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Socialization of Digital Literacy and Artificial Intelligence to Improve Knowledge and Skills in Rangdumulya Village

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ABSTRACT

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Technology Digital Literacy Artificial Intelligence The socialization of Digital Literacy and Artificial Intelligence was carried out in Randumulya Village, Karawang Regency, which focused on increasing the community's insight into skills so that they can train and create creative ideas and opportunities. The socialization was carried out by two targets, namely to village officials and the community and students at elementary schools in the village. This activity was carried out in the Village Hall with resource persons who were expert lecturers in their fields and activities with students were carried out at the school and accompanied by students to be more interactive. The results of the satisfaction of 55 respondents who were carried out by distributing questionnaires reached 85% who stated that they were satisfied. With this training, it can help the village community to know and get benefits from digital literacy and technological intelligence so that it has a positive impact and standard of living in the village.

Sosialisasi Literasi Digital dan Artificial Intelligence dilakukan di Desa Randumulya Kabupaten Karawang yang berfokus kepada meningkatkan wawasan keterampilan masyarakat sehingga dapat melatih dan menciptakan ide kreatiftas dan peluang. Sosialisasi dilakukan dua target yaitu kepada aparat desa dan masyarakat serta siswa di Sekolah dasar di Desa. Kegiatan ini dilakukan Aula Desa dengan narasumber Dosen pakar dibidangnya dan kegiatan bersama siswa laksanakan di Sekolah dan didampingi oleh mahasiswa agar lebih interaktif. Hasil kepuasan dari 55 responden yang dilakukan dengan menyebar Kuesioner mencapai 85% menyatakan puas. Dengan adanya pelatihan ini dapat membantu masyarakat Desa mengenal dan mendapatkan manfaat dari literasi digital kecerdasan teknologi sehingga memberikan dampak positif dan taraf hidup Desa.

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A. INTRODUCTION

Technological developments are developing quite rapidly, marked by the trend of utilizing technology in all fields which is directed towards online, mobile & multimedia-based technology (Novalia et al., 2022). Technological support becomes a technological intelligence that offers many opportunities to include possibilities in all areas to become more efficient and effective (Voutama et al., 2022). In addition, technological developments have changed people's habits from only reading through print media, watching on television to digital which is synchronized on smart technology devices (Fitriani et al., 2023). One of the problems in the field of education, partners must have a commitment to upgrade the human resources of educators and students there so that they are able to synergize with the digital technology education platform that must be mastered by current teacher human resources, it's just that the location and design of the school's skills and creativity are different (Fattah et al., 2023). So that several things are needed that must be developed in the learning process, because the process of developing student creativity also affects the understanding of the lessons learned, while the influence of teachers in this training is in order to change the way of teaching from ordinary teaching to extraordinary teaching that is educational and fun (Asis Nojeng et al., 2023). Related to the facilities and infrastructure in the learning process. This excellent infrastructure can be seen from the availability of the Internet network, a number of PCs in the computer lab and the availability of the school's URL web link. This infrastructure is very supportive if the learning process is implemented Digital Literacy School Platform-Based Learning based on Artificial Intelligence through optimization of the technology platform and will also improve the ability and skills as a provision of basic expertise (Kusumadinata et al., 2023).

Community service activities with the theme of Socialization of Digital Literacy of Technological Intelligence or Artificial Intelligence will be carried out in Rangdumulya Village. The potential or problems in the village include the fields of Education, Health, Socio-Cultural, Economic, and Environmental, while in this community service activity it will be in the field of Education (Demmanggasa Yultan et al., 2023). In the field of education, the potential and problems that occur are the number of educational institutions that are sufficient but are not balanced with minimal infrastructure and still need insight and training, one of which is in the field of technology to improve skills, especially in digital literacy and technological intelligence for teenagers and young people of productive age so that they have provisions for the latest knowledge today according to the needs of the world of work and business opportunities (Asnawati et al., 2023). Based on these problems, in accordance with the service activities of the Socialization of Digital Literacy and Technological Intelligence, these problems will be overcome through the use of technology (Gede et al., 2023).

The challenge that occurs is the knowledge and use of technology for teenagers and young people in the village. This greatly influences them to what extent they know and understand what technology is like today (Theguh et al., 2024). The introduction of technology that is not accompanied by education does not provide positive results and tends to be unfocused, even negative, and the lack of knowledge and use of technology is also ineffective for the continuity of the development process and education levels for them. One effort that needs to be made is to provide an introduction and socialization of technology with the concept of digital literacy socialization to teenagers and children, both junior high school students and elementary school students (Asnawati et al., 2023).

