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A Digitally Savvy Generation in the AI Era: Education on AI Ethics, Hoax and Deepfake Detection, and Cybercrime Prevention for Students at MA Al-Muhajirin

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Abstract

Artificial intelligence enhances daily life, but it also brings disadvantages like deepfakes, hoaxes, and cybercrime risks. This community service initiative focused on students at MA Al-Muhajirin, West Bandung Regency, who were initially ignorant of AI ethics, deepfake identification, and digital security due to teens' increased internet usage. The team developed a three-phase educational program with interactive seminars, a post-assessment, and a pre-assessment to address this. AI ethics, how to spot deepfakes and hoaxes, preventing cybercrime, and pertinent digital legislation were all covered in the program. An educational module for long-term school use was also created as part of the project. The program's results show that it is successful in increasing students' awareness and knowledge of responsible AI use, enhancing their capacity to confirm facts and spot manipulative content, and encouraging safer, more critical, and moral online activity. This program acts as a long-term model for teaching digital literacy in order to develop a responsible, tech-savvy youth..

Keywords: *Artificial Intelligence, Digital Literacy, Deepfake, Hoax, Cybercrime.*

Introduction

Artificial Intelligence (AI), in particular, has advanced so quickly in recent years that it has significantly impacted human society (Fauzi et al., 2023). The availability of numerous AI-based platforms enables users—particularly the younger generation—to access information, produce content, and complete tasks quickly and efficiently. In essence, technology-based data processing makes everyday tasks easier for people (Putri & Sutabri, 2023).

However, despite these advantages, technological advancements also bring grave risks, including online fraud, loss of personal information, the spread of malware, AI-based hoaxes, and deepfake technology that replicates audio-visual content. According to reports, since 2019, deepfake content on the internet has increased by more than 550%.

Because over 70% of active internet users are teenagers aged 13 to 18, this demographic is particularly susceptible to misinformation because they cannot independently verify information. To use technology more sensibly and foster healthy communication, society must implement digital literacy (Lapiana & Oktaviana, 2024).

Based on an initial observation, researchers identified a literacy gap at MA Al-Muhajirin, located in Cihampelas Village, West Bandung Regency. Most students use social media and smartphones extensively, but they have never been taught about cybersecurity, digital ethics, or the risks of AI manipulation. This ignorance could lead to unintentional participation in cybercrime, which carries serious legal repercussions.

Students from STMIK Mardira Indonesia serve as the service team for the Community Service (Pengabdian kepada Masyarakat / PkM) program "Digitally Smart Generation in the AI Era: Education on AI Usage Ethics, Hoax and Deepfake Detection, and Cybercrime Prevention for Students at MA Al-Muhajirin, which aims to give students useful educational knowledge. In addition to shielding them from cybercrime, they expect this effort to foster a youth ecology that is critical, moral, and technologically astute.

Method

At MA Al-Muhajirin, located at Jalan Raya Cihampelas No. 17, RT 01/RW 02, Cihampelas Village, Cihampelas District, West Bandung Regency, West Java, the team carried out this community service project. Twenty-six students who actively use digital gadgets participated in this program. The team used three steps to implement the program: a pre-assessment to measure participants' initial abilities, instruction delivery, and a post-assessment to conduct a final evaluation.

The team began the first phase by using Google Forms to administer a pre-test with ten questions on cybersecurity, deepfakes, hoaxes, and basic knowledge of artificial intelligence (AI). To adapt the content to participants' needs, this exercise aimed to assess students' baseline level of understanding.

As an educational intervention, the team then conducted an interactive session. The speakers used PowerPoint presentations featuring case studies, samples of AI-manipulated content, and simulations on how to confirm facts using reputable fact-checking websites to convey the information. To encourage active participation, critical thinking, and an understanding of the importance of using AI safely and ethically in everyday life, presenters encouraged direct discussion and questions during the session (Ruslandi et al., 2022).

