

Research Article

Digital Literacy of Santri Through Islamic Boarding School Culture

Tia Muthiah Umar*, Dede Lilis Chaerowati, Mohamad Subur Drajat

Universitas Islam Bandung, Indonesia

ORCIDTia Muthiah Umar: <https://orcid.org/0000-0002-9329-441X>Dede Lilis Chaerowati: <https://orcid.org/0000-0003-0592-8089>Mohamad Subur Drajat: <https://orcid.org/0000-0002-2950-7011>**Abstract.**

This paper examines the digital literacy of santri (students in Islamic boarding schools) developed within the cultural context of pesantren. In the digital era, santri are not only required to possess strong religious knowledge but also life skills to adapt to the rapidly changing times. Therefore, digital literacy in the 4.0 era becomes an essential competence they must acquire. This study explores the phenomenon of santri's digital literacy fostered by the educational culture established in pesantren. The paper is based on an exploratory study that delves into the topic of digital media culture to varying depths. The findings reveal that the pesantren culture provides a significant opportunity to cultivate a culture of digital media literacy among students. The guidance and direction provided by Islamic boarding schools play a crucial role in strengthening students' digital attitudes and behaviors, regardless of their location. The commitment of these institutions to developing students' digital culture is of utmost importance, as the digital era is inevitable. Prohibiting students from engaging with the digital world is not a wise choice; instead, guiding students to develop a discerning and proficient use of digital media in content production can provide a more enriching digital experience within the framework of a digital culture aligned with Islamic values.

Keywords: Aisyiyah Boarding School, digital literacy, exploratory study, Islamic boarding school culture

Corresponding Author: Tia
Muthiah Umar; email:
tiamutiaumar@unisba.ac.id

Published 30 October 2023

Publishing services provided by
Knowledge E

© Umar et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the 5th Sores Conference Committee.

1. Introduction

Indonesia is formed by various tribes, cultures, and various religions in it. Among the religions in Indonesia the fastest growing is Islam. One of the factors that influence the rapid growth of Islam is the number of Islamic boarding schools that have developed in Indonesia. Islamic boarding schools (pesantren) is the center of the largest Islamic civilization in Indonesia. Islamic boarding schools are famous for their character education. The challenge for pesantren in the current era is to be able to keep up with the

 OPEN ACCESS

changing times. Islamic boarding schools must follow the existing culture without losing the culture that has been instilled in the pesantren.

One of the challenges is the development of the digital era, from "traditional media culture" then undergoing a transformation into "digital media culture" and "visual media culture". Where we are currently witnessing a generation that Don Tapscott in *Growing Up Digital* calls the "Net Generation", or what Brian Books calls the "visual generation" or the "V" (Visual) generation [1]

There has not been much research on digital literacy in Islamic boarding schools. Previous studies were more on the effects of using digital media for santri and Islamic boarding schools.

In Ulum and Mun'im research found that pesantren still must be able to avoid or reduce the negative impacts caused by technological advances, by maintaining the noble values of pesantren in shaping character, so that pesantren can still maintain the pesantren culture [2]

Lundeto's study on the digitalization of Islamic Boarding Schools also points out that despite the many positive effects of globalization, it cannot be denied that it also comes along with its negative effects. The practice of using information and communication technology in Islamic boarding school education cannot be underestimated by the Muslim community in Indonesia. However, there are still many aspects that need to be observed, such as changes in curriculum, methods, teaching styles, and optimal use of current technology [3]

Then Ahmad in his study of digital literacy places it more as a foundation for religious moderation with the findings that digital literacy can be used as a basis for learning religious moderation. the students can get digital content in the form of religious moderation material from website, social media, and others. The students also take advantage of digital literacy to create religious moderation content [4] .

In using digital media, it is not enough just to be able to apply it, but also to be equipped with other knowledge and skills so that users can better understand what digital media is, as well as the benefits and risks of using it [5].

