



Prosperity: Journal of Society and Empowerment

Vol. 2 No. 2 (December 2022): 122-135

DOI: 10.21580/prosperity.2022.2.2.10906

---

## Digital Literacy Assistance for Women at Madrasah Technology Al-Khwarizmi Pangalengan, Bandung Regency

Ridwan Rustandi<sup>1\*</sup>

<sup>1</sup>State Islamic University Sunan Gunung Djati Bandung, Indonesia

(ridwanrustandi@uinsgd.ac.id)

### ABSTRACT

This study aims to analyze the process of digital literacy education and assistance for women at Madrasah Teknologi Al-Khwarizmi Pangalengan, Bandung Regency. Specifically, the research focuses on four aspects of digital literacy: digital skills, digital culture, digital ethics, and digital safety. The analysis uses a constructivist paradigm with a qualitative approach. Data were collected through observation, interviews, FGD, LGD, and documentation. Meanwhile, the mentoring process is carried out using an asset-based community development (ABCD) approach. The results of the research and mentoring show that the Madrasah of Technology Al-Khwarizmi is a non-formal educational institution in rural areas that focuses on providing understanding and assistance in digital literacy, especially for women. In addition, digital literacy assistance for women is carried out through increasing computer skills as a preventive measure against digital threats, positive cultural habituation by studying and reading the Qur'an in internet activities, strengthening digital ethics through family counseling and moral development for parents and community involvement and partnership networks in maintaining internet awareness.

**Keywords:** Digital Literacy, Woman, Accompaniment, Madrasa, Community

### ABSTRAK

Penelitian ini bertujuan untuk menganalisis proses edukasi dan pendampingan literasi digital bagi perempuan di Madrasah Teknologi Al-Khwarizmi Pangalengan Kabupaten Bandung. Secara spesifik, penelitian diarahkan pada empat aspek literasi digital yakni *digital skill*, *digital culture*, *digital ethic*, dan *digital safety*. Penelitian menggunakan paradigma konstruktivisme dengan pendekatan kualitatif. Data dikumpulkan melalui observasi, wawancara, FGD, LGD, dan dokumentasi. Sementara proses pendampingan dilakukan dengan pendekatan *asset based community development* (ABCD). Hasil penelitian dan pendampingan menunjukkan bahwa Madrasah Teknologi Al-Khwarizmi menjadi lembaga

pendidikan non formal di wilayah pedesaan yang fokus memberikan pemahaman dan pendampingan literasi digital, terutama bagi kalangan perempuan. Selain itu, pendampingan literasi digital bagi perempuan dilakukan melalui peningkatan keterampilan komputer sebagai langkah preventif menghadapi ancaman digital, pembiasaan budaya positif dengan kajian dan membaca al-Qur'an dalam aktivitas berinternet, penguatan etika digital melalui konseling keluarga dan pembinaan akhlak bagi orang tua, dan pelibatan komunitas dan jejaring kemitraan dalam penguatan kewaspadaan berinternet.

**Kata kunci:** Literasi Digital, Perempuan, Pendampingan, Madrasah, Komunitas

## 1. INTRODUCTION

As a new medium, the Internet offers new ways for users to interact and do activities. The Internet creates an information environment for every user in their daily activities. This environment is designed as a system that influences and is bound to one another. At this point, the Internet becomes a medium that is interconnected and convergence (Nasrullah, 2015). Interconnection, interactivity, and convergence of internet media lead to the existence of social relations that are built in virtual networks. This relationship is referred to as cyberspace, where human activity occurs through a network connected to building a virtual community (Fakhruroji, 2015).

Mass media is a public domain that is used for various user interests. In this case, public space is constructed to represent social realities that affect various aspects of life. Shoemaker and Reese (1996) state that the influence of the mass media comes from media workers, media routines, organizations and ideology. These four aspects are seen as having a significant level of influence in the process of interpreting social reality. In this case, social reality is seen as containing identity, social relations and values prevailing in society (Rustandi & Muchtar, 2020).

