

DIGITAL LITERACY OF MADRASA ALIYAH STUDENTS IN PADANGSIDIMPUAN

LITERASI DIGITAL SISWA MADRASAH ALIYAH DI PADANGSIDIMPUAN

Sri Wahyuni Hasibuan¹, Irmasani Daulay², Nurainun Ritonga³, Siti Rahma Harahap⁴

^{1,2,3,4}Sekolah Tinggi Agama Islam Negeri (STAIN) Mandailing Natal, Jl. Prof. Dr. Andi Hakim Nasution,
Panyabungan 22978, Indonesia

e-mail: sriwahyunihsb@stain-madina.ac.id

ABSTRACT

This study aims to describe the implementation of digital literacy by madrasa aliyah students on Islamic/dakwah material, madrasah aliyah students' understanding of digital literacy, and the obstacles faced by madrasa aliyah students in implementing digital literacy on Islamic/dakwah material in Padangsidimpuan City. This research was conducted on students at MAN 1, MAN 2 Model, MAS YPKS, and MA An Nuur located in Padangsidimpuan. The research method is descriptive qualitative. Data were obtained by interviewing students and religion teachers, taking documentation and making observations. The results of the study are that the implementation of digital literacy of students at the Padangsidimpuan aliyah madrasah has been applied in finding Islamic/dakwah material (internet searching), understanding how web browsers work (hypertext navigation), being able to evaluate material read or watched (content evaluation) and being able to compile knowledge owned to be applied (knowledge assembly). Students' understanding of the definition of digital literacy in madrasah aliyah in Padangsidimpuan City is still not good. In contrast to technical skills and processing information, students can understand the use of digital in literacy. They can search for Islamic information via the internet network, are able to download and share some of the information they receive. The obstacles faced by students are quotas or internet packages, too many advertisements when watching Islamic/dakwah videos, and many different opinions from experts that make them confused.

Keywords: Digital Literacy, Internet Searching, Hypertextual, Content Evaluation, Knowledge Assembly

ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan implementasi literasi digital yang dilakukan siswa madrasah aliyah pada materi keislaman/dakwah, pemahaman siswa madrasah aliyah terhadap literasi digital, dan kendala yang dihadapi siswa madrasah aliyah dalam penerapan literasi digital materi keislaman/dakwah di Kota Padangsidimpuan. Penelitian ini dilakukan pada siswa di MAN 1, MAN 2 Model, MAS YPKS, dan MA An-Nur yang berlokasi di Padangsidimpuan. Metode penelitian adalah deskriptif kualitatif. Data diperoleh dari wawancara siswa dan guru, dokumentasi dan observasi. Hasil penelitian adalah implementasi literasi digital siswa di madrasah aliyah Padangsidimpuan telah diterapkan dalam menemukan materi/dakwah keislaman (internet searching), memahami cara kerja web browser (navigasi hypertext), mampu mengevaluasi materi yang dibaca atau ditonton (evaluasi konten) dan mampu mengkompilasi pengetahuan yang dimiliki untuk diterapkan (kompilasi pengetahuan). Pemahaman siswa tentang definisi literasi digital di madrasah aliyah di Kota Padangsidimpuan masih kurang baik.. Berbeda halnya dengan kemampuan teknis dan mengolah informasi, para siswa dapat memahami penggunaan digital dalam berliterasi. Mereka dapat mencari informasi keislaman melalui jaringan internet, mampu mengunduh dan membagikan beberapa informasi yang diterima. Kendala yang dihadapi mahasiswa adalah kuota atau paket internet, banyaknya iklan saat menonton video/dakwah Islami, dan banyaknya perbedaan pendapat dari para ahli yang membuat bingung.

Kata Kunci: Literasi Digital, Pencarian Internet, Hypertextual, Evaluasi Konten, Penyusunan Pengetahuan

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INTRODUCTION

The presence of digital technology has had an impact on the madrasa education scheme and the relationship between madrasas and the community. Apart from reasons for efficiency in learning and broad access to information, the digital world has become a new means of obtaining and conveying religious ideas and opinions. In the field of education, good digital technology can play a role in developing students' knowledge about learning and encouraging their curiosity and creativity.

Unfortunately, many anticipate the presence of digital technology in madrasa because it has a negative impact. Negative impacts that can arise from using digital devices include being too focused on using cellphones, the emergence of pornographic content, violent content, hacking and so on. The impact can affect the interaction and learning of students like the face-to-face tradition in the classroom. In addition, it can also reduce the courtesy of students to teachers. However, the negative impacts that arise can be minimized with good digital literacy skills. This is the task of the teachers, bearing in mind that the development of the times continues to spin in just a matter of seconds.

Digital literacy according to Paul Gilster in (Susilo, 2019) is ability to use technology and information from digital devices effectively and efficiently various contexts such as academic, career and everyday life. The characteristics of digital literacy do not only refer to various operation and use skills information and communication technology devices technology (hardware and device platform software), but also for the process of "reading" and "understand" the contents of technological devices as well the

process of "creating" and "writing" into a new knowledge.

