

Digital Literacy in the Early Childhood Islamic Education Space in Purwokerto

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Abstract

The Society 5.0 era is a civilization where digital technology is a solution to solve various problems as well as a tool to improve the social welfare of the community. The presence of this civilization is marked by rapid technological advances and disruptions in various spaces including the education space, especially early childhood Islamic education. Based on this, digital literacy is an important aspect that must be introduced to early childhood in carrying out its role as a digital generation. This research was conducted with the aim of exploring digital literacy in the early childhood Islamic education space, focusing on the opportunities and challenges faced. This research is a qualitative research with a case study method on 3 early childhood Islamic education institutions in the city of Purwokerto (RA Rumah Kreatif Wadas Kelir, RA Muslimat NU Masyithoh 13 Sokaraja, and TK Diponegoro 173 Teluk, Purwokerto) with data collection through interviews with educators, parents, classroom observations, and curriculum documentation. The results of the study show that digital literacy has a great opportunity to improve the quality of early childhood learning and introduce the wise use of technology, including: 1) Children who are Adaptive and Flexible to Technology; 2) Ability to Absorb Information Quickly; 3) Children's Tendency to Think Logically, Analytically, And Openly. However, behind the opportunity, there are also challenges of digital literacy in the early childhood Islamic education space, namely: 1) Information Overload; 2) Digital Distraction; 3) Moral Degradation.

Keyword: Digital Literacy, Early Childhood, Islamic Education.

Introduction

The development of digital technology has brought major changes in various aspects of life, including in the world of Education. In recent years, the mass media often reported on the disruption that occurred in various sectors due to technological advances, not least in the field of Education. According to a report from Kominfo (Kominfo, 2023), Indonesia is experiencing a rapid increase in internet use, especially among children and adolescents. The Data states that around 56% of children aged 5-12 years have been exposed to the internet through various digital devices, and this has a direct impact on the way children learn the world around them. The impact of digital technology includes not only faster and wider access to information, but also changes in the way we think, communicate and interact socially.

Various other news also highlighted the negative impact of the use of digital technology by early childhood, including the potential dependence on devices, declining social skills of children, and threats to the development of moral and religious values. According to a survey conducted by KPAI (KPAI, 2022), excessive use of technology without supervision can cause disturbances in the development of character and morals of children. These news stories are one of the main drivers for educators, especially in Islamic educational institutions, to rethink their role in equipping children with digital literacy balanced with Islamic values.

The Era of Society 5.0 which is characterized by the rapid advancement of digital technology demands a change in the paradigm of education, including in early childhood Islamic education. Technology can no longer be seen as something separate from everyday life, but should be a tool that supports the learning process and character development of children. This brings us to the topic of digital literacy, which is increasingly relevant in the context of Early Childhood Islamic education. Digital literacy here is not just the ability of children to use technological devices, but also the ability to filter information, think critically, and use technology wisely in accordance with Islamic values.

Digital literacy is an important aspect that must be introduced to early childhood in carrying out its role as a digital generation in the era of Society 5.0 (Nugraha, 2022). Early childhood Islamic education, as one of the important containers in the formation of character and morals of children, has a great opportunity to utilize technology in improving the quality of learning. By introducing digital literacy early on, children are expected to be an adaptive, flexible generation, and able to utilize technology for good. They are expected not only to be users of technology, but also individuals who think logically, analytically, and openly, in accordance with the principles of Islamic teachings that encourage people to always learn and think deeply.

In RA Muslimat NU Masyitoh 13 Sokaraja, the implementation of digital literacy has been carried out for a long time even before the pandemic. Mrs. Siti Nurochmah, head of RA Muslimat NU Masyitoh 13 Sokaraja said that the development of the Times, then education must also follow the flow, otherwise it can erode by itself. Moreover, children today are unlikely to be able to escape from technology, inevitably have to be introduced early. This is the background for the integration of learning with simple technology, ranging from the use of televisions, projectors, laptops/ computers, and smartphones.

In line with this, Mrs. Dian Wahyu Sri Lestari, head of RA Rumah Kreatif Wadas Kelir, also said that children need to be introduced to the use of technology wisely from an early age. Nowadays, almost all children in Ra Rumah Kreatif Wadas Kelir are familiar with technology, including social media. In this case, the pandemic is one of the early doors for the use of technology to become increasingly massive. According to Ibu Dian, the use of technology in early childhood must be accompanied by understanding and understanding that technology is important but does not mean to be a tool to depend on. Thus, there is a need for the introduction of digital literacy for early childhood so that its use remains useful and not excessive.

