

Online Social Presence in E-Learning-Based Librarianship Education and Training Using CMC Tools

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Abstract: The Covid-19 pandemic has caused significant changes in the way people live in almost all parts of the world. Among the changes that occur are the patterns of communication and interaction that are currently mostly done online. The National Library of the Republic of Indonesia also implements a policy of communicating and interacting online in the implementation of various activities, one of which is education and training. Since October 2020, the Education and Training Center of the National Library of the Republic of Indonesia has held online e-learning-based librarianship training. The implementation of e-learning-based education and training uses asynchronous and synchronous Computer-Mediated Communication systems to support the learning process. The use of CMC in online learning provides a new communication experience for education and training participants. Changes in communication patterns from face-to-face to computer-mediated also affect the interaction of training participants. This study aims to determine how the fabric of communication and interaction occurs through Computer-Mediated Communication in creating an online social presence. The method used in this research is a case study with a qualitative approach. Data was collected through semi-structured interviews and collecting other supporting documents. The results showed that online communication and interaction in e-learning-based librarianship education and training was quite well established. Although it may feel strange at first, over time the training participants can adjust to online communication and interaction patterns. Participants are more comfortable communicating and interacting using a text-based CMC system than face-to-face virtually.

Keywords: online communication, interaction, online social presence, CMC, online learning, librarianship education, and training

I. INTRODUCTION

The Covid-19 outbreak that began at the end of 2019 has an impact on all aspects of life, one of which is changes in communication. The Covid-19 pandemic has limited community activities and interactions, especially since the issuance of Minister of Health Regulation Number 9 of 2020 concerning Large-Scale Social Restrictions (PSBB). The regulation limits activities in the school and workplace environment, restrictions on religious, socio-cultural activities, modes of transportation, and activities in the field of defense and security [1].

Within the National Library of Indonesia, the policy to limit face-to-face activities is also applied to the implementation of librarianship education and training. The system for providing librarianship education and training has changed from a face-to-face pattern in the classroom to an online/virtual e-learning-based program which began on October 5, 2020. There are 5 types of e-learning-based librarianship training held in the 2020 Fiscal Year, namely: Technical Training Library Management Inpassing/adjustment, Head of School Library Education and Training, Library Services Training, Library Material Preservation Training, Management Training, and Library Accreditation Assessor Training. In 2020 there will be 20 e-learning-based librarian education and training activities held online [2].

Library Management Technical Training (Inpassing) is training that must be followed by Civil Servants with educational qualifications other than libraries, documentation, and information to be able to occupy functional positions of librarians [3]. This provision is regulated in the Regulation of the Head of the National Library Number 3 of 2019 concerning Procedures for Appointing Civil Servants in Functional Positions of Librarians through Inpassing Adjustments. Library Management Technical Training (Inpassing) in 2020 is divided into VII batches. The implementation of training for batches I and II is carried out offline because there is no regulation on activity restrictions. The e-learning-based Library Management Technical Training (Inpassing) started from batch III which was combined simultaneously with batches IV and V, lasting 19 working days from October 5 to November 2, attended by 143 participants [4]. Meanwhile, batches VI and VII were held from November 4 to 30 with 88 participants [5]. The implementation of this education and training is expected to improve the competence of professional and qualified personnel in the library sector.

E-learning is learning through electronic media such as television, CDROM, satellite, internet-based media, intranets, and others [6]. The Australian National Training Authority said the concept of e-learning is broader than online learning because it uses all electronic media for a wide range of applications and processes in delivering vocational education and training more flexibly [7]. E-learning is "a learning experience in a synchronous or asynchronous environment

using different devices such as laptops, cell phones, and so on with internet access" [8]. Online learning is an innovation in providing easy access for students to attend education without being physically present in class.

