

## **THE RESPONSE OF ISLAMIC EDUCATION TO THE ADVANCEMENT OF SCIENCE IN THE COVID-19 PANDEMIC ERA IN THE ISLAMIC BOARDING SCHOOLS**

### **RESPON PENDIDIKAN ISLAM TERHADAP KEMAJUAN SAINS ERA PANDEMI COVID-19 DI PESANTREN/SEKOLAH ISLAM**

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#### **Abstract**

This study discussed that Islamic boarding schools as educational institutions responded to Covid 19 pandemic era through their educational system. This study aimed to examine how Islamic educational institutions responded to the advancement of science in the current Covid-19 era. The method used was the library research method with a qualitative approach by excavating, discovering, reading, explaining, and conveying implicitly or explicitly to literature from the data. The source data came from articles, journals, and books related to Islamic education, Islamic boarding schools, and the response of Islamic education to the Covid-19 pandemic. In analyzing the data, the researcher used data descriptive and content analyses. The findings indicated that Islamic boarding schools applied online learning during the Covid-19 Pandemic era. Therefore, Islamic boarding schools responded by using science technology in the learning process by developing lesson plans based on the current situation.

**Keywords:** *Science, Islamic Education, Islamic Boarding Schools*

#### **Abstrak**

*Penelitian ini membahas pondok pesantren sebagai lembaga pendidikan yang merespon pandemi Covid-19 melalui sistem pendidikannya. Penelitian ini bertujuan untuk mengkaji bagaimana lembaga pendidikan Islam menyikapi kemajuan ilmu pengetahuan di era Covid-19 saat ini. Metode yang digunakan adalah metode penelitian kepustakaan dengan pendekatan kualitatif dengan menggali, menemukan, membaca, menjelaskan, dan menyampaikan secara implisit atau eksplisit ke literatur dari data. Sumber data berasal dari artikel, jurnal, dan buku terkait pendidikan Islam, pesantren, dan respon pendidikan Islam terhadap pandemi Covid-19. Dalam menganalisis data, peneliti menggunakan deskriptif data dan analisis isi. Temuan menunjukkan bahwa pesantren menerapkan pembelajaran online selama era Pandemi Covid-19. Oleh karena itu, pondok pesantren meresponnya dengan menggunakan iptek dalam proses pembelajarannya dengan mengembangkan RPP berdasarkan situasi saat ini.*

**Kata Kunci:** *Sains, Pendidikan Islam, Pondok Pesantren*

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## **1. Introduction**

Artificial intelligence can make a decisive contribution to scientific and technological advances to provide humanity with the resources it needs to face its survival problems (Alcoforado, 2020). The term Islamic education is often defined as Islamic religious education in schools/*madrasah*. The usual Islamic education in schools

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is limited to PAI (Islamic educational subject) learning in public schools. In *madrasah*, each Islamic education subject is separated, namely *Aqidah Akhlak*, *Fiqh*, *Tafsir*, and Arabic. This understanding is very narrow because Islamic education is an institution, and within that institution, there is an Islamic learning process. *Pesantren* is an Islamic educational institution. *Pesantren* comes from the word *santri*, which is, added with the prefix and the suffix. The term "*santri*" is an amalgamation of two syllables, namely *santri*, which means well human beings and helping. The boarding school has the meaning of a place for education to guide people to become good people (Indra in Legistia, 2019).

Islamic boarding school itself is a religious institution. That has the task of teaching education and disseminating the teachings of the Islamic religion as the key to living in society (Munif & Baharun, 2018). According to Azra in Suradi (2017), Islamic education is complete human education, intellect, and skills to prepare humans for a better life. Law No.18 of 2019 explained that *pesantren* defines as an institution established by individuals, foundations, and Islamic community organizations. Then, people who are Muslim and have devotion to Allah SWT—instilling good morals and upholding the Islamic religion which can be seen from an attitude of humility heart, tolerance, moderation. The noble values of Indonesiacaan be seen through education, preaching, and community empowerment. Students in the *pesantren* are called *santri*, namely students who are undergoing education and deepening the science of Islam. Islamic education has a purpose to instill positive character values in students through various formal and non-formal learning activities, with this process it is hoped that the formation of values can be optimal, especially for students in Islamic boarding schools.