The pesantren culture is prospective to build a good digital literacy for students, because on the one hand the character development of the students can continue, but on the other hand the skills of students in using digital media wisely will also help strengthen the character of students who are adaptive to the times.

For this reason, Aisyiyah boarding school as a boarding school with a modern character utilizes digital media in activities at the boarding school, but limits its use,

especially for the personal needs of students. This is done as an effort to build digital literacy based on the culture of the Aisyiyah Islamic boarding school.

Therefore, the purpose of this article is to explain how students' digital literacy is built through pesantren culture with a focus on students' understanding of the rules for using digital media in Islamic boarding schools, the intensity of using digital media by students in the learning process and activities at Islamic boarding schools, the ability of students to access digital media, and the ability of students to produce content.

2. Research Methods

This study is an exploratory research, because there is no relevant information from previous research on digital literacy of santri based on Islamic boarding school culture. Exploratory research is preliminary research that aims to get an overview of a research topic that will be studied further.

Exploratory research is a study that seeks to answer a question or address a phenomenon. This type of research seeks to identify general principles to explain data and observations, and is also known as the inductive method and referred to as interpretative approach [6].

The object of this research is 'Aisyiyah Boarding School Bandung (ABS) which was founded by Aisyiyah Organization of West Java in 2013. It is located at Jalan Laswi No. 308 Baleendah, Bandung Regency.

There are two main methods available for data gathering, namely the primary and secondary research methods. This research uses primary research methods. In primary research methods, data is collected directly from the subject of investigation, through survey and focus group discussion. The survey was conducted by distributing questionnaires to santri at the level of junior and senior high school via google forms as many as 32 students. While the focus group discussion (FGD) was conducted with 9 representatives of students from junior and senior high school. Data analysis techniques were carried out by classifying data, sorting and analyzing data. The data analysis technique based on questionnaires was carried out by tabulating the data in the form of numbers from the questionnaire coding results into a single frequency table. The table is analysed to describe the conclusion.

3. Result and Discussion

Digitization has had a far-reaching influence on mass culture due to the emergence of the internet as a form of mass communication, and the widespread use of personal computers and other devices such as smartphones. Digital technology is ubiquitous around the world, so the study of digital culture has the potential to cover all aspects of everyday life, and is not limited to the internet or modern communication technologies.

3.1. Santri's understanding of the rules for using digital media in Islamic boarding schools

ABS students generally know about the rules for using gadgets from various sources, including alumni. Meanwhile, the students and their parents gave their approval to the rules of the pesantren by signing a letter of agreement at the beginning of the acceptance of the students. The rules of behavior for students have been written in the manual, which also explains various logical consequences. The logical consequence is that when students, for example, students violate the use of gadgets, it will reduce the quota of students using gadgets on weekends.

Basically, the institution assumes that students do not yet have skills in using gadgets, so that in learning, the teacher will raise issues that are currently hot, to be discussed with students, and train students to validate information by looking for the facts together with the teacher.

A study conducted by Castellanos Sánchez et al. (2017) found that can apply digital technology to digital technology to digital technology because it makes it easier for teachers to understand students [7].

All this time Islamic boarding schools have maintained religious fields such as mastery of the Al-Quran, Al-Hadith and sharia that have become the focus of education orientation [8].

ABS is committed in this regard considering the vision and mission of the pesantren. With the vision of forming Insan Kamil Reformers, the steps outlined in the Mission are to manage the education process based on Faith and Taqwa and in line with technological developments.

Regulations are made by the institution taking into account concerns over the phenomena that occur among children and adolescents who are addicted to using gadgets.

The institution tightens and continues to update the regulations, so that students can maximize their study time without gadgets, also to see the discipline of students,

therefore every time there is a rule update, it will be coordinated by the homeroom teacher and the coach of the students.