The implementation of e-learning-based librarianship education and training is through the Computer-Mediated Communication (CMC) system. Hiltz and Turoff (1978) stated Computer-Mediated Communication is communication between humans that is carried out through a computer system [9]. December (1997) defines CMC as a process of exchanging information by humans through computer intermediaries in certain contexts for various purposes [10]. According to Walther (1992), computer-mediated communication can be done directly (synchronously) or indirectly (asynchronously) depending on the media or CMC tool used [11]. In the synchronous CMC system or mode, the communication process takes place in real-time, while the asynchronous CMC users do not have to be online at the same time, in other words, the communication is delayed [12]. Examples of synchronous CMC tools used in online learning are e-mail, listservs, discussion boards, and blogs/weblogs. Asynchronous CMC includes: chat, Instant Messaging (IM), audio conferencing, and videoconferencing [13]. Since advancing of technological the form of CMC is also developing, not only purely synchronous or asynchronous but also a combination of the two that occurs in the same environment as NetMeeting and ICQTM [14]. The use of the two CMC modes gives different effects to the user. Synchronous CMC demands immediate response or feedback, while asynchronous CMC provides time for users to think and answer messages from the other person [15].

The Education and Training Center of the National Library of the Republic of Indonesia uses the Zoom Meetings, Moodle LMS, and WhatsApp applications in the e-learning-based learning process. Zoom is a video-based communication application that connects people in various parts of the world [16]. One of the familiar zoom products used in online communication today is Zoom Meetings. Zoom Meetings with various features in it support synchronous and asynchronous CMC systems which are currently widely used in online learning.

In e-learning-based librarianship education and training, Zoom Meetings are used during the online teaching and learning process in virtual classrooms. Moodle LMS is a Learning Management System that is open source, used as a virtual learning room that is flexible, easily accessible and equipped with security and privacy features [17]. This application is integrated into the Eldika portal (E-learning Education and Training for Librarianship) which is a collection of virtual classrooms where online learning for librarian staff [18]. Education and training participants can participate in online learning, access learning materials, save and submit assignments, pre-test, post-test, formative quizzes and discuss through channels on the Eldika portal. Furthermore, the WhatsApp application is used in

librarianship education and training for communication media between participants and participants with the training organizing committee. The WhatsApp Group feature in this application is used by participants to communicate and discuss group assignments in the form of papers that will be presented at the end of the training. The choice of this application as a CMC tool in education and training is because WhatsApp has features of exchanging messages, simple calls, safe, reliable and can be used on various types of mobile phones [19].

Changes in education and training methods from direct face-to-face to computer-mediated have an impact on changing communication patterns between participants -teachers and participant-participant. When the social presence in learning changes online, it certainly has an impact on the communication and interaction of the people involved in it. Short et al., (1976) emphasized the importance of social presence in person-to-person communication [20]. Garrison (2009) defines social presence as the ability of participants to introduce themselves in a community or society to communicate and develop interpersonal relationships in an environment of mutual trust [21]. Social presence is related to how individuals develop their interpersonal relationships, communicate and describe themselves online [22]. Important for participants of online education and training to maximize the use of CMC tools in communicating and establishing interactions so other participants and teachers/instructors can feel their presence. Various studies on social presence have been carried out, generally using a quantitative approach. Researchers have mixed views on measuring levels of online social presence. Yen and Tu (2011) measure social presence in the online environment through four dimensions, namely: social context, online communication, interactivity, and privacy. Social context is associated with CMC users' feelings towards the communication environment, social forms, social relationships, and building trust relationships. The online communication dimension concerns the ability to operate information technology equipment such as typing and online language as well as the ease of expression. Interactivity relates to the immediate response and the user's communication style. The privacy dimension is users' beliefs about security in sharing personal or confidential information [23].

Communicating and interacting online with people who have never met face-to-face is a challenge for participants in education and technical training in library management. Communication that occurs online for some people may experience disruption due to several factors. In terms of interaction, not everyone feels comfortable discussing online. For this reason, researchers want to examine how online social presence is in e-learning-based librarianship education and training from the point of view of the dimensions of online communication and the dimensions of interactivity. The research focused on online communication and interaction of participants in education and technical training in library management (inpassing).

