restrict internet access in order to maintain students' focus on their studies. This has led to an internal

digital divide, where some students are very active on social media, while others do not have sufficient digital experience.

However, in general, pesantren teachers realise that equipping students with digital literacy is an important part of tahdzib al-nafs (moral self-cultivation). Teachers act as figures of digital moderation, guiding students to use social media for dakwah bil-hikmah (preaching with wisdom), not as a tool for provocation or spreading hatred.

Discussion

Digital Literacy for Islamic Boarding School Students: Between Tradition and Digital Transformation

Islamic boarding school students, as an integral part of the Islamic education system in Indonesia, have a strategic position in shaping a moderate, knowledgeable Islam that is adaptive to the times. Islamic boarding schools, as the oldest Islamic educational institutions, have long been known as centres for the transmission of religious knowledge that is deeply rooted in the tradition of tafaqquh fi al-din (deepening religious knowledge). However, in the digital era, pesantren now face new challenges: how to preserve the purity of Islamic values while preparing santri to interact critically and wisely in the digital space, which is full of information, including religious misinformation.

The phenomenon of digitalisation has had a multidimensional impact on social and religious life. Students who were once limited to access to classical Islamic texts and conventional teaching now live in a digital ecosystem that allows them to access thousands of sources of knowledge through their mobile devices. On the one hand, this convenience accelerates the transfer of knowledge and broadens religious horizons; on the other hand, it also opens the door to religious information that has not been scientifically or religiously validated. Religious misinformation circulating through social media whether in the form of out-of-context sermon excerpts, manipulated interpretations of verses, or false hadith claims has the potential to mislead the faithful, including santri who do not yet have strong digital literacy skills.

In this context, digital literacy is not only understood as the technical ability to use technology, but also includes cognitive, social, and ethical abilities in understanding, evaluating, and producing information responsibly. The concept explained that digital literacy is 'the ability to understand and use information in various formats from various digital sources.' However, in the era of social media, this understanding has evolved into critical skills in sorting information, thinking reflectively about digital messages, and ethical awareness in participating in the virtual world.

Santri, as subjects of Islamic education, have great potential to become agents of digital literacy in society. Based on the results of research in several Islamic boarding schools in Kediri, most santri have used social media such as WhatsApp, Instagram, TikTok, and YouTube as a means of preaching and communication. However, the research also shows that the level of digital literacy among santri is still predominantly at a functional level that is, the ability to use

digital devices for specific purposes while critical and ethical aspects are still relatively low (Dewi & Azhar, 2025). This means that santri can access and share information, but are not necessarily able to assess the validity and impact of the information being disseminated.

The main challenge faced by santri in dealing with religious misinformation is their lack of ability to verify sources. In an era where information can be produced by anyone, scientific authority is often reduced. Religious narratives now come not only from scholars or academics, but also from public figures, influencers, or anonymous accounts with rhetorical and technological capabilities. This condition makes some santri vulnerable to accepting information without the process of *tabayyun* (clarification), even though this principle is a fundamental value in Islam as mentioned in QS. al-Hujurat [49]: 6, 'O you who believe, if a wicked person comes to you with any news, ascertain the truth, lest you harm people unwittingly and afterwards become full of repentance for what you have done.'

In the context of digital literacy, the principle of *tabayyun* can be interpreted as a form of critical literacy, namely the ability to identify the motive, validity, and context of information before believing or disseminating it. Thus, strengthening digital literacy for santri is not a secular process separate from Islamic values, but rather a manifestation of Islamic teachings on caution in receiving and disseminating information.

Modern Islamic boarding schools that have integrated technology-based curricula are beginning to show positive results. Several institutions, such as Pondok Pesantren Sidogiri, Gontor, and Tebuireng, have implemented digital literacy training based on Islamic ethics. These programmes not only teach the use of information technology but also instil awareness of the dangers of digital slander, online gossip, and the dissemination of harmful content. With this approach, students are educated to become active and productive users in the digital world, not just consumers of information.

Digital transformation in Islamic boarding schools has also given rise to a new model of *da'wah* that is more contextual and technology-based. Students are now producing *da'wah* content through YouTube, TikTok, and podcasts in a language that is more accessible and relevant to the younger generation. In this context, digital literacy is a key skill so that santri's *da'wah* is not only visually appealing, but also theologically and methodologically correct (Rahma, 2023). This is because *da'wah* without digital literacy risks being trapped in simplistic teachings or even spreading intolerant narratives due to misinterpretation.

