

## Communication and Community: The Community Service to Optimize for Computer Literacy and Internet Training for Bekasi Societies

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### **Abstract**

*Indonesia has a degree of literacy capacity; however, the reading interest in the community is still highly concerning; hence, the volunteer is required to increase information literacy and digital transformation so that the country can compete globally. Information literacy is one of the qualities necessary for a person to possess, particularly in today's world of intense international rivalry and rapid digital transformation. Information Literacy is required due to the rapid development of information so the need for information literacy is necessary. The most important reason is that everyone needs to recognize that there is a great deal of information circulating. This study aims to describe the implementation of community service in optimizing computer literacy and internet training for the Bekasi Society. This study used community-based research (CBR) as the method, particularly in advancing communication and information technology, which highly supports the dissemination of information to the public as a whole. The finding shows that there is an improvement in participants' information literacy abilities and their capacity to use computers and the internet. All participants in the Community Service comprehended the methods to search for information via the internet, create and produce engaging learning materials, and use computers and current media to support the learning process.*

**Keyword:** *Digital Transformation, Training, Information Literacy, Computer*

### **Abstrak**

Indonesia memiliki kapasitas literasi yang cukup baik, namun minat baca masyarakatnya masih sangat memprihatinkan, oleh karena itu, dibutuhkan relawan untuk meningkatkan literasi informasi dan transformasi digital agar Indonesia dapat bersaing secara global. Literasi informasi merupakan salah satu kualitas yang perlu dimiliki oleh seseorang, terutama di dunia yang penuh dengan persaingan internasional yang ketat dan transformasi digital yang cepat. Literasi Informasi diperlukan karena perkembangan informasi yang begitu cepat sehingga kebutuhan akan literasi informasi sangat diperlukan. Alasan yang paling penting adalah setiap orang perlu menyadari bahwa ada banyak sekali informasi yang beredar. Penelitian ini bertujuan untuk mendeskripsikan pelaksanaan pengabdian kepada masyarakat dalam mengoptimalkan literasi komputer dan pelatihan internet bagi Masyarakat Bekasi. Penelitian ini menggunakan metode penelitian berbasis masyarakat (community-based research/CBR), khususnya dalam memajukan teknologi komunikasi dan informasi yang sangat mendukung penyebaran informasi kepada masyarakat secara menyeluruh. Hasil penelitian menunjukkan bahwa terdapat peningkatan kemampuan literasi informasi dan kapasitas peserta dalam menggunakan komputer dan internet. Seluruh peserta Pengabdian Masyarakat telah memahami cara-cara untuk mencari informasi melalui internet, membuat dan memproduksi materi pembelajaran yang menarik, serta menggunakan komputer dan media yang ada saat ini untuk mendukung proses pembelajaran.

**Kata Kunci:** Transformasi Digital, Pelatihan, Literasi Informasi, Komputer

## INTRODUCTION

Nowadays, due to the intense international competition, people are required to have the ability to access resources through information literacy. Notably, the rapid development of information has led to the growing and urgent demand for information literacy. According to the Association of College and Research Libraries (2000), information literacy is a fundamental necessity for lifelong learning. It is used in all disciplines, learning environments, and education degrees (2000). Further, information literacy is a requirement for lifelong learning.

This indicates that information literacy is a fundamental skill that plays a vital role in all activities related to all disciplines and all levels of education, including pre-school, elementary school, junior high school, high school or vocational high school, and any level of higher education.

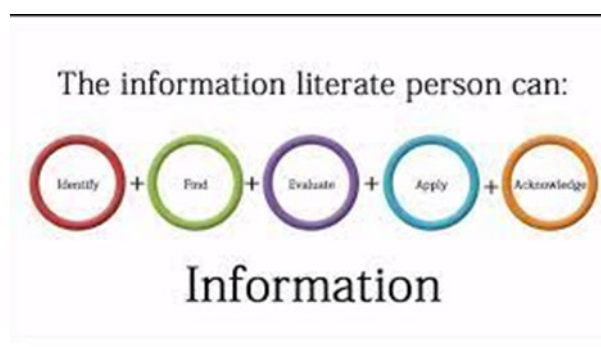
Literacy in information denotes that every individual possesses the intellectual capacity to analyze, argue, and comprehend new information critically and effectively. Thus, information literacy is always associated with continuing education throughout one's life. Literacy is an essential skill as it can contribute to expanding educational opportunities. As Chan Yuen Chin (2001) said, having a good understanding of how to use information resources is valuable in achieving lifelong learning goals.

Particular research areas consider information literacy as the major outcome of students after completing higher education (ALA, 2000: 4). The United States is one of the developed countries that belongs to this category. This is because the goal of education is to encourage continuous learning throughout one's life.