There are three Islamic educational institutions in Indonesia. The first is education in the *Qur'an* recitation, which is education that focuses on the process of reading and memorizing the *Qur'an*. This education is arguably the oldest in Indonesia, and it is used for a beginner who wants to learn Islam. However, it is focused on studying the reading and memorizing of *Qur'an*. Next, it is the Islamic boarding school called *pesantren*, an educational institution to study Islam. Then, the last one is *madrasah*. Usually, school financed by the government and under the ministry of religion provides Islamic education to children and adolescents who attend *madrasah* (Satria, 2019). According to Nata in May (2015), there are *three* objectives of Islamic education: individual goals, meaning everything related to the individual such as the personalities of students, mental and emotional, intellectual, and all things related to students. From this individual goal, it is expected that each student can experience self-improvement. Second, social goals, in this purpose, Islamic education is expected to improve the relationship of students with their community. Third, professional goals, teaching and education are useful as sciences, arts, and activities in society.

During the Covid-19 era, *santri* carries out learning from home. There are no offline activities at all in the Islamic boarding school. This situation introduces a new way of learning for *pesantren* because it can be seen that the boarding school is well known for its traditions, the learning system, the books used, and the teaching method. The current Covid-19 pandemic has an impact not only on the boarding school system and teachers but also on students themselves. They are expected to understand the material and carry out exams virtually. It has a negative and positive impact on the educational structure.

The Covid-19 Pandemic period shook the learning process. Learning was initially carried out face-to-face and is now turning into online learning (Ali, 2020;

Fahmalatif, Purwanto, Siswanto, & Ardiyanto, 2021; Hussein, Daoud, Alrabaiah, & Badawi, 2020; Sunarto, 2021; Tang, Chen, Law, Wu, Lau, Guan, He, & Ho, 2021). Distance learning uses WhatsApp, google classroom, zoom meetings, Microsoft teams, and other applications that support the online learning process.

This research is important because, recently, Islamic education is considered an education that only focuses on *halal* and *haram*, or permissible and forbidden. A small part of the general public sees narrowly about Islamic education. Therefore, Islamic education needs to respond to the dynamics that occur. One way to respond to this is by looking at the harmonization of religious education with science, especially in the era of the Covid-19 pandemic. In this way, Islamic education is considered a pioneer of future science with various scientific integrations. The difference between this study and previous research is the process of harmonizing science into religious education. If other research only sees that religious education needs to be integrated through the curriculum and Islamic textbooks, the focus is on the curriculum side. Meanwhile, this research focuses on the integration process with a quick response through Islamic learning methodology. Therefore, the difference is in the aspects of the learning curriculum and Islamic learning methodology.

## 2. Research Method

The research method used in this research was library research. According to Zed in Yahya (2015), library research is a research method carried out by understanding works, journals, and books that discuss the issues studied in this research. This research used a qualitative approach by excavating, discovering, reading, explaining, and conveying implicitly or explicitly to literature from the researcher's data. The data used in this study came from articles, journals, and books related to Islamic education, Islamic boarding schools, and the response of Islamic education to the Covid-19 pandemic. In analyzing the data, the researcher used data descriptive and content analyses.

## 3. Results and Discussion

### 3.1 Results

Islamic education has a significant role in shaping the ethics and morals in the people's lives and the nation to create religious and devoted people (Mansir & Karim, 2020). The relationship between religion and science is indeed very close and useful to complement each other. There is a fundamental difference between science and technology. Science is more concerned with the theory and knowledge related to the basic, universal, objective, and systematic objects. At the same time, technology is more practical and related to the most important ways of applying science to use nature for human welfare (Asbar, 2019). The current globalization at this time causes many changes from various dimensions of life. These changes occur due to the increasing level of knowledge and technology. It shows that making people aware of mastering science and technology in education is very important.