II. STATEMENT OF THE PROBLEM AND RESEARCH OBJECTIVE

Based on the description above, the formulation of the problem in this study is:

How the communication and interaction that occurs between education and training participants through CMC media from the perspective of online social presence theory, especially in the online communication dimension and the dimension of interactivity?

Answering the research question, the objective of this study is to determine the communication and interaction which occurs between education and training participants through CMC media from the perspective of online social presence theory, especially in the online communication dimension and the dimension of interactivity.

III. METHODOLOGY

This research is a type of research with a qualitative approach. Qualitative research is concerned with exploring and understanding the meaning conveyed by individuals or groups about social or human problems [24]. In qualitative research, the object under study is collected and analyzed, therefore researchers must have a deep understanding of theory and broad insight [25]. The ability of researchers to draw conclusions based on existing data is the key in qualitative research analysis [26].

Specifically, this research is a qualitative descriptive study using the case study method. Data was collected through semi-structured interviews and collected documents as secondary data. Interviews were conducted with eight informants who participated in the technical training of library management (inpassing) representing eight levels of functional positions of librarians. The sampling technique using purposive sampling with the type of maximum variation sampling.

IV. RESULTS AND DISCUSSION

Participating in e-learning-based librarianship education and training for most participants is a new thing. Participants with various educational backgrounds and ages have diverse abilities and understandings of information and communication technology. Some of the participants were not accustomed to using Computer-Mediated Communication tools in communicating. It certainly affects communication and interaction in an online learning environment where the presence of the interlocutor is not significantly real.

Based on research on two dimensions of online social presence according to Yen and Tu (2011), the results are as follow:

1) Dimensions of online communication

Participants in librarianship education and training have good skills in using information and communication technology tools in terms of typing, writing, and understanding online

languages. Unfortunately, these skills do not fully provide a sense of comfort to participants to communicate in the online environment. Based on the results of the study, some of the participants felt comfortable communicating and interacting through Computer-Mediated Communication media because they were used to using synchronous or asynchronous CMC tools. Meanwhile, other participants feel uncomfortable using CMC media because they are not satisfied with communicating online, participants are not free to express or express feelings. Participants also felt that staring at a computer screen or cell phone for too long while online learning could cause eyestrain. In communicating online, participants preferred to use text-based CMC tools because they were easy to operate.

From the aspect of ease of expressing the message, most of the participants feel easy to express it through the CMC tool. In general, participants prefer to communicate via text-based CMC such as using the WhatsApp application. Text-based online communication makes participants feel more comfortable psychologically, beside the messages conveyed are also well conceptualized so that they are easy to understand and can anticipate misunderstandings. However, there are also education and training participants who choose to communicate face-to-face virtually because they are freer to express their feelings and convey directly the problems or obstacles encountered in online learning. Some of the other participants expressed opinions that were quite different from the two previous responses. Participants found it difficult to express their feelings through CMC media, both synchronously and asynchronously. Online learning makes the delivery of subject matter difficult to understand, especially for things that are too technical because sometimes teachers are less systematic in presenting the material. When they are not satisfied with the topic of discussion, participants find it difficult to ask for detailed explanations because many other participants interrupt to ask questions in different contexts. Technical difficulties from the internet network and limited virtual learning time were also factors that caused the participants to have difficulty expressing their feelings. Participants say that online communication, whether virtual or text, still cannot replace the face-to-face communication that provides freedom of expression.

