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Digital Literacy and Increased Utilization of Higher Education E-Learning in Indonesia : A Literature Review

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ABSTRACT

This study was conducted to determine the role of digital literacy on e-learning capabilities at UIN Sunan Ampel of Surabaya as a function of sharing information. With digital literacy, users will have extraordinary abilities to think, learn, communicate, work together, and create. Digital literacy that is important for users to have includes information literacy, media literacy, and Information and Communication Technology literacy. The digital literacy capabilities of users can be implemented in a university environment. Through digital literacy, a person can access information effectively and efficiently, evaluate information critically, and use that information more usefully. This study uses a qualitative and descriptive analysis method. Data is organized and collected through observations, surveys and interviews with literacy users, namely students and lecturers at UIN Sunan Ampel of Surabaya. The results found a model of increasing digital literacy in e-learning. This improvement model includes several elements such as communication and collaboration in the form of active participation in learning and research activities. Then the components of individual competence in the form of use skills, critical understanding, and communicative abilities. The conclusion is that the model of increasing access to digital literacy using e-learning is good enough at UIN Sunan Ampel of Surabaya.

Keywords: Digital Literacy, Communication and Collaboration, Higher Education and E-learning

INTRODUCTION

Digital literacy is one of six basic literacy that is applied mainly in learning activities. Five other things include literacy, numeracy, science, finance as well as culture and citizenship. Digital literacy can be applied in families, schools and communities. Digital literacy can be grown with electronic-based learning (e-learning) based on a learning management system (LMS). One of the LMS is Schoology. Schoology is one of the LMS in the form of a learning management web that has a display like social media Facebook and can be accessed free of charge by students and teachers (Putri et al, 2014). In the era of the fourth revolution known as the digital revolution, all information can be obtained in real-time and quickly anywhere and anytime. The existence of a search engine helps someone find the reference material he wants quickly with low cost. This is because teaching materials and interaction activities have been digitized by technological advances. Friedman (Afandi, Junanto, & Afriani, 2016) illustrates this change as “the world is flat” which refers to a situation where the world is not limited to national boundaries and time zones due to technological developments.

The development of information technology has created a "new space" that is artificial and virtual, called cyberspace (Piliang, 2012). The development of information technology has been responded to by the penetration and behavior of Indonesian internet usage which has grown from year to year. The results of the APJII survey (Association of Indonesian Internet Service Providers) stated that there was an increase in internet users in Indonesia as many as 132.7 million people in 2016 to 143.26 million people in 2017, or equivalent to 54.7 percent of the total population of

Indonesia (Indonesia, 2016). The development of information technology is part of the emergence of the digital revolution era in Indonesia. Its very rapid development is able to have a great influence and dominate all sectors of people's lives, including in the world of education. Academic demands at each level of education in Indonesia are different (Akbar & Dina, 2017). Digital-age in education, especially in higher education, has consequences in the form of learning design by utilizing digital media as a means to increase student knowledge. Digital media can present learning materials contextually, audio and visually in an interesting and interactive way (Umam, Kaiful; Zaini, 2013). Islamic boarding schools as part of higher education institutions should adapt themselves to organize a digital-based learning process. Advances in information technology and the internet today have resulted in very abundant digital information resources (Kurnianingsih, Rosini, & Ismayati, 2017: 62).

On the other hand, the development of information technology is likened to two sides of a coin that has positive and negative effects on society. Digital literacy learning is inevitable (Anggraini, 2016). This demand then gave birth to an idea about the importance of digital literacy, including in the world of education. Islamic boarding schools are currently experiencing a “cultural gap” (Adib, 2013). The emergence of technological developments is a new challenge for the teaching model in Islamic boarding schools. Islamic boarding schools, which have long implemented the textual education model by studying books with the sorogan model, are now facing new challenges in the digital era. Sorogan is a method for students to read their own book subject matter in front of the teacher (Maksum, 2016).

