

Developing students' digital literacy through cyber-counseling in the era of society 5.0

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Abstract

In the era of society 5.0, science and technology are increasing. The development of this technology needs to be accompanied by digital literacy competence in preventing threats and dangers generated by technology. Digital literacy is critical to use technology to obtain information and communicate. This paper aims to develop students' digital literacy through cyber counseling services. The method used is a literature study by reviewing literature sources in books, proceedings articles, national and international journals related to the study variables. Cyber-counseling is an innovation of guidance and counseling services by utilizing technology to implement counseling. The counseling process is conducted using electronic devices and internet networks, not face-to-face but online. Guidance and counseling aim to help students achieve optimal development in themselves. The development of students' digital literacy can be done by using cyber counseling on essential services, individual planning services, and responsive services. Examples of implementation in essential services can be developing group guidance services regarding conceptual of digital literacy. In individual planning services, practical social media skills development can be carried out. And in responsive services, counseling is carried out for students who have problems with cyberbullying.

Keywords: cyber-counseling, digital literacy, society 5.0

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INTRODUCTION

Along with the times, the development of technology is also growing rapidly. This development continues to accelerate in an effort to meet human needs globally, like the current technological developments leading to the era of society 5.0. The concept of society 5.0 is a refinement of the previous concepts. As is well known, the industrial era 1.0 is an era where humans are still in the age of foraging for food by hunting and recognizing writing. Then in the industrial era 2.0, humans began to know how to grow crops. Furthermore, it developed into industry 3.0, which has entered the industrial era where humans have started to use machines to help carry out daily activities. And now, as we are experiencing technological developments are already in the industrial era 4.0, where humans are familiar with computers and the internet. Instead of the development of industrial technology 4.0, which is still being developed in Indonesia, a new era of the order has emerged, namely society 5.0.

Era Society 5.0 was first initiated by Japan (Fukuyama, 2018). According to Nastiti and 'Abdu (2020), society 5.0 is a concept of a human-centred and technology-based society by applying AI technology based on big data and robots to carry out or support all aspects of human life ranging from health, urban planning, transportation, agriculture, industry, and education. This is also supported by the opinion of Setiawan and Lenawati (2020) that society 5.0 was developed in order to form a super-smart society that is able to optimize the use of the internet to be used as solutions for living a better life. The era of society 5.0 is a concept of applying the internet of things, big data, and artificial intelligence technology, which was developed to assist and support human activities in all aspects of life for the creation of a smart, quality, and prosperous society.

In dealing with the development of technology 5.0, of course, the ability to apply the technology is needed, as for the efforts that can be made, namely by cultivating digital literacy skills. This skill aims to prevent threats and dangers resulting from technology, such as information distortion. According to Sujana and Rachmatin (2019), although technological developments provide extraordinary benefits for human life, there are not a few negative impacts such as various online fraud crimes, misleading information (hoaxes), pornography, and so on. Therefore, to overcome the negative impacts, each individual needs to have language skills, critical and creative thinking skills and must have adequate digital literacy.

Digital literacy was first proposed by (Paul Glistner (1997) in Kurnianingsih, 2017) as a term for using technology and information from digital devices effectively and efficiently in various contexts, such as academics, careers, and everyday life (Kurnianingsih et al., 2017). Hague also stated that digital literacy is the ability to create and share in different ways and forms, to create, collaborate, and communicate more effectively, and to understand how and when to use good digital technology to support these processes (Kurnianingsih et al., 2017).

Sumiati and Wijonarko also explained the benefits of digital literacy, including enriching vocabulary, adding new insights and information, making one's interpersonal skills better, increasing speed in understanding information, improving verbal skills, improving analytical and thinking skills, increasing focus and understanding. Ability to concentrate and make it easier for a person to string together meaningful words and write. From some of the statements above, it can be concluded that digital literacy is a skill to operate various information technology and communication technology devices, and also as an effort to understand the content of technological devices.

One of the technological innovations that can be used as an effort to develop students' digital literacy skills is by using cybercounseling. Guidance and counseling services can help students achieve optimal development in themselves. Cybercounseling is a counseling service process that is carried out using electronic devices and internet networks, so it is not done face-to-face but online. The purpose of this paper is to develop students' digital literacy through cyber counseling services.

RESEARCH METHOD

The method used in this paper uses a qualitative approach, namely the study of literature by reviewing literature sources in the form of books, proceedings articles, national and international journals related to the study variables. The data obtained is then analyzed, then summarized and classified, and the results are arranged systematically. So that it raises new ideas and ideas that are still related to the topic of discussion. The main discussion in this research is regarding the development of digital literacy for students through cyber counseling services in the society 5.0.