Some of the abuse of using gadgets by students during learning is usually in the form of accessing personal social media. And for students who violate it will be given positive disciplinary action. So far, the agency considers that the violation of the rules is still at a reasonable level.

The socialization of the rules is also carried out during classical guidance by the teacher of guidance and counseling subject, so that students become more aware of the limitations they need to know. Santri also have to manage the time to be able to use the device, know what limits can and cannot be accessed. How do students respond to information, and what to do. This is very important so that students can make better use of their gadgets, not just using social media, but how to take advantage of various applications on gadgets for the development of students' interests and talents.

3.2. The intensity of the use of digital media in the learning process

Effective learning activities require media as a learning resource that can support the absorption of as much information as possible. Along with the times, technology plays an important role as a means to get the learning material being taught.

TABLE 1: The intensity of the use of digital media in the learning process.

No	Digital media used in schools	Percentage
1	Never	0%
2	Rarely	34%
3	Often	58%
4	Very often	8%

Technology and learning media are one of the supports that play an important role to improve the quality of human resources in the learning process [9]. Learning is one form of the communication process, so that there is no misguidance in communication, a means is needed that helps the communication process [10]. Digital literacy skills play an important role in supporting the success of online learning [11].

'Aisyiyah Boarding School is an educational institution in the form of an Islamic boarding school which before the pandemic had used mobile media for learning. The school learning system since 2019, has used Edubox media, a website-based application consisting of exam applications, assignments, and materials on a local network (intranet), so it does not depend on internet access.

Most of the learning process to evaluation is paperless. Therefore, the use of gadgets is a must, even though its use is strictly regulated.

The use of gadgets is increasing and effective when the pandemic comes, by utilizing various available features or applications, such as zoom meeting, google meet, google classroom, quizizz, which is a web tool to create interactive quiz games, so that ABS students are familiar with digital media.

With the global pandemic, digital teaching has also become more urgent, and many people have explored this. Lee et al. believed that in response to teaching challenges in higher education, blended learning has become a common practice in school and colleges [12].

In entrepreneurship subjects, for example, the teacher instructs the students to open the news, enter the material into the real world, provide training for the students to make presentations using Canva to make posters and also power points. Meanwhile the teacher of guidance and counseling subject maximizes the zoom meeting media for counseling media.

To use the device in learning, students must go through a permit procedure to the picket teacher who will prepare the device to be used by students. Santri can use the computer laboratory under the supervision of the teacher, for the purpose of searching for data or printing documents. Applications or sites suggested by teachers vary depending on interests, for example English teachers can use the Jakarta Post website to get learning materials. Likewise other subjects. While the program that must be used for learning and evaluation by all teachers is the Edubox application, so all students are required to have an account.

All teachers are also required to create a Google classroom that will be used to complete learning needs that are not facilitated in Edubox. For example, goggle classroom class 10 science, is used to coordinate assignments to collect assignments. Assignments to study santri are also no longer written, but are already in audio-visual form, such as making Vlogs, to describe any findings obtained in learning outside the classroom, which are then posted on designated social media.

In the teacher's observation, the use of gadgets in ABS pesantren is more effective than general school students, because students can focus on learning. As part of the millennial generation, santri are also very closely related to gadgets, which because of the living conditions of the pesantren, the use of gadgets is under the control of the institution.

3.3. The intensity of the use of digital media in the process of Islamic boarding school activities

The use of digital media in Islamic boarding school activities is not significant enough, this can be seen from the agenda of Islamic boarding school activities that have been prepared, showing the curriculum and targets that must be achieved with learning strategies that require a face-to-face approach between students and teachers.

TABLE 2: The intensity of the use of digital media in the process of Islamic boarding school activities.