As is well known, social media users in Indonesia continue to increase from year to year. According to the results of (Social, 2020) there are 175.4 million internet users in Indonesia and 160 million active users. Compared to 2019, this year there have been an increase of 10 million Indonesians who are active on social networks. From Indonesia's total population of 272.1 million people, this means that 64% of Indonesia's population has access to cyberspace. Percentage of internet users aged 16 to 64 who use several types of devices including: mobile phone (96%), smartphone (94%), non-smartphone (21%), laptop or desktop computer (66%), tablet (23%), game consoles (16%), virtual reality devices (5.1%).

Based on the results of a survey conducted at the madrasah aliyah in Padangsidempuan City, students have not maximally used digital devices in finding or understanding Islamic/dakwah material. Some students still use books as their main source of reading and information. Facilities or infrastructure in madrasas such as wifi are not only available in several parts of madrasas such as administration rooms, teachers' rooms, principal's rooms and libraries.

(Nilam Pangestika, Muhammad Faizin, 2022) state that there are several variables that can affect how the learning system process takes place, including teacher and student variables, facilities, tools, available media, and the environment, as well as individual differences such as intelligence, character, and background. Another issue is choosing the appropriate subject matter which suitable for students' psychological and academic levels, challenges in changing

subject matter in various ways so students don't get bored quickly, challenges in finding learning resources and tools, challenges in evaluating and time.

In practice, students learn not only from study books, but also from other activities that are useful for developing students' potential, interests and talents. These activities include tambourine training, madrasah poetry and preaching. Madrasa is one of the main pillars of the educational tradition and Islamic da'wah media in Indonesia. In developing da'wah or Islamic materials, students must have good digital literacy skills especially with easy access to receiving information, if it not accompanied by good digital literacy then the wrong information that accepted by society will have a negative impact. Therefore, researchers are interested in conducting research with the title "Digital Literacy of Madrasah Aliyah Students in Padangsidempuan City."

This study aims to describe the implementation of digital literacy by madrasa aliyah students on Islamic/dakwah material, madrasah aliyah students' understanding of digital literacy, and the obstacles faced by madrasa aliyah students in implementing digital literacy on Islamic/dakwah material in Padangsidempuan City.

Implementation is a dynamic process in which implementation policy makers are involved in various activities to ultimately achieve results that are in accordance with the intended policy goals or objectives. To engage effectively in social life, a person must have the skills, mindset and interest to manage, access, analyze and evaluate information as well as integrate and evaluate digital media. They must also be able to produce digital content and communicate with others (Setyaningsih et al., 2019).

Digital literacy according to Paul Gilster is ability to use technology and information of digital devices effectively and efficiently in various contexts such as academic, career and everyday life. Digital literacy does not only refer to operation skills and the use of various information and communication technology devices technology (hardware and device platforms software), but also for the process of reading and understanding the presentation of the contents of technological devices as well the process of "creating" and "writing" into a new knowledge.

(Gilster, 1997) groups them into four core competencies that a person needs to have, so that it can be said to be digitally literate, including:

a) Internet Searching

Competence is a person's ability to use the internet and perform various activities on it. This competency includes several components, namely the ability to search for information.

b) Hypertextual Navigation

This competency is a skill to read and dynamically understand the hypertext environment. So one is required to understand the navigation (guidance) of a hypertext in a web browser which is of course very different from the text found in textbooks. This competency includes several components including: knowledge of hypertext and hyperlinks and how they work, knowledge of the difference between reading textbooks and browsing via the internet, knowledge about how the web works includes knowledge of bandwidth, http, html, and url, as well as the ability to understand the characteristics of web pages.

c) Content Evaluation

This competency is a person's ability to think critically and provide an assessment of what is found online accompanied by the ability to identify the validity and completeness of information referenced by hypertext links. This competency includes several components, including: the ability to distinguish between display and information content, namely the user's perception in understanding the appearance of a visited web page, the ability to analyze the background of information on the internet, namely the awareness to explore more about sources and makers of information, the ability to evaluate a web address by understanding various domains for each institution or a particular country, the ability to analyze a web page, and knowledge of FAQs in a newsgroup/discussion group.

d) Knowledge Assembly

This competency is an ability to organize knowledge, build a collection of information obtained from various sources with the ability to collect and evaluate facts and opinions properly and without prejudice. This is done for certain purposes both education and employment. This competency includes several components, namely: the ability to search for information via the internet, the ability to create a personal newsfeed or notification of the latest news which will be obtained by joining and subscribing to news in a newsgroup, mailing list or other discussion group that discusses a topic. according to specific needs or topic issues, the ability to cross-check or re-check the information obtained, the ability to use all types of media to prove the truth of the information, and the ability to compile sources of information obtained on the internet with real life that is not connected to the network.

Understanding digital literacy is defined as the ability to extract ideas explicitly and implicitly from various digital information sources. This understanding is the most basic principle in developing digital literacy. Students' understanding of digital literacy is manifested in understanding terms, technical skills and the ability to process information.

In implementing digital literacy by students, there are several obstacles that arise, namely lack of awareness of the importance of digital literacy, limited access and infrastructure, negative content and hoaxes, lack of skills and knowledge, rapid changes in technology.