Religious Misinformation on Social Media: Patterns, Impacts, and Dynamics

Religious misinformation is one of the most dangerous forms of disinformation (false information spread without verification) because it concerns public beliefs and morals. According to (Fathurrohman et al., 2024), misinformation has greater destructive power than political or economic hoaxes because it can shape long-term ideological perceptions. In Indonesia, religious misinformation often appears in the form of twisted quotations from verses or hadiths, fake fatwas claimed to be from religious leaders, and provocative narratives that divide Muslims in the name of religious truth.

Social media such as Facebook and TikTok are the main mediums for the dissemination of religious information among Indonesian Muslims. According to a survey by Katadata Insight Center (2023), more than 68% of internet users in Indonesia admit to obtaining religious information from social media. Ironically, only 22% of them verify the accuracy of this information. This pattern shows weak digital literacy, especially in a religious context that requires knowledge of interpretation and scientific sanad.

Santri actually have a strategic position to be the last line of defence in countering such misinformation. However, several studies show that some santri are actually caught up in the practice of sharing information without confirmation due to religious emotional impulses. For example, when issues of abuse against Islamic symbols arise, many santri spontaneously repost information without confirming the validity of the source. This phenomenon demonstrates the existence of digital zealotry religious fervour that is not balanced with digital verification skills (Darajat et al., 2022).

The involvement of santri in the digital ecosystem is inevitable. They are part of the millennial and Gen Z generations who have grown up with technology. However, the difference between digital natives (those born in the digital era) and digital wisdom must be emphasised. Being a proficient user does not necessarily mean having wisdom in digital media. Digital literacy requires wisdom in critical thinking, ethical behaviour, and positive contributions to the digital public sphere.

In addition to knowledge, social and psychological dimensions also play an important role in the spread of religious misinformation. Social psychology explains that people are more likely to believe information that aligns with their beliefs (confirmation bias). In a religious context, this bias is even stronger because it is related to spiritual identity. This explains why many Islamic boarding school students (and the general public) are more likely to believe messages that come from the same group or school of thought without questioning their validity. Therefore, digital literacy strategies in Islamic boarding schools must include education in critical thinking, inter-school dialogue, and training in source clarification based on scientific evidence (Anggraini et al., 2025).

In terms of policy, the Ministry of Religious Affairs and the Ministry of Communication and Information Technology have actually developed several pesantren-based digital literacy strengthening programmes, such as Santri. However, the effectiveness of these programmes is still limited because they do not touch on the epistemological dimension of religious literacy. This means that training is more focused on the use of technology, rather than on the formation of critical and ethical thinking frameworks. In fact, in the context of Islamic boarding schools, true digital literacy is literacy that is integrated with the values of *adab al-'alim wa al-muta'allim* the ethics of seekers of knowledge who uphold truth, honesty, and scientific responsibility.

Therefore, strengthening the digital literacy of santri must be placed as part of Islamic character education (*ta'dib*), not merely technological skills. Digital literacy is not only a technical ability, but also a spiritual reflection on how a person uses technology for goodness and benefit. With this approach, pesantren can become a model of Islamic education that contributes directly to the development of a civilised digital society.

The Relationship between Digital Literacy and the Religious Critical Thinking of Santri

Digital literacy and religious critical thinking are closely related in the context of Islamic education. Digital literacy can be seen as a new epistemological foundation that complements santri's tafaqquh fi al-din abilities in the modern era (Eraku et al., 2021). In the classical paradigm, santri's critical thinking skills were developed through the methodologies of nahwu, balaghah, and mantiq, which emphasised sharp text analysis. However, today, these abilities need to be expanded into the digital realm namely, how religious texts are transformed, reproduced, and disseminated through social media algorithms that often select content not based on truth, but on engagement.

This process creates dissonance between scientific truth and viral truth. Much religious content gains widespread attention precisely because it is provocative, emotional, or extreme. This is where digital literacy becomes an epistemic fence for santri so that they do not get caught up in the illusion of digital popularity. The ability to understand how algorithms work, recognise clickbait, and critically interpret visual and narrative messages is a new form of ijthad ma'rifah al-ma'lumat ijthad in understanding information.