No	Digital media used in Islamic boarding school	Percentage
1	Never	14%
2	Rarely	68%
3	Often	14%
4	Very often	4%

The Islamic boarding school learning agenda includes Classical models, in the form of classroom learning such as Dirosah Islamiyah, Al-Quran Literacy, Arabic Communication, Tahsin & Tahfidz Quran, Al Islam & Kemuhammadiyah, the main targets are Cognitive and Affective (Knowledge & Adab). Also Positive Habituation activities consist of positive daily activities, such as: Morals & Adab when hanging out, Morals & Adab when eating, Studying, Respecting Teachers and Parents etc.

Islamic educational institutions continue to develop with various variants. Kholidi (2016) said that there are pesantren that are traditional, modern, or mixed. But all of them do not leave their roots by emphasizing religious education and morality [13].

Positive habituation as a hidden curriculum is carried out by the institution by providing education about etiquette in using social media, positive surfing, healthy internet, and parenting involving parents/guardians of female students.

During the pandemic some time ago, Islamic boarding schools used the "Blended Learning" method, namely the Merging of Teaching and Learning Processes through digital media and "Worksheets" (assistance sheets). According to Masitoh the embodiment of blended learning at the elementary and secondary education levels must be supported by the availability of internet or intranet network hardware facilities as well as the ability and insight of teachers about blended learning [14].

The internet owned by ABS is internet with a trusted provider with speeds above standard, routers on the internet are stored at several points in the classroom and dormitory areas, besides that intranets are also available such as Mumtaz (intranet system in collaboration with Bank Muamalat) which is also connected to all parents

of female students, in addition to the Edubox program which is usually used for the implementation of learning and the evaluation process for daily, semester and end of academic year learning.

The characteristics of teachers who are young on average, allow the process of using technology as a learning medium to run without significant obstacles, supported by the provision of internet network facilities that are sufficient in number and speed, so that teachers can organize blended learning well.

The use of digital media related to learning to improve cognitive aspects is conveyed through virtual zoom, G-Meet, and the like. Meanwhile, relating to positive habituation, Islamic boarding schools distribute modules/worksheets, checklist sheets/assistance for positive habituation, such as the Sunnah Practice Checklist (rawatib, tahajjud and shaum Monday-Thursday), cleaning the house, yard, washing dishes, washing clothes, and so on. Checklist for independent study, checklist for chatting and chatting with parents or family.

The checklist or worksheet must be submitted (photo/pdf) to the musyrifah every week, and every 2 weeks the musyrifah schedules a casual chat with parents and female students using the WA Video call application. There is fun time on Sundays, where students can use their time to work, usually students can call their parents, or access online media, such as Instagram, Canva, and even play games. Sunday is a day for students to release stress (stress release) after studying and doing activities on other days.

In using social media, students can channel their interests productively, in accordance with the aim of applying the ABS vision, namely forming Insan Kamil Reformers, which must be closely related to the demands of the development of science and technology.

The right use of digital media will provide many benefits for students. For this reason, students must also be equipped with digital literacy. It is a prominent skill that students must have in the digital age. Higgins, Wolfe and Marcum (2008) said that without having sufficient skill of digital literacy, students will gain an unreliable source of learning, and they will be difficult to control themselves [15]. Building digital skills is needed for students in the revolution era of society 5.0 so that they are able to use digital technology properly.

3.4. The ability of students to access Digital Media

The Santri categorized as technology literate, have been able to access a lot of knowledge through gadgets, so that it affects the level of confidence that is seen in the Public

speaking skills of the students who are quite good, because students search on social media not only to waste time, but more to find things. -things related to interest. For example, students who are interested in khitobah (public speaking) skills will access YouTube to learn good sermons. Of course, students will also use more pronunciation in Arabic, where currently the world of Arabic learning is entering the digital revolution or industrialization 4.0 [16].

TABLE 3: The ability of students to access Digital Media.