RESEARCH METHODS

The research methodology is descriptive qualitative method. The research subjects were 15 students in MAN 1, 15 students in Model 2 MAN, 7 students in MA An Nuur and 5 students in MAS YPKS. There are three forms of data collected through this study, namely (1) verbal data, namely data from interviews with students and religion teachers and religion guidance teacher (rohis teacher) related to the research focus, (2) subject behavior (informants), namely data obtained from observations related to the research focus. and (3) documentation analyzing facts that are arranged logically from written and unwritten documents that contain instructions. Technique of analysis data was data reduction, data display, and drawing conclusions

RESULT AND DISCUSSION

The ability to use digital literacy must also be possessed by educational people in the current technological era. Abilities include the ability to use the internet as a digital learning

medium, knowledge of various applications on the internet and technical skills in the use of digital media devices. The use of digital literacy in learning will be able to recommend active learning that is innovative, creative, effective and fun. Apart from that, one of the advances in digital-based learning technology is that students can access information that is educational and more up to date. Activities can be carried out using digital devices, such as computers, laptops or smartphones connected to an internet network that can be easily accessed by madrasah residents. Individuals' digital literacy must be able to be utilized properly. So there is no reason not to use digital even if you use a cellphone or laptop. Today's technological sophistication has launched the latest technological tools so that humans must have good digital literacy so that all digital technology tools can provide good access to benefits for their users.

Digital learning is basically learning that directly involves the creative use of digital devices during learning activities, and digital technology is also often referred to as e-Learning. Analyzing the use of digital devices gives teachers the opportunity to design more interesting learning to be presented to students, where the learning design can combine face-to-face learning or can also be completely online in the context of what we design to be delivered directly to students.

This study aims to describe the implementation of digital literacy in understanding da'wah/Islamic materials for Madrasah Aliyah students in Padangsidempuan City, to find out students' understanding of digital literacy and to find out the obstacles students face in implementing digital literacy. This research was conducted at 4 Madrasah Aliyah in

Padangsidempuan City, namely Padangsidempuan MAN 1, Padangsidempuan Model 2 MAN, An Nuur MA and Padangsidempuan YPKS MAS during the period of May and July. The research subjects were 15 people in MAN 1, 15 people in Model 2 MAN, 7 people in An Nuur MA and 5 people in MAS YPKS.

1. MAN 1 Padangsidempuan

The research objects at MAN 1 Padangsidempuan were 15 students from XI MIA. Students' activities in digital literacy activities were observed and then they were interviewed to obtain accurate data. Apart from students, a religion teacher named Pak Daud Lubis was also interviewed regarding the implementation of literacy in madrasa.

Based on the results of observations made at MAN 1 Padangsidempuan, it was seen that madrasah facilities and infrastructure support the students' digital literacy movement. The facilities and infrastructure which available in madrasahs included infocus, loudspeakers. LCDs were installed in several classrooms and teachers' rooms. However, internet facilities were only provided in a number of school locations such as the principal's room, administration room, teacher's room and library. Madrasa had facilities and infrastructure to support students' digital literacy. Facilities and infrastructure in the form of a computer lab, infocus and LCD in the classroom. Internet facilities were only available in a number of madrasah rooms such as the head of madrasah, administration room. Officer of Friday prayer activities were also appointed students, other religious activities such as scientific discussions, da'wah evenings and yasinan were also held here. The difference is that MAN 1 does not have a vice principal for religion.

Based on the results of interviewed by some students, it was seen that Interviews conducted with spiritual mentors as well as religious teachers said "students' digital skills were good, such as semester exams using a computer, the implementation of learning also sometimes takes videos from YouTube, and even every Friday prayer, students become imam preachers.

Implementation of students' digital literacy in understanding da'wah/Islamic material.

a. Internet searching

In internet searching competency, MAN 1 students are in the very good category. Based on the results of interviews conducted with students of the Padangsidempuan MAN 1 about how they use computers and use the internet. Students' ability to operate hardware, such as turning on the computer, using the mouse, keyboard and printer is very good. They have learned to use computers in junior high school. Students also often browse Islamic/dakwah material to find out in detail about the topic being studied and as learning material. To find Islamic material, they usually access the internet 2 or 3 times a week.

"I access the internet to look for da'wah/Islamic material depending on if something is not understood and look for it on the internet" (Mawar Siregar)

The ability of students to operate digital devices were very good, even though they had not been used optimally. In general, students had moved on digital literacy.

b. Hypertextual Navigation

In hypertextual navigation competency, MAN 1 students are in the very good category. The results showed that students mastered how to find good Islamic/dakwah information, they understood

how to download, installed several applications. In accessing da'wah/Islamic material, students always use terms or keywords that are almost the same as the topic of the problem and open a browser (internet explorer, Mozilla and also chrome. They also shared Islamic articles through wa groups or other social media. When they found an interesting article, students shared it with others through social media, namely through the WhatsApp group. They also downloaded articles that are appropriate to the topic because they can re-read them when needed.

