

## Pesantren, the COVID-19 Pandemic and Digital Transformation: A Global Development Perspective

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### Abstract

Scholarly debate on Islamic education lingers in a system that is often criticized for its reluctance to accept any forms of modernization, and this present study tries to prove the opposite. By exploring the dynamics of *pesantren* (Islamic boarding school) as an Islamic educational institution in coping with distance learning during the COVID-19 pandemic, this study observes the digital transformation made by *pesantren* during the time of the pandemic, and examines if this indicates development as per the concept of Sustainable Development Goals (SDGs). While SDG 4 suggests that the adoption of the Internet and computers is essential and becomes an indicator of quality education, locally it is debated whether the utilization of digital technology is compatible with *pesantren* values. Yet, this study argues that the pandemic situation—which requires distance learning—has forced *pesantren* to compromise in utilizing digital technologies. Different responses are made by *pesantren* depending on their institutional types: traditional, semi-traditional-modern, and modern. But significant improvement is reflected in how they have used digital technologies before and during the pandemic; either in their main pedagogical practice, or virtual study of yellow books (*Kitab kuning*), or in institutional and administrative matters. The discussion focuses on how—despite incompatibility in their values—digital adaptation could determine *pesantrens*' survival and viability in the twenty-first century, by reflecting on how they survived the crisis during post-colonial times. In this case, not only does *pesantrens*' digital adaptation satisfy the fulfillment of basic needs as in SDG 4, but it also helps them connect with the outside world, and further engage on issues within other SDGs. Overall, the study supports scholarly discussion on the resilience of faith-based education; that, despite the predicted collapse, it still manages to survive and adapt to modernity and development.

**Keywords:** *Pesantren education, COVID-19 pandemic, digital transformation, global development, SDGs, Islamic education, Islamic boarding school, madrasa*

## Introduction

Started in 2015 as a continuation of the 2000–2015 Millennium Development Goals (MDGs), the 17 points of the Sustainable Development Goals (SDGs) have become a roadmap for all state members of the United Nations as their development agenda to reach equality and justice for all by 2030. Ranging over various sectors including poverty, gender equality, and the environment, one point that is crucial among all the targets is SDG 4 pertaining to quality education. Specific for SDG 4, the main goal is to ensure the “inclusive and equitable quality education and promote lifelong learning opportunities for all”. In detail, SDG 4 has ten specific targets among which is Goal 4.a, which is to build and upgrade educational facilities for inclusive and effective learning environments, with several success indicators including the fulfilment of the basic needs of: (1) electricity, (2) the Internet and (3) computers for pedagogical purposes, as well as (4) facilities for the disabled, (5) drinking water, (6) single-sex bathrooms and (7) handwashing facilities (United Nations, n.d.). From the list of indicators, it is clear that the use of digital technology is crucial for educational practices; that in order to create an effective learning environment, digital technologies must be included as a means to support the teaching and learning activities. Thus, from a global development perspective, the role of digital technology is crucial in attaining achievement of the targets within SDG 4 on quality education.

Albeit essential, access to digital facilities in educational practices is yet still far from adequate. In the latest development, as per the UN’s Sustainable Development Goals report 2021, the data which the organization had gathered from 2016 to 2019 showed that the proportion of schools with computer facilities only stood at 48 percent globally, and the condition in the least developed countries was even worse as it only reaches 26 percent. Meanwhile for internet facility, only 40 percent of schools worldwide have internet access and, similar to computer facilities, the index in the least developed countries is far below, with only 16 percent. In addition, the report highlights the urgent need for ICT infrastructure and the availability of digital facilities such as the Internet and computers at home to support remote learning during the pandemic; that in general the COVID-19 pandemic has indeed hurdled the development within SDG 4 at the global level (United Nations, 2021).

In Indonesia, internet penetration is steadily growing whilst the digital divide persists. Citing the Indonesian Internet Providers Association (APJII), as of the second quarter of 2020, a total number of 196.7 million internet users have been reported in Indonesia, accounting for 73.7 percent of the total population (SAFE-net, 2021). This represents an increase from the previous years which was only 64.8 percent in 2018 and 2019. Also, access to mobile phones is recorded at 345.3

million users, which represents 125.6 percent of the total population, meaning that each individual in Indonesia has at least one, if not two mobile phones on average. That being said, the digital divide remains a problem as, from the total internet users reported nationwide, most of them are dominated by Java and Sumatra with 56.4 percent and 22.1 percent respectively, while the remaining 21.5 percent is reported in Kalimantan and other islands in middle and eastern Indonesia. This inequality, APJII notes, is caused by the difficulty for ICT infrastructure to reach the regions (Kompas, 2020). As a consequence, this problem results in a direct impact on educational practices, in which the country's 12,000 schools, mostly located in 3T regions (underdeveloped, outermost, and underdeveloped), are reported to have not yet had internet access, according to data from Indonesia's Ministry of Education and Culture (CNN Indonesia, 2020). Meanwhile there are also 48,000 schools whose internet access is of poor quality. Even, during the pandemic, SAFEnet noticed that many students were found to have failed to study because they did not have the tools to access virtual classes, either because they were dependent on their parents to access smartphones, or they did not have other tools such as laptops, computers and gadgets, or they could not afford internet data packages, resulting in the deprivation of their right to study. This illustrates that the digital divide has caused a negative impact on educational practices, affirming that in times of emergency, like pandemics, the dependence of education on digital technology increases and thus the availability of ICT infrastructure and facilities becomes paramount.