Technology is an important component in the 21st century. The application of technology is applied in various sectors, one of which is the education sector in learning process activities (Warsito, & Djuniadi, 2016). Computers, LCDs, internet and data processing and presentation software are some of the applications of technology in teaching and learning environments. The wide use of internet access has both positive and negative impacts on the people of Indonesia. We are presented with various kinds of information, both true and false. This needs to be followed up so that people can be selective and have self-protection in receiving information that is scattered in the digital world. This condition requires Islamic boarding schools, especially Islamic boarding schools, to adapt. The emergence of the digital era is also a challenge as well as an opportunity for lecturers at Islamic boarding schools to innovate in learning activities. Lecturers at Islamic boarding schools are required to have digital literacy skills. Based on observations, it is known that at UIN Sunan Ampel of Surabaya as a higher education based on modern pesantren was established in 2014. Since then learning activities have been dominant with textual models using printed books.

The use of digital media in the learning process is still very limited. On the other hand, 21st century education requires educational institutions to be responsive to developments and changing times by mastering information technology or called digital-age literacy. The adjustment of universities in the use of digital media in the learning process is an urgent matter, including at UIN Sunan Ampel of Surabaya. There are several studies that have been carried out with a focus on digital literacy and the use of ICT (Information, Communication and Technology) in the world of education, especially on the use of e-learning. In 2012 Yazdi wrote an article about e-learning as an interactive learning media based on information technology. The results show that the final product of e-learning is expected to be an information technology-based learning application (Yazdi, 2012). Research on e-learning has also been conducted by Chandrawati on the use of e-learning in learning.

The results show that there are three possibilities for developing e-learning in an internet-based learning system, namely web courses, web centric courses, and web enhanced courses (Chandrawati, 2010). In addition, Afandi, Junianto, and Afriani wrote a scientific article on literacy in the digital era (Afandi et al., 2016). The conclusion in the article explains that referring to the document published by enGauge 21st century skills there are 4 main domains, one of which is the Digital-Age Literacy domain which consists of eight aspects, namely basic, scientific, informational, visual, technological, and multicultural literacy and awareness. global. Other research was conducted by Wijaya, Sudjimat, and Nyoto (2016). This research seeks to explore the 21st century competencies required by industry and the world of work. The results show that the 21st century skills needed in the business and industrial world are: (1) skills and learning to innovate; (2) life and career; and (3) information technology and media skills (Wijaya, Sudjimat, & Nyoto, 2016).

In line with these four studies, this study seeks to explore further about the use of digital media that can be a force to improve digital literacy skills in education. Digital literacy in higher education can be done by means of communication and collaboration in the form of active participation in digital networks for learning and research. Furthermore, this study seeks to find a model for strengthening digital literacy carried out in pesantren-based universities. Digital literacy is an individual's interest, attitude and ability to use digital technology and communication tools to access, manage, integrate, analyze and evaluate information, build new knowledge, create and communicate with others in order to participate effectively in society. In Potter's conception (Widyastuti, Nuswanto, & Sidhi, 2016), the effort to literate a digital-based society is not just introducing digital media but also synergizing daily activities that lead to increased productivity. According to Sholihah, digital literacy is an effort to find, use and disseminate information effectively (Sholihah, 2016).

LITERATUR REVIEW

The world is currently in the era of the industrial revolution 4.0. According to Risdianto (2019) "several characteristics of the industrial revolution 4.0 are the internet of things, namely the speed controlled by the internet. Currently, almost all work is connected to the internet connection. The next feature is big data. Have we ever been presented with advertisements about our favorite items? How does the system know because there is a data that collects our information. Some people call the industrial revolution 4.0 the digital revolution and the era of disruption. According to Kasali (2018) "in this era information technology has become the basis or basis in human life.

The impact that is very felt from the digital era is the abundance of information sources that can be accessed unlimitedly". In addition, the world is currently still in the midst of the COVID-19 pandemic. The result of this pandemic is a change in the form of learning from face-to-face learning to online learning. This of course requires students and lecturers to be ready for these changes. One of the abilities that must be possessed by lecturers and students in order to face the era of the digital revolution and the covid-19 pandemic is the ability of Digital Literacy. According to Paul Gilster in his book entitled Digital Literacy (1997), digital literacy is defined "as the ability to understand and use information in various forms from a very wide variety of sources that are accessed through computer devices". Bawden (2001) "offers a new understanding of digital literacy rooted in computer literacy and information literacy. Computer literacy developed in the 1980s, when microcomputers were increasingly used, not only in the business environment, but also in society.