I searched for Islamic articles from Google and downloaded them so that I could add to my knowledge of Islam what was not known, I became aware of Islam and shared it with the WA group so that everyone could know or understand their knowledge" (Mawar Siregar)

C. Content Evaluation

In content evaluation competency, MAN 1 students were in the good category. The results showed that students of MAN 1 and MAN 2 Models could sort Islamic information/material according to their needs. When looking for Islamic material or viewing broadcasts in the form of teacher lectures, students could sort out good and bad information because students had learned the material from the teacher. However, not all students can do it. There were also some students who didn't really understand a material so they needed a religion teacher's guide.

d. Knowledge Assembly

In knowledge assembly competency, MAN 1 students are in the quite good category. As explained above, MAN 1 students could produce or provided new information and shared it with other friends.

They gained knowledge about Islam and shared it through religious discussions and Friday sermons. When looking for Islamic material, students were familiar with the existence of ebooks and related articles that could be downloaded. Some students used ebooks as a reading source because they think it is more efficient and economical.

2. MAN 2 Model Padangsidimpuan

The results of observations made on MAN 2 Padangsidimpuan Model students regarding the application of digital literacy in the madrasa environment were not much different from MAN 1 Padangsidimpuan. The use of computers, the internet and digital literacy support facilities is almost the same. Religious activities carried out in madrasas such as congregational Friday prayers and religious discussions are also the same. The difference is that in MAN 1 there is no deputy head of the madrasah for religious affairs, but in MAN 2 Model they have a deputy head of the madrasah for religious affairs.

Religious activities at MAN 2 Model are very good. In fact, this madrasa added 1 vice principal, namely the vice principal for religious affairs. With the deputy head of the religious field, the roles of religious students and teachers in carrying out every religious activity are greatly supported and empowered. One of them is in Friday prayer activities in congregation. Each class takes turns carrying out Friday prayers based on the schedule that has been made. Students become muezzins, imams, and preachers. At the time of the Friday prayers, students carry out yasinan activities. In addition, there are religious discussion activities that are held once a week. Here students will share information about religion which will be guided by 1 teacher/ustad. The material in this discussion activity includes fardu kifayah, funeral

prayers, tasawuf morals, other religious knowledge.

Another activity is the preaching night. This activity is carried out once every 1 semester at the time of admission of new spiritual members. The activities carried out are almost the same as religious discussions except that they are carried out at night. Students who join rohis (religious organizations) are trained to become ustad. They will be taught how to look for da'wah material, filter out correct and incorrect information, and then they will be trained to present it in public. There are also mass rukiyah activities and routine spiritual gatherings. This was obtained based on the results of interviews with spiritual mentors (religious organizations) at madrasas, namely Pak Ilham Syarif, M.Pd.

Implementation of students' digital literacy in understanding da'wah/Islamic material.

a) Internet Searching

Search activities on the internet are usually carried out by someone on the basis of encouragement of information needs that must be met. The ability to search the internet is described by (Gilster, 1997) as an ability to use the internet and carry out various activities such as: ownership and use of e-mail accounts, reading online news, using the internet for assignments, online transactions and utilizing multimedia such as accessing YouTube, downloading and so on. This competency is an individual's ability to search for information using the internet and carry out various activities in it.

In internet searching competency, MAN 2 students were in the very good category. Students' ability to operate hardware, such as turning on the computer, using the mouse, keyboard and printer were very good.. Students also often browse

Islamic/dakwah material to find out in detail about the topic being studied and as learning material. To find Islamic material, they usually access the internet 3 or 4 times a week.

"Yes, because at the rohis we also receive Islamic/dakwah articles 4 times a week and that is included in the routine at the rohis" (Dzaky Harahap).

The ability of students to operate digital devices were very good, even though they had not been used optimally. In general, students had moved on digital literacy.

b. Hypertextual Navigation

In hypertextual navigation competency, MAN 2 students were in the very good category.

"Yes, I downloaded the article because I think the article is important and can broaden my Islamic knowledge. Sometimes I share it with the wa group." (Aini Zahra)

They were used to using search engines like google, yahoo. In addition, students also often look at YouTube to get information related to the material they are looking for. From the results of the interview, it means that students use several types of social media in watching Islamic videos. They have several choices of media that become materials in finding material. If they want to see videos with a long duration, students prefer to watch YouTube, while looking for short videos and get to the point, they look at social media such as Instagram and Tiktok.

c. Content Evaluation

In content evaluation competency, MAN 2 students were in the good category. The results showed that students of MAN 1 and MAN 2 Models could sort Islamic information/material according to their needs. When looking for Islamic material or viewing

broadcasts in the form of teacher lectures, students could sort out good and bad information because students had learned the material from the teacher. However, not all students can do it. There were also some students who didn't really understand a material so they needed a religion teacher's guide. Therefore, the evaluation of the information content of] MAN 2 Model students were good category.

d. Knowledge Assembly

In knowledge assembly competency, MAN 2 students were in the quite good category. As explained above, MAN 2 Model students could produce or provided new information and shared it with other friends. They gained knowledge about Islam and shared it through religious discussions and Friday sermons. When looking for Islamic material, students were familiar with the existence of ebooks and related articles that could be downloaded. Some students used ebooks as a reading source because they think it is more efficient and economical. Therefore, the preparation of MAN 2 Model student knowledge is quite good.

