

## The Lived Experience of Pesantren Community Using Technology for Education



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**ABSTRACT:** The lived experience of using educational technology is embedded in a specific social and cultural context. This study aims to investigate the meaning of the lived experience of the pesantren community using technology for education in their learning environment. This study used the hermeneutic phenomenology method to interpret the meaning of the experience of the pesantren community. Eight people from a pesantren for college students were purposively selected as participants. They were asked to describe their experiences using technology for education, how they used it, and what it meant for them. Thematic analysis of the interview transcripts was then carried out to obtain interpretations of the meaning of the participant experiences. The analysis results reveal the meaning surrounding maintaining the pesantren subculture, the disruptive impact of technology, and the struggle for inclusion and social mobility. This study concludes that technology can be used to adapt the culture of pesantren education. The contribution of this research strengthens the theoretical implications of the linkages between educational technology and culture by providing empirical evidence from the experience of the pesantren community as a subculture.

**KEYWORDS:** Lived experience, educational technology, pesantren, subculture, phenomenology

### I. INTRODUCTION

This study investigates the use of information and communication technology (ICT) for various educational purposes in the social and cultural context of pesantren (Islamic boarding schools). As an indigenous institution, pesantren has played an important role in the education and life of democratic societies in Indonesia (R. W. Hefner, 2019; Isbah, 2020). Its educational characteristics have a unique culture when compared to other educational cultures in general. Abdurrahman Wahid (2001) calls the uniqueness a subculture. The subculture of pesantren education has three core elements: *kyai* as a leader, classical texts, and a value system based on classical texts (Wahid, 2001: 233-234). Usually, Islamic boarding schools' efforts to develop institutions, management, curricula, educational methods, or educational technology never eliminate these three elements. Because of this uniqueness, the lived experience of pesantren communities using technology for education in their environment is also unique, in contrast to the experience of most communities or even their own experiences while in other learning environments such as schools, madrasahs, and universities.

Previous studies have documented the use of technology in madrasah and school education settings held by Islamic boarding schools (Habibi et al., 2021; Hanafi et al., 2021; Munifah & Purwaningrum, 2022), for example, for English learning, civic education, health education (Bajari et al., 2021; Farid & Lamb, 2020; Putra et al., 2019). But, there is a lack of evidence relating to how the experience of boarding school communities using technology for education and the interrelation of that experience with the unique disposition of their al subculture. Several studies linking digital technology and pesantren subcultures tend to emphasize the issue of religious authority in the field of proselytizing (Halim, 2018; C. Hefner, 2022; Nisa & Saenong, 2022) and give little explanation about its use for teaching and learning activities and how it interacts with religious beliefs, respect for *kyai*, classical text and the value system practiced by the student community. In addition, the broader issue of social justice and inclusion remains virtually untouched, although some studies have revealed the potential of Islamic boarding schools to encourage social mobility (Assa'idi, 2021; Roqib, 2021).

The research approach in the field of educational technology is still dominated by frameworks, models, and issues that ignore cultural aspects. Nevertheless, there is a continuing insistence on examining the confluence of culture, learning, and technology (Bradshaw, 2017; Subramony, 2017). Various framework typologies covering these three aspects have also been developed (Benson, 2018). Phenomenology can be considered one of the frameworks for understanding experiences with technology in certain social and cultural contexts (Aagaard, 2017; Cilesiz, 2011; Valentine et al., 2018). In particular, Aagaard (2017) states that human life experiences have always been embedded in social, cultural, and historical contexts. Cilesiz (2011) also argues that the use of new technologies can change the culture in the classroom. Thus, culture can influence the use of educational technologies and vice versa.

## The Lived Experience of Pesantren Community Using Technology for Education

International research from a variety of cultural backgrounds and countries shows how cultures and educational technologies intertwine with each other. Jung dan Lee (2020) compares the cultures and habits of people in three countries which are factors that corroborate a person's intention to adopt technology in different ways. Young dan Asino (2020) reports how the use of technology is influenced by the desires, goals, and beliefs of its users, which are often influenced also by school culture, religious traditions, and language. Meanwhile, Istenic and Lebenicnik (2022) found the influence of belief, self-regulated learning, and the teachers as role models. Regarding gender and religion, Hardaker et al. (2017) reveal that Muslim girls in the UK feel limited in learning resources, and so want greater access to technology. These various problems are also found in various studies on Islamic boarding schools in Indonesia.