However, information literacy only spread widely in the 1990s when information was more easily compiled, accessed, and disseminated through networked information technology. Thus, according to Bawden's opinion, digital literacy is more associated with technical skills in accessing, compiling, understanding, and disseminating information. Regarding the information received by students, it is necessary to have a cultural approach in learning to filter the information received (Darwanto et al, 2020). Meanwhile, Douglas A.J. Belshaw in his thesis *What is 'Digital Literacy'?* (2011) said that “there are eight essential elements for developing digital literacy, which are as follows. Cultural, namely understanding the various contexts of users of the digital world. Cognitive, namely the power of thought in assessing content. Constructive, namely the creation of something that is expert and actual. Communicative, namely understanding the performance of networks and communications in the digital world. Responsible self-confidence. Creative, doing new things in new ways. Critical in addressing content”; Digital Literacy in Online Learning Digital literacy skills have an important role in learning, including online learning.

Research conducted by Azmi (2006) states that "the skill of finding information in the database is considered by students as one of the important skills that students must possess because it plays an important role in determining the success of their studies. Therefore, students with good digital literacy skills will try to find and select important information and understand, communicate, and convey ideas in the digital space. In line with research conducted by Azmi, several other studies state that digital literacy skills will open opportunities for students to think, communicate, and create which ultimately leads to student learning success (Sujana & Rachmatin, 2019) (Elpira, 2018). Therefore, awareness of the urgency of digital literacy skills needs to be increased both among decision makers. A study conducted by Dinata (2021) states that there are several things that can be done by the leadership of an institution, either a school or a university, related to the development of digital literacy skills. Things that can be done are 1) digital literacy training; 2) cultivation of campus digital literacy culture; 3) form a campus digital literacy drive team.

Digital media is a type of device in new media. According to Dennis McQuail, there are four types of new media, namely interpersonal communication media such as email, interactive game media such as games, data or information search media such as search engines on the internet, and participatory media, such as chatting on the internet. In this study, what is meant by digital media literacy is the ability and expertise of an individual in utilizing computers, the internet, and other digital tools as a means of supporting communication activities optimally. Many skill models are useful for improving one's abilities and are sometimes referred to as multi-literacy (Mardina, 2011). According to NCREL & Metiri Group literacy skills are skills that emphasize literacy skills that are connected to one another in the digital era, not only limited to the ability to read, listen, write and speak orally (Burkhardt et al., 2003). Digital literacy, also known as computer literacy, is the ability to use computers, the internet, and other digital tools.

Digital literacy is an effort to know, to search, to understand, to analyze, and to use digital technology. Beetham, Littlejohn and McGill mention there are seven elements of digital literacy (JISC, 2017). The seven elements of digital literacy include: (1) Information literacy is the ability to find, evaluate and use the information needed effectively (Hasugian, 2008), (2) Digital scholarship is an element that includes the active participation of digital media users in academic activities to make information available. from the digital media as a data reference, for example in research practice or completion of college assignments (Stefani, 2017), (3) Learning skills are learning effectively various technologies that have complete features for formal and informal learning activities, (4) ICT literacy or known as information and communication technology

literacy which focuses on ways to adopt, adapt and use digital devices and ICT-based media, both in terms of applications and services.

The ICT-based media in question are for example computers or LCD projectors/power points that have been designed/designed in such a way that they can be used according to their understanding, especially if they are connected to the internet as a learning base (Budhirianto, 2016), (5) Career and identity management related to ways to manage online identity. A person's identity can be represented by a number of different avatars who are able to communicate with more than one party at almost the same time (Damayanti, Maria Nala; Yuwono, 2013), (6) Communication and collaboration is a form of active participation for learning and research through networks. digital, and (7) Media literacy includes critical reading and creative academic and professional communication skills in various media. The existence of media literacy makes the audience not easily deceived by information that at a glance fulfills and satisfies their psychological and social needs (Rianto, 2016).