Islamic boarding schools are interpreted as educational institutions (Efrizal, 2012). The identity of Islamic boarding school is the place and ideology fort of Islam from the intervention and contamination of imperialism. It represents the tradition of Islamic education and is a symbol of the local Islamic tradition (Das, Halik, & Amaluddin, 2016). Despite the advancement of technology and science, Muslims still

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have to develop Islamic education. The Covid-19 pandemic has made the world of education seek many ways to break the virus chain. This effort takes massive social restrictions by implementing online learning and implementing health protocols for each school. Limiting activities at schools and even canceling agendas that should be implemented at schools. The learning process of Islamic education is in line with the era of advanced technology. The Covid pandemic has created a new challenge in which a more rational, competitive, and pragmatic lifestyle occurs in society.

If Islamic education dwells on a rigid educational system, Islamic education will be difficult to accept in the surrounding community. Advances in science and technology make it easier to replace the learning system in schools. However, the replacement of curricula, lesson plans, and all educational systems are unexpectedly changed. The adjustment does not take long because the schools, *madrasah*, Islamic boarding schools, and students already understand current technology. The Covid-19 Pandemic should not be a barrier to studying because in QS. Al-Mujadalah verse 11, it has been explained that Allah will provide space when someone opens up for an assembly. When someone stands up, Allah will elevate the level of believers and knowledgeable people with several degrees. It means that Allah will raise the degree of people who study compared to those who do not (Masduki, 2015).

### 3.2 Discussion

The Ministry of Religion plays an important role in the responsibility for the implementation of Islamic education. It has initiated an emergency curriculum guide for *madrasah* for learning during the current Covid-19 pandemic. It has been stipulated in the Decree of the Director-General of Islamic Education Number 2791 of 2020. This published guides can be used for Islamic education starting from *raudhatul athfal*, *madrasah ibtidaiyah*, *madrasah tsanawiyah*, to *madrasah aliyah*.

The content of this emergency curriculum emphasizes noble morals, character development, independence of students but still pays attention to fulfilling basic and core competencies (Prasetia & Fahmi, 2020). The response to Islamic education related to the current outbreak is replacing the Islamic boarding school educational curriculum: the teaching system and the financing system, the Islamic boarding school curriculum prior to the pandemic. The study hours were closer but still met the needs and remained under control by the *kyai* (teachers) in the Islamic boarding school. Then, the teaching system that was previously known was full of book learning, *sorogan*, *wetonan*, reading the *Qur'an*, and memorizing (Shiddiq, 2016). During the current pandemic, Islamic boarding schools use an online system in learning.

Distance learning has both advantages and disadvantages. The advantages of this online learning system are that parents can monitor and see the development of their children during the learning process. Therefore, the boarding school must collaborate with parents and guardians to assist and support students while studying at home. Not always accompany them when learning, but at least they prepare all the technology needs in online learning, including adequate smartphone, laptop, and network facilities, during online learning. *Pesantren* administrators must also be responsible for managing the learning process by helping teachers who have difficulty using technology and assisting in preparing for online learning.

Then, Islamic boarding schools must provide additional rewards for material and non-material expenditures such as fees for teachers, smartphones, internet, and time to teach online from the financing system. Also, it needs to assist in purchasing internet

packages for students to support online learning at their homes (Kahfi & Kasanova, 2020). Islamic education in schools during the Covid period was used as motivation to grow and increase the spiritual level so that the impact of this pandemic does not attack psychological conditions. The existence of Covid is not a barrier to Islamic education in the continuity of the learning process. Several things must be considered. They are namely learning planning, the learning process, and learning evaluation.

Learning planning is the process of making a decision related to learning objectives by using all available learning abilities and resources. The existence of the Covid made the teachers change the lesson plan that was previously face-to-face and replaced it with distance learning. It was made quite simple because the lesson plan initially printed out into many pages and became only one page. This change is based on the Ministry of Education and Culture of 2019 concerning the design of the lesson plan. Next is the learning process. The learning process is all activities that are formed to provide lessons to students in the face-to-face educational process. Students are expected to take part in active learning. However, seeing the current conditions, learning is not running as usual. There is no direct interaction between teachers and students. The last one is the evaluation of learning which is the process of giving grades to students.

Currently, every school/*madrasah/pesantren* is implementing distance learning. The implementation of Islamic education during a pandemic must look at three things, namely Islamic reasoning based on the *Qur'an* and *Hadith*, technology, and human resources. *Qur'an* and *Hadith* have been defined as spirit or life in Islamic education. Without *Qur'an* and *Hadith*, Islamic learning will deviate from what has been stipulated in the *Qur'an*. It will create *Bid'ah* that deviates from the *Shari'* in the formulation of the Islamic educational curriculum. It should still be based on Islamic teachings because *Qur'an* itself, its credibility and authenticity are still related to this era.