Several studies highlight the importance of leadership roles in developing digital culture and educational technology in Islamic boarding schools (Habibi et al., 2021; Hanafi et al., 2021; Munifah & Purwaningrum, 2022). Several studies have taken issue with limiting access to technology for students, especially female students, who are considered vulnerable to internet hazards (C. Hefner, 2022). On the contrary, other studies have revealed the emergence of efforts by women Muslims to develop religious authority in the digital world (Nisa & Saenong, 2022). In this digital age, religious authorities and traditional educational institutions are facing great challenges with the emergence of ustadz and Islamic learning resources on the internet (Janawi et al., 2022). However, on the other hand, the threat also encourages traditional pesantren to increasingly utilize digital technology (Mukhibat & Ghafar, 2019; Schmidt, 2018; Zamhari et al., 2021). The literature has shown how diverse the technological experience of the pesantren subculture community is. However, to date, there has been no empirical research examining the lived experiences of the subculture community in using technology for education in the unique social and cultural context of their boarding schools.

Based on the identification of research gaps and the need to include cultural aspects in the study and practice of educational technology, this research wants to examine more about the experience of the pesantren community in using technology for education. The hermeneutic phenomenology method was used to produce an interpretive analysis of the experience of the student community in a student boarding school. This research is important to provide empirical evidence of how experiences with educational technology are met with experiences as a subculture of boarding schools.

## II. METHOD

This research adopts hermeneutic phenomenology to investigate the experiences of pesantren communities in using technology for education in the social and cultural context of pesantren. Hermeneutic phenomenology is a framework and method that focuses on the investigation of human experience (Van Manen, 2016a: 39). Based on the philosophical tradition of Gadamer's interpretation, this method is used to transform the experience of the pesantren community into a text. That text is interpreted by involving the experience of the researcher (Van Manen, 2016b: 38). In the field of educational technology, phenomenology has been used to investigate the experience of using technology in various contexts, such as informal learning in Internet cafes, digital distraction experiences, or Pokemon Go playing experiences (Aagaard, 2018; Cilesiz, 2009; Valentine & Jensen, 2021). This study develops a tradition of phenomenological inquiry to uncover experiences with technology in traditional Islamic educational settings in Indonesia.

The research was conducted in 2020 at a special student boarding school located in Solo, Central Java. The boarding school was chosen with several reasons in mind. *First*, the pesantren maintains three elements of the pesantren education subculture (Wahid, 2001). *Second*, members of the pesantren community consist of college students. *Third*, all members of the pesantren community, both men and women, use technological devices intensively. So, while this pesantren maintains the uniqueness of the traditional Islamic education system, it also allows students to bring their own equipment and use it freely in the pesantren environment. In addition, according to the phenomenological perspective, the pesantren community is suitable to be selected as a participant because it has a relatively homogeneous character and has the ability to reflect on its experience with technology (Cilesiz, 2011).

The research procedure begins with gaining access to the research site through formal licensing from the university to the pesantren organization. Preliminary observations were made to obtain the perspective of people in the pesantren community (Creswell, 2013: 49), followed by selecting potential participants with the criteria of having a significant and meaningful experience in the use of technology in the pesantren (Cilesiz, 2011). Based on these criteria, The participant was recruited using purposive techniques based. Eight people were recruited as participants, consisting of *kyai*, teachers, administrators, and students, men and women. They were asked to recount their respective subjective experiences and thoughts through unstructured interviews. The question is about their experience of using technology for education, how they use it, and what it means to them. The interview process was recorded with the permission of the participants and then transcribed into writing.

Thematic analysis was performed using the Miles, Huberman, and Saldana coding guide (Miles et al., 2014). In phenomenological studies, the theme is the structure of experience underlying the phenomenon under study (Van Manen, 2016b: 79). To capture this theme, researchers did not interact directly with the experience of students using technology for educational purposes. More precisely, researchers interacted with the text of the interview transcript, which contained descriptive notes of students'

## The Lived Experience of Pesantren Community Using Technology for Education

experiences using educational technology. Thus, the process of thematic analysis is also a process of hermeneutic interpretation. In the process of analysis or interpretation, the researcher has a role in interpreting textual data. In other words, the process of interpreting the meaning is not only based on the description of the experience spoken by the participant and also involves the experience of the researcher (Van Manen, 2016b: 38). The results will be presented in the following section. Related to ethical issues, the identity of participants is not explicitly displayed to maintain their privacy (Cilesiz, 2011), but rather only pseudonyms and little information about participants' backgrounds that are relevant to their statements.