No	Social media accounts used	Number of users
1	Instagram	30
2	Twitter	5
3	Line	3
4	Whatsapp	21
5	Tiktok	14
6	Telegram	1
7	Google class room	8
8	Youtube	15
9	Chrome Edubox	4
10	Zoom	6
11	Quora	1
12	Pinterest	1
13	Quizziz	4
14	Gform	3
15	Zenly	1
16	Capcut	1
17	Shopee	1
18	Ibis paint	1
19	Webtoon	1
20	Canva	1
21	Aisyah App	1

More than 20 social media accounts commonly used by students, with media account ownership per student on average 3 accounts. Various accounts are used for various purposes, ranging from learning tools, hobbies to entertainment.

Digital literacy is important for students to have along with the rapid development of the digital world and can lead to two opposing sides in relation to the development of digital literacy. The development of digital equipment and access to digital information presents both challenges and opportunities. Pirzada & Khan (2013), also Vrana (2016) said that the implementation of digital literacy programs that are expected to support Industry 4.0 is critical thinker, communicator, collaborator, and creator. In addition, digital

literacy has a significant effect both on students’ core competencies and future job performance requiring knowledge and skills that are enhanced by digital technology [17].

3.5. The ability of students to produce content

One of the digital media used as a means of promoting pesantren is the Tik Tok application. The institution has formed a special promotion team that involves female students as content creators, they work professionally, so there is an incentive for the work produced by students.

TABLE 4: The ability of student to produce content.

No	Ability student to produce content	Percentage
1	Never	40%
2	Ever	60%

ABS students are social media literate, as can be seen from the learning behavior of students who are always looking for information on new trends in digital media, even students who already have video editing skills.

For students who are having projects that require internet-based references, pesantren will be facilitated to be able to use digital media as a data source, such as students who are currently completing a book writing project.

An interesting fact at the graduation of grade 6 students in March 2022, most of the presentation videos were made and edited by the students. The institution is greatly assisted by students at events that require the provision of digital products.

The effect of the advent of social media in our lives cannot be ignored. Hurt, et al (2012) said that social media is used for sharing learning experiences, research, academic events and getting the latest information. Monopolis (2014) show that in the recent past, it has also infiltrated the education sector because it provides a learner-centered technologically and socially rich environment [18].

4. Conclusion

The pesantren culture has a great opportunity to be able to form a digital media literacy culture among the students. Mentoring and direction of educational institutions to students can strengthen the digital attitude of students wherever they are.

The vision and mission of the institution which is shown in various rules, especially digital rules in ABS and Islamic boarding schools, as well as teaching resources, and the internet network that is already owned, is very supportive in guiding and directing students to be able to follow the learning process and Islamic boarding school during the pandemic, because before Even during the pandemic, the students are quite literate with digital media.

'Aisyiyah Boarding School Bandung with the mission of educating students to become insan kamil reformers, is well aware that in this digital era, it is certain that all aspects of life are impossible to carry out without the help of digital technology.

Therefore, building a digital culture of santri is important to become a commitment from pesantren, and implemented strategically, because the digital era is unavoidable. Forbidding students to interact with digital is not a wise choice, but rather how to guide students' closeness to technology, through efforts to raise awareness to be able to understand, conduct critical studies, be proficient in producing content, so as to help students better understand the meaning of digital experiences today and in the world. future, within the framework of a digital culture that is in accordance with the values of Islamic teachings.

Acknowledgements

The authors would like to acknowledge for grant support from Research Institute and Community Service and The Dean of Faculty of Communication Science Universitas Islam Bandung through Cost-Sharing Research in 2022.