Elements of communication and collaboration are the focus of this research. Communication and collaboration as part of the digital literacy element means that there is active participation in digital networks for learning and research. Meanwhile, according to Stefani, communication and collaboration is the active participation of digital media users to streamline time, this is closely related to media as digital which has convergence (Stefani, 2017). Communication and collaboration has an individual competence component which consists of use skills which are the ability to access and operate media, critical understanding in the form of the ability to analyze and evaluate media content comprehensively and communicative abilities, namely the ability to communicate and participate through media (Commission & Unit, 2009). This research is important to do to find the use of digital literacy at UIN Sunan Ampel of Surabaya. This supports the policy of the Ministry of Communication and Information of the Republic of Indonesia as stated in Press Release No. 181/HM/KOMINFO/08/2018 dated August 16, 2018 regarding Digital Literacy to Prepare Superior and Intelligent Human Resources in the Era of the Industrial Revolution 4.0 (Ministry of Communication and Information of the Republic of Indonesia, 2018). To support the government's policy, this study aims to find a model for strengthening digital literacy at UIN Sunan Ampel of Surabaya.

Learning Learning has a basic word, namely learning. In the Big Indonesian Dictionary, language learning is defined as an effort to gain intelligence or knowledge, practice, change behavior or responses caused by experience. Gagne (1977) states that "learning occurs when a stimulus along with the contents of memory affects the student in such a way that his actions change from the time before he experienced the situation to the time after he experienced the situation earlier". Morgan (In Ratumanan, 2004) states that "learning is any relatively permanent change in behavior that occurs as a result of practice or experience". Based on the opinions of the two experts, it can be concluded that learning is a relatively permanent change in behavior or actions as a result of a stimulus or the result of training or experience. The change referred to here is not only a change in behavior, but also about attitudes and cognitive. Efforts made by educators / lecturers to help someone to gain knowledge, skills, and attitudes are called learning. Gagne (1977) states that learning is "a set of external events designed to support some internal learning process". Furthermore, Gagne (1985) suggests that "learning is intended to produce learning, external situations must be designed in such a way as to activate, support, and maintain the internal processes contained in each learning event". Hardini and Puspitasari (2012:10). "Learning is an activity that intentionally modifies various conditions that are directed at achieving a goal, namely

the achievement of curriculum goals". Thus it can be concluded that learning is a process of interaction between students and educators and learning resources in a learning environment.

Based on the definition of learning, it can be said that a learning will take place if there are two factors, namely 1) the interaction between educators and students and 2) the existence of learning resources. The interaction between educators and students can occur face to face directly or virtually through a certain platform such as zoom, google meet, and others. Learning resources can be in the form of books, modules, dictation, internet, and others. Good learning resources are those that are in accordance with the characteristics of students. Therefore, the development of teaching materials needs to be carried out by educators (Dinata et al, 2020). Therefore, during a pandemic outbreak that requires social restrictions, learning will still be able to take place virtually using various platforms. What needs to be underlined is that virtual or online learning requires interaction between educators and students with a learning resource. The expected interaction, of course, is reciprocal interaction. Learning either online or face-to-face must be aimed at cognitive, affective and psychomotor development (Dinata, 2019).

METHOD

In this study, a qualitative descriptive method was used to find a model for improving digital literacy carried out by UIN Sunan Ampel of Surabaya in the learning process. The data in this study were obtained through direct observation and in-depth interviews. Observations were carried out by directly observing the activities of basic course lecturers in uploading learning materials on the e-learning portal, preparing pre-test and post-test questions, as well as creating discussion forums and scoring student assignments through the e-learning website. Interviews were conducted with lecturers at UIN Sunan Ampel of Surabaya, consisting of 5 basic subjects (Introduction to Communication Science, Communication Theory, Communication Psychology, Contextual Communication, and Mass Communication). Interviews were conducted in-depth about the components of individual competence which consist of the use of skills, critical understanding, and communicative abilities. After conducting in-depth observations and interviews, researchers constructed messages obtained from informants and mapped the use of e-learning as a form of digital literacy, especially communication and collaboration elements in the form of active participation in digital networks for learning activities.

The data analysis technique is carried out based on the theory of Miles and Huberman, there are three stages of data analysis (1) data reduction, (2) data display, and (3) data conclusion according to the researcher's interpretation (Tamin, 2011). Reduction is done by summarizing, choosing the main things, and focusing on the things that are important. Presentation of data in the form of brief descriptions, charts, relationships between categories, flowcharts and the like. Conclusion drawing/verification is the third line in the data analysis technique after data reduction and presentation. The validity of the research data was carried out by triangulation. Triangulation is a way to get really valid data by using multiple methods (Bachri, 2010). Data collection techniques that combine various techniques and existing data sources. Triangulation of data in this study is a triangulation method which is done by combining observation and interview techniques, and combining data sources from several research subjects.