### III. RESULTS

Thematic analysis or hermeneutic interpretation of a was carried out on the text of the interview transcript containing a description of the participants' experiences in using technology for education. The results found that the essence and meaning of their experience were centered on three themes: maintaining of the pesantren subculture, the disruptive impact of technology, and the struggle for inclusion and social mobility.

#### A. Maintaining the pesantren subculture

When information and communication technology is used in the pesantren education system, which is known to have unique identities, traditions, and subcultures, participants feel an experience that also intersects with their experiences as a subculture community. Some participants explicitly use the terms subculture, culture, and identity, whereas the rest simply explain it implicitly. Participants described a mismatch in their culture. Therefore technology is rarely used. In addition, they also feel anxiety about the loss of the pesantren subculture and the desire to maintain their subculture.

Eight participants involved in the study said that technology is rarely used for education in Islamic boarding schools, especially in the teaching and learning of the Quran and classical texts (yellow book). One of the participants (Ahmad), who is a *kyai*, gave an explanation and encouraged researchers to see pesantren as a subculture, as explained by Wahid (2001). Because of these cultural differences, Ahmad argues that the learning technology used in universities and Islamic boarding schools is different. In addition to indicating differences in access and technology facilities, Ahmad also felt that the student community developed many technologies that were not known to the outside community. He says,

"Each community is usually familiar with certain living equipment. The farming community develops its living equipment; the industrial society is also, so the trading society will also develop different living equipment again. The student of pesantren community will know a lot of living equipment that is different from the *abangan* [nominal muslim] community, for example."

In this regard, Ahmad reflects on technology in a general sense. Meanwhile, when reflecting on a more specific understanding of information and communication technology (ICT), he said that the technology is rarely used in Islamic boarding schools. Other participants also admitted that they rarely use technology for Islamic boarding school education. One of the factors is the belief in *sanad*, the scientific transmission. Rahmat explained, "Sanad connects our knowledge to the teachers on it. We learn *fiqh*, where to go, where to refer." Meanwhile, Muslimah, who is a teacher of reading and memorizing the Quran, argues that people can learn to read the Quran from various media and technologies. Muslimah says, "You can learn from that. But you still have to deal with it face-to-face." Nevertheless, the belief about *sanad* also developed due to technological advances that allowed for face-to-face encounters between teachers and students. For example, Faiz said, "Live is more connected. There is also the interaction between teachers and students. It can be face-to-face indirectly."

The belief in seeking the right knowledge encourages participants' vigilance in the search for reliable sources and information. That correct knowledge is believed to be mainly to be obtained from *kyai*. Zainab argues, "As a layman who really wants to start religious learning if, for example, directly using e-learning is not appropriate, because we don't know what the sanad is really like. But if we come directly, for example, to pesantren, we really know what kind of *Kyai* personality, really know first [the *kyai*] goes to anyone." In addition, to get reliable information in this digital era, students usually refer to sources that tend to be close to the beliefs and subcultures of the pesantren community. Tazkia says, "If I want to find some information about something, I usually look for it on the NU Online website or the Lirboyo website."

Participants felt that traditional teaching methods had advantages. For example, to discuss important themes such as the relationship between religion and the state, Ahmad believe, "Such a theme is more suitable when discussed by pesantren people because they understand history, the law of *fiqh siyasah*" In addition, pesantren people are considered to have strong religious authority, because they are able to access and understand important reference references in Arabic, such as the books by Al-Mawardi and Ibn Khaldun. He said, "The campus doesn't learn that. Most are only in the history department. Even then, through the translation." Rahmat also said the same thing, "*Santri* learns religion more steadily, recitation of the Quran more steadily, we can review the history of the classical text in Arabic." When comparing with Islamic religious education courses taught at the university undergraduate level, Ali said, "The material is about sharia jurisprudence in taking Islamic law through the Quran, Hadith, Ijma, Qiyas, masalah mursal, Urf, Istihsan. But it's not too heavy."