#### *Digital Technology and Pesantren: Previous Studies*

It is clear at this point that from the global development perspective, the presence of ICT facilities becomes an important indicator for SDG 4 on quality education. Overall, Indonesia's digital inequality remains a critical issue for educational practice, but another perspective comes from the pesantren, or Islamic boarding school, as a traditional form of educational institution in Indonesia. Previous literature has indicated that the application of digital technology in pesantren is problematic. The problem is mainly derived from the perception that digital technology is arguably not compatible with pesantren values and traditions. Fazlur (2019) through his field observation found that some traditional pesantren strictly forbid the use of the Internet for their students—colloquially known as *santri*. In this context, *santri* are those who stay 24 hours full time in a boarding house environment and attend schools within the premises with limited access to the outside world. From Fazlur's (2019) observation, the reason why the Internet is banned for the *santri* is mostly because the *kiai* (clerics responsible as pesantren leaders), doubt the *santri*'s capability to tackle the negative effects brought by

digital technology. In this case, there is a tendency that the kiai have what is called “technophobia”, which in its definition includes a negative attitude toward computers, or with their operation and their societal impact (Rosen & Weil, 1990).

While Fazlur’s (2019) focus is on traditional pesantren, Munawara’s (2018) study of a semi-traditional-modern Pesantren Tebuireng in East Java, showed a similar tendency; that even though digital technologies have been applied within the pesantren environment, they are used only as a “tool” and do not determine the human civilization within the pesantren. In general, digital technologies are perceived only as “entertainment sources” which could lead santri to becoming addictive to them and thus access is partly restricted. This limitation is aimed to make santri more focused on their study on the Quran and Islamic books. In this sense, similar to traditional pesantren, semi-traditional-modern pesantren perceive digital technologies in a negative way, and the use of the Internet within the semi-traditional-modern pesantren is unwanted rather than utilized. This is in contrast with the fully modern pesantren such as Pesantren Darul Lughah Walkaromah in Probolinggo, East Java which has employed digital technologies in their teaching and learning activities (Fauzi et al., 2018). In learning about Islamic studies, for instance, they have equipped their santri with digital-related facilities such as PowerPoint presentations, flash, digital Quran, digital habits, and e-books. This indicates that within the pesantren itself they have different responses on how they perceive and utilize digital technologies depending on their institutional types.

Types of pesantren	Response	Perception
Traditional	Fully restricted	Negative
Semi-traditional-modern	Partly restricted	Tend to be negative
Modern	Accepted	Positive

**Table 1.** *Pesantrens’ Response to and Perception of Digital Technology before the COVID-19 Pandemic Context.*

Table 1 indicates the difference between the three types of pesantren in responding to and perceiving digital technologies. The irony is that while modern pesantren have fully embraced digital technology in supporting their teaching and learning activities, on the contrary traditional and semi-traditional-modern pesantren still have a negative perception about it—they think that it will have negative impacts on their students—resulting in it being fully banned or partly restricted within their environment. The interesting point here, while the global leaders with the SDGs goals have tried to make progress and development in the

education sector by perceiving the presence of the Internet and computers as indicators of quality education, contrarily traditional and semi-traditional-modern pesantren have voiced a reversed-narrative for they still have a negative perception of digital technologies and further exclude or partly restrict the facilities from their teaching and learning process, resulting in the limitation of or fully banned access to the Internet and digital technologies within premises that have physically been exclusive from the outer environment.

Notwithstanding, the condition above fits within the general context of how pesantren perceive and utilize digital technologies based on the studies that were conducted before the COVID-19 pandemic. Given that the pandemic has drastically changed almost all aspects of life, including learning and teaching activities, it is then crucial to view the dynamic of pesantren and digital technologies within the context of the COVID-19 pandemic. As explained, the data have shown that the pandemic has hurdled the teaching and learning process—either globally or within Indonesia—mainly due to the digital divide, or the lack of infrastructure and digital literacy. Despite remaining problems, one thing highlighted by the United Nations is that the COVID-19 pandemic should be taken as an opportunity to accelerate digital transformation in times of emergency. Thus, it is then crucial to question whether or not the COVID-19 pandemic has brought positive changes in the utilization of digital technologies within pesantren, as per the UN's suggestion, which is to seize the moment of the pandemic to expedite digital transformation across the planet, and to ensure that digital technologies are “a force for good” (United Nations, 2021, May 17). So, the intriguing questions are: Has the COVID-19 pandemic accelerated the digital transformation within pesantren? And, how could digital adaptation contribute in determining pesantrens' survival and viability in the twenty-first century, which is also known as the Digital Age, considering perception of the incompatibility in their values?