RESULTS AND DISCUSSION

Cyber counseling in the era of society 5.0

The main characteristic in society 5.0 is the balance in the development of the business economy with the social environment. With the existence of technology in the era of society 5.0, this is an effort to reduce the impact of the problems that occurred in the 4.0 industrial revolution. The utilization of this technology aims to help meet the needs of the community.

An example of the application of technology in the era of society 5.0 in the field of education is the use of cyber counseling in guidance and counseling services. The process of providing online counseling services is carried out through an online network. The practice of implementing online counseling continues to grow. In this case, it is defined as a process of synchronous and asynchronous interaction between counselors and counselees using chat media, email, and video conferencing via the internet. The synchronous process is the provision

of counseling services through simultaneous online activities between the counselee and the counselor, which can be carried out through video calls or text chats. Meanwhile, the asynchronous process is the process of providing services or counseling communication whose activities do not occur at the same time (does not occur directly), such as when sending messages or emails but do not directly getting a reply from the counselor or counselee.

But in this case, it will certainly experience development in accordance with the characteristics of the era of society 5.0. if it is reviewed based on the special characteristics of society 5.0 era developments in media or cyber counseling applications, special features related to IoT (Internet of Think) or artificial intelligence can be developed to read and analyze the counselee's condition so as to facilitate the provision of assistance by counselors. Updates can also be done by modifying the application specifically so that in the counseling process, the counselee can feel the presence of the counselor in real terms even though it is based on cyber counseling services.

Digital literacy

Literacy is not only limited to the ability to read and write. But it becomes more complex to listen, speak, see, express and reflect critically on ideas (Dewi, D. A, at all. 2021). Literacy related to technology is called digital literacy, which is a person's ability to understand digital content. Understanding digital content is related to understanding social situations in the midst of technological developments.

The application of digital literacy aims to provide convenience for the community to be wise and responsible in using technology. The benefits of applying digital literacy include 1) growing new insights for someone in finding and understanding information, 2) growing one's ability to think critically, 3) improving verbal skills, 4) increasing one's focus and concentration (Sriyanto, 2021). In the field of education, digital literacy can be utilized in digitalization-based learning processes. This is to facilitate interaction and communication between teachers and students. In addition, the ability to operate the software is also a form of optimization of digital literacy.

Developing students' digital literacy through cybercounseling

Digital literacy is not just the ability to use software or run digital devices, but digital literacy is covering various types of cognitive, sociological, and emotional skills that are linked, which are needed by users in order to play a proper role in the environment digital. Currently, the most important capability for students is digital literacy skills. There is a negative effect on the behaviour of children and adolescents from the use of digital media and the internet based on several studies conducted on Indonesian children and adolescents. This is because the use of digital media and the internet that lacks parental supervision has an effect on the moral decline of Indonesian children and adolescents because not all information originating from digital media and the internet is suitable for consumption by children and adolescents. Therefore, the role of Guidance and Counseling teachers is very important in the development of digital literacy in students.

In order to develop students' digital literacy, this is done through cybercounseling on basic services, individual planning services, and responsive services. Cybercounseling is a professional counseling practice carried out by counselors using electronic media to communicate with counselees via the internet (Petrus, 2017 in Saputra, N. M. A., Hidayatullah, H. T., Abdullah, D., & Muslihati, M. 2020). The advantage of implementing cybercounseling is that the counselee and counselor do not have to meet each other in a physical space, so that both of them do not have to travel, are bound by appointments, and spend money to get somewhere (Sutijono, (2018) in Sari, M.P., & Herdi, H. 2021). this is in line with the statement (Fadhilah, M. Fat all. 2021) that the presence of cyber counseling is also a more efficient alternative to assist students in counseling

without having to meet directly with BK teachers. Examples of implementation in basic services can be developing group guidance services regarding conceptual studies of digital literacy, in individual planning services, effective social media skills development can be carried out. And in responsive services, counseling is carried out for students who have problems with cyberbullying.

CONCLUSION

From the results of studies and research, the implementation of guidance and counseling services aims to help students achieve optimal development in themselves. Therefore, the development of students' digital literacy can be done through the use of cyber counseling in basic services, individual planning services, and responsive services. Digital literacy is very important so that students are wiser in the current era of technological progress. Cybercounseling is a service development in the era of society 5.0 due to the optimization of the use of IoT (Internet of Thinking). Its development starts from the use of email, social media, video conferencing to the development of android-based applications.

Effectiveness in the implementation of guidance and counseling services, which are supported by various existing features, is expected to facilitate the implementation of services and the presence of virtual counselors becomes real so as to give the impression of warmth for the counselee. The use of cyber counseling services provides convenience in the implementation of the guidance and counseling program so that it can be done anywhere and anytime or has a high level of flexibility in its implementation.

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