Research by (Bustomi et al., 2023) shows that increased digital literacy significantly improves the critical thinking skills of madrasah students and santri. In field tests at several modern Islamic boarding schools in Yogyakarta, santri who participated in critical media literacy-based digital literacy training were able to demonstrate improved abilities in analysing the content of online lectures, distinguishing authoritative sources, and assessing the accuracy of information using scientific and sharia approaches.

This relationship is not one-way, but mutually reinforcing. The higher a person's level of religious understanding, the more likely they are to use digital literacy responsibly. Conversely, the better their digital literacy, the more opportunities they have to understand religion through broader and more scientific sources. In the context of Islamic boarding schools, digital literacy can be a means of strengthening classical scientific methodology. For example, by utilising digital libraries for studying religious texts, accessing interpretations across different schools of thought, and comparing the opinions of scholars through digitised primary sources.

However, digital literacy can also be a double-edged sword. Without critical thinking skills, students can become trapped in fragmented religious authority. In the digital world, anyone can claim to be an "ustaz" or "expert in interpretation" without scientific verification. This phenomenon highlights a crisis of authority in digital Islam. Therefore, strengthening religious critical thinking must be integrated into digital literacy training. It is not just a matter of introducing applications or websites, but of instilling an epistemological awareness that religious knowledge has a chain of transmission and methodology that must be respected.

Kiai and ustaz in Islamic boarding schools have a key role to play in this regard. They must become digital role models scholars who not only master religious texts but also understand how religious knowledge is disseminated and debated in the digital space. When students see their teachers actively using

social media in an intelligent, polite, and factual manner, they will imitate the same pattern. Islamic education since classical times has strongly emphasized the concept of *uswah hasanah* (good example), and this principle remains relevant in digital literacy.

Therefore, the relationship between digital literacy and religious critical thinking can be understood as a symbiotic relationship. Digital literacy strengthens critical thinking skills in relation to digital religious texts, while a strong understanding of religion provides a moral foundation for using technology responsibly (Nurfazri et al., 2024). The integration of the two will give rise to a generation of *santri* who are not only technologically savvy, but also *ulama al-raqmi* ethical digital scholars.

Islamic Boarding School Strategies in Countering Religious Misinformation

As Islamic educational institutions, Islamic boarding schools have a major responsibility to equip students with the skills to face the era of disinformation. The strategies of Islamic boarding schools are not limited to teaching digital skills, but also building a value system that underlies the use of technology (Mutmainah et al., 2024). Based on observations in several Islamic boarding schools in Kediri, there are several strategic patterns applied by Islamic boarding schools to increase students' resilience to religious misinformation.

First, a strategy of integrating a digital literacy curriculum based on Islamic values. Modern Islamic boarding schools have begun to incorporate digital literacy material into *tahfidz*, *fiqh*, and *aqidah* lessons. This learning not only teaches how to verify information but also relates it to Islamic teachings such as the concepts of *tabayyun*, *amanah* in conveying news, and the prohibition of spreading slander. The integration of these values is important so that digital literacy does not lose its Islamic spirit (Oktahariana et al., 2024).

Second, a strategy to strengthen the *pesantren's* digital community. Many *pesantren* now form creative teams of *santri* who are tasked with managing the *pesantren's* official social media accounts. These teams function as digital laboratories that train *santri* in the production of educational and *da'wah* content (Rahma, 2023). Activities such as these indirectly shape applicable digital literacy skills: *santri* learn to create infographics, write content, verify sources, and interact with audiences in a polite manner.

Third, a strategy to strengthen collaboration with external institutions. Several Islamic boarding schools have collaborated with the Ministry of Communication and Information Technology, Google Indonesia, and civil society organizations to provide digital literacy training. The "Santri Siaga Hoaks" (Hoax Alert Santri) program, for example, is an initiative that combines religious and technological approaches. Through this training, *santri* are taught to use digital verification tools such as Google Fact Check Tools, TurnBackHoax, and Hoax Buster Tools.