## Method

To answer these questions, I collected data from existing studies, media coverage, and relevant reports and publications either from the government or non-governmental organizations, as well as policy documents, to find how pesantren practiced their teaching and learning activities before and during the time of the pandemic. From the data collection, my focus is on whether or not there is any difference in how pesantren utilized digital technologies before and during the pandemic, and does this indicate improvement and development. From the way the data are collected, this study employs a qualitative systematic review which is defined as “a review of research literature using systematic and explicit, accountable

method” (Gough et al., 2012). I chose this method because there have been numerous studies that fall within this topic, especially in a local context, but none of them collocate their discussion to the broader context of the scholarly debate on Islamic education at the global level, nor is it viewed from the international development lens.

Thus, the novelty of this present study is that it tries to fill in the gap by systematically reviewing the findings of the existing studies and information from the relevant reports and publications to provide a deeper understanding on what is actually happening by bringing the discussion to the scholarly debate on Islamic education vs modernization, as well as viewing the problems from the perspective of global development. This way, this present study provides a clearer research problem and employs a broader theoretical lens, which at the end bridges the discussion from the local level to a global context, which apparently local researchers focusing on this particular topic have failed to do. Meanwhile, as for the data validity, I use the source triangulation technique by comparing data from different sources to ensure their accuracy before being used and analyzed, and eventually generate findings from them.

## Results

As a real implication of the COVID-19 pandemic, the Indonesian government has regulated a distance learning policy since March 2020, following a circular from the Ministry of Education and Culture No. 15/2020. This circular regulates that distance learning can be conducted online using internet and digital technologies, or by utilizing television, radio or independence modules (SAFEnet, 2021). As part of educational institutions, pesantren are obligated to comply with the policy resulting in many pesantren sending their students home and conducting the learning and teaching activities online; albeit later they were allowed to perform face-to-face learning following the issuance of a newer regulation (Rahma et al., 2021). In this case, modern pesantren which have utilized digital technologies in their regular activities, might have been more ready than traditional and semi-traditional-modern pesantren in coping with the situation. But, in general, this study found that the process of distance learning at pesantren during the COVID-19 pandemic was deemed ineffective, as it was still marked with technical issues, mainly caused by the digital divide in the deficiency of infrastructure and facilities, as well as in the lack of digital literacy and skills.

### *Pesantren Values vs Distance Learning: Policy Context*

Since the enactment of the distance learning policy in March 2020, there has been an argument concerning the question as to how pesantren could cater with

their distance learning activities in a time of pandemic. On the one hand, there is a concern that pesantren, with its dormitory systems, could be COVID-19 clusters, yet on the other hand pesantren will never be pesantren—in essence—if they perform distance learning activities. The reason is rather more substantial than technical. Fahham (2020), a researcher within Indonesia's House of Representatives (DPR RI) research center, explained that, despite the pandemic situation, face-to-face learning activities for pesantren are inevitable. This is because the emphasis of pesantren learning outcomes is not merely on the transmission of knowledge but rather on character education and the actualization of Islamic and national values. Thus, such outcomes require the presence of students within the pesantren premises for 24 hours to perform the learning processes called “Islamic living activities” and “learning to live together”. In detail, Fahham (2020) argued that pesantren have four pillars of education inspired by the UNESCO initiation, namely: (1) learning to know, (2) learning to do, (3) learning to be, and (4) learning to live together.

The pillar of “learning to know” can be found within the activity where the pesantren teacher (*ustadz*) does not only teach but also guide students in mastering religious knowledge. The pillar of “learning to do” can be seen from how the students implement what they have learned under strict supervision. Pesantren are also highly concerned about the talents and interests of their students which is the practice of the pillar of “learning to be”. While the pillar of “learning to live together” is related to the dormitory system in which, from the beginning, students have been accustomed to living together and respecting differences. Another reason is that many pesantren have abandoned their quest for education in other pesantren, culminating in the extinction of the tradition of traveling to study (Pohl, 2009) resulting in many pesantren to be more exclusive from the outside world. From the learning processes of “Islamic living activities” and “learning to live together” above, it is then obvious that the learning and teaching activities in pesantren cannot be replaced with distance learning, as they must be practiced and supervised within the pesantren for 24 hours a day.

In support of Fahham (2020), Triono (2020) from NU Online not only highlighted the incompatibility of distance learning with pesantren teaching practice, but he also argued that the face-to-face learning in the pesantren would also help in supporting the government's quarantine program. This is due to the fact that the pesantren itself has been considered an isolation place which has limited access to the outside world. In other words, the act of keeping the students in pesantren is considered better than sending them home for distance learning. An NU-affiliated Pesantren Roudlotul Mubtaadiin in Jepara, Central Java, decided not to send their students home due to this particular reason (Triono, 2020), while

another pesantren in Bandung regency, Pesantren Baitul Hidayah, also did the same thing, supported by the Bandung deputy regent (Jabar Expres, 2020).