Before participating in online librarianship education and training, participants may need to adapt themselves to use CMC tools in communication to join the learning process comfortably. Anticipation of technical obstacles such as internet connection, instructions, and arrangements in using videoconferencing applications for virtual learning in the classroom is also a concern for teachers and training participants. Creating good communication in online learning requires mutual agreement or discussion between students and teachers. Choosing the right platform plays a role in advancing the online learning system and helping participants engage in online communication in a collaborative learning environment [27]. Collaborative learning emphasizes the role of participants to interact with each other, exchange opinions,

and share information in developing skills through the use of appropriate electronic communication tools [28].

2) Interactivity Dimension

In communicating and interacting using CMC media, the response to messages varies depending on the CMC tool used. The use of synchronous CMC tools such as the Zoom Meetings application and phone calls on WhatsApp makes communication happen in real-time that means the responses to the messages immediately responded. In the text-based CMC such as WhatsApp and discussion forums in the Eldika, the messages are not immediately responses/delayed. In the discussion forum on the Eldika portal, the message response depends on questions asking by participants. The more questions they asking the teacher will take time to respond to the messages.

Participants in librarianship education and training have various communication styles in interacting, and they feel comfortable with it. Some participants are active in learning and discussion in WhatsApp groups, while others tend to be passive.

When participating in learning, online the reactions of participants also varied. Some participants are comfortable participating in the learning process even though the material or topic of discussion is new to them. Some participants enjoying involve in learning and discussion in virtual meetings, but others prefer to interact in small groups through WhatsApp Groups. Participating in a combined class consisting of two or more classes makes participants uncomfortable because most participants are scrambling to ask questions, causing a commotion in the virtual learning.

Differences in the interaction of participants in librarianship education and training influenced by the CMC tool using. Lack of social and emotional cues in the CMC system causes limitations in online interactions [29]. Other influencing factors are the experience of participants who are not yet or are not used to discussing online. This psychological aspect can be an obstacle for participants to participate effectively in online learning or discussions [30]. Education and training participants must be familiar and adapt themselves and improve the experience of online communicating to increase interactivity in online learning. The role of the instructor or instructor, in this case, is necessary to build interaction patterns to overcome the challenges faced by participants [31].

V. CONCLUSION

Online learning using CMC tools provides a different experience in online communication and interaction to the participants in e-learning-based librarianship education and training. It affects the level of social presence in online learning. In addition to information and communication technology literacy skills, training participants must also get used to communicating and interacting through CMC media to be more psychologically comfortable when participating in online learning and discussions. Awkwardness in

communicating and interacting through Computer-Mediated Communication impacting to the level of participants' activeness in the learning process in virtual classes. However, in text-based communication, participants feel more comfortable because they are not dealing directly with others, so that the communicator can arrange the words or messages before sending them. It is in line with the characteristics of asynchronous channels in the perspective of Walther (1996) on Computer-Mediated Communication. Asynchronous CMC allows users to send quality messages because there is no demand for time or immediacy in responding to chats from other people [32].

In e-learning-based librarian education and training, it can be seen that the interactions that occur between fellow training participants are well established because of the immediate response to messages. Participants also felt comfortable with their communication style when interacting with other participants. This condition is different from the interaction of participants with the teacher which looks less responsive. When learning in virtual classes using the video conferencing application in the Zoom Meetings application, the teacher responds directly to participant questions. However, the time for face-to-face communication via video conferencing is limited, so interactions outside the virtual classroom are carried out through discussion forums on the Eldika portal. The message sent through the discussion forum was not immediately responded because there was already a provision from the training organizer regarding the teacher's schedule to answer questions in the discussion forum. Participants with various communication styles did not prevent them from participating in virtual or text learning even though the material or topic of discussion was new to them.

Online communication and interaction of the participants in e-learning-based librarianship education and training are quite well established although the participant encountered various obstacles. Although at the first time it was awkward to interact with strangers face-to-face, the training required participants to adapt to new patterns of communicating through computer mediation. Training participants realizing the online communication and interaction have become a necessity, not only because of the Covid-19 pandemic, but also the demands of the times to be literate in information and communication technology.

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