Meanwhile, in TK Diponegoro 173 Teluk, Purwokerto, children in TK Diponegoro 173 Teluk, Purwokerto, have also started to get to know technology as part of the daily learning process. The principal of the kindergarten, Ibu Kusriyati, stressed the importance of the role of teachers and parents in directing the use of technology in children. According to him, technology can be an effective tool to enrich the early childhood learning experience, but it must always be supervised and limited wisely. In addition, it is also emphasized that good digital literacy must include instilling Islamic values, such as responsibility and honesty, so that children can learn to use technology not only for entertainment, but also to increase knowledge and build good character.

Based on the above background, the researcher assesses the importance of in-depth understanding of the opportunities and challenges of digital literacy in the early childhood Islamic education space. Given that digital technology has become an integral part of everyday life, Islamic education needs to respond adaptively in order to be able to utilize this technology to support the development of children's character and morals.

Metode Penelitian

This study uses a qualitative descriptive method, in which researchers collect data related to digital literacy in the context of Islamic education for early childhood. Researchers took 3 research locations namely RA Rumah Kreatif Wadas Kelir, RA Muslimat Nu Masyitoh 13 Sokaraja, and TK Diponegoro 173 Teluk, Puwokerto. After that, the data is elaborated in detail and analyzed to obtain a broad picture of the opportunities and challenges of digital literacy in Islamic education for early childhood. The Data in this study consisted of citations obtained through interviews, field notes from the results of observations, with observations made in a participatory and unstructured manner to collect information related to digital literacy in early childhood Islamic education in the three institutions. In addition, data were also obtained through documentation in the form of photos that support research data.

Result

Based on the results of interviews, obtained, researchers found that the majority of teachers are of the opinion related to digital literacy opportunities in the early childhood Islamic education space as follows:

Table 1. Interview data related to Digital literacy opportunities in the Early Childhood Islamic education space

Lembaga Pendidikan	Jumlah Guru Wawancara	Anak-anak yang Adaptif dan Fleksibel terhadap Teknologi	Kemampuan Menyerap Informasi dengan Cepat	Kecenderungan Anak Berpikir Logis, Analitis, dan Terbuka
RA Muslimat NU Masyithoh 13 Sokaraja	8	6 guru (75%)	5 guru (62,5%)	4 guru (50%)
RA Rumah Kreatif Wadas Kelir	7	7 guru (100%)	7 guru (100%)	6 guru (85,7%)
TK Diponegoro 173 Teluk Purwokerto	8	7 guru (87,5%)	6 guru (75%)	5 guru (62,5%)

Based on the table above, it was found that all teachers at RA Rumah Kreatif Wadas Kelir (100%) mentioned that digital literacy makes children very adaptive and flexible to technology. This score is higher than the other two institutions. Ra Rumah Kreatif Wadas Kelir also stands out in terms of opinions regarding the ability of children to absorb information quickly, with all teachers (100%) stating that children have a high ability to absorb information through digital technology. Then in the next opinion, the highest score was also in RA Rumah Kreatif Wadas Kelir, with 85.7% of teachers mentioning that digital literacy helps children think logically and analytically.

The challenges according to the results of interviews from teachers in 3 institutions include:

Table 2. Interview data related to digital literacy challenges in the Early Childhood Islamic education space

Lembaga Pendidikan	Jumlah Guru Wawancara	Kelebihan Informasi (Information Overload)	Gangguan Digital (Digital Distraction)	Degradasi Akhlak
RA Muslimat NU Masyithoh 13 Sokaraja	8	6 guru (75%)	7 guru (87,5%)	5 guru (62,5%)
RA Rumah Kreatif Wadas Kelir	7	5 guru (71,4%)	6 guru (85,7%)	6 guru (85,7%)
TK Diponegoro 173 Teluk Purwokerto	8	7 guru (87,5%)	8 guru (100%)	6 guru (75%)

Based on the results of the table above, it was found that in all institutions, most teachers mentioned that information overload is the main challenge in digital literacy. TK Diponegoro 173 Teluk Purwokerto has the highest rate with 87.5% of teachers stating this. Meanwhile, the challenge of digital distraction was recognized as the most significant problem by the majority of teachers in all three institutions, especially in TK Diponegoro 173 Teluk Purwokerto, where all teachers (100%) agreed that digital distraction was the main challenge. Then in the third opinion related to moral degradation, in RA Rumah Kreatif Wadas Kelir, the challenge of moral degradation is an important concern, with 85.7% of teachers stating this as a challenge. The same is also recognized by 75% of teachers in TK Diponegoro 173 Teluk Purwokerto.