Following this concern, aided by the massive campaign of a so-called “new normal”, pesantren were eventually allowed to perform face-to-face learning three months after the distance learning took place, obviously within certain conditions. This is in accordance with the joint decree SKB 01/KB/2020 of four ministries—the Ministry of Education and Culture, the Ministry of Religious Affairs, the Ministry of Health, and the Minister of Home Affairs—regarding the learning implementation for the 2020/2021 academic year during the COVID-19 pandemic. Point 2 of the joint decree stipulates that face-to-face learning could be conducted within the schools in GREEN zone territories, while those within YELLOW, ORANGE and RED zone territories are forbidden to perform any face-to-face learning whatsoever. That being said, point 3 of the joint decree stated that the point 2 above is “exceptional for pesantren, religious education and higher education” (p. 5), which means pesantren were allowed to perform face-to-face learning despite the condition. The joint decree also regulates that pesantren could start their new academic year as soon as Syawal 1441 Hijriah of the Islamic calendar, which was in June 2020, or about three months after the distance learning policy was first enacted in March 2020.

With the issuance of the joint decree, face-to-face learning finally resumed for pesantren after the Idul Fitri 2020. Yet, the regulation detailed provisions for strict health protocols and specific requirements which must be fulfilled by pesantren in order to be allowed to implement in-person learning activities, namely: (1) Pesantren must establish a task force to accelerate the handling of COVID-19; (2) They must provide facilities that meet health protocols; (3) They must be free from COVID-19, proved by a certificate from the task force for the acceleration of handling COVID-19 or the local government; and (4) The leaders, managers, educators and students must be in good health as evidenced by a certificate from the local health service facility. The joint decree also stated that if the schools with a dormitory system wanted to open face-to-face learning, they must be quarantined and strictly closed from outside visitors, which in the pesantren context would be the parents or other people who would visit the santri.

By August 2020—or five months after the implementation of distance learning—*Republika* reported that almost all pesantren in Indonesia had conducted face-to-face learning, citing data from the Ministry of Religious Affairs. From 34 provinces, only two provinces did not report face-to-face learning activities for their pesantren; namely Papua and North Sulawesi (Mukhtar, 2020). And, by July 2021, around 99 percent of pesantren had performed face-to-face learning, as reported by Kompas.com (Prastiwi, 2021). It is crucial to note that the implementation of face-to-face learning in each pesantren varies in percentage of capacity (from 25 to



100 percent), but one thing is certain, that this phenomenon ironically happened within the context of the pandemic, when the learning activities at the country's regular schools were carried out online as they must abide by the distance learning policy and the joint decree.

### *Pesantren and Distance Learning: The Practice*

It is now clear that the practice of distance learning at pesantren was in the full-mode only within the first three months upon the enactment of the distance learning policy, followed by a hybrid learning method (a mix between online and offline) within certain pesantren which do not host students in full capacity—such as 25, 50 or 75 percent only. This shows that although the policy allows pesantren to perform face-to-face learning, yet in practice, distance learning cannot be avoided. In general, a number of studies have indicated how the COVID-19 pandemic became an impediment to the pesantrens' learning activities. For instance, a study by Budiyantri et al. (2021) on the implementation of online learning at a semi-traditional-modern pesantren, Persatuan Islam 1-2 Bandung, found that the problem in implementing distance learning arose from the fact that a majority of the teachers (*ustadz*) were those from the older generation with a lack of knowledge and skills in utilizing digital applications. Communication between young and older teachers has also been disrupted, resulting in ineffective coordination between the human resources of the pesantren. As an implication, learning and teaching activities are intensely carried out via the WhatsApp group, either for “learning” or “coaching” which results not only in ineffective learning, but also exposes the students to boredom. In this case, this semi-traditional-modern pesantren conducted the learning method over two phases: first by a hybrid method in combining both online and offline learning; and in the second phase by conducting the learning activities “fully online”.

Meanwhile, a traditional pesantren, Raudlatut Tholibin in Cirebon, West Java, eventually allowed their students to be engaged with digital facilities such as smartphones and computer laptops (Jaenudin, 2021). That being said, the students were not given full-time access, being allowed to access them only within specific times. The reason for this was that some of their students are required to join virtual learning for their formal education. Within the context of the pesantren Raudlatut Tholibin, the formal education is under different management than the pesantren, resulting in the approval for the students to utilize digital technologies for the virtual classes required by their formal education. Once the virtual class is finished, the digital facilities must be collected and kept by the pesantren management. This indicates that within this traditional pesantren, they changed their policy from fully restricting the utilization of digital technologies before the pandemic, to allowing

their students to utilize them during the pandemic, even though only for specific times and for pedagogical purposes. This traditional pesantren shifted its policy from fully banning to partly allowing the use of digital technology in their pesantren during the COVID-19 pandemic.

As for the modern pesantren, a study by Aziz et al. (2021) on the pesantren IHAQI Creative Boarding School Bandung found that the learning and teaching practice at the pesantren—although fully online—was still marked with technical issues. In terms of digital utility, this modern pesantren has used advanced apps; it has utilized Zoom, Google classroom, Google meet and even has its own IHAQI E-Learning app. However, the problem comes from the student side, in that it was reported that the students have difficulties in understanding the materials, mostly caused by irregular participation due to bad connections, especially for the students living outside Java such as in Bali, Kalimantan and Papua. The conditions at IHAQI Creative Boarding School, were confirmed by a study by Haryana et al. (2021) which indeed found three different issues facing pesantren in implementing distance learning, based on assessment of the problems during the implementation. The issues are divided into three categories: problems for *santri* (students), problems for *ustadz* (teachers), and environmental problems.