RESULT AND DISCUSSION

This study found a model for increasing digital literacy at UIN Sunan Ampel of Surabaya. Communication and collaboration as one of the elements of digital literacy in this research is in the form of developing learning content by utilizing e-learning portals. The courses that use e-

learning consist of Introduction to Communication Science, Communication Theory, Communication Psychology, Mass Communication, and Contextual Communication. To find out the digital literacy skills of the basic subjects of UIN Sunan Ampel of Surabaya, they are divided into three categories, namely skills (use skills), critical understanding (critical understanding), and communicative abilities (communicative abilities). The individual abilities of the basic subjects at UIN Sunan Ampel of Surabaya are presented in table 1.

Table 1. Individual Competence of UIN Sunan Ampel Course Supervisor

No.	Category Individual Competence	Step	Items
1	Communicative abilities	Basic	Research subjects have not been able to communicate and actively participate in e-learning because they are only at the stage of uploading content and have not been implemented into the learning process with students
2	Critical Understanding	Medium	Research subjects are able to understand the content, function, and regulation of the use of digital media, but the willingness to cross-check information is lacking
4	Use Skill	Advanced	Research subjects are able to use digital media, and are still in the process of adapting the use of e-learning

The data presented in table 2 is the level of competence which refers to the level of digital literacy ability of the European Commission Directorate General Information Society and Media (2009). There are three criteria in strengthening digital literacy skills through the use of e-learning at UIN Sunan Ampel of Surabaya. E-learning is a learning system adapted from existing systems in conventional educational institutions into a digital system via the internet (Susanti & Sholeh, 2008). E-learning in learning functions as a supplement that is optional, complementary (complementary), or substitute (Chandrawati, 2010). The first digital literacy criterion is use skills.

Use skills are skills in accessing and operating media activities. Use skills have three criteria, namely skills in using media in a standard (low) standard, skills actively in using media, and high skills in using and utilizing media. Indicators of skills or use skills, especially in the use of computers and internet access, consist of ownership of Medium Definition Level. Individual communicative abilities through media are also limited. Individuals are fluent in the use of media, know their functions and are able to operate them, are more complex. Expanded use of media. The user knows how to obtain and evaluate the information he or she needs, as well as evaluate (and improve) information-seeking strategies. Advanced Individuals are very active in the use of media, aware of and interested in the laws that affect their use.

The user has an in-depth knowledge of techniques and language and can analyze (and, ultimately) change the conditions that affect his or her communicative relationships and message creation. In the social field, the user is able to activate group cooperation which allows him to solve problems. Sources: European Commission Directorate General Information Society and Media; Media Literacy Unit, 2009 computer/laptop; use of a computer/laptop; ownership of social media and e-mail accounts; frequently visited sites; downloads and uploads. The researcher made direct observations by observing and observing the uploading of learning content to the e-learning portal by the lecturer of UIN Sunan Ampel of Surabaya.

The researcher observed the uploading of learning content which consisted of learning material, pre-test and post-test questions, and created a discussion forum through e-learning. Based on the results of initial observations before there was e-learning, it was found that the research subjects, namely the lecturers of UIN Sunan Ampel of Surabaya, were able to use and utilize media in the learning process. The forms of media use also vary, some use digital media using a laptop as a tool for presentation of lecture material to students, the internet as a source of information in extracting information related to lecture material (download), the use of social media in the form of Whatsapp groups as a means of lecture discussion outside the classroom. and e-mail for collecting student assignments.

There are also those who use Youtube as a medium to upload student assignments to be given an assessment. Some subjects still prefer to use the lecture method as a form of learning in class. Books are still the main reference in the preparation of learning materials. This is as stated by one of the research subjects. "On certain topics I convey material using the lecture method, for example related to communication theory, lectures and the use of books as references are more appropriate, although on other topics, case studies for example, can be used by utilizing other learning media.").