Discussion

1. Digital literacy opportunities in the Early Childhood Islamic Education Space

a. Children who are adaptive and flexible to technology

Rapid technological advances have changed the way children interact and learn. (Safitri & Muryanti, 2021) In the context of Early Childhood Islamic education, the results showed that children have the ability to be adaptive and flexible to technology. They quickly adapt to using digital devices, both for entertainment and learning. Early introduction of technology makes it easy for children to explore various media and applications that support their learning process (Lindriany et al., 2022). In this regard, digital technology has opened up access to a variety of learning resources that were previously difficult to reach, such as interactive learning videos, Islamic stories, and daily prayer applications.

Mrs. Siti Nurrochmah, principal of RA Muslimat NU Masyithoh 13 Sokaraja, explained that the use of technology in her institution has started with the introduction of digital technology such as the use of television to watch the stories of the Prophet together.

"We invite children to not only play, but also learn through technology that is easily found around, for example, television. There are 3 televisions. Well on the remote there are features like OK Google, Well there the children are very enthusiastic to try it. With just a voice, the television can already directly display what is sought" (S. Nurrochmah, wawancara, 2024).

Meanwhile, in RA Rumah Kreatif Wadas Kelir also indicate children who have been flexible and adaptive to technology, as conveyed by one of the teachers there, Mrs. Retno Kurniasih:

"If the teacher has taken out the laptop, they are very enthusiastic to try it. When we gave instructions for them to learn to type, they immediately sprightly and so easy to learn to recognize the alphabet." (Retno Kurniasih, interview, 2024).

From there, it can be seen that early children in Islamic educational institutions have adaptive and flexible abilities to digital technology. They are rapidly making use of digital devices for both entertainment and learning. Technology has opened access to a variety of learning resources that support their development, especially in the context of Islam.

b. Ability to Absorb Information Quickly

The results of the next analysis, namely digital literacy, spurred the ability of early childhood children to absorb information quickly through digital media. Advances in technology allow children to access information in various forms, whether visual, audio, or interactive (Habibah et al., 2021). In the Islamic education space, this can be an opportunity to introduce religious teachings in a more interesting and effective way. Technology can be a powerful tool in delivering complex religious learning materials in a way that children can easily understand.

Mrs. Kusriyati from Tk Diponegoro 173 Teluk, explained that in her institution, technology is used to accelerate the learning process of children.

"Children very quickly grasp the information conveyed through digital media. For example, when we introduce short prayers through animated videos, children memorize them faster than traditional methods. However, we still give an understanding that technology is only a tool, and religious values should be the basis in their lives" (D. S. Lestari, interview, 2024).

In line with this, Mrs. Dian Sri Lestari, principal of RA Rumah Kreatif Wadas Kelir, also revealed that children at school are very updated with information on social media, as in her interview as follows:

"Sometimes kids know more than the teacher. There are children who when asked what ideals? The answer is to be a farmer. I'm interested in dong, what kind of cattle breeders? Said the son, a successful cattle breeder later cows are Japanese cows, and the farm is in the country of Japan. Well, such references I think children get one of them yes from social media or digital technology, children have a broad insight and quickly absorb information,"

In conclusion, from the above, the ability of early children to absorb information through

digital media is very high, which speeds up the learning process. Technology allows them to access vast amounts of information in an interactive and engaging way. However, it is still necessary to ensure that religious values remain the basis for the use of this technology, as expressed by Mrs. Kusriyati and Mrs. Dian Sri Lestari.

c. **The Tendency of Children to Think Logically, Analytically, and Openly**

Next is the tendency of early childhood children to think logically, analytically, and openly when introduced to digital technology. Technology allows children to explore various concepts through applications, educational games, and other visual and interactive media (Maulana Ahmad et al., 2024). This encourages the child to question, analyze and find solutions independently, which contributes to the development of a more logical and analytical way of thinking. In the Islamic education space, this ability can be used to understand religious teachings more critically and openly.

Mrs. Dian Sri Lestari, principal of RA Rumah Kreatif Wadas Kelir explained that digital technology has helped children in her institution to think more logically and analytically.

"We often use prophetic stories to teach morals. Usually we take the children to watch a movie together, and the children begin to ask more critically about the background of the story, so there is a simple discussion that is very interesting." (Dian Wahyu Sri S., interview, 2024).

In line with this, Mrs Dian Sri Lestari, also added that the children in her school have a tendency to think more openly and analytically through the use of digital technology.

"Children are also more open in sharing information they find, especially from technology, both from videos and content they watch. For example, content about the Palestinian and Israeli conflict. I often see children discussing and arguing with each other about what is happening in Palestine. They told each other that it was the Palestinians who were right and Israel who should be fought. Even though we have never told directly about the information but the children already understand, so we just have to add it and straighten out the simple discussion again," (D. Sri Lestari, Interview, 2024).