The problems for *santri* consisted of two aspects; namely, (1) the lack of digital tools such as smartphones, and (2) limited access to the Internet due to quotas. Meanwhile, in regard to problems for *ustadz*, they were comprised of three aspects with the first two being similar to the *santri*'s problems. The three issues faced by the *ustadz* were: (1) the lack of digital tools such as smartphones; (2) limited access to the Internet due to quotas, and (3) limited knowledge and literacy in digital technologies. In addition, a third aspect that also contributes to ineffective online learning at pesantren is the environmental problem comprising: (1) the lack of infrastructure; (2) the lack of digital tools; and (3) limited internet bandwidth which affects the quality of the Internet. In this case, the conditions in pesantren described above confirm the UN's global report, as well as SAFEnet's, that the COVID-19 pandemic has indeed hurdled educational practices mainly due to the digital divide in the lack of infrastructure and facilities, as well as digital literacy. In this case, the problems highlighted by the UN and SAFEnet in the educational field correspond to what has happened in pesantren.

### *Digital Transformation in Pesantren During the Pandemic*

Albeit pesantren are allowed to conduct face-to-face learning despite the pandemic, it does not mean that the COVID-19 pandemic has not helped accelerate the digital transformation within pesantren. During the time when pesantren performed distance learning, it is noted that pesantren had no choice except to

utilize the internet and digital technologies to perform their teaching and learning activities, indicating a force for good pertaining to the utilization of digital technologies by pesantren. This indicates that the presence of internet and digital technologies as an indicator of quality education of the SDG 4 has been met within pesantren during this emergency period, obviously with a note that the implementation is still marked with technical difficulties, as in most educational institutions worldwide. Yet, considering that before the pandemic internet and digital technologies were perceived negatively by pesantren and their presence was rather unwanted due to the consideration that they would bring negative impacts and disturb the students' learning rather than facilitating it, the utilization of internet and digital technologies during the time of emergency of the pandemic in pesantren could be seen as a sign of improvement and development.

From the way the traditional and semi-traditional-modern pesantren practice and perform their teaching and learning activities, it is clear that there is a shift in how these two-types of pesantren responded to the use of digital technologies before and during the pandemic. Before the pandemic, these two types of pesantren perceived digital technology negatively which resulted in partly or fully restricting their presence. However, during the pandemic, traditional pesantren eventually allowed their students to access digital technology, even though only within specific times and for pedagogical purposes. Meanwhile, semi-traditional-modern pesantren eventually followed modern pesantren by conducting "fully online" learning during the pandemic.

Types of pesantren	Before COVID-19	During COVID-19
Traditional	Fully restricted	Partly restricted
Semi-traditional-modern	Partly restricted	Accepted
Modern	Accepted	Accepted

**Table 2.** *The Shift in Pesantren's Response to the Use of Digital Technology Before and During the COVID-19 Pandemic*

Table 2 above clearly illustrates the shift in how pesantren changed their responses to the utilization of digital technologies before and in the time of the pandemic. Modern pesantren continued with their acceptance of the utilization of digital technology, while semi-traditional-modern pesantren shifted from partially accepting to full utilization. In the meantime, traditional pesantren shifted from fully restricting it to partly restricting it. From the changes they have made, it proves that pesantren have the ability to adapt themselves to pandemic situations by modifying

their internal policy to allow their students to use digital technology for pedagogical purposes.

Apart from the shift in the utilization of digital technology in their regular teaching and learning practices, another indicator of crucial improvement in digital transformation within pesantren during the COVID-19 pandemic is shown from the massive movement of pesantren teachers in conducting virtual study of the yellow books, colloquially known as “*Kitab kuning*”, either via Youtube, Facebook or other media platforms. A survey by Basid and Saimroh (2020) involving 254 respondents from different pesantren in Indonesia showed that 46.9 percent of them admitted that their pesantren had conducted virtual study of the *Kitab kuning* during the COVID-19 pandemic. This innovation is aimed at continuing learning activities not only for their active students but also their alumni. Table 3 provides information on numerous pesantren conducting virtual study of the *Kitab kuning* during the COVID-19 pandemic, along with the titles of the books.