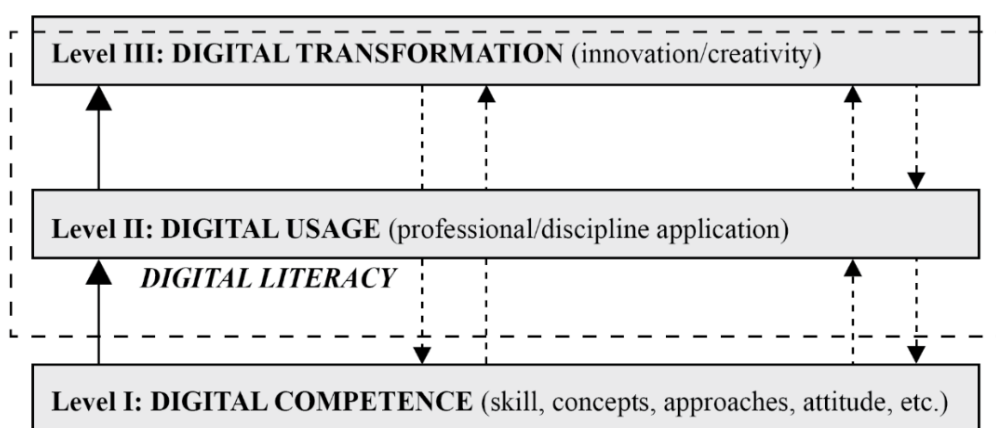
Recent developments in communication studies place the internet as a new medium for communicating messages. Therefore, theoretically, the study of the use of the internet as a communication medium is commonly referred to as new media. This term refers to the communication condition established through network-based digital devices. In this case, the network in question is a digital connection between humans as users and digital devices, computers and smartphones that have access to the internet network. This includes things related to the web, blogs, e-mail, online forums, social networks, social media, and so on (Puspita, 2015).

The trend of internet users in the world is increasing. This is indicated by the penetration of internet use which continues to increase every year. The penetration of active internet users globally reaches 4.66 billion people, with a growth rate of 7.3 per cent in 2021. The average length of time accessing the internet is in the range of 6 hours and 54 minutes. Meanwhile, in Indonesia, the total number of active internet users reached 202 million or around 73.7 per cent of the total population of Indonesia. During January 2020-January 2021, the increase in penetration of internet users in Indonesia reached 15.5 per cent, with an average duration of accessing the internet of 8 hours and 52 minutes (Hootsuite, We Are Social, 2021).

Based on gender, the penetration of internet use in Indonesia is still dominated by men compared to women. Hootsuite noted that male internet users reached 50.3 per cent and women reached 49.7 per cent. Meanwhile, IndonesiaBaik.id noted that the percentage of internet users in 2018 was 45.84 per cent male and 44.24 per cent female. Other data released by APJII in 2017 noted that the composition of internet users based on gender included 51.43 per cent men and 48.57 per cent women. As for age, the composition of internet users in Indonesia is as follows: 5-9 years (25.2%), 10-14 years (66.2%), 15-19 years (91%), 20-24 years (88.5%), 25-29 (82.7%), 30-34 years (76.5%), 35-39 (68.5%), 40-44 years (51.4%), 45-49 years (47.6%), 50-54 years (40.9%), 55-59 years (40%), 60-64 years (16.2%), and 65 years and over (8.5%) (APJII, 2018).

Digital literacy is the knowledge and ability to use digital technology, communication tools or networks in finding, evaluating, using and producing information in a healthy, wise, intelligent, accurate, accurate and law-abiding manner. Digital literacy is understanding and using information from various sources accessed via computer devices (Gilster, 1997). Meanwhile, in the view of Bawden (2001), digital literacy is rooted in computer and information literacy. The Ministry of Communication and Information of the Republic of Indonesia 2020 released the results of a survey in 34 provinces in Indonesia regarding the status and conditions of digital literacy in Indonesian society. Based on the survey results, Indonesia's digital literacy status is at 3.47 out of a score of 5.

The approach to developing digital literacy is carried out in two ways: a conceptual approach that focuses on cognitive and social-emotional development and an operational approach that focuses on the professional, creative and critical use of technical devices.



**Image 1.**  
**Digital Literacy Development Level according to Mayes and Fowler, 2006**  
(Source: Ministry of Education and Culture, 2017)

Meanwhile, digital threats target internet users in Indonesia in the form of contact risk, content risk and context risk. All three are described as several indicators that have the potential to be vulnerable to internet abuse and lead to negative impacts in the form of cyberbullying, online harassment, human trafficking, illegal content, digital violence, online fraud, pornographic content, to content -Content containing radical virtual terrorism. Digital threats go hand in hand with the potential for digitizing the culture of Indonesian society, which is recorded as the most significant

active internet user in the world. Therefore, assisting in strengthening digital literacy is an influential agenda that must be carried out to maintain positive information dissemination traffic in the digital space.