Some participants described the difficulty of using technology because pesantren have a special tradition of pedagogy. Some of the customs in teaching the yellow book include classical Arabic texts used as teaching materials, hanging translation methods,

## The Lived Experience of Pesantren Community Using Technology for Education

and techniques for writing letters on paper. All these customs have become cultural and part of the identity of the pesantren community. Although it seems strange to outsiders of pesantren, they do not want the culture to be lost due to the use of technology to learn Islam. Farhan says,

"If you teach classical text with technology, I don't know yet. Even if anyone knew, it would probably be very helpful. But that culture will be gone. There is a culture of coming to *kyai*. I can't imagine that if you use an application, use a tablet, and he wants to write *utawi-iki-iku*; it must be with a small *pegon* letter, while the tools are big, eat a place too. Sometimes if it is not cultivated, there will be a culture shock as well. We hope that culture shouldn't be lost because it becomes our identity."

### B. The disruptive impact of technology

The participants described the experience that the use of technology in Islamic boarding school education could have both positive and negative impacts. Although rarely used for traditional Islamic education, participants took advantage of technology in various extracurricular activities, broadcasting on radio stations, doing coursework, and independent learning. So, instead of rejecting technology, according to them, technology should be used to adapt to the culture of pesantren. As Ahmad said, "The important thing is to be able to control, utilize and develop the equipment of life to live better, make it easier for humans to live life and stay awake in their humanity."

Some participants described the practical benefits of technology in learning inside. Rahmat says, "If in this lodge it is required to install Maktabah Syamilah as a handle, for example, for the search for impromptu books to equalize sometimes many books whose prints are not clear." Meanwhile, Faiz said, "There may be some students who use their books from cellphones, download the PDF version on the internet to learn by themselves. From teachers, there are also those who give the book through cellphones, especially during the current pandemic via the internet or cellphones." Faiz explains that technology provides abundant learning resources but is very practical and effective to use. He says, "Maybe it's easier to carry or more to store."

Apart from the Arabic version, the classic text usually has a translated version that can be easily obtained from the internet. Tazkia added that digital technology provides various sources for creating a written work. He said, "For example, the Digital Quran can improve the quality of oneself to create a narrative or article about a theme. And from that theme, there are references to books and also verses from the Quran that can be added to add to the quality of the written work. Meanwhile, Farhan said, "*Kyai* used to introduce the application of the Quran. So if, for example, friends want to make sermon material, they can immediately search with what words, there will be related letters later." According to the participants, the media and technology are good according to who is using them. The participants positively assessed the emergence of the trend of *Kyai* or *ustadz* pesantren broadcasting the recitation of the yellow book online. This trend arose because of the rampant Islamic learning resources that mislead ordinary people and lead to the ideology of radicalism and terrorism. Farhan says,

"So people who were previously unable to participate in the recitation can now enjoy it at home. Instead of watching negative content, it's better to watch something like that. It brings a positive thing. So what if the question arises? Yes, there must be likes, comments, and subscriptions. There must be admins who will reply. I rate it positively."

The participants also described Whatsapp as making it easy to communicate, coordinate, and discuss various topics. All members of the pesantren community, both men and women, used to use it. Ali said, "There is a Whatsapp group that contains boys and girls." Nevertheless, Zainab stressed that technology could have both positive and negative impacts. He says,

"The positive is that we learn more from various sources. Right now, it's okay to pass by a laptop internet cellphone like that. So if we have any difficulties, we can search. But on the downside, yes, people know cell phones are sprawling demons. So if you have a cellphone with the default, laziness continues to not want to do anything. Sometimes, for example, you read the Quran from your cellphone. There is a WA notification, even the one that WA opens. I'm explaining that it's a negative thing, which teachers may not know. We ignore the teacher."

### C. The struggle for inclusion and social mobility

The participants, especially from *kyai* and pesantren teachers, also described the experience of the pesantren community as a subculture that experienced oppression during colonialism and even some whose injustices are still experienced today. This experience has an important meaning in designing the educational goals of pesantren in an integrated manner with universities. This experience also gives importance to the use of technology not only for the effectiveness of learning but also to fight for equality and social inclusion in the student community. Therefore, pesantren encourages and facilitates students in pesantren to achieve higher education well and improve their technology skills and digital literacy.

Some participants described experiences of injustice, gaps in access to technology, and digital divides experienced by the pesantren community. Rahmat says, "In academia, the yellow book is not used." Other participants described that there is still a digital divide in access to technology and digital literacy, so it becomes an obstacle when recitation of the yellow book online during the Covid-19 pandemic. This activity cannot be participated in by all teachers and students. Faiz said, "So only teachers who can teach online can use the [Zoom] application, and there are laptops." In addition, he also said that all students have smartphones, but a small number of students do not have laptops and have to borrow from their friends to do academic assignments.