Additionally, the massive of information circulating leads people to acknowledge that information literacy is crucial. This is because the advancement of communication and information technology highly supports the dissemination of information to the public as a whole. People can obtain information from some sources, such as libraries, community resources, specific groups, the internet, and many more. It can be the form of digital or printed. However, the various forms of media used to deliver information lead audiences (who analyze and comprehend the information) to new difficulties. Moreover, they have to sort out the information that is relevant to them.

In this era, literacy skills are necessary not only because they are essential in general but also in exceptional cases. The advancement of science and technology, as well as the dissemination of knowledge, has improved rapidly. Consequently, this has resulted in an ever-expanding scope of globalization. Then, it

will be unfair and harmful without having the ability to face and manage it; one of them is adequate literacy skills. In this case, it lets the increasingly open new information and knowledge, which can be helpful as a preparation to compete with other countries. Through good literacy skills, increasingly opening up space for new information and knowledge, this is useful in preparing to compete with other countries. Information literacy is an individual's ability to understand, evaluate and use information. It comprises five components: identifying, locating, evaluating, applying and acknowledging information sources. A lifelong learning process that supports development over time, as shown in Figure 1.



**Figure 1.** Information Literate Person  
**Source:** <https://libguides.seminolestate.edu/>

Although the Indonesian population has a relatively high literacy rate, their enthusiasm for reading is still a concern. Based on the results of some studies, including the Program for International Student Assessment (PISA) in 2019, it has been determined that Indonesia has one of the lowest literacy rates among the bottom ten countries. As the information presented, Indonesia is ranked 62nd out of 70 countries (PISA, 2018).

The low interest in reading is the reason why literacy levels in Indonesia are poor. According to other findings, only one person out of a thousand in Indonesia has a passion for reading. As a result, the low interest in reading has a significant impact on the annual production of books in Indonesia. The ratio of the total number of readings in Indonesia has a national ratio of 0.09, which shows that Indonesia has a low reading rate. This demonstrates that ninety per cent of Indonesians look forward to publishing one new book each year (Ministry of Home Affairs, 2021).

Indeed, having high information literacy skills can ease someone to study independently and explore the outside world quickly, but it is not the only factor that will make it easier. This is necessary for students to absorb information and knowledge entirely. Because of its relevance, information literacy enables some-

one to improve self-quality, obtain something beneficial, develop activities, and assist others in their job. Currently, the importance of being literate in information, having access to the internet, and having a basic understanding of computers is an obligation and a requirement. However, some individuals in the Bekasi area of West Java needed to recognize the significance of being literate in information, having access to information, and being familiar with the internet.

According to the findings of surveys and the observations conducted by the community in the Bekasi area, there is still a significant number of teachers, students, and the community who need help comprehending information literacy and internet access using computers. In addition, most people in the Bekasi area still need to understand how to acquire and assess information, particularly on the internet.

Although information literacy enables someone to improve their quality of life, obtain many advantages, create a variety of activities, and assist others in their work, the relevance of information literacy remains. Teachers, students, and communities have obligations and requirements that must be met to fulfil the increasing needs of information literacy, internet access, and computer skills. By concerning these two issues, it can impact the accomplishment of the learning process.

Students, teachers and communities must have a strong understanding of information literacy and computer skills to access the internet for good professional competence. Furthermore, in manifesting an effective learning process, they need to master information literacy and utilize internet access. It is expected that they can create conditions or strategies that can comfort students in following the learning process.

According to the findings of polls and analysis of the current situation, it is vital to enhance the literacy levels of the community, particularly among educators and learners. In the Bekasi area of West Java, the main focus comprises students and teachers. Internet connectivity for teachers and students is projected to be the initial step toward promoting information literacy in the Bekasi area of West Java due to information literacy training activities being conducted there. Hence, the formulation of problems associated with this community service activity includes, among other things:

- a. Improving techniques to enhance the community's information literacy.
- b. A good educational process should utilize internet access effectively and efficiently.
- c. Improving accessibility of the internet for educational purposes.

The purpose of community service activities is to enhance people's information literacy abilities and their skills to access the internet effectively and efficiently, particularly in the learning process, which can take place anywhere, including school, home, workplace, and other environments. So, this is the goal of the activities (PISA, 2018).

Solutions and outputs accomplished by this community service, generally, the community in the Bekasi area of West Java consisting of teachers and students need training and mentoring, specifically related to information literacy and the use of internet connection in the learning process. This is due to the findings of the interviews and observations showing that the literacy level of the Bekasi community is still relatively low. Meanwhile, one of the aims of the regional government is to increase the overall level of literacy skills the community possesses from one year to the next.