Pesantren	Name of <i>Kitab Kuning</i>
PP Leteh Rembang	Bidayah al Hidayah, Kimya’u al-Sa’adah, Burdah, Tafsir al Ibriz, Tajul Arus, Idhatu an- Nasyiin, Arba’in Nawawi, Kitab Abi Jamrah.
PP. Lirboyo Kediri	al-Hikam, Adzkar an-Nawawi
PP Al-Tsaqafah Ciganjur	Tafsir Yasin, Nashoih al- ibad, Maulid Burdah, Maulid al-Barzanji
PP API Tegalrejo Magelang	Arbain Nawawi, Ayyuha al- Walad, tafsir Yasin, Durrot an-Nasihin, Washiiat al-Mustofa, Lubbab al Hadits
PP Sidogiri, East Java	Syarah Waraqad, Riyad al-Shalihin, Jam’u al-Jawami’

**Table 3.** *Samples of Pesantren which Conducted Virtual Study of the Kitab Kuning During the COVID-19 Pandemic (Basid & Saimroh, 2020)*

What needs to be highlighted here is that pesantren will never be pesantren without conducting the study of the *Kitab kuning*. This is one of five requirements for an educational institution to be called pesantren, along with four other requirements; namely the presence of *kiai* (clerics), *santri* (students), mosque, and *pondok* or dormitory (Dhofier, 1982). The book itself is called the yellow book because it is printed on yellow paper, but in essence it is characterized as written in Arabic, generally without lines, punctuation and commas, in an ancient style of writing method, and obviously contains Islamic knowledge (Daulay, 2007). In most cases, the *Kitab kuning* are books that were written by medieval Muslim scholars

between the sixteenth to eighteenth centuries (Nata, 1997). Specifically, study of the *Kitab kuning* is the pedagogical characteristic that differentiates pesantren from other educational institutions.

For traditional pesantren, the study of the *Kitab kuning* is the vital element, even the main pedagogical practice, unlike for semi-modern and fully modern pesantren which, in addition to the study of the *Kitab kuning*, also adopt the national curriculum and madrasa curriculum which are developed respectively by the Ministry of Education and Culture and the Ministry of Religious Affairs. Traditionally, methods used for the study of the *Kitab kuning* can be divided into at least four; namely memorizing, *wetonan*, *sorogan*, and *muzakarah* (Nata, 1997). *Wetonan* is when the teachers recite the book and the students listen, while *sorogan* is when the students recite the book and the teacher supervises them. Meanwhile, *muzakarah* is when the study of the *Kitab kuning* is conducted through discussion. But, as an outcome of the pandemic situation, pesantren now have another method to perform their study of the *Kitab kuning*, which is via live streaming on social media platforms such as Youtube and Facebook. This new method not only helps reach the students who are distant to continue their study, but also provides an opportunity for other parties besides the students to also join the study. This phenomenon proves that the COVID-19 pandemic has given an opportunity for pesantren to upgrade themselves and adapt to new challenges in any situation. In this case, not only has the pandemic been a force for good for the pesantren in applying digital technologies, but it also has made them reflect and be more conscious that to survive, they must follow what educational development requires in pedagogical practices, which in this context is the utilization of digital technology.

Not only has the COVID-19 pandemic forced pesantren to utilize digital technologies in their pedagogical practices, either in their regular classes or in the study of the *Kitab kuning*, the pandemic has also helped numerous pesantren to go even further by digitizing their institution through the “Pesantren Go Digital” program initiated by the state-owned enterprise PT Telkom Indonesia. Through this program, PT Telkom Indonesia helps digitize pesantren not only in learning and teaching activities but also in administrative, business and skill development aspects. These include providing a digital learning platform, website builder assistance, digital dakwah, the multifunction santri’s digital card, e-commerce for the pesantren businesses, fast connectivity, and digital-related training for the pesantren’s human resources. The pilot project was launched in March 2020 and, by early 2022, there have been 1,001 pesantren that have become members of this program across Indonesia (Pesantren Go Digital, n.d).

Not only that, the pesantren’s struggle in coping with the needs of digital skills and facilities has also led to creating an awareness that the pesantren indeed

need special attention. This has attracted the government to help pesantren overcome their lack of abilities and facilities in digital technologies. In 2020, the government allocated a Rp211 billion fund specifically to help 14,115 pesantren across Indonesia to cope with their distance learning where, in detail, each pesantren received Rp5 million (CNBC Indonesia, 2020). In 2021, the Ministry of Religious Affairs also inaugurated the pesantren digitalization program, in which they granted funding to a total of 500 pesantrens across Indonesia, consisting of Rp50 million for each in the form of ICT facilities. Based on the ministry's decree No. 5919/2021, the pesantren which were granted the funding come from different provinces, from Aceh to Papua. In addition to that, the Ministry of Religious Affairs has also collaborated with the Ministry of Informatics and Communication to train pesantren human resources, as well as other Islamic institutions, in digital skills to improve their abilities and capabilities in dealing with digital technologies (Andrios, 2021), indicating not only an awareness of the importance of digital technology internally within the pesantren, but the stakeholders have also paid attention toward helping pesantren cope with their lack of abilities and facilities in digital technologies.

## Discussion

From the findings of this study and other studies, it is clear that the COVID-19 pandemic has indeed accelerated the digital transformation within pesantren, although along the process they still face many technical difficulties. This shows that the pesantren as Islamic educational institutions have the ability to adapt themselves to the challenges posed by the COVID-19 pandemic by transforming themselves into being more digitally able to cope with distance and hybrid learning. This condition supports the thesis that Islamic educational institutions that are oftentimes associated as “static” and “backward-looking” have proven themselves otherwise. This study illustrates that although some argued that digital technologies are not compatible with pesantren values and tradition, the pandemic has forced pesantren to compromise and use digital technology to support their pedagogical practices, which, in this case, indicates an improvement and development. The findings of this study contribute in supporting the scholarly discussion that Islamic education and faith-based educational institutions could survive and adapt themselves to modernity and development.