## The Lived Experience of Pesantren Community Using Technology for Education

As a teacher at pesantren as well as a lecturer at a university, Farhan emphasized that students should not only learn the Quran and the yellow book in pesantren. Students must also keep abreast of technological developments outside and develop ICT skills and digital literacy. In general, he feels that boarding school students can use technology well, especially since almost everyone has a laptop. But he did not ignore the fact that there are students who lack technological skills. Farhan says, "There's that student of mine, who is in first or two semesters because maybe he's been in the cottage for a long time, or maybe in his school he's still behind... [how] to turn on the LCD only he didn't know."

As the leader of the pesantren, Ahmad felt that he did not initiate the development of digital technology. Ahmad said, "I'm not in charge of the digital aspects. I'm just a wearer of the facilities provided by the cottage, not the person who initiated it." For that matter, he tends to delegate it to his employees or students. However, realizing the importance of technology for the social inclusion of students, she seeks to design a curriculum that can empower students, including through an andragogy approach, independent learning, and student-centered learning. He also facilitates students by developing skills through various curricular activities. One of the activities that often uses technology is broadcasting on radio stations. Ahmad said, "Then there is a system of developing talents and interests. Some students in the radio studio. There is a scripting writing section; there is a broadcaster section; some are in the production department, some are taking care of hardware, finance, making students from various majors, including religious lectures, and even memorizing the Quran, getting to know how the world of broadcasting is."

Regarding the purpose of pesantren education, Ahmad believes that "The curriculum [pesantren] directs that students can live with dignity in their public spaces... enabling them to get into the middle class." That goal was also understood by other teachers. For example, Muslimah says, "Honorable in the public sphere, the point is like that." Farhan also said, "[pesantren] does not separate that religious science and world science." Therefore, students are required to undergo their higher education at the university properly. When students are faced with a dilemmatic choice to choose Islamic boarding school and university activities, students are encouraged to be required to choose to study. Rahmat said, "If there is a more important assignment such as lectures, it is mandatory to go to college... [the *kyai*] does not allow lectures to lose to the cottage."

The participants from the students described how technology using technology is related to andragogy and independent learning applied in Islamic boarding schools. Zainab said, "In here, we are taught a lot of practices, including one of them is training on IT, which teaches students who already have a scientific background in the IT field. So if on campus, for example, the department is IT, later, the knowledge that has been gained is taught in the cottage. So andragogy learning is like that." Meanwhile, Faiz said, "Here, there are students who form their own interest groups that can take advantage of ICT. The interest group is journalism, writing articles, and then there are also copywriters who use LCD projectors."

## IV. DISCUSSION

This paper investigates the meaning of experiences using educational technology according to the pesantren community. Through phenomenological frameworks and methods, the results of this study provide valuable insight that the use of educational technology is inherent in the subculture of pesantren communities and their struggle to achieve mobility and social inclusion. The experience of students using technology in pesantren can be unique and different from the experience of using technology at university or in other types of pesantren. The findings of this study also reinforce several previous studies that considered pesantren as a subculture and found the influence of this subculture on the use of technology in the pesantren educational setting (Halim, 2018; Wahid, 2001). This study adds to the experience of using technology in different pesantren contexts, namely the type of student boarding school. This type of boarding school provides greater access to technology for both male and female students. The use of technology in student boarding schools is related to informal learning, learning for adults, and self-regulated learning, as found in several previous studies (Cilesiz, 2009; Istenic & Lebenicnik, 2022).

The results of an interpretive analysis of the essence and meaning of the experiences told by participants found three important themes: maintaining the pesantren subculture, the disruptive impact of technology, and the struggle for inclusion and social mobility. The first theme revealed a wide gap and even conflicts between educational technology and the subculture of pesantren education, as felt by the participants. This phenomenon is in line with the findings of Young and Asino (2020), reporting that the use of technology and school or organizational subcultures usually occur conflicts or incompatibilities. Therefore, the pesantren community rarely uses technology in teaching the Quran and classical texts. The use of technology is also influenced by beliefs about the importance of strict transmission of knowledge, attendance, and face-to-face between teachers and pupils, and emphasizes practice in boarding life. Technology was also perceived as a threat, but participants felt the importance of maintaining their subculture due to habits, traditions, excellence, and being part of their identity. These findings reinforce previous studies looking at the linkage of educational and cultural technologies (Istenic & Lebenicnik, 2022; Jung & Lee, 2020; Subramony, 2017; Young & Asino, 2020). Research and development of educational technology in the future needs to adapt to cultural aspects, especially in the educational setting of Islamic boarding schools.