## **METHODS**

This study used the Community Based Research (CBR) method, which will determine various techniques for data collection and analysis, and also a research model that lets the target social community as an active part of the research process. Additionally, it increases the effectiveness of the data collection and analysis process and produces valuable recommendations for improving the quality of their social life. Meanwhile, the research model is getting closer to the action research model (Brakefield-Caldwell, 2000).

This model is carried out using dynamic and cyclical trials, which means that it is assessed and designed continuously to acquire the best model that meets demands. After that, Action Research is carried out by a team between the researcher and partners from the social group that is used as the target group in the research. Nevertheless, the academic process in CBR does not look for the meaning of phenomena, and it also does not interpret the meaning of phenomena; instead, it formulates a design that is necessary by the community based on the results of their trials in real life. This makes the foundation of CBR research qualitative because it will always correspond between design and social needs.

In order to manifest the change in society, researchers and academics need to initiate the practice, which allows the public to engage in the formulation of significant concerns that need intervention (Gregory, 2013). Then, they are allowed to take part in the process of developing research proposals and preparing presentations to submit those proposals to the government or any organizations that are funding the research. After that, the researchers must include the community in deciding which social groups will be employed as research subjects.



Both in the process of selecting social communities and in the process of developing instruments to measure the level of success of interventions in the conducted research, community representatives need to be involved in the preparation of the design of models that will intervene in their social communities and also the measurement instruments.

Some social groups of research participants are also involved in using the model design intervention. This involvement takes place during the process of utilizing the model design. Lastly, the community as the research topic is the party who assists in the formulation of the final research results, as well as their dissemination, and they also assist in explaining to the community how the new model was applied in their social life so that the changes that they desired would take place.

The time devoted to performing this community service is two days. An exploration starts the training with community service cooperation partners conducted in December 2023. Next it is followed by the first surveys and observations conducted in February and March 2023. In April 2023, based on preliminary observations, the community service team offered internet and computer access, as well as restored various schools in the Karawang area so that students could access the internet. In addition, in March of 2023, the group in charge of community service began preparations by arranging the content to be presented during the training. After that, the activities for the training will be held in April 2023, specifically on April 16 and April 17, 2023.

## RESULTS AND DISCUSSIONS

Community Service activities, notably teacher and student training in developing information literacy and utilizing internet and computer access, have been going well and efficiently following previous community service plans. This is because the previous community service plans were accurate. These exercises were planned to enhance information literacy and repair the use of the internet and computer access.

In conducting this activity, the first steps were exploration and coordination, which were subsequently followed by the development of collaborative commitments and the beginning of preparations. So, the activities, including community service, were carried out over two days.

This community activity resulted in various notes and ideas or inputs for improvement, which were conveyed to students and teachers in the Bekasi area of West Java. These ideas and suggestions are beneficial in enhancing the entire quality of information literacy, as well as utilizing the use of internet and com-

puter access in the learning process.

In the first stage, training on computers to develop these abilities can be followed for free to increase people's interest and motivation to study. Computer training can increase knowledge about the importance of technology, as well as generate demand for technological advancement and the drive to pursue it. On the other hand, the challenges in this training were the lack of facilities and infrastructure, as well as the attitude that the old approach to computer training is the best.

### ***The Plan of Action***

One of the most essential undertakings is enhancing the standard of living in the Bekasi population. Literacy rates and the ability to access the internet in the community must be improved; therefore, ongoing training and support are required. Training in information literacy skills comprises the development of multiple skills, including the following:

- a. In order to provide technical talents and skills, training must utilize a variety of knowledge sources.
- b. The methods and abilities taught, namely utilizing information sources, tools for retrieving information, and information itself.
- c. Make information the primary source in the problem-solving process.

In addition, in line with the ideas of information literacy specialists, it is possible to establish the existence of ten qualities or characteristics of information literacy, and someone is considered to master information literacy if he/she can do the following things:

1. Knowing the accuracy and completeness of the information that is the basis for making the right decision;
2. Knowing the requirement of communication;
3. Formulating questions based on information needs;
4. Identifying potential sources of information;
5. Developing the right search strategy;
6. Accessing information sources, including computer-based and other technologies;
7. Evaluating information;
8. Organizing information for practical purposes;
9. Integrating new information with existing information;
10. Knowing the need for these ten skills will be covered in depth throughout the information literacy training given to the Bekasi society.



The following occasion is a training activity for the use of the internet and computer access for both teachers and students. In this case, the skills taught include the knowledge required to utilize the internet and computer access effectively and efficiently to increase the level of education received in the classroom. The information offered to foster a deeper understanding of how to maximize the use of the internet and computer access, as follows:

1. Utilizing the World Wide Web as an effective information search approach
2. Creating or generating educational materials using digital technologies, such as PowerPoint presentations, films, animations, graphics, and such a thing.
3. Using computers to archive and document educational experiences.
4. Utilizing the latest teaching methods and tools that are engaging and working.