Table 2. Level of Competence

Step	Describes	Average value
Basic	Individuals have a set of abilities that enable the basic use of media. There is limited media use. Users know their basic functions, use them for specific purposes and to define tools. The capacity of users to critically analyze the information received is still limited.	55-69
Medium	The individual's communicative ability through the media is also limited. The individual is fluent in the use of media, knows its function and is able to operate it, it is more complex. Expanded use of media. Users know how to obtain and evaluate the information they need, as well as evaluate (and improve) their information-seeking strategies.	70-84
Advanced	Individuals are very active in the use of media, aware of and interested in the laws that affect their use. The user has an in-depth knowledge of techniques and language and can analyze (and, ultimately) change the conditions that affect his or her communicative relationships and message creation. In the social field, the user is able to activate group cooperation which allows him to solve problems	85-100

Sources: European Commission Directorate General Information Society and Media; Media Literacy Unit, 2009.

In 2021, UIN Sunan Ampel of Surabaya will develop e-learning as a learning medium that is able to fully accommodate the concept of virtual learning. In the developed e-learning there is material content, quiz questions, and also a forum as a medium for discussion between lecturers and students. With e-learning, lecturer learning materials can be better documented. E-learning will greatly help increase the level of use of digital literacy skills of lecturers because learning activities can be carried out virtually by utilizing digital media. This is in line with the research conducted by Trilling & Fadel which states that in the 21st century education must always move in line with the progress of the times (Trilling & Fadel, 2009). This movement is based on a change

in the educational paradigm from conventional to modern education. The paradigm shift in education can be seen in the table 3.

Table 3. Differences of Higher Education Paradigm

No.	The Old Paradigm of Higher Education	New Paradigm of Higher Education
1	Technology is an expensive investment	Technology as a differentiating element
2	Single discipline	Multi-disciplinary
3	Focused on institutions	Focused on the market
4	Depends on the activities of the institution	Depends on market assessment
5	Learning is done in the classroom	Learning can be done anywhere
6	Multicultural in nature	Global in nature
7	Government funded	Funded through community funds
8	Students are treated as objects	Students are considered as consumers
9	The output/product is single	The information obtained can be reused
10	Subjects according to the given	Choose courses as you wish

Table 3 shows the importance of an information technology-based learning concept and mechanism which is then known as e-learning. This has the effect of transforming conventional education into digital form. This transformation encourages the improvement of digital skills and a shift in the textual learning model to contextual learning. Contextual learning is a learning concept that helps educators/teachers relate the material they teach to students' real-world situations and encourages students to make connections between their knowledge and its application in their lives as family and community members (Sulianto, 2011).

Universities are required to use a new paradigm in learning so that it can produce maximum output. This research is also in line with the research of Wijaya, Sudjimat, and Nyoto on the transformation of 21st century education (Wijaya et al., 2016). The second category of Individual Competence is Critical Understanding, which is the ability to analyze and evaluate media content extensively and completely. The criteria for this critical understanding include: the ability to understand the content and function of the media, have knowledge of the media and media rules or regulations, and the behavior of media users in utilizing the media. Criteria for critical understanding include the informant's trust in the mass media or the internet; able to distinguish the truth of news site content; ability to understand government regulations related to media; and check news sources.

Based on the results of the interviews, it is known that the research subjects have the ability to analyze and evaluate media content, especially those from digital media, although not comprehensively. The research subjects have been able to understand the content and function of the media and use it as a source of information in learning activities. "Besides printed books, Youtube is one of the media that I use in learning activities. Upload student assignments on certain topics and then they will be assessed when the assignments are already on Youtube." "In certain discussion topics I use Youtube as a source of information, for example in a mass communication course, I take videos from Youtube about the future of communication to be discussed in class."

In addition, the research subjects also have knowledge about media, although not all of them understand about media regulation, especially in Indonesia. The research subjects also do not always cross-check news sources. With the existence of e-learning as a digital learning medium, critical understanding abilities will continue to increase. UIN Sunan Ampel of Surabaya lecturers are trained to create creative and innovative learning content that will be uploaded on the portal, not just "copy and paste" and take advantage of other people's work. Based on the results of

observations, it is known that the critical understanding ability of the research subjects increases along with the existence of e-learning at UIN Sunan Ampel of Surabaya. Researchers found that research subjects were able to use e-learning to prepare more creative and innovative materials. Uploaded content is more varied such as animations, images, and audio visuals.