The second finding of this study reveals the meaning that technology can have a disruptive impact on education, especially Islamic boarding school education. That perception is in line with the idea that there is never a simple solution by considering technology as a *panacea* for all educational problems (Sancho-Gil, 2020). That perception is also closer to Stiegler's idea that

## The Lived Experience of Pesantren Community Using Technology for Education

technology is a pharmacum, that is, a drug as well as a poison (Lewin, 2016). Based on this idea, Lewin (2016) also questioned the disruptive impact of technology on attention in religious education settings. Furthermore, Aagaard (2018) revealed that technologies such as laptops could cause digital distractions in the classroom. One of the participants (Zainab) gave an example of how the experience of digital distraction, namely when he was disturbed by the presence of incoming Whatsapp messages while reading the Quran via smartphone. Meanwhile, the experience of losing attention is exemplified by ignoring the teacher in the classroom. Future research may adopt various phenomenological methods to explore the positive and negative impacts of technology in Islamic boarding school education.

Finally, the findings of this study reveal the experiences of oppression and injustice of pesantren communities and their struggle for inclusive mobility and social mobility. This experience encouraged them to develop curriculum and boarding school programs that run in harmony with education at the university. This development has implications for the importance of relaxing technology access policies, in addition to improving the technical skills and digital literacy of students. With these various efforts, students are expected to play a role in public spaces. The purpose of boarding school education is in line with the spirit of the critical framework proposed in the study and practice of educational technology that incorporates cultural aspects (Benson, 2018; Bradshaw, 2017). For example, Bradshaw (2017) proposes critical pedagogy because it not only recognizes cultural diversity but also dismantles the existence of practices of injustice and exclusion and then fights for justice and social inclusion. This critical framework demands that the objectives of educational technology go beyond simply improving the effectiveness of learning but also preparing learners as participants in a democratic society.

This research has a number of limitations. First, the participants involved in this study said their use of technology had their own subjective experiences (Van Manen, 2016a: 61), so it was not intended as a representation of the entire population or a generalization to other boarding school communities that could have different practices. However, the sample is useful because this study aims to study the experience of using technology in an educational environment. The experience of the participants can contribute to filling the research gap because there has been no research that specifically explores the use of technology in Islamic boarding schools that exclusively serve students at the tertiary level. Not only did the participants have greater access to technology, but they were also able to reflect on their experiences descriptively and critically (Cilesiz, 2011). Secondly, as part of the interpretive tradition, research by qualitative methods with this hermeneutic phenomenological approach is intersubjective. The interpretive process of giving meaning to the participant's experience is not entirely based on the description spoken by the participant during the interview and then transcribed into textual form. Rather, it is worth acknowledging that the process of interpretation also involves the subjectivity of the researcher as well. Nevertheless, in the study of phenomenology, subjectivity also shows the strength of the researcher towards the richness and depth of the object of study (Van Manen, 2016b: 20).

## V. CONCLUSION

Pesantren is an indigenous Islamic educational institution that has a unique subculture that maintains traditional teaching and learning methods. Islamic boarding school education has the characteristics of a method of teaching classical texts under the guidance of *kyai* by living with the *kyai* in a dormitory complex. This study using hermeneutic phenomenology highlights the phenomenon that the using of information and communication technology (ICT) in Islamic boarding school education can have positive and negative impacts on education or on the subculture of the pesantren community. However, based on researchers' interpretations of the participants' experiences, technology can be used in ways that are in accordance with the pesantren subculture and even have the potential to encourage mobility and social inclusion. However, in today's digital era, technological skills and digital literacy are needed so that the pesantren community can play a role in democratic public spaces. This study suggests further study and practice of educational technology in the setting of Islamic boarding school education or educational settings with other traditions and cultures in Indonesia. Thus, researchers or developers of educational technologies also need to understand the cultural diversity of learners, in addition to adopting frameworks that bring together educational and cultural technologies, especially critical frameworks, to fight for justice and social inclusion.

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## The Lived Experience of Pesantren Community Using Technology for Education

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## The Lived Experience of Pesantren Community Using Technology for Education

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