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The purpose of this community service activity is to provide insight and technological skills to be able to help and facilitate the learning process of students both offline and online, where technological facilities such as computers, laptops, internet networks, projectors and other multimedia media supporting education are primary needs that must be present in educational institutions. Conducting introduction and socialization of Digital Literacy and intelligence technology or Artificial Intelligence which is developing and becoming smart technology. Artificial Intelligence Application Training to the community, teachers, especially students, teenagers and village youth so that they can increase knowledge and insight into part of technological progress and become provisions for the world of work and business opportunity ideas.

B. LITERATURE REVIEW

Digital literacy is the knowledge and hope to use digital media, communication tools, or networks in searching, finding, using, creating information, and utilizing it in a healthy, wise, intelligent, careful, precise, and lawful manner in order to foster communication and interaction in everyday life (Asis Nojeng et al., 2023). Digital literacy is also the ability to use information and communication technology (ICT) to communicate information or content with technical and cognitive knowledge (Demmanggasa Yultan et al., 2023). Digital literacy also means having the ability to think critically in the face of a flood of information in cyberspace. That way, someone can sort out information that is correct, relevant, and useful, and avoid the trap of misleading or dangerous content. In addition, digital literacy includes the ability to adapt to new technologies that continue to develop. This is important to keep up with the changing times, both in the increasingly digital world of work and in everyday life. More than just technical skills, digital literacy also teaches social responsibility. For example, how to use technology to support sustainability, build more inclusive communities, or even create innovations that have a positive impact on many people (Rahayu et al., 2023). In the world of work, digital literacy is an important advantage because many jobs today require the ability to use digital tools and platforms. For the wider community, digital literacy can encourage the creation of healthier interactions in cyberspace (Theguh et al., 2024). This involves communicating politely, respecting differences of opinion, and avoiding the spread of hate speech (Kusumadinata et al., 2023). With good digital literacy, we not only become smart technology users, but also part of the solution to building a safer, more inclusive and beneficial digital ecosystem for all (Gede et al., 2023).

Artificial intelligence, or AI, is a branch of technology that enables machines or computer systems to mimic human abilities to think, learn, and make decisions (Kuncara et al., 2024). This technology is designed to analyze data, recognize patterns, and solve problems automatically without direct human intervention (Sony Maulana et al., 2023). Examples include virtual assistants like Siri or Google Assistant that can understand voice commands and provide answers, to more complex AI systems like autonomous vehicles that are capable of driving themselves (Mardikawati et al., 2023). AI plays a major role in various fields, such as health to diagnose diseases, business to analyze markets, and education to personalize learning (Romdhini et al., 2024). However, the development of AI also raises ethical challenges, such as data privacy and the potential replacement of human labor (Hakeu et al., 2023). Therefore, although AI brings many benefits, its use needs to be monitored to ensure that it remains in line with humanitarian values and has a positive impact on society (Sanhaji & Hizbullah, 2023).

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C. METHODS

The following is an explanation of each flow of community service activities in Randumulya Village, Karawang, as follows:



Figure 1. Activity Framework

1. Planning stages and problem analysis

The planning and problem analysis stage is the initial part of a series of activities where this activity is carried out based on the problems that occur in the partner, namely Randumulya Village with several selected problems along with proposed solutions by formulating an activity plan that focuses on teenagers and young people and the community in the village, schedule planning, and the process of community service activities carried out.

2. Stages of Socialization and Preparation of Activities

Socialization of preparations to the community service team and conducting socialization/invitations to related parties, including village leaders, communities and teenagers and youth who participate in this activity as well as socialization to other involved parties.

3. Stages of Activity Implementation

This stage is the core stage of the activity, namely the process of implementing activities carried out with strict health protocols during the pandemic. At this stage, there is a Rounddown of events that are categorized into three main parts:

- a. Opening ceremony
 Opening of the event by both partners and the service team.
- b. Socialization, Training, Activities
- c. Closing of the event activities

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4. Closing and Evaluation Stages

This stage is the final stage of the service activity, namely the process of evaluating both the shortcomings and advantages obtained and can be used as a basis for ongoing activities. And at this stage, a report on service activities is made.