Indeed, scholarly debate on Islamic education has been centered on its system that is often criticized for its reluctance to accept any forms of modernization, while contrarily the presence of Islamic education in Southeast Asia has been associated with “modernity” and “development” (Noor et al., 2008). In fact, pesantren's resilience has been proven over time. Within the post-colonial

context, for instance, when the presence of state-based education caused a crisis in Islamic education, many argued that Islamic educational institutions would not survive as people would prefer state schools instead of faith-based education. Even in the 1950s and early 1960s, policy analysts and governments across Southeast Asia projected that Islamic education would eventually deteriorate in the face of the secular school system. Yet, this prediction of collapse surprisingly did not happen, as the Islamic educational institutions managed to find ways to survive. Reasons this predicted collapse did not occur were due to the resurgence of piety, as well as the rise of Islamic education in the 1970s and 1980s following the Islamic educational institutional expression of changes (Hefner, 2010).

Specific for Indonesia—a country where the Islamic boarding school system is arguably the most resilient in Southeast Asia (Hefner, 2010), Islamic education survived because the resurgence resulted in a “renaissance” by which they made numerous changes that helped sustain their existence. In regard to the changes, they are eager to embrace general subjects into their curriculum, not only to balance their Islamic education but essentially to cope with the crisis caused by the presence of state-based schools with their general education. The growing inclusion of general education within Islamic educational institutions was in line with the issuance of a joint decree (SKB) of three ministries in 1975 which was aimed to raise the standard of Islamic education to that of non-religious state schools by permitting students from Islamic schools or madrasas to enroll in state colleges if they met the requirements and passed the admission exam. This 1975 joint decree eventually advanced the trend of pesantren opening madrasas to provide general education for their students, and harmonize their curriculum with that of state public schools. Even, this prompted pesantren to progress further by expanding their educational scope to include senior high schools and college programs (Hefner, 2010). By setting up madrasas within their premises, pesantren have their own specially modified curriculum (Lee, 1995), combining the national curriculum, madrasa curriculum and the pesantren’s own curriculum. However, considering that Islamic education in Indonesia is “relatively decentralized” each pesantren has the flexibility to design their own educational policy and practices, making them “discursively diverse” (Tayeb, 2018). Yet one thing is certain that, despite the predicted collapse, pesantren or madrasas still exist in Indonesia until today, proving their resilience. With their willingness to progress, to modify, and to change for the better, they could eventually compete with the state-based schools and other private schools. Currently, about 4 million *santri* are studying at 27,722 pesantren across Indonesia (Religious Affair Ministry of Indonesia, n.d.). With the progression they have made by combining general and Islamic education, pesantren provide a balanced education that caters for the needs of Muslim parents.

Yet, although pesantren survived the crisis caused by state schools during post-colonial times thanks to their bold move in adopting general education into their curriculum, the challenge did not stop there. As the world has started a new millennium where digital technology is in demand, pesantren's resilience is once again tested with the twenty-first century challenge pertaining to digital use in educational practices, which is arguably not compatible with their values and tradition. In spite of the internal debate on this incompatibility, pesantren once again prove that they can adapt themselves to modernity and development; this time through their adoption of digital technologies which have been accelerated due to the COVID-19 pandemic which requires distance learning or hybrid learning, forcing pesantren, whether modern, semi-traditional-modern or traditional, to some extent experience digital transformation.

### *Challenges and Survival: Between Post-Colonial and the Twenty-first Century*

By reflecting on the pesantren's progression to cope with the crisis caused by the presence of state schools during the post-colonial time through adopting general education into their curriculum—which Hefner (2010) viewed as part of “Islamic educational renaissance”—it suffices to say that the adoption of general education is what has helped pesantren in Indonesia survive and flourish until today, besides societal and political factors. This compares with Malaysia's pesantren or *pondok* education which did not follow such a movement. Pondok or pesantren education in Malaysia is “informal” and thus not part of the “national education system” (Tayeb, 2018). As an implication, pondok graduates in Malaysia are not capable of continuing their study to formal education, let alone colleges, by only studying at the pondok—which is in contrast to the condition in Indonesia. This comparison shows the significance of the impact of adopting general education on pesantren's survival, affirming that in order to survive and compete with the state schools, pesantren need to reform and be willing to adopt what is needed for their improvement and development, which in this case was general education.

From evidence of the historical facts on how pesantren survived the post-colonial crisis with their adoption of general education, pesantren are expected to do the same when it comes to facing the twenty-first century challenge of digital technology, that is arguably not compatible with their tradition. In essence, general education and digital technology have three things in common. First, they are arguably not part of the pesantren's values and tradition, yet, second, they both improve the quality of pesantren education. And third, they could add pesantren captivation in competing with other educational institutions, especially state schools. With these similarities, it is argued that the challenge for pesantren's survival lies in how they can adapt to developments enforced from the outside the



pesantren, namely general education in post-colonial times, and digital technology for this century. Considering that adopting general education is what helped pesantren survive their predicted collapse in post-colonial times, thus, rejecting digital technology would negate the spirit of progression and improvement that they have built since the twentieth century, especially during the post-colonial era, and would eventually impact their survival in this so-called Digital Age. Pesantren would not be as progressive as today if they did not embrace general education into their curriculum, so would they not be without digital technology.