An educator has an important role in the educational field. An educator must master pedagogical, professional, social, and personality competencies. An educator must have a good level of communication, especially in these conditions. Educators must communicate with the parents/guardians of students to monitor and communicate well with students to feel comfortable with online learning.

In today's pandemic era, technology is beneficial. However, education could not force the will to continue to carry out face-to-face learning. It is now completely reversed when previously learning was conducted with 75% face-to-face and 25% online-based. It is expected that not only educational institutions strive for the learning process to run well. However, students are also expected to follow learning well because learning without students' activeness will not achieve educational goals properly. Students still have to respect and have courtesy towards the teacher even though the learning process is online. Students should know and understand the manners during the learning process. They must also know about character education so that even though they do not learn at school or *madrasah*, they still have a polite character.

Character education is very important in the school environment, family, and the surrounding community because character education can form a more disciplined person (Purnomo, Mansir, Tumin, & Suliswiyadi, 2020). Even though learning is carried out online, students are expected to remain active when offline learning, such as giving questions and actively speaking in discussion sessions. However, online learning is more difficult for students to understand and receive lessons. It is also more difficult

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when learning to count or requires practice. Students will experience difficulties, but students are still expected to pay attention to the teacher while teaching.

The positive impact is introducing information technology during the Covid era. The students can understand the technology and are more advanced in understanding IT because it is important for their future. When they have graduated from Islamic boarding school, they will not be left behind because the Islamic boarding school itself is familiar with the ancient educational community. The negative impact that occurs is that students are lazier to learn. Besides, they are also lazy to pay attention to the teacher when giving lessons because there are off-camera features in learning applications.

The relationship between religion and science is indeed very close and useful to complement each other. There is a fundamental difference between science and technology. Science is more concerned with theory and knowledge related to basic and universal, objective, and systematic types of objects. Then, if technology is more practical, it is related to the most important ways of applying science to use nature for human welfare (Asbar, 2019). The current globalization at this time causes many changes from various dimensions of life. These changes occur due to the increasing level of knowledge and technology. It shows that making people aware of mastering science and technology in education is very important.

Despite the development of technology and science, Muslims still have to develop Islamic education. The Covid-19 pandemic has made the world of education seek many ways to break the virus chain. This effort takes massive social restrictions by implementing online learning and implementing health protocols for each school. Limiting activities at school and even canceling agendas that should be implemented at school. The learning process of Islamic education is in line with the era of advanced technology. The Covid pandemic has created a new challenge in which a more rational, competitive, and pragmatic lifestyle occurs in society.

The relationship between Islamic education and knowledge/science in *madrasah* and Islamic boarding schools are interrelated, support, and complement each other. Both of these materials can be developed in the teaching and learning process. It has the intention that the process of delivering religious material to students is more interesting, effective, and able to motivate students to study general science. On the other hand, educators of different subjects are obliged to discuss the material and the main discussion. Earlier, it could also be related to religious education. In addition, if a rationale and attractive delivery are applied to the teaching and learning process, the students can more easily get and understand the core based on the main discussions delivered by the teachers to students. According to religious teachings, these advantages can increase belief using science because students can analyze existing scientific evidence in religion. Then, the relationship of Islamic education using science in *madrasah* needs emphasis, which can create scientific research. Students are also required to master the relationship between the two in Islam, education and science, which is the basis of science to describe the truth.

#### 4. Conclusion

The response to Islamic education related to the current outbreak is replacing the Islamic boarding school educational system during the Covid-19 pandemic. Islamic boarding schools used to face-to-face learning became online learning. Islamic boarding schools or *Pesantren* must also be responsible for managing the learning process by helping teachers who have difficulty using technology and preparing for online learning.

Then, Islamic boarding schools must provide additional rewards for material and non-material expenditures such as fees for teachers, smartphones, internet, and time to teach online from the financing system. Students still have to respect and have courtesy towards the teacher even though the learning process is online. Students should know and understand the manners during the learning process.

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