This finding is in line with the results of Barokati and Annas' research on the Computer Programming course which was used as one of the first trials in the implementation of e-learning (Barokati & Annas, 2013). The results showed that the Computer Programming course that had been implemented at UIN Sunan Ampel of Surabaya had several differences that were better than before the implementation of e-learning. This finding is also in line with Agustina's research which aims to determine the use of e-learning in learning and the influencing factors at Bina Darma University Palembang (Agustina, 2015). The results showed that the condition of the use of e-learning as a learning medium at Bina Darma University was in a fairly good condition with a percentage level of 60%. The third category of Individual Competence is Communicative Abilities or communication skills, namely the ability to communicate and participate through media channels. Communication skills are skills in building social relationships willing to participate in the environment through media channels. In addition, communication skills also include skills in compiling media content.

The communicative abilities indicators consist of updating information on the internet and discussions through e-learning forums. Based on observations, it was found that before using and utilizing e-learning communicative abilities in the learning process had not been carried out. Communication skills on the internet are limited to status update activities on social media that have nothing to do with the learning process, criticize social media outside of learning materials, and also update news from the internet for the benefit of increasing information for themselves. With the existence of e-learning as a virtual learning medium, the ability of research subjects in the communicative abilities criteria will certainly increase. The increase in communicative abilities occurs because learning activities will always use and utilize the internet.

This is in line with Adawi's research which states that with the application of distance education based on computers and networks (internet, fax, fax-internet, etc.), the dependence on distance and time required for the implementation of education can be overcome because all that is needed will be provided online so that it can be accessed at any time (Adawi, 2008). The reference used to determine the ability of UIN Sunan Ampel of Surabaya lecturers in using and utilizing digital media is based on the criteria determined by the European Commission, Directorate General of Public Information and Media; The Media Literacy Unit was subsequently converted and adapted to social conditions in Indonesia.

One of the most famous frameworks in the concept map is the Individual Competence Framework. Individual Competence or individual competence is an individual's ability to media. These include the skills to use, to produce, to analyze, to communicate through the media. This individual competence consists of two categories, namely: (1) Personal competence, namely individual skills in using media and analyzing media content. (2) Social Competence, namely individual skills in communicating and building social relations through the media and being able to produce media content.

Based on the results of the analysis, it was found that a digital literacy improvement model presented was a digital literacy improvement model at UIN Sunan Ampel of Surabaya which was carried out through a learning process. Communicators consisting of basic course supervisors convey messages (learning content) to communicants (lecture participants) through e-learning media. The use of new media in the form of e-learning in the learning process is the implementation

of communication and collaboration elements in digital literacy, in which there is an individual competence component consisting of use skills, critical understanding, and communicative abilities. Increasing these three components through the use of e-learning will make communicators' digital literacy skills even stronger.

Digital literacy skills in the Media and Teaching Material Development course are divided into three categories, namely skills (use skills), critical understanding (critical understanding), and communicative abilities (communicative abilities). Indicators of skills or use skills, especially on the use of computers and internet access, consist of ownership of a computer/laptop; use of a computer/laptop; ownership of social media and e-mail accounts; frequently visited sites; downloads and uploads. This is in line with the opinion of Trilling & Fadel which states that in the 21st century education must always move in line with the progress of the times (Trilling & Fadel, 2009). The category of Critical Understanding, or critical understanding, is the ability to analyze and evaluate media content extensively and completely. Based on the observations, it is known that the Critical Understanding ability of the research subject increases along with the existence of e-learning at UIN Sunan Ampel of Surabaya. Research subjects are able to use e-learning to prepare more creative and innovative materials. Uploaded content is more varied such as animations, images, and audio visuals.

The results showed that in the Media and Teaching Material Development course which had been implemented at UIN Sunan Ampel of Surabaya, there were several differences that were better than before the implementation of e-learning. Entering the current New Normal era, the need for the use of the internet in accessing all information about news and information in education has become a primary need, but in using the information media, it is expected to use it wisely and be able to analyze and evaluate good and bad content. This is in line with the results of Bahrul's research (2019) which states that students