References

- [1] Ibrahim IS. Kritik Budaya Komunikasi: Budaya, Media, dan Gaya Hidup dalam Proses Demokratisasi di Indonesia, 1st ed. Yogyakarta, 2011.
- [2] M. Ulum, A. Mun'im. "Digitalisasi Pendidikan Pesantren (Paradigma dan Tantangan Dalam Menjaga Kultur Pesantren)." *AnCoMS*, vol. 3, no. 1, pp. 664-670, Nov. 2019.
- [3] A. Lundeto, "DIGITALISASI PESANTREN: HILANGNYA BUDAYA TRADISIONALIS ATAU SEBUAH KEMAJUAN?", *JURNAL EDUCATION AND DEVELOPMENT*, vol. 9, no. 3, pp. 452-457, Jul. 2021.
- [4] Achmad S. DIGITAL LITERACY AS A FOUNDATION FOR RELIGIOUS MODERATION LEARNING AT SALATIGA'S AL-HIJRAH TINGKIR ISLAMIC BOARDING SCHOOL. *Paedagogia: Jurnal Pendidikan*. 2022 Mar;11(1):119–129.

- [5] Chaerowati DL, Muthiah Umar T, Drajat MS, Dendha O, Permana L, Trivira PS. Digital literacy of 'Aisyiyah women for continuity of communication in the time of the Covid-19 Pandemic. Bandung City, Indonesia: Study on Aisyiyah; 2022. <https://doi.org/10.2991/assehr.k.220407.081>.
- [6] A. Singh. An Introduction to Experimental and Exploratory Research (February 20, 2021)
- [7] Eraku SS, Baruadi MK, Anantadjaya SP, Fadjarajani S, Supriatna U, Arifin A. Digital literacy and educators of Islamic education. *Edukasi Islami: Jurnal Pendidikan Islam*. 2021 Feb;10(01):569.
- [8] Sulaiman AI, Ahmadi D. Empowerment communication in an Islamic boarding school as a medium of harmonization. *Jurnal Komunikasi: Malaysian Journal of Communication*. 2020;36(4):323–338.
- [9] Fernanda FF, Rahmawati LE, Putri IO, Nur'aini R. PENERAPAN LITERASI DIGITAL di SMP NEGERI 20 SURAKARTA. *Buletin Literasi Budaya Sekolah*. 2020 Dec;2(2):141–148.
- [10] Sugiono S. "PODCAST: BUDAYA DIGITAL DALAM ASPEK EDUKASI SELAMA PANDEMI COVID-19." *Diakom: Jurnal Media dan Komunikasi*. 2021 Dec. 4(2):108–118. <https://doi.org/10.17933/diakom.v4i2.256>
- [11] Dinata KB. "LITERASI DIGITAL DALAM PEMBELAJARAN DARING." <https://doi.org/10.47637/eksponen.v11i1.368>
- [12] Chen X, Jiang Z. Teaching Practice for Digital Media Design in the Context of Media Integration. *Mobile Information Systems*. 2022;2022:1–11.
- [13] Salim A, Dillah IU, Susilowati IT. Islamic Boarding School Response to the Impact of COVID-19 in Maintaining the Pesantren Values. *International Journal of Islamic Educational Psychology*. 2021 Dec;2(2):177–190.
- [14] Masitoh S. Blended Learning Berwawasan Literasi Digital Suatu Upaya Meningkatkan Kualitas Pembelajaran dan Membangun Generasi Emas 2045. *Proceedings of The ICECRS*. 2018 Mar;1(3): <https://doi.org/10.21070/picecrs.v1i3.1377>.
- [15] Saksono L, ul Anam, Hafidz A, Sholeh M, Farid Ilhamudin M, Verina Widya Putri N. "Edisi Januari 2022 Jurnal Education and development Institut Pendidikan Tapanuli Selatan Hal."
- [16] Nurcholish A, Hidayatullah I, Rudisunhaji A. "KARAKTERISTIK DAN FUNGSI QIRA'AH DALAM ERA LITERASI DIGITAL." 2019;18(2). [Online]. Available: <https://doi.org/10.20414/tsaqafah.v18i2.1853>.
- [17] Anggia Nastitie Ariawan V, Marthyane Pratiwi I. "Digital literacy abilities of students in distance learning." 2020.

- [18] Bagarukayo E. "Social media use to transfer knowledge into practice and aid interaction in higher education." 2018.