After completing the educational session, each participant completed a post-test to assess any improvements in their level of comprehension. The team used these results to gauge the program's success. To ensure that education on AI usage, hoax and deepfake detection, and cybercrime prevention continues sustainably, the service team created an AI literacy module that the school can use as teaching material.

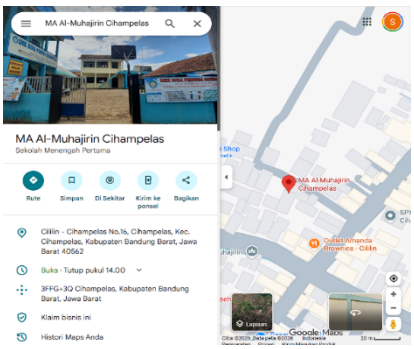




Figure 1. Location of the Community Service Activity

Results and Discussion

At MA Al-Muhajirin, located at Jalan Raya Cihampelas No. 17, RT 01/RW 02, Cihampelas Village, Cihampelas District, West Bandung Regency, West Java, the team carried out this community service project. The program targets 26 kids who actively use digital gadgets. The team used three phases to develop the implementation strategy: pre-assessment, instructional execution, and post-assessment.

To introduce the activity to all participants, the team held an opening ceremony to kick off the program. A representative from MA Al-Muhajirin, the Head of the PKM Execution Committee, and the Head of the Advisory Board of Community Service gave opening remarks after the master of ceremonies.



Figure 2. Opening of the MC Activity

In their opening remarks, the speakers stressed the importance of strengthening teens' digital literacy so they can use AI responsibly, understand the ethics of using AI, and recognize the spread of deepfakes,

hoaxes, and other cybercrimes. The team proceeded with the activity according to the established agenda after finishing the opening series.



Figure 3. Greetings from representatives of MA Al Muhajirin and Community Service Supervisor Lecturers



Figure 4. Speech from the Chief Executive of Community Service

The team completed the first step using a Google Forms pre-test with 10 questions on cybersecurity, hoaxes, deepfakes, and artificial intelligence (AI).

The pre-test aimed to assess students' initial level of understanding so the team could tailor the content to participants' needs.



Figure 5. Pre-test session using Google Forms

Delivering the content through an interactive seminar was the next step. Speakers used PowerPoint slides that included case studies, samples of content altered by artificial intelligence, and simulations of how to verify information using reputable fact-checking websites. The team gave attendees the chance to debate, ask questions, and share their thoughts on a range of topics related to AI use, the spread of hoaxes, deepfakes, and cybercrime risks during the presentation. The team chose this strategy because it promotes participant involvement, builds critical thinking skills, and clarifies the importance of using digital technology ethically and responsibly (Ruslandi et al., 2025).



Figure 6. Material Presentation and Ice-Breaking Session

The team continued the activity with a post-test to evaluate learning after the speakers delivered all the information. The team administered the post-test to gauge participants' increased comprehension after enrolling in the educational program and to assess how successfully the activity was carried out. To ensure that instruction on using AI, identifying hoaxes and deepfakes, and preventing cybercrime continues sustainably, the service team created an AI literacy program as a follow-up.



Figure 7. Post-Test Session



Figure 8. Awarding Prizes to Active Students



Figure 9. Presentation of the Certificate to MA Al Muhajirin



Figure 10. Joint Documentation Session and Closing of Community Service Activities

Conclusion

The group effectively completed the community service project "Digitally Smart Generation in the AI Era: Education on AI Usage Ethics, Hoax and Deepfake Detection, and Cybercrime Prevention for Students at MA Al-Muhajirin" in compliance with the predetermined objectives. All participants and the school administration responded well to this activity. Through the series of instructional sessions, students learned how to use artificial intelligence responsibly, spot deepfakes and hoaxes, and take simple precautions against various cybercrime risks. Throughout the event, participant engagement was successfully increased by combining the

material presentation with interactive seminars, debates, and case study analysis.

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