There are Four indicators are related to information literacy and internet access, as presented in Table 1. The first and second indicators are targets that must be achieved, namely improving information literacy skills and internet and computer access. The third and fourth indicators are optional, with choices related to information selection for micro, small, and medium enterprises (MSMEs) and businesses, and internet access focused on learning and digital libraries. Thus, this depiction reflects attempts to improve information literacy and access to information technology in various contexts, including options related to MSMEs and businesses.

**Table 1.** Output Achievement Target Plan achieve

No	External Type	Achievement Indicators
1	Improving Information Literacy Skills	Mandatory
2	Increased Internet and Computer Access Capabilities	Mandatory
3	Selecting information for MSMEs and Businesses	Choice
4	Internet access for learning and digital library	Choice

The training invited forty people from the Bekasi area to take part in some training activities, beginning with training to promote information literacy to training to improve internet access and computers. The participants were split up into two groups: teachers and students.

a. Instructions for Use and Management of Information

Bruce (2003: 3) made the concept of information literacy from the point of view of an educational stance. Bruce stated that information literacy is the ability to gain access, assess, organize, and use information to learn, solve problems, and make decisions in both formal and informal learning situations, at work, at home, and in educational settings. This realization demonstrates that information literacy is the capability to gain access, analyze, organize, and utilize information in the learning process, resolving problems, and making formal and informal decisions in the context of school, work, or domestic life. In order to manifest the improvement of people's information literacy, the provided material aims to improve the ability to (as follows):

1. Seek information;
2. Find information;
3. Analyze information;
4. Evaluate information;
5. Communicate information;

which is essential in fulfilling information needs in order to solve various problems.



**Figure 2.** All of participants from any communities



**Figure 4.** The Demonstration for hardware

On April 16 and 17, approximately 21 people from the Bekasi area joined this occasion. The participants, as shown in Figure 2, included teachers and UT students. Eventually, as a result of the Community Service, all participants knew and understood strategies for seeking, locating, analyzing, and evaluating information, and then communicating it. Besides, the community needs to pay more attention to one aspect regarding the information, which is the need to examine and assess the information.

a. Instructions on Information Collection and Computer Use

This training also focuses on delivering material about mastering information technology, as shown in Figure 3, to facilitate information literacy. Then, the education to enhance one's ability to access the internet and computers is presented by the following material:

- 1) A method for conducting beneficial research via the internet;
- 2) The creation of engaging educational materials via computer-based applications; these can be in the form of PowerPoint presentations, videos, animations, graphics, and many more;
- 3) The utilization of computers in order to compile archives and educational documents; and
- 4) Using a variety of contemporary forms of instructional media that are both engaging and productive.

b. The output of participation

Eventually, all participants in the Community Service comprehended the methods to search for information via the internet, create and produce engaging learning materials, and use computers and current media to support the learning pro-

cess.

In addition, as an effort to provide community service, the implementation team not only provides the necessary resources to disseminate information to educational institutions but also to community-based facilities. In April 2023, the group of volunteers conducted community service by cleaning and painting the computer lab, creating internet access, and providing helpful equipment to enable internet access.

#### c. Observation and Assessment

After participating in the activity for two days, precisely on April 16 and 17, 2023, the community service team conducted the first stage of monitoring and evaluation. Then, the second stage is conducted on June 3, 2023. The team carried out both stages. The community service team distributed ten questions to the initial phase of the evaluation process.

The results of the assessment questionnaire revealed that every participant experienced a considerable improvement in information literacy abilities and skills to use computers and the internet. This is because all participants answered the questionnaire. In addition, on June 3, 2023, the community service team shared their insights with a few participants about the provided content.

The findings of the interviews and observations also demonstrated that all participants were able to use all the training materials effectively. Specifically, it is related to processing, analyzing, and assessing information, as well as utilizing various media and apps to facilitate an efficient and successful learning process.

## CONCLUSION

Based on this training, some different things appeared, including significant improvements in the methods for locating possible information sources, the formulation of appropriate search techniques, and the gaining of access to information sources, including computer-based technology and other technology.

It is the desired growth and evaluation of information to obtain accurate and factual knowledge. The most effective method for helpfully organizing information and for integrating newly acquired facts and figures with prior knowledge. The higher motivation to use knowledge as critical thinking skills to solve problems, as well as the increased ability of participants to utilize internet and computer access in the effective learning process.

This program can promote ideas for people who have creativity and passion to be realized. Notably, this instruction aims to ease the community's daily responsibilities. Last, this computer training collabs with a variety of communities in the Bekasi area, including education services, government agencies, and in-

dustry, in order to accommodate the graduates of this training, who will be entering the future workforce.

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