With this ability to think logically, analytically, and openly, technology has become an important tool in developing children's way of thinking more deeply. This not only helps them in understanding academic learning but also in understanding religious teachings in a more rational and critical way.

2. **Challenges of Digital literacy in the Early Childhood Islamic Education Space**

a. **Information Overload**

In the context of digital literacy, especially in Early Childhood Islamic education, information overload is one of the main challenges that need to be considered. Information overload refers to a situation in which an individual-both educator and learner- is exposed to too much information in a short period of time, making it difficult to sort out what is relevant and what is not (Rivki & Bachtiar, 2022). Early children, who are supposed to focus on cultivating Islamic morals and values, are often confused when accessing abundant digital information. The inability to analyze this information can lead to confusion, and potentially even incorrect internalization of desired values.

In an interview with Mrs. Siti Nurrochmah, head of RA Muslimat NU Masyithoh 13 Sokaraja, he explained that:

"Children are now very easy to get information from the internet, but they do not yet have the ability to sort out what is good and what is bad. It's our job, teachers and parents, to guide them."

He emphasized the importance of mentoring and limiting access to sources of information that are not suitable for early childhood consumption. According to him, the role of teachers in providing clear signs regarding the use of digital technology is very necessary in Islamic education.

Ibu Siti's opinion is in line with previous research which states that excess information can hinder the learning process, because children receive more information that is not directly related to the material being studied (Pratiwi & Pritanova, 2017). Therefore, educators in early childhood Islamic educational institutions need to integrate more

targeted digital literacy strategies, for example by using applications or platforms that provide Islamic content tailored to the child's age.

b. Moral Degradation

One of the biggest negative impacts of the rise of digital access without good assistance is moral degradation. Early childhood is the most vulnerable group in absorbing information from their environment, including from digital media (Rivki & Bachtiar, 2022). When children unknowingly access content that is incompatible with Islamic values, such as shows that promote violence, a free lifestyle, or disrespectful attitudes, this can change their behavior. The process of internalizing Islamic morality, which should be formed from an example, is hampered by exposure to information that is not in line with religious norms.

Mrs Dian Sri Lestari, head of RA Rumah Kreatif Wadas Kelir, in an interview expressed her concern about this problem.

"We often see a change in attitude in children after they watch too many shows on the internet. Sometimes we become rude, unruly, and imitate inappropriate words that even we as teachers have never heard before."

According to him, the role of Islamic education in schools is to strengthen moral values, but this is difficult to achieve if children are exposed to negative content from digital media without supervision.

In line with the statement pointed out that uncontrolled consumption of digital media in early childhood can affect their social behavior, making them more easily affected by trends that are not in line with Islamic values. Therefore, Islamic schools should take preventive measures in maintaining the morals of students through strict control of digital media access in schools, as well as providing parents with an understanding of the importance of supervision at home.

c. Digital Distraction

In addition to the problem of information overload, digital disruption is another significant challenge. Digital distraction occurs when children's attention is distracted by various non-educational content that can be easily accessed through digital devices (Rivki & Bachtiar, 2022). This disorder not only has an impact on children's concentration while studying, but can also damage focus in efforts to internalize Islamic values taught in schools.

Mrs. Kusriyati, head of kindergarten Diponegoro 173 Teluk Purwokerto, in an interview explained,

"We often get complaints from parents, that children often really play cellphone when at home, so it's hard to be invited to study, if you study you also have to finish quickly because you want to play cellphone again,"

She added that although smartphones can be an effective tool in learning, but without good supervision and control, smartphones actually become a very strong source of distraction. To combat digital disruption, some schools have implemented strict restrictions on the use of digital devices. At Ra Rumah Kreatif Wadas Kelir, for example, children are only allowed to use smartphones on certain days under the supervision of teachers, and the content displayed is carefully selected. Ibu Dian also stressed the importance of parental involvement in managing screen time at home. Teachers and parents should work together to ensure children are not exposed to inappropriate content.

Conclusion

The advancement of digital technology has provided great opportunities for Early Childhood Islamic education, especially in terms of technological adaptation, the ability to absorb information quickly, as well as the tendency of children to think logically, analytically, and openly. Technology not only facilitates more engaging and interactive learning, but also helps children develop critical and independent thinking skills. However, it is important to balance the use of technology with the teaching of religious values so that children are not only proficient in technology but also have good character and morals. Collaboration between technology and religious education must be supported by appropriate curricula

and in-depth understanding from educators, as demonstrated in interviews with principals and teachers at RA Muslimat NU Masyithoh 13 Sokaraja, RA Rumah Kreatif Wadas Kelir, and Tk Diponegoro 173 Teluk Purwokerto.

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