

Strengthening Digital Literacy In Building Critical Thinking

¹⁾Salahuddin, ²⁾Dewi Hasanah, ³⁾Neneng Hasanah, ⁴⁾Asmawati, ⁵⁾J. M. Ekafitrianda, ⁶⁾Edi Saputra, ⁷⁾Neni, ⁸⁾Melia Jessica

^{1,2,3,4,5,6,7,8)}Islamic Religious Education, State Islamic University of Sultan Thaha Saifuddin Jambi, Jambi, Indonesia
Email Corresponding: eka_fitrianda@uinjambi.ac.id *

ARTICLE INFORMATION	ABSTRACT
<p>Kata Kunci: Pelatihan Penguatan Literasi Digital Critical Thinking Pengabdian Kepada Masyarakat Belajar dan Pembelajaran</p>	<p>Kegiatan pengabdian masyarakat dilaksanakan oleh tim Prodi Pendidikan Agama Islam UIN Sultan Thaha Saifuddin Jambi di IAI Al-Mujaddid Sabak Tanjung Jabung Timur dengan tujuan untuk memperkuat kemampuan berpikir kritis mahasiswa di era Revolusi Industri 4.0. Pelatihan ini dihadiri oleh 30 mahasiswa dan 15 dosen yang berasal dari berbagai latar belakang pendidikan. Dalam kegiatan ini, mahasiswa diberikan penjelasan dan pemahaman tentang pemanfaatan teknologi untuk tujuan pembelajaran, Mengeksplorasi sisi kreatif melalui multimedia, kegiatan ini untuk mendukung proses pembelajaran yang lebih inovatif dan interaktif, memungkinkan mahasiswa untuk menyampaikan materi dengan cara yang lebih menarik dan mudah dipahami. Selain itu, kegiatan ini juga menjadi wadah untuk mengemukakan ide-ide kreatif secara konseptual dan praktikal. Mahasiswa diajak untuk berdiskusi dan berbagi pengalaman tentang cara-cara efektif dalam mengintegrasikan teknologi digital dalam pembelajaran, guna meningkatkan keterampilan berpikir kritis dan kreatif mahasiswa. Oleh karena itu, pelatihan ini bertujuan untuk meningkatkan kesadaran, pengetahuan, dan keterampilan dalam dalam mengoptimalkan proses pembelajaran. Hasil dari sosialisasi ini menunjukkan bahwa peserta sangat antusias dan aktif berpartisipasi, meskipun terdapat tantangan terkait akses terhadap perangkat yang memadai. Kegiatan literasi digital ini diharapkan dapat meningkatkan kemampuan berpikir kritis di kalangan mahasiswa dan dapat terus berkembang, seiring dengan kemajuan teknologi di era modern ini.</p>
<p>Keywords: Training Strengthening Digital Literacy Critical Thinking Community Service Learning and Study</p>	<p>Community service activities were carried out by the Islamic Religious Education Study Program team of UIN Sultan Thaha Saifuddin Jambi at IAI Al-Mujaddid Sabak Tanjung Jabung Timur with the aim of strengthening students' critical thinking skills in the era of the Industrial Revolution 4.0. This training was attended by 30 students and 15 lecturers from various educational backgrounds. In this activity, students were given an explanation and understanding of the use of technology for learning purposes, Exploring the creative side through multimedia, this activity is to support a more innovative and interactive learning process, allowing students to deliver material in a more interesting and easy-to-understand way. In addition, this activity is also a forum for expressing creative ideas conceptually and practically. Students are invited to discuss and share experiences on effective ways to integrate digital technology in learning, in order to improve students' critical and creative thinking skills. Therefore, this training aims to increase awareness, knowledge, and skills in optimizing the learning process. The results of this socialization showed that participants were very enthusiastic and actively participated, despite challenges related to access to adequate devices. This digital literacy activity is expected to improve critical thinking skills among students and can continue to develop, along with technological advances in this modern era.</p>

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



I. INTRODUCTION

Digital literacy is a person's ability to understand and utilize digital technology effectively. This includes a variety of skills ranging from basic computer use to understanding AI (Artificial Intelligence) and machine learning. The reasons why digital literacy is important in the digital era are: Use of technology, digital literacy allows individuals to use technology safely, effectively, and responsibly, Critical thinking skills, can improve

a person's ability to think more critically and understand information so that they are not easily fooled by false information or hoaxes and can make better and safer decisions, Creativity and innovation, digital literacy opens up opportunities to develop creativity and innovation through access to various digital tools, Digital responsibility, digital literacy teaches individuals to be responsible for all their activities in the digital space, including ethical consumption and communication of information.