3. MAS YPKS Padangsidimpuan

MAS YPKS had facilities and infrastructure to support students' digital literacy. Facilities and infrastructure in the form of a computer lab, infocus and LCD in the classroom. Internet facilities were only available in a number of madrasah rooms such as the head of madrasah, administration room. Religious activities carried out at MAS YPKS include memorizing the letters in juz 30. This memorization will later be heard during the flag ceremony. However, for congregational Friday prayers, they do not carry them out at the madrasah because the madrasah facilities didn't have mosque.

Implementation of students' digital literacy in understanding da'wah/Islamic material.

a. Internet Searching

In internet searching competency, MAS YPKS students were in the very good category. The results of interviews conducted with MAS YPKS students were that the students could operate computers well. Madrasa also had computer labs. Semester examination were also carried out on a computer basis. When accessing the internet, students preferred to access the internet to search for Islamic/da'wah material.

b. Hypertextual Navigation

Digital literacy is the ability to read and understand information in the form of hypertext or multimedia formats (in the form of text, images, audio and video). The diversity of forms of information generated from digital sources makes literacy skills needed to understand it. Nelson (Gibbins, 2014) explains that hypertext is a series of texts connected by other links to allow different choices for readers on an interactive screen. In other words, this competency is an individual's ability to read and understand navigation properly and accurately in a hypertext environment on a web browser where the text is very different in any book.

In hypertextual navigation competency, MAS YPKS students were in the good category. At MAS YPKS and MA An Nur students could operate a computer and could use a browser (Mozilla, Chrome) to access Islamic material usually 2 or 3 times a week. However, students don't always download and share this material to WhatsApp groups. They also used social media such as YouTube to view Islamic studies.

Judging from the research data, it shows that the ability to read and understand

information in the form of hypertext or multimedia formats is quite good. Student competence in operating digital devices is already good, it would be even better if it was balanced with students' knowledge in filtering incoming information and news. Students' experience in considering information content needs to be further developed by providing optimal digital literacy, so that it has an impact on students' knowledge and skills in making the most of technological devices.

c. Content Evaluation

(Gilster, 1997) revealed that the ability to evaluate content is the ability to think critically and provide an assessment of what is found online accompanied by the ability to identify the validity and completeness of information referenced by hypertext links that one has. Critical evaluation is important in digital literacy, one must develop their evaluative tendencies when accessing digital content. Having a deep mindset is very important when interacting with accurate online sources. Without critical evaluation, someone will be more easily directed by technology than those who direct technology.

In content evaluation competency, MAS YPKS students were in the low category. Different findings were obtained for MAS YPKS students. The students had not provided an assessment of what was found online accompanied by the ability to identify the validity and completeness of the information available. When viewing video content about Islam, students did not share the video and do not discuss Islamic studies in the video with religious teachers or friends from an Islamic organization. Therefore, students' evaluation of information content is still low.

d. Knowledge Assembly

Knowledge assembly is important for teenagers to have in relation to the activity of

assembling information obtained from various sources to create new knowledge. (Gilster, 1997) explains that knowledge compilation is the ability to organize knowledge and build a collection of information obtained from various sources, accompanied by the ability to collect and evaluate facts and opinions well and without prejudice.

In knowledge assembly competency, MAS YPKS students were in the low category. This is different from MAS YPKS students who did not share their Islamic knowledge with other students. This was because students did not have a forum for sharing knowledge such as routine religious studies or religious organizations apart from learning activities in class. Religious extracurricular activities such as spiritual activities exist but were not optimal and were not well empowered. Students were looking for Islamic material only because they received assignments from religious teachers in Islamic religious subjects. Therefore, students' knowledge formation is still low.

4. MA An Nur

The results of observations made at MA AN Nur regarding the facilities and infrastructure supporting digital literacy were internet facilities only in several madrasa rooms such as the madrasa head's room, administration room, teacher's room and library. In implementing digital literacy, students still use it minimally because not all students have internet quota every day. There are also some of them who don't bring cellphones to the madrasah. Implementation of students' digital literacy in understanding da'wah/Islamic material.

a. Internet Searching

In internet searching competency, MA An Nur students were in the very good category. The results of interviews conducted

with MA An Nur students were that they did not access the internet too often to look for Islamic/preaching material. Some students preferred to ask the teacher things they don't know. To operate a computer, students could do it well. There was a computer lab that is used every week for studying or searching for material on the internet. Some students were even allowed to bring laptops into class.

b. Hypertextual Navigation

In hypertextual navigation competency, MA An Nur students were in the good category. At MA An Nur students could operate a computer and could use a browser (Mozilla, Chrome) to access Islamic material usually 2 or 3 times a week. However, students don't always download and share this material to WhatsApp groups. They also used social media such as YouTube to view Islamic studies.

c. Content Evaluation

In content evaluation competency, MA An Nur students were in the low category. Different findings were obtained for MA An-Nur] students. The students had not provided an assessment of what was found online accompanied by the ability to identify the validity and completeness of the information available. When viewing video content about Islam, students did not share the video and do not discuss Islamic studies in the video with religious teachers or friends from an Islamic organization. Therefore, students' evaluation of information content is still low.

d. Knowledge Assembly

In knowledge assembly competency, MA An Nur students were in the low category. students who did not share their Islamic knowledge with other students. This was because students did not have a forum for sharing knowledge such as routine religious

studies or religious organizations apart from learning activities in class. Religious extracurricular activities such as spiritual activities exist but were not optimal and were not well empowered. Students were looking for Islamic material only because they received assignments from religious teachers in Islamic religious subjects. Therefore, students' knowledge formation is still low.

Based on the results of observations made, students search for Islamic/da'wah material via the internet network in the school environment not only during learning time but also during their free time. The free time they used includes breaks, when classes were free and they also used the time when there were religious discussions in the prayer room. The device used in general is a cellphone and uses a private network, not WiFi. This is because only a few areas use WiFi, such as the teacher's room, principal's room, library and administration.

For example, there was a topic about zakat. In this case, students looked for material related to zakat on the internet. They used the internet as a companion to the material obtained from textbooks. The students thought they preferred to search for Islamic material via the internet because they could search specifically by using keywords for what they wanted to know. In contrast to textbooks, there was not necessarily a discussion of the material we wanted to get. The use of the internet network was very necessary to obtain information to develop their understanding of zakat itself.

The purpose of students in accessing the internet was to obtain information about Islam, helped in doing Islamic religious study assignments, term papers and other assignments. Internet access was not only for finding religious knowledge quickly and

easily but also for entertainment such as music, games and films.

Technological sophistication is able to package literacy in different forms, books that were originally written on paper with technological advances can be converted into digital form, which we currently call digital literacy. This digital literacy is one of the results of technological developments in this era of globalization (Sulianta, 2020) . Advances in technology and information bring changes to students as a generation that is able to adapt to the times, entering the era of digital literacy. This development is expected to be able to protect students more wisely in utilizing their digital abilities, especially in the field of education.

In the educational context, good digital literacy also plays a role in developing one's knowledge of certain subject matter by encouraging students' curiosity and creativity. This digital literacy is also applied by students directly according to learning material, either by presenting videos or content material that attracts interest and motivation to learn for students using digital literacy.

The development pattern is that information from the internet becomes the basis or initial information, then students made comparisons with other media, or other sources on the internet, and if they still had doubts students discussed it with people who know more, teachers, coaches, friends or parents. Only then, they considered whether to receive the information, practice it or shared it with friends at the madrasah.

The current development of information causes an inevitable information frenzy. This makes sense considering the increasing amount of information available to the wider community, whether written,

recorded or digital (Moh Yamin, Supiana Supiana, 2022). As a result, society can grow and become trapped in millions of increasingly complex pieces of information. To prevent this, everyone needs to be able to find, use, evaluate and develop new knowledge effectively and efficiently. Students must be able to find and classify information so as not to misunderstand it. In this case, students are expected to acquire information literacy, acquire critical thinking and problem solving skills, and motivate them to learn. Information exploration skills are a supporting force and can be a kind of tool for more consistent and efficient learning (Gracia Gampu, Marien Pinontoan, 2022).

The compilation of knowledge is carried out using one's own thoughts and the help of others (discussion) to form new knowledge. Literacy in the digital era requires awareness within a person to care about other people to discuss and get help.

Usually students can only get information from the teacher. However, along with the times and the sophistication of technology, now information is not only obtained from teachers, but students can independently access information. In studying Islamic/dakwah material at madrasas, students can find out information from digital media related to religion such as ebooks, learning videos, television, the internet, etc.

II. Student Understanding of Digital Literacy
Understanding digital literacy is defined as the ability to extract ideas explicitly and implicitly from various digital information sources. This understanding is the most basic principle in developing digital literacy.

1. MAN 1 Padangsidimpuan

Understanding of digital literacy terms among MAN 1 students were in the good category and understanding of literacy in

technical skills and processing information for MAN 1 students were also in the good category. According to the results of interviews with MAN 1 students, many students do not know or do not understand what digital literacy is. There are several students who understand that digital literacy is reading articles on the internet. More of them don't understand and are hearing about digital literacy for the first time. However, there are also students who explain that digital literacy is reading articles via the internet or using digital devices. Overall, students' understanding of the meaning of digital literacy in madrasah aliyah in Padangsidimpuan City is still not good.

2. MAN 2 Model Padangsidimpuan

Understanding of digital literacy terms among MAN 2 Model students were in the good category and understanding of literacy in technical skills and processing information for MAN 2 Model students were also good. The result were similar to MAN 1. Students' understanding of digital literacy is manifested in understanding terms, technical skills and the ability to process information. Students' understanding of the term digital literacy, most students do not understand the meaning of digital literacy.

3. MAS YPKS

Understanding of digital literacy terms among MAS YPKS students were in the fair category and understanding of literacy in technical skills and processing information were in the fair category. Students also do not understand the definition of digital literacy. Students think that digital literacy is reading and the internet, there are even some students who have just heard the term.

4. MA An Nur

Understanding of digital literacy terms among MA An Nur students were in the fair

category and understanding of literacy in technical skills and processing information were in the fair category also.

In contrast to technical skills and processing information, students can understand the use of digital in literacy. All students, both MAN 1, MAN 2, MAS YPKS, and MA An Nur can search for Islamic information via the internet network, are able to download and share some of the information they receive. If there is information obtained from teachers and from the internet, students can also weigh and process good and bad information.

Digital literacy is the use of digital means to explore various references to increase knowledge. The use of digital literacy emerged later, when the Indonesian people began to increase their need to access information quickly via the internet. In Islamic communities, the use of digital literacy is increasing to access religious studies. Digital literacy arises because of the need to access and process information, in the form of audio, audio-visual and note content. In the context of madrasas, digital literacy is useful to support the learning process, with the aim of creating human resources who have competence in the field of technology (Husna & Novita, 2022)

If it is related to the definition, most students do not understand the meaning of digital literacy. It's different in practice, they have used digital literacy in understanding Islamic/dakwah material. The use of digital literacy is not only in the classroom during religious lessons but also outside the classroom such as religious activities in schools. Students actively seek Islamic information by reading articles, downloading and sharing interesting articles. Students also watch videos of Ustad lectures from various

social media such as YouTube, Instagram and Tiktok.

In the world of education, students are one of the users of information. The information needed by students is not only in printed format. The Internet began to present information in a different format, namely digital. This information is presented through various facilities provided by the internet, such as websites, weblogs, or mailing lists. To achieve maximum learning outcomes in the learning process, digital literacy does not only require someone to use digital devices properly, but also must understand everything related to digital technology.

Digital literacy skills must not only be mastered by students, but must also be possessed by all elements related to education, especially teachers and students. According to (Rayinda, Prayogi, 2021) students' digital literacy abilities are closely related to students' ability to use digital media to communicate and obtain and convey information based on pedagogical principles while being aware of their influence on the methods used in education. Students' skills in using information and communication technology are of course very necessary in the learning process both in the classroom and outside the classroom. The ability of someone to use technology well and wisely is what is called digital literacy.

(Santrock, 2012) explains that students' adolescence is also a period of critical thinking. Where cognitive changes that enable increased critical thinking in students include four things, namely: 1) increased speed, automation and capacity in processing information, which allows the use of information obtained to be used for other purposes; 2) broader knowledge content in various fields; 3) increased ability to construct

new combinations of knowledge; and 4) more extensive and spontaneous use of strategies or procedures in applying or acquiring knowledge, such as planning, considering various alternatives, and cognitive monitoring.

Students are very interested in internet media because of its speed in getting the information they need, besides that the internet provides sufficient facilities to meet their needs for information. It just needs to be accompanied by an understanding of digital literacy itself. The ability to use strategies or procedures more extensively and spontaneously in applying or acquiring knowledge, such as planning, considering various alternatives, and cognitive monitoring. This means that the empowerment potential that internet media has among students is very potential, as long as there is supervision and control over the content being browsed and teenagers are equipped with skills and morals.

With the efforts of teachers who try to present interesting lessons from varied learning sources, students can improve their learning abilities in the classroom and outside the classroom. But this activity is not complete without being balanced with student competence in the digital field. To encourage a culture of literacy, students also need to be taught to open the window to digital literacy with other efforts that can attract students' interest in trying. For example, teaching students to create an email, then asking students to submit assignments via email. This activity can open a window on students' digital literacy so they want to try.

Another effort is to display electronic books that students can easily obtain on the internet. Read through electronic books then ask students to describe it again using their

own language, written in doc format, and sent via email. So with this activity you can use email as a medium for assignments and collecting tasks. Apart from that, teachers can also access online applications such as schoology and Google Classroom which can be used as a medium for other assignments. This activity will further enrich students' digital literacy, so that students can follow technological developments well and be able to compete in the global world.

III. Barriers faced by students in using digital literacy

Based on the results of data collection, what researchers did was find several obstacles faced by students in implementing digital literacy. The first is the data package or internet quota. Most students have limited internet packages, especially as schools do not provide free internet (wifi) access throughout the school. So students still rely on internet quota independently. Furthermore, when students read and watch Islamic videos, they find that advertisements appear too frequently. Searching takes a lot of time so it often fails to get the information needed.

When viewed in terms of material, the obstacles faced by students are that there is a lot of material that is not yet clear. The information available is not all precise, accurate, and can be accounted for its validity. Students usually find things like this when they view videos on social media such as Tiktok and Instagram. The Islamic videos seen from these 2 social media are usually very short so if they are studied based on the material they get in class, it will show differences. In other words, students are not successful in obtaining relevant information.

Another obstacle faced by students is the many different opinions from experts,

causing confusion. With so many sources of information, it is not uncommon for students to experience confusion in understanding the information that best suits the needs of students, the most accurate and reliable sources (Susilo, 2019). In this case it is necessary to have a skill in analyzing information as well as possible, students need to have information literacy skills. This ability is needed so as not to cause a partial understanding of religion to students. In addition, when looking for Islamic information, assistance from a religious teacher is required.