D. RESULTS AND DISCUSSION

4.1. Rounddown of Socialization Activities

The socialization aims to increase the insight of the Rangdumulya Village community, especially the community and elementary school students in the village so that they can fulfill literacy about the use of technology and knowledge of the development of artificial intelligence (AI). This activity consists of community service organizers consisting of lecturers and students where this activity involves the community carried out with Lecturer speakers while School Students involve students who aim to provide more interesting contributions along with creative ideas so that they become more interactive. This community service activity was carried out on August 3, 2024 including several event schedules which can be seen in Table 1 below.

Time **Event** Description 07.30-08.30 Departure to Rangdumulya Village. Committee 08.30-09.00 Preparation in the Village, greetings from Committee the committee, greetings from the Village Head. 09.00-12.00 Introduction to Digital Literacy and Lecturers & Village officials Artificial Intelligence for village officials and the community. and the community. 12.00-13.00 13.00-15.00 Introduction and learning of technology, Students and Pupils in digital literacy and artificial intelligence for Schools. students 15.00-16.00 Closing Activities Committee & Participants 16.00-17.00 Committee Preparing to return to campus

Table 1. Activities Rounddown

4.2. Activities Rounddown

The socialization activities carried out by the resource person, namely the Lecturer to the Village apparatus and the Community who were present were about awareness of technological developments and the positive use of technology and the introduction of artificial intelligence (AI) which is currently developing very rapidly. The media used is multimedia-based to support the implementation process of activities so that learning runs smoothly. Some of the devices needed such as Laptops that will be used for training and activity simulations, projectors, and artificial intelligence (AI) in supporting activity workshops. The following is some documentation of the activities.

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Figure 2. Activity Documentation



Figure 3. Documentation with Village Officials

In the implementation of socialization to students guided by students in accordance with the theme of the activity and has been adjusted to the problems and conditions needed by students and schools. Activities are carried out in two schools, namely SDN Rangdumulya I and SDN Rangdumulya III. Things that are done to implement the program, begin with conducting a field survey of elementary schools in Rangdumulya Village. After that, it is continued by taking care of the permit letter with the School. After the permit has been approved, activities are carried out at SDN Rangdumulya I and SDN Rangdumulya III. This activity is intended for students of SDN Rangdumulya I and III. This program begins with a consultation with the village and youth organizations considering that this activity is also carried out in schools and the village environment. After the consultation, learning activities are carried out to get to know digital literacy, technology, and introduction to basic artificial intelligence (AI) application applications. Here is some documentation of activities with students at the School.

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Figure 4. Documentation of School Activities



Figure 5. Documentation with Students

4.3. Evaluation Results

The community service activities that had been carried out in Rangdumulya Village were then carried out a survey to see the extent of the positive response from the community towards activities with the theme of socialization of technological intelligence literacy. Questionnaires were distributed to respondents consisting of approximately 55 people to assess the activities and benefits obtained.

Table 2. Questionnaire

No	A list of questions	Satisfaction Level					
		1	2	3	4	5	
1	What do you think about this activity?						
2	How interesting is this activity in your opinion?						

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3	What is your assessment of the socialization and what has been done?			
4	How do you feel the benefits of this activity?			
5	Is there a need for ongoing activities of this program?			

Based on the questionnaire that has been distributed to the community in Rangdumulya Village, the following results were obtained.

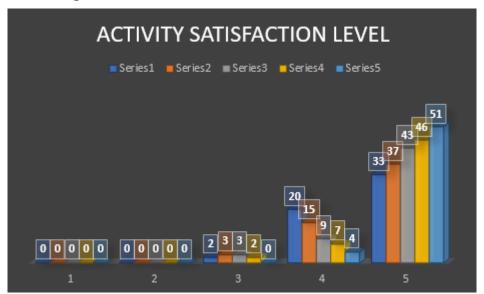


Figure 6. Respondent Satisfaction Results

Based on the results of the survey conducted for each field, the level of satisfaction in the range of 5 reached 85% and above. So from the results it can be concluded that this activity is very beneficial for the community in Rangdumulya Village, especially the ongoing activities of this community service activity. The existence of this activity is fully supported by related partners, namely the Rangdumulya Village Office so that this activity runs and is implemented sustainably so that this activity can be continued and integrated.

E.CONCLUSION

The output achieved in this community service activity is the provision of insight and knowledge of technological intelligence literacy with targets in the fields of education, health, and economy in Rangdumulya Village. This community service activity has generally been carried out in Rangdumulya Village which was attended by the Village Head Mr. Abdul Aziz, and the Village Secretary Mr. Nurpuad, all village officials, and the community in Rangdumulya Village where the target of socialization carried out went well with the target achievement of technological intelligence literacy knowledge.

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