While much previous research and community service has focused on strengthening digital literacy as part of 21st-century education, this new contribution identifies an unaddressed gap, particularly in connecting digital literacy to more structured critical thinking skills. Most previous community services have focused on mastery of digital tools and basic skills in technology, but have not sufficiently explored how these skills can be applied to develop deeper critical thinking among learners. Therefore, this community service introduces a more holistic approach by emphasizing the use of digital literacy as a tool to strengthen critical analysis, evaluation of information, and the formation of rational arguments, rather than just as a technical competency. This approach also includes the integration of various interactive digital platforms that enable research-based learning, problem-based discussions, and assessment of more complex sources of information, to encourage the development of sharper and more applicable critical thinking skills in the real world.

The existence of education will be an investment in implementing goals and life to become an advanced and educated nation ([Nurlinasari and Hamid, 2018](#)). Education leads to three development focuses, namely literacy, numeracy, and writing for all Indonesian people ([Febrianti and Irianto, 2017](#); [Putri Pradana, 2020](#)). The very rapid development in the 21st century is the existence of information and communication technology (ICT), which provides the widest possible opportunities for innovation in various areas of life, one of which is the realm of education ([Fajri et al., 2021](#)). This is because the current digital era is marked by the emergence of skills that must be met as an answer to modernization in all areas of life ([Nabilah, 2020](#)).

According to [Heitin \(2016\)](#), there are three categories in digital literacy, namely: Finding and consuming digital content, such as conducting web searches or accessing information through search features on social media. creating digital content, namely uploading content to digital platforms such as YouTube videos, or blog posts, communicating or sharing digital content, this happens if we don't create content, but we share it again, a content that is going viral. A country is said to be advanced can be seen from the literacy index of its citizens ([Prianto, 2020](#)). Indonesia must be able to develop a basic literacy culture for students as one way to meet 21st century skills ([Maulani et al., 2020](#)). Literacy is an important thing in life ([Ningrum et al., 2021](#)). According to [Tachyudin et al. \(2020\)](#), the result of the weak reading level of both the community and the millennial generation will cause a lack of self-confidence when interacting and socializing in community life. In fact, having good literacy will increase students' understanding as the younger generation in receiving and filtering accurate written and unwritten information ([Octavialis and Ananda, 2021](#)).

Community service activities at the Al Mujaddid Sabak Islamic Institution, Jambi Province are carried out so that strengthening digital literacy among lecturers and students can be further improved, so that the skills of all lecturers and students to reason and think critically about everyday life can be increased, strong digital literacy can make the teaching and learning process more interactive, innovative, and effective. As well as increasing awareness, knowledge, and skills in optimizing the learning process.

II. PROBLEM

The results of the initial observations conducted by the team on community service activities of the Islamic Religious Education Study Program of UIN Sultan Thaha Saifuddin Jambi, found several main problems related to the lack of maximizing digital literacy strengthening in learning. These problems include: Unequal access to technology, Quality of content that is less educational, lack of interest in reading for students, the less than optimal use of social media platforms as a means to disseminate useful and educational information. Therefore, efforts are needed to strengthen digital literacy in developing a curriculum that integrates AI into the learning process. The research locations are as follows:

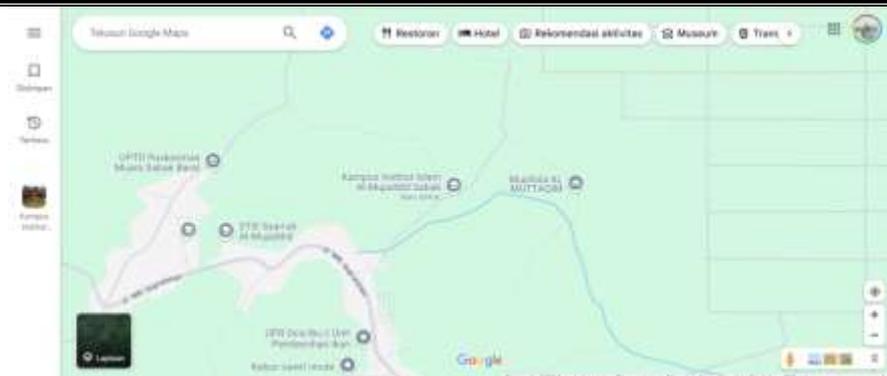


Figure 1. IAI Al Mujaddid Sabak

III. METHOD

The methods used in community service on Strengthening Digital Literacy In Building Critical Thinking at IAI Al Mujaddid Sabak are as follows:

1. Introduction to Digital Literacy: Provides a basic understanding of digital literacy, including how to use digital devices and applications that are important in academic life.
2. Wise Use of Social Media Workshop: Teaches how to use social media wisely, especially for academic purposes, and how to avoid false information and hoaxes.
3. Information Verification Training: Teaches students how to verify the truth of information found on the internet so as not to get caught up in the spread of fake news.
4. Critical Thinking Simulation in Digital Problem Solving: Trains students to use technology to solve problems by thinking critically, analyzing information objectively and formulating appropriate solutions.
5. Digital Ethics Counseling: Explains the importance of ethics in using technology, including privacy, personal data security, and how to act responsibly in the digital world.
6. Evaluation: Measures the success of activities using pre-tests and post-tests as well as participant satisfaction surveys.

With this approach, activities will be easier for students to understand and implement, while also providing a real impact in improving their digital literacy and critical thinking skills.

IV. RESULTS AND DISCUSSION

The stages of Community Service (PKM) carried out by the Islamic Religious Education Study Program team at UIN Sultan Thaha Saifuddin Jambi in AI training at IAI Al-Mujaddid Sabak, Jambi City can be explained through the following stages:

1. Problem Identification

The main problem found in field observations is the low utilization of technology among students and lecturers in the field of Islamic Religious Education (PAI). This indicates a lack of understanding of the importance of technology and access to educational platforms that can improve critical thinking skills, especially in this digital era. The results of the observation show that although many participants have digital devices such as smartphones, most are not yet accustomed to using them for learning purposes or accessing educational resources on the internet. This factor, if not immediately addressed, can hinder the progress of the quality of education at the tertiary level.

2. Program Planning

This digital literacy strengthening program was carefully planned after the problem was identified. One of its main objectives is to provide students and lecturers with a deep understanding of the importance of technology in improving critical thinking skills through digital-based learning. One of the most effective elements in this program is comprehensive and relevant material planning. Material on the basics of digital literacy and the importance of critical thinking is very suitable to be given at the beginning, to build a strong understanding of the relationship between technology and cognitive processes in learning.

3. Training Implementation

At this stage, the training was carried out involving 30 students and 15 lecturers as participants. The participants were given socialization regarding digital literacy and its application in building critical thinking skills. The results of the training implementation showed that participants began to understand that digital literacy is not only about technical skills, but also related to the ability to think critically in analyzing and evaluating information obtained from the internet. Several participants showed improvements in accessing and analyzing information from various digital sources that they had not previously utilized optimally.

4. Evaluation and Reflection

After the training, an evaluation was conducted to measure the extent to which participants understood the material that had been presented. This evaluation involved quizzes, group discussions, and direct question and answer sessions. Most participants showed good understanding, although some felt that they were not fully ready to apply this knowledge in their educational context. As a result of the evaluation, most participants provided positive feedback regarding the benefits they received, but some suggested that the training sessions focus more on direct applications and longer practice times. This reflection provides a clear picture that although basic knowledge has been mastered, practical application and further practice are needed. Therefore, it is important to design follow-up sessions that focus on the direct use of technology in teaching and learning activities.

5. Follow-up

The follow-up of this program includes providing ongoing guidance and curriculum development. With many participants who are still new to using technology for learning, mentoring sessions are needed to ensure that they can implement the knowledge they have acquired effectively. Mentoring that is carried out in the long term is very important to ensure that participants not only understand the theory of digital literacy, but can also use it in real contexts, such as in teaching and research. Therefore, developing a curriculum that integrates technology is an important step in improving the quality of education in the future.

6. Closing

In the final stage, documentation and reporting are carried out as a form of evaluation and as a reference for future program development. This documentation and reporting process provides valuable insights for further program development. One thing that needs to be considered is the importance of collecting further data related to the results of using technology in learning after the program has been running for some time. This will provide a more complete picture of the long-term impact of strengthening digital literacy on improving critical thinking skills.