Fourth, strategies to improve the capacity of teachers and *pesantren* caregivers. The digital literacy of *santri* will not develop if their teachers are technologically illiterate. Therefore, *pesantren* need to ensure that every *ustaz* and *ustazah* has at least a minimum level of competence in managing digital

information. Training in digital pedagogy for religious teachers is important so that they can integrate digital resources into their teaching (Reksiana et al., 2024).

Fifth, a strategy to strengthen digital media ethics. This is an aspect that is often overlooked. Digital literacy is not only about technical skills, but also about ethics and morality. Islamic boarding schools have a moral advantage in instilling akhlaq al-karimah values in the use of social media. Students are taught not to spread information without permission, not to make rude comments, and not to judge someone in the digital space without basis. Thus, they learn that the digital world also has a dimension of accountability.

The results of these various strategies show that Islamic boarding schools that are active in digital literacy have experienced significant changes in the communication patterns of their students. Students have become more selective about news sources, more careful in sharing information, and more active in clarifying religious issues circulating on social media (Farina, 2025).

However, the implementation of these strategies is not without obstacles. Some Islamic boarding schools still face infrastructure limitations, lack of financial support, and resistance from some caregivers who consider technology a threat to classical scientific traditions. In fact, digitization does not have to erase tradition (Hidayatulah et al., 2025). On the contrary, it can be a new medium for preserving classical Islamic heritage, such as the digitization of classical Islamic texts and online teaching of classical Islamic texts.

Thus, Islamic boarding schools that are able to manage technology wisely will become pioneers in building an Islamic scientific ecosystem that is relevant to the challenges of the times, without losing their scientific identity.

Integration of Islamic Values in Digital Literacy Education for Islamic Boarding School Students

The integration of Islamic values into digital literacy is at the heart of efforts to combat religious misinformation. Islamic values provide a moral and spiritual framework that guides human behavior in all activities, including digital activities (Afnan & Maksum, 2025). Digital literacy without religious values will only produce technical intelligence without moral direction, while religious values without digital capabilities will cause people to fall behind the times.

In classical Islamic literature, the concept of literacy has long been known through the terms qira'ah (reading), tafakkur (thinking), and tabayyun (verification). When applied in a digital context, these three concepts can form the foundation of digital literacy education for santri. Qira'ah emphasizes the importance of reading and understanding information deeply, not just swallowing it whole (Achmad, 2022). Tafakkur teaches critical reflection on every piece of information received, while tabayyun guides Muslims to verify the truth of news before spreading it.

In the pesantren curriculum, this integration can be done through three approaches:

- a. Internalizing Islamic values in digital literacy content, such as inserting verses and hadiths relevant to information ethics;

- b. Digital Islamic reflection-based learning methods, where students are invited to discuss cases of misinformation and find solutions based on Islamic principles; and
- c. Evaluating students' digital behavior using Islamic moral standards, not just technical aspects.

This approach has proven effective in building spiritual awareness amid the rapid flow of information. Based on (Oktahariana et al., 2024) research, students who participated in an Islamic values-based digital literacy program showed significant changes in their media attitudes: they were calmer in responding to controversial issues, more careful in disseminating content, and more empathetic towards differences of opinion.

Islamic values also provide guidance on the concept of digital amanah moral responsibility for the information produced and disseminated. In the Qur'an, amanah is a key characteristic of believers (QS. al-Mu'minin [23]: 8). In the digital context, amanah means maintaining the accuracy of information, respecting privacy, and not manipulating facts (Ichwan et al., 2024). Therefore, Islamic boarding schools must position digital literacy education not merely as teaching 21st-century skills, but also as part of their moral mission (akhlaqiyah). Students who possess faith- and character-based digital literacy will not only become smart technology users, but also spreaders of goodness (digital da'i).

Conclusion

The results of this study also show that digital literacy is not merely the technical ability to read or write in cyberspace, but also the epistemological and spiritual ability to understand the truth and intent behind every message that circulates. In this case, Islamic values can serve as normative guidelines that lead digital media users to be critical and ethical.

Thus, it can be concluded that santri digital literacy is a form of actualizing Islamic values in the context of modern life. It is not only a tool for defending against hoaxes and disinformation, but also a means of da'wah that fosters awareness, moderation, and digital civility. Santri who are digitally literate will be able to maintain a balance between faith and information, between speed and truth, and between freedom of expression and moral responsibility.

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