Several previous studies that are relevant to this research include research by Taufiq Rahman, Iman Supratman, & Bukhori (2019), who assisted in the media literacy program in Cibeureum Village, Kertasari District, Bandung Regency. This service is carried out through in-class training, fieldwork, assistance, and evaluation. The results of the activity led to an increase in knowledge, selectivity in choosing media, social media and content, and efforts to increase critical thinking in capturing messages received.

Research conducted by Bachtiar Adi Saputra & Nurdiansyah (2020) regarding strengthening digital literacy through a digital media-based Islamic high school curriculum development model in the 4.0 era. The digital literacy framework in this research refers to JISC 2017, which includes seven main competencies: information literacy, digital scholarship, media literacy, learning skills, ICT literacy, career and identity management, and communication and collaboration. The research was conducted at SMA 1 Muhammadiyah Taman, Sidoarjo Regency. It was concluded that there was a significant correlation between digital literacy skills in using digital media through the ISMUBA curriculum (Islamic, Muhammadiyah-ness, and Arabic).

Teguh Prasetyo Utomo's research (2020) regarding information literacy in the digital era from an Islamic perspective. This research examines the phenomenon of the explosion of information that floods the digital space and its implications for the everyday life of the user community. In addition, the research was carried out using a qualitative approach through the library research method. It was concluded that information literacy skills in Islamic studies are carried out by strengthening critical thinking and the ability to select information selectively. Islam introduced the concept of *tabayyun* as an effort to filter information in the digital space.

One of the efforts to strengthen the role of religious institutions is to focus on increasing digital literacy. One of them is the Al-Khwarizmi Madrasah Technology (MTA) Pangalengan, Bandung Regency, which since 2020 has provided non-formal learning in the form of computer literacy, information literacy, and digital literacy based on al-Qur'an literacy values. Madrasah Technology Al-Khwarizmi is under the auspices of the Bumi Insan Asha Nugraha Foundation (YBIAN) Indonesia, which aims to form a happy generation. This is done through non-formal education in the form of computer courses with core material related to computer literacy (Microsoft Office and graphic design), information literacy (healthy internet and social media wise), digital literacy, and Al-Qur'an literacy which leads to strengthening mindset, mentality, skillset and society. MTA seeks to build moral strength as a foundation in dealing with the era of information disruption.

A critical, exciting aspect of Al-Khwarizmi Madrasah Technology is the combination and collaborative learning process between parents and children to build a healthy digital ecosystem. MTA provides computer learning for children and their parents, especially mothers, to assist with technological skills and digital literacy. Until 2021, there will be 30 women in the age range of 19-50 years. The 30 female students are intensively participating in computer courses and digital literacy

assistance aimed at healthy use of the internet for personal needs and regular supervision for the benefit of the family.

This research is expected to provide usefulness both theoretically and practically. Theoretically, it is expected to strengthen scientific development based on community service. Thus, it becomes a reference for developing formulations in digital da'wah literacy. In practice, research is expected to contribute to efforts to internalize and increase skills in digital literacy efforts for women. Thus, digital competence among women can lead to efforts to use digital technology critically and wisely.

## **2. METHOD**

Conceptually, the digital literacy framework used as a reference is increasing digital competence, which refers to A Global Framework of Reference on Digital Literacy Skills from UNESCO in 2018. Where the digital literacy framework is formulated into four sub-indices and seven pillars. The four sub-indices include 1) the information and data literacy sub-index, which consists of the pillars of information and data literacy (a) and critical thinking (b); 2) the communication and collaboration sub-index with the pillars of communication skills (c) and ethics in technology (d); 3) security sub-index with personal security (e) and device security (f) pillars; and 4) technological capability sub-index with technological capability pillar (g). The four sub-indices and seven pillars were formulated by the Ministry of Communication and Information (Kemenkominfo) of the Republic of Indonesia to become the four pillars of the national digital literacy roadmap consisting of 4 competencies, including 1) Digital Skills; 2) Digital Culture; 3) Digital Ethics, and 4) Digital Safety.

The research focuses on education and assistance to increase digital literacy in digital skills, digital culture, digital ethics, and digital safety for women to inculcate values and attitudes of religious moderation. This assistance is carried out in several stages, starting from assistance on aspects of knowledge (mindset), mentality (mentality/attitude), skills (skillset), and action (society/behaviour) through computer literacy, information literacy and Al-Qur'an literacy (dawah).