Overall, the digital literacy strengthening program in building critical thinking skills has a positive impact, although there is a need for more practice and guidance after the training. With proper follow-up and the development of a technology-based curriculum, it is hoped that the quality of education, especially in Islamic Religious Education, can improve significantly. The use of technology in education must continue to be developed in order to meet the challenges of education in the digital era.

V. CONCLUSIONS

Community service activities with the theme of strengthening digital literacy in building critical thinking skills carried out by the Islamic Religious Education Study Program team of UIN Sultan Thaha Saifuddin Jambi at IAI Al-Mujaddid Sabak, Jambi Province aims to strengthen digital literacy in the campus and community environment as well as the use of educational platforms in learning, running smoothly and successfully. This training was attended by 30 students and 15 lecturers who enthusiastically participated in the session.

The community service program conducted by the Islamic Religious Education Study Program at UIN Sultan Thaha Saifuddin Jambi revealed key issues related to the underutilization of technology in learning. These challenges include unequal access to technology, subpar educational content, low student engagement in reading, and the underuse of social media for educational purposes. To address these concerns, the program aimed to strengthen digital literacy by integrating it into the curriculum and offering workshops on critical thinking, responsible social media use, and information verification. The activities provided students with the necessary skills to navigate the digital world more effectively and encouraged a deeper understanding of technology's role in enhancing academic growth and critical thinking.

The program's implementation included training for both students and lecturers, focusing on digital literacy, critical thinking, and ethical technology use. While the training showed positive results, with participants

becoming more adept at accessing and analyzing digital information, feedback indicated that further practical application and extended practice sessions were necessary. As a result, follow-up sessions and mentoring were deemed crucial to ensure the effective application of digital literacy in real-life academic contexts. The program also highlighted the importance of curriculum development that integrates technology to sustain improvements in educational quality, particularly in Islamic Religious Education, and to ensure students and lecturers can fully benefit from digital tools in their teaching and learning processes.

The community service activity (PKM) carried out regarding digital literacy in building critical thinking skills is very useful, this can be seen from the enthusiasm of the participants in discussing and asking questions. This shows the interest and desire of the participants to be able to improve the strengthening of digital literacy in the current 5.0 era. From the lecturers and participants who attended this community service activity, they had good digital literacy skills. It's just that the main task together is to get used to looking for news sources through online media or official government sites and educational platforms, so that later it will provide a positive contribution to learning activities, especially to the quality of the Islamic religious education curriculum.

REFERENCES

- Dhifa, Nabila, et al. 2020. Social Media Civilization in the Industrial Era 4.0, Malang: Muhammadiyah University.
- Heitin, L. 2016. What is digital literacy? Education Week, <https://www.edweek.org/teaching-learning/what-is-digital-literacy/2016/11>
- Irianto, PO and Febrianti, LY 2017. "The Importance of Literacy Mastery for the Young Generation in Facing the MEA" in the International Seminar The 1st Education and Language International Conference Proceedings Center for International Language Development of Unissula
- Lauckner, Heidi. 2012. Using Constructivist Case Study Methodology to Understand Community Development Processes: Proposed Methodological Questions to Guide the Research Process. Canada: Dalhousie University
- Nurlinasari, L., & Hamid, SI (2018). The Effectiveness of Critical Multiliteracies Model in Improving Elementary Students' Civic Literacy on the Civic Education Subject. 18(2), 9–18
- Octavialis, N., & Ananda, A. (2021). Civic Literacy Development at SMP Negeri 11 Padang. 4(2), 122–128.
- Putri Pradana, FA (2020). The Influence of School Literacy Culture Through the Utilization of Reading Corners on Students' Reading Interests in Elementary Schools. Journal of Education and Counseling (JPDK), 2(1), 81–85. <https://doi.org/10.31004/jpdk.v1i2.599>
- Prianto, Cahyo. et al. (2020). Covid-19 Pandemic: Issues and Reflections in Indonesia [e-book]. Jakarta: Yayasan Kita Menulis
- Ginting, ES (2021). Strengthening literacy in the digital era. In Proceedings of the National Seminar on Learning Indonesian Language and Literature (SemNas PBSI)-3 (pp. 35-38). FBS Unimed Press. Mardina, R. (2017, May). Digital literacy for the digital natives generation. In Proceedings Conference Paper. May.
- Rahmawati, N., Prasetyo, WH, Wicaksono, RB, Muthali'in, A., Huda, M., & Atang, A. (2022). Utilization of Reading Corners in Improving Students' Civic Literacy in the Digital Era.