In addition, the United Nations has perceived the presence of the Internet and computers in pedagogical practices as indicators of quality education, clearly not without reasons. Despite the fact that digital technology is inevitable in this fourth industrial revolution, beyond that, the adoption of digital technology in educational practices could bring positive impacts in certain aspects. Many studies have showed that digital learning has been proven to boost students' motivation and has increased positive effects on learning outcomes compared to traditional teaching (Lin & Chen, 2017). Also, traditional teaching is deemed to not satisfy students any longer—especially for students of Generation Z and Alpha who are known as digital natives—resulting in the growing trend of e-learning and blended learning, as well as the “flipped classroom”. The latter method is a new teaching technique in which the instruction is conducted online or through video recordings such as on YouTube, while, in contrast, the homework is required to be conducted in the classroom. This new technique has been proven to not only impact learning outcomes, but also increase the students' engagement and coordination where students tend to ask questions of the teachers regarding the topics that they found unclear during the distance learning, and also the students with better capabilities tend to help their classmates with lower capability (Qiang, 2018). This implies that in this twenty-first century the classroom for digital-savvy generations is not limited to only the physical room, but has been expanded to social settings, social media and also the Internet, which require teachers to equip themselves with new teaching techniques and supervision.

#### *Pesantren and SDGs: Towards a More Global-Oriented Pesantren Development*

Survival and development are like two-sides of a coin; to survive is to develop. In this case, pesantren adopting digital technology implies two things: first, this follows educational development as suggested by the United Nations within its Sustainable Development Goals (SDGs); and second, it brings a step closer for pesantren to engage in other issues within SDGs. Through digital technology, pesantren—which have physically limited access to the outside environment—could connect with the world and actively participate in solving global issues; be this by

spreading peace education to counter extremism and contribute in promoting world security, by helping solving poverty and hunger, by increasing society's economic participation, by caring for climate change, or fostering gender equality, and so on. Thus, by adopting digital technology, pesantren are expected to be more critical, reflective and participative to engage with and solve global development issues. This is especially crucial because until today—two decades after the United Nations (UN) started its agenda on the Millennium Development Goals (MDGs) which is continued with the Sustainable Development Goals (SDGs) in 2015—pesantren's involvement on SDGs is yet still not optimal, proven by limited discourses discussing the importance of SDGs for the pesantren's development. Thus, it is suggested that world organizations, and global and state leaders concerned with SDGs and international development should pay their attention to pesantren, to familiarize them about SDGs and their importance, to help them fulfill the indicators set for equality and development, and educate them to have a more global-oriented development. Due to limited discourses on pesantren and SDGs, most pesantren are apparently still unaware of SDGs—let alone making efforts to fulfil the indicators within the 17 targets. While, in fact, pesantren should be the target of development under the SDGs considering the traditional nature of the institutions. Thus, it is important to improve development within pesantren—as a traditional form of educational institution—to make sure that none of them is left behind in each development aspect.

## Conclusion

“Slow but sure” might be the right words to describe the relationship between digital technology and pesantren. From a global development perspective, there is no doubt that all pesantren are expected to have access to the Internet and computers for their pedagogical purposes. Yet, considering that the main issue in pesantren is related to the debate on incompatibility in their values, in that learning through togetherness and Islamic experiential learning are not compatible with distance learning, digital transformation within pesantren might not be as rapid as in other educational institutions. This could be influenced by the type of pesantren, whether traditional, semi-traditional-modern or modern; each of which has different perceptions of and responses to the utilization of digital technologies. However, the COVID-19 pandemic has brought some improvement within pesantren regarding the utilization of digital technologies. The pandemic might be difficult, but it is proven to have accelerated development within the pesantren in reference to digital transformation. The use of digital technologies in their regular learning activities, as well as in their study of the *Kitab kuning*, or even in the rapid

movement of “pesantren go digital” prove that not only the COVID-19 pandemic has forced the pesantren to compromise with conditions and move forward into development, but also indicates the pesantren’s resilience in adapting themselves to modernity and development in this century. Pesantren’s adaptation to digital technology is seen as a continuation of their progression from the twentieth century. While this century’s challenge is different, yet pesantren once again have proved that they can adapt themselves to modernity and development with the adoption of digital technology.

World organizations, and global and national leaders are recommended to pay more attention to the development trends in pesantren, including in their technological use and pedagogical practices as well as in all other development fields. Further research is suggested to examine whether the digital transformation within pesantren during the pandemic could be sustained into post-pandemic times. This is crucial since sustainability cannot be separated from development. Furthermore, any research that falls within the scope of pesantren and SDGs is highly encouraged, due to the limited discourse on pesantren and SDGs available thus far.

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