When viewed from the perspective of facilities and infrastructure, the obstacles found were the limitations of digital devices in madrasas. Some madrasah facilities that must be in every class have also not been fulfilled, such as infocus, wifi, etc.

"In addition to the lack of interest in learning, there are also many who complain about learning constraints when online, namely quotas. The quota if online does not facilitate if in the madrasa environment, the madrasa does not facilitate with WIFI HOSPOT and learning resource centers that can be used by students" (teacher interview about obstacles).

Digital literacy activities are incomplete if they are not balanced with supporting facilities. Computer space and WiFi provision are also needed to access various official sites to filter accurate information. Students also need to know the difference between official and unofficial sources of information, so they don't swallow the information they get.

Many students don't understand electronic books, some don't even know about them. Some students also don't have email, many of whom don't understand how to use it.

Students have also not been taught to use online applications as a means of assigning and collecting assignments. Regarding this presentation, all educators and formal education unit institutions, especially at the elementary level, must respond more quickly so they can keep up with developments in literacy programs (A. Marzuki, 2023). As educators, you must be able to know and understand 21st century education which emphasizes students' critical thinking, problem solving and collaboration (Ahsani, 2021).

CONCLUSION

Based on the results of the research and discussion described in the previous section, it can be concluded that:

1. The implementation of digital literacy for Madrasah Aliyah students in Padangsidempuan on internet searching is very good, in hypertextual navigation is good, in the content evaluation of MAN 1 and MAN 2 Model students is good while MAS YPKS and MA An Nur are still low, and in the preparation of MAN 1 and MAN students' knowledge 2 The model is good, while the MAS YPKS and MA An Nur are still low.
2. Overall students' understanding of digital literacy is not good.
3. The obstacles faced by students in implementing digital literacy are data packages, a lot of material whose truth is not clear and many different opinions from experts, which makes it confusing.

REFERENCES

- A. Marzuki, A. K. (2023). Penerapan Literasi Digital Dalam Pembelajaran Akidah Akhlak Materi Sifat Amanah Siswa Kelas Iv Mi Al Huda Kedungumpul

- Kandangan Temanggung. *Afeksi: Jurnal Penelitian Dan Evaluasi Pendidikan*, Volume 4 N. <https://afeksi.id/jurnal/index.php/afeksi/>.
- Ahsani, et all. (2021). *Penguatan Literasi Digital Dalam Pembelajaran di Sekolah Dasar Indonesia den Haag*. Volume 8 N.
- Gibbins, N. (2014). *Telling Tales: Hypertext Writing*. <http://edshare.soton.ac.uk/13323/>.
- Gilster, P. (1997). *Digital Literacy*. Wiley.
- Gracia Gampu, Marien Pinontoan, J. M. (2022). Peran Lingkungan Madrasah Terhadap Pembentukan Karakter, Disiplin dan Tanggung Jawab Siswa. *Edukatif: Jurnal Ilmu Pendidikan*. <https://doi.org/10.31004/Edukatif.V4i.3090>.
- Husna, M. F., & Novita, T. R. (2022). Literasi Digital dalam Pembentukan Karakter Siswa di MTs Uswatun Hasanah Mirza Kota Binjai. *Jurnal Abdi Masyarakat Indonesia*, 2(1), 227–234. <https://doi.org/10.54082/jamsi.196>.
- Moh Yamin, Supiana Supiana, Q. Y. Z. (2022). Penggunaan Literasi Digital di Madrasah Aliyah Negeri. *Edukatif: Jurnal Ilmu Pendidikan*, Volume 4 N, 6366–6377.
- Nilam Pangestika, Muhammad Faizin, M. (2022). Analisis Faktor Penghambat Implementasi Pembelajaran Daring Siswa SD Inpres 68 Kota Sorong. *Jurnalpendidikdasar.V4i1.2065*. <https://doi.org/DOI:10.36232>.
- Rayinda, Prayogi, R. E. (2021). Kecakapan Abad 21: Kompetensi Digital Pendidik Masa Depan. *Jurnal Manajemen Pendidikan*, 14(2), 144–151.
- Santrock, ohn W. (2012). *Life-Span Development*. McGraw-Hill Education edition.
- Setyaningsih, R., Abdullah, A., Prihantoro, E., & Hustinawaty, H. (2019). Model of Strengthening Digital Literacy Through Utilization of E-Learning. *Journal of ASPIKOM*, 3(6), 1200.
- Social, W. are. (2020). *Survei Penggunaan Digital di Indonesia*.
- Sulianta, F. (2020). *Literasi Digital, Riset dan Perkembangannya dalam Perspektif Social Studies*.
- Susilo, H. (2019). *Pengaruh literasi digital dan literasi informasi keislaman terhadap hasil belajar afektif pendidikan agama Islam peserta didik SMA N 1 Kendal [UIN Walisongo Semarang]*. <http://eprints.walisongo.ac.id/12137/>.