This study uses a constructivist paradigm with a qualitative approach. At the same time, descriptive analysis was carried out to interpret qualitative data. This research's subject is assisting digital literacy for women, which consists of four aspects, including digital skills, digital culture, digital ethics, and digital safety. Meanwhile, the research object was female students aged 19 to 50 years, totalling 30 people at the Al-Khwarizmi Pangalengan Madrasah Technology, Bandung Regency, which was carried out from October to December 2021. The constructivism paradigm was chosen to map formulations regarding digital da'wah literacy carried out by this madrasa. A qualitative approach is used to analyze events, people, objects and so on that intersect with digital da'wah literacy assistance.

Data were collected through observation, interviews, Focus Group Discussions (FGD), Leaderless Group Discussions (LGD), and documentation. Data analysis was carried out through three stages: data reduction, data presentation, and conclusion. Meanwhile, the mentoring process uses the ABCD (Asset Based Communities Development) approach. Assistance with this method prioritizes the utilization of assets and communities. This assistance is carried out through several key stages, including the Discovery, Dream, Design, Define, and Destiny stages.

### 3. RESULTS AND DISCUSSION

#### 3.1 Upgrading Computer Skills as a Digital Threat Preventive Measure

Digital skills can be viewed as essential skills to strengthen digital literacy. This relates to conceptual knowledge and operational skills in operating digital devices. Digital skills are the first pillar in growing digital competence to counter various potential digital threats that every user of digital technology may experience. Digital literacy is related to using digital media and accessing digital content productively, positively and critically. Digital literacy is also related to information literacy and computer literacy. The digital literacy pressure point is conceptual and operational skills in using devices connected via the internet.

Based on the research results, Al-Khwarizmi Madrasah Technology's efforts to improve people's digital skills are carried out through learning computer programs that combine three primary materials related to monotheism, technology education, and environmental insight. In this case, Al-Khwarizmi Madrasah Technology is a platform for non-formal educational institutions that provide computer learning by combining primary religious and environmental education. As the name suggests, this institution does not only formulate a computer technology education curriculum but also strengthens tauhid education and environmental insight.

This can be seen from the vision, mission and objectives of the Al-Khwarizmi Madrasah Technology as shown in figure 2 below:

Source: Institute Documents, 2021

Figure 2.

#### Profile of Al-Khwarizmi Madrasah Technology

Figure 2 is an admissions brochure for Al-Khwarizmi Madrasah Technology students. In the picture above, you can see the vision, mission, goals, educational programs, and the number of tuition fees at this Madrasah Technology. This illustrates the purpose of education which leads to the formation of a happy generation built through the process of instilling monotheistic values, increasing akhlakul karimah as self-development capital, increasing critical technological skills and strengthening leadership mentality. A happy generation starts with a generation with morals and works so that it spreads benefits and forms a happy ecosystem based on monotheism education, technological skills and environmental awareness.

The three focuses of madrasa objectives, as well as being the spirit of learning for students, include 1) Having morals, which means that Islamic education is the foundation in responding to

trends in technological progress; 2) Working as an effort to build a critical, creative, innovative and collaborative attitude in working, spreading benefits and goodness; and 3) Happiness, where this education is oriented towards building collective awareness in achieving inner and outer goodness both in this world and the hereafter.

Furthermore, the vision, mission, and objectives of madrasah education are elaborated into a non-formal education curriculum which contains several main subjects, including Al-Qur'an education, social media jurisprudence, positive and healthy internet, information and media literacy, basic computer techniques, basic techniques of graphic design, and basic techniques of videography. These subject matters present three aspects of digital literacy: computer literacy, information literacy, and Al-Qur'an literacy. This educational program is formulated to increase technological skills in anticipating digital threats.



**Figure 3.**

### **Computer Learning Activity Female Santri aged 30-50 years**

Figure 3 is a class computer learning program whose students come from among the women of Family Welfare Development (PKK) in Margamukti Village, Pangalengan District, Bandung Regency. Approximately 15 housewives participated in a unique computer learning program for four months. These mothers were taught basic computer skills in the form of Microsoft Office programs which are practically related to their duties as PKK administrators. Based on observations, these students were not only equipped with operational skills but also a conceptual understanding of the importance of digital skills. Thus, they can control the use of internet technology both for themselves and in supervising their children.

For homemakers, digital skills are essential to have to anticipate digital threats. This is based on the potential for digital threats targeting women. Based on a national digital literacy survey conducted by the Ministry of Communication and Informatics in 2020, it was concluded that women are seen as having a lower digital literacy index than men. Therefore, women tend to be vulnerable to digital threats in the form of online fraud, sexual harassment, sexual violence, exposure to hoax information and hate speech. Not to mention relating to child supervision in communication technology devices.

Several informants acknowledged that it was not easy to control their children's behaviour using digital devices (smartphones), especially when they were connected to digital content. There are concerns from informants that their children are accessing inappropriate digital content such as

pornography, cyberbullying, and other negative behaviours. Meanwhile, they admit they have operational limitations in using digital devices or are 'technologically clueless' (technologically illiterate). Therefore, this motivated the informants to join as students or students at the Al-Khwarizmi Madrasah Technology, with the hope that there would be an increase in technological skills that would be not only useful for themselves or in completing organizational tasks in the PKK but also at least can be helpful to in controlling the use of his son's technology.

Internet penetration in rural areas is quite significant. APJII data for 2018 shows that internet users in rural areas (rural) have reached 61.6 per cent. This number illustrates the significant level of internet penetration in society. The trend of increasing internet penetration in rural areas has not been matched by increased digital literacy. This use is still dominated by passive users who quickly access and receive information without selecting the information obtained. So that it has the potential to experience digital threats in various forms of behaviour and actions. Therefore, digital literacy assistance for women in rural areas is essential to minimize potential digital threats.

Informants AA, SL, SR, and RN as teaching staff at the Al-Khwarizmi Madrasah Technology stated that the concept of learning in this madrasa refers to the reality of internet users who still lack literacy. So that people, especially mothers, become passive users but find it challenging to filter the digital information they receive. Therefore, the concept of education at the Al-Khwarizmi Madrasah Technology is formulated to provide operational skills and strengthen the paradigm of value education and monotheism as the foundation of self amid the digitalization of life. This is done by introducing computer devices to mothers and positive internet content for the family to consume.

### **3.2 Habituation of Positive Culture in Internet Activities**

Digital culture is related to the habits and habits of users in activities in the digital space. This relates to the penetration of informative and educative content that dominates the digital space. Digital technologies have enabled more networked, collaborative and participatory forms of culture. According to Miller (2012), the specific characteristics of digital culture can be explained by the types of technical processes involved, the types of cultural forms that emerge, and the types of digital cultural experiences.

Digital culture or digital culture is an individual's ability to read, describe, familiarize, examine, and build national insights, Pancasila values and Bhinneka Tunggal Ika in everyday life). Digital culture as a form of digital citizenship in the Indonesian context is in the 'collective, formal' domain where individual digital competencies function so that they can act as citizens within formal limits relating to their rights, obligations and responsibilities in the 'state' space (Prananingrum, Kurnia, & Astuti, 2021).

Positive cultural habituation at Al-Khwarizmi Madrasah Technology is carried out in the learning process and institutional activities. The learning process can be found by reading books and the Koran before computer learning activities are carried out. The teaching staff become facilitators in educating students regarding essential information relevant to religious material. This habituation is carried out for 30 minutes before the computer learning activity begins. Technically, the facilitator directs the students to open information on the internet thematically. Then the facilitator provides



introductory material, then the participants respond by commenting on the content accessed and ending with reinforcement from the verses of the Koran on the discussed theme.



**Figure 4.**

### **Thematic Al-Qur'an Learning Routines at the Al-Khwarizmi Madrasah Technology**

Figure 4 shows a facilitator carrying out Al-Qur'an learning activities as a positive cultural habit before the course begins. At the same time, the picture on the left shows a female student reading the Koran. These two pictures above show the existence of positive cultural habituation as reinforcement in implementing computer learning. Where the facilitator guides in building information literacy and Al-Qur'an literacy. This habituation will strengthen students' competence when accessing and interacting in the digital space.

The study topics discussed in this routine are related to current societal issues but are limited based on the characteristics of students. For students who are still students, the issues are related to the trend of the millennial and Z generations. Meanwhile, for students from among mothers, it is related to phenomena that are currently hot (viral) in society. This positive habituation is carried out to build critical, collaborative and participatory thinking in the students so that they can respond to things that are developing in the national context, both locally and globally.

Based on observations, the agency formulates critical materials relating to hoaxes, hate speech, diversity, religiosity, etc. Then participants were given an introduction by accessing information from the internet. Furthermore, it ends with an affirmation from an Islamic perspective. This habituation is essential to strengthen the students' attitude toward internet activities. So that students have critical power in receiving, accessing, designing, and managing the information and digital devices they have.

In addition, other positive cultural habituation is carried out by involving students in scientific activities that specifically discuss digital literacy, for example, through Digital Literacy webinar activities organized by Bandung Regency ICT Volunteers and Village Peace Creative Content Training organized by the West Java Regional Virtual World Peace Ambassadors. Several students were delegated to absorb actual information intake regarding information, media, and digital literacy. Thus strengthening the concept of learning at the Al-Khwarizmi Madrasah Technology.

The GE informant, a 19-year-old female student, admitted there was a positive impact when she attended learning at this madrasa. In which he confessed that: *"Sateuacan belajar komputer, aya pembahasan sareng ngaos Qur'an. Abdi ngaraoskeun cara beda dina pembelajaranna. Ieu oge semakin membuka wawasan abdi, terutami ngeunaan informasi-informasi positif di internet* (Before

learning computers, there was discussion and study of the Koran. I feel a different learning method. This opened my horizons, especially concerning positive information on the internet”

In addition, madrasa institutional collaboration with several communities strengthens the educational process and understanding of digital literacy for students, where the students can increase their knowledge from competent facilitators outside the institution, such as facilitators from ICT Volunteers, West Java Peace Ambassadors, West Java Saber Joaks (JSH), Sinergi Foundation, and other organizations. Strengthening this habituation relates to the conceptual and operational aspects of positive content, healthy internet activities, responsibility as a user, regarding hoax information, to increasing competence in graphic design.

Habituating a positive culture in the learning process can at least be a provision for students to instil a critical and participatory mindset when accessing, designing and managing information from the internet so that it is expected to bring up an attitude of responsibility both towards himself and others in the process of controlling internet usage activities. This is a strength in building an insightful and moral digital culture.

### **3.3 Strengthening Digital Ethics through Family Counseling and Moral Development**

The development of digital communication has the characteristics of global communication that crosses geographical boundaries and cultural boundaries. While each geographic and cultural boundaries also have different ethical boundaries. Every country, even region, has its ethics, and so does every generation has its ethics. In the digital space, we will interact and communicate with these various cultural differences, so it is possible that this global meeting will create new standards of ethics (Kusumastuti et al., 2021). Digital ethics (digital ethics) is the ability of individuals to realize, exemplify, adapt, rationalize, consider, and develop governance of digital ethics (netiquette) in everyday life. That using digital media should be directed at an ethical intention, attitude and behaviour for the common good. In order to improve the quality of humanity (Sibercreation & Deloitte, 2020).

The concept of learning at the Al-Khwarizmi Madrasah Technology emphasizes two learning subjects, namely children and parents. In this case, students in the student category take part in classical learning methods regularly for 4 hours per week. Where the students study for two days a week and eight days a month. Meanwhile, parents learn with the general stadium method monthly through moral development and family counseling.

This pattern is applied to strengthen the process of fostering and strengthening digital ethics for students and parents. Specifically for parents, it is carried out through family counselling methods and moral development, which is carried out once a month. In this case, the madrasa holds regular parent meetings filled with counselling and moral development processes related to digital literacy themes. The parents who attended this counselling activity consisted of mothers. Mothers are provided with provisions on how to supervise their child's internet interactions. In addition, the institution presents facilitators who have competence as academics, psychologists and educational practitioners. So that parents are given a complete picture of the process of strengthening digital ethics in supervising their child's social interactions during internet activities.



Figure 5.

### Family Counseling and Moral Development at Al-Khwarizmi Madrasah Technology

Figure 5 shows the family counselling and moral development activities for students and parents at the Al-Khwarizmi Madrasah Technology. Counselling is carried out using a group guidance approach, presenting resource persons who are competent as academics, practitioners, counsellors, and psychologists. Parents (mothers) are given skills and knowledge about supervising their children's social ethics in internet activities. To be able to control and anticipate harmful access to information.



Figure 6.

### Family Counseling and Moral Development Activity Poster

Figure 6 is an activity poster displaying the theme, resource persons, and time for family counselling and moral development activities at the Al-Khwarizmi Madrasah Technology. The selection of themes and resource persons is based on the issues or subject matter of the counselling to be delivered. The main topics are moral and ethical values or social manners in the digital era. Then it is lowered into discussion material and packaged in such a way according to the target of the activity.

Family counselling and moral development are attended mainly by mothers. This relates to parenting and monitoring their children's internet activity. The theme is presented practically, where the facilitator describes the material conceptually and provides practical tips on parenting and social supervision of children. In addition, the resource persons did not only present from a scientific point of view in general but also emphasized the Islamic perspective as the foundation for strengthening social ethics in the digital space.

### **3.4 Internet Vigilance through Positive Community Engagement**

The internet as a new media is a media sphere, a cultural space surrounding the public space. The media sphere is a mediated public space. The media sphere is the forerunner to realising the public domain, which requires the involvement and emancipation of various users with various interests (Hartley, 2004). One type of new media popularly used by internet users is social media or social network sites. Social networking sites are web-based services that allow users to create profiles, view a list of available users, and invite or accept friends to join the site. The social network has a user profile page display, which consists of the user's identity and photo (Puspita, 2015).

The use of the internet as a communication medium in human activities is related to trends in technological development. In this case, information and communication technology offers new ways in people's daily activities. There is the use of digital devices to meet human interactional needs and interests. Therefore, using these technological devices leads humans to build a network society based on digital connections (Castells, 2002). In the study of communication, the embodiment of this network society is formed through a public space called cyberspace. A medium that facilitates human communication through optical networks, computers and internet connections (Oswalt, 1997). Cyberspace becomes a public space related to virtual reality and forms a virtual community (Holmes, 2012).

Internet vigilance or digital safety can be interpreted as a process to ensure digital services. Both online and offline can be carried out safely and comfortably (Sammons & Cross, 2017). Not only to secure the data we have but also to protect personal data that is confidential. Practically, Al-Khwarizmi Madrasah Technology has increased awareness of the internet in building digital security by providing students understanding through email and Google Drive as data storage space. In addition, this vigilance is also carried out by providing an understanding of harmful content on the internet that may not be accessed and even spread.

This understanding process is also carried out through the involvement of positive communities outside of institutions concerned with providing education about digital literacy to women. For example, the Duta Damai community targets millennial generation youth and Jabar Saber Hoaks (JSH), which has a program to increase internet awareness for women in rural areas. This institutional involvement is usually described regarding understanding regulations regarding the ITE Law, the concept of parenting in the digital era, tips and tricks for monitoring children's internet activity, and so on. This strengthens the role of participatory institutions in building a positive digital habitus and ecosystem.

Supervision of internet activity must involve various network partnerships. This is to ensure that literacy is strengthened in welcoming digital transformation. According to Mayes and Fowler (2006), digital literacy is tiered, starting from digital competence in skills, concepts, approaches and attitudes. Digital competence will increase skills in using digital devices productively, critically and selectively. So, in the end, it will become a habituation that leads to digital transformation, manifested in the form of innovation and creativity (Kemendikbud, 2017).

This principle of collaboration can be seen in digital literacy assistance for women at the Al-Khwarizmi Madrasah Technology. The existence of institutional cooperation between Madrasahs and government and private stakeholders such as the Margamukti Village Government, PKK, ICT

Volunteers, Diskominfo, Jabar Saber Hoaks, Hasanah Firyal Islamic Boarding School, and the Synergy Foundation. According to an AA informant, this institutional collaboration is one of the strategies to strengthen digital knowledge and skills in supervising students when interacting in digital spaces.

#### 4. CONCLUSION

This research found several essential aspects in assisting women's digital literacy. First, Al-Khwarizmi Madrasah Technology is a non-formal educational institution in rural areas focusing on providing digital literacy understanding and assistance, especially for women. This is evidenced by special programs for homemakers and private employees to participate in computer and internet technology learning. Second, digital literacy assistance for women is carried out in several aspects, including improving computer skills as a preventive step in dealing with digital threats, habituating a positive culture by studying and reading the Koran in internet activities and strengthening digital ethics through family counselling and moral development. For parents, community involvement and partnership networks strengthen internet awareness.

#### 5. REFERENCES

- Aleman, A.M.M. & Wartman, K.L. (2009). *Online Social Networking on Campus: Understanding What Matters in Student Culture*. Taylor & Francis Press. Penelitian Psikologi VOLUME 37, NO. 2, DESEMBER 2010:176–. 188.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). (2018). *Laporan Survei Penetrasi dan Perilaku Pengguna Internet di Indonesia Tahun 2018*. <https://apjii.or.id>, diakses pada tanggal 19 Oktober 2021.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII) (2020). *Laporan Survei Penetrasi dan Perilaku Pengguna Internet di Indonesia Tahun 2019-2020*. <https://apjii.or.id>, diakses pada tanggal 19 Oktober 2021.
- Bawden, D. (2001). "Information and Digital Literacies: A Review of Concepts", *Journal of Documentation*, 57(2), 218-259.
- Castells, M., & Cardoso, G. (2002). *The Network Society: From Knowledge to Policy*. Washington: Center for Transatlantic Relations. The Johns Hopkins University.
- Fakhrurroji, M. (2015). Mediatization of religion in "texting culture": self-help religion and the shifting of religious authority, *Indonesian Journal of Islam and Muslim Societies*, 5(2), 231-254. <https://doi.org/10.18326/ijims.v5i2.231-254>.
- Gilster, P., & Watson, T. (1999). *Digital literacy*. New York: Wiley Computer Pub.
- Hartley, J. (2004). *Communication, Cultural, and Media Studies: The Key Concepts (Terj. Penerbit Jalasutra)*. London: Routledge.
- Holmes, D. (2012). *Teori Komunikasi, Teknologi dan Masyarakat*. Yogyakarta: Pustaka Pelajar.
- Kementerian Komunikasi dan Informatika. (2020). *Status Literasi Digital di Indonesia, Hasil Survei di 34 Provinsi*. Jakarta: Kominfo dan Katadata Insight Center.
- Kementerian Komunikasi dan Informatika. (2021). *Modul Literasi Digital*. Jakarta: SiBerkreasi dan Tim GNLD Kemenkominfo.

- Kementerian Pendidikan dan Kebudayaan. (2017). *Modul Pendukung Literasi Digital*. Jakarta: Tim GLN Kemendikbud.
- Kominfo, Siberkreasi, & Deloitte. (2020). *Roadmap literasi digital 2021-2024*. Jakarta: Kominfo, Siberkreasi, & Deloitte.
- Mayes, T., and Fowler, C. (2006). *Learners, Learning Literacy and The Pedagogy of E-learning”, Digital Literacies for Learning*. London: Facet Publ.
- Miller, C.A (2012). *Nursing Care of Older Adult: Theory And Practices*. Philadelphia: JB.
- Nasrullah, R. (2015). *Media Sosial: Perspektif Komunikasi, Budaya, dan Sositologi*. Bandung: Simbiosis Rekatama Media.
- Oswalt, M. J. (1997). *Virtual Urban Futures*. London: Sage.
- Puspita, Y. (2015). Pemanfaatan New Media dalam Memudahkan Komunikasi dan Transaksi Pelacur Gay, *Jurnal Pekommas*, 13(3), 203-212.
- Rahman, M. T., Supratman, I., & Bukhori. (2019). Program Literasi Media Di Desa Cibeureum Kecamatan Kertasari Kabupaten Bandung, *Al-Khidmat: Jurnal Ilmiah Pengabdian Kepada Masyarakat*, 3(2), 51-57.
- Rustandi, R., & Muchtar, K. (2020). Analisis Framing Kontra Narasi Terorisme dan Radikalisme di Media Sosial (Studi Kasus pada Akun @dutadamaijabar), *Jurnal Komunikatif*, 9(2), 134-153.
- Sammons, J. & Cross, M. (2017). *The basics of cyber safety: Computer and mobile device safety made*. Cambridge: Elsevier.
- Saputra, B. A., & Nurdiansyah. (2020). Penguatan Literasi Digital melalui Model Pengembangan Kurikulum SMA Islam Berbasis Media Digital di Era 4.0, *Islamika: Jurnal Keislaman dan Ilmu Pendidikan*, 2(1), 36-45.
- Shoemaker, P. J., & Reese, S.D. (1996). *Mediating The Message: Theories of Influences on Mass Media Content*. Toronto: Longman Publishers USA.
- Utomo, T. P. (2020). Literasi Informasi di Era Digital dalam Perspektif Ajaran Islam, *Buletin Perpustakaan UII*, 3(1), 61-82.
- We Are Social. (2021). *Digital 2021, Global Overview Report*. <https://wearesocial.com> diakses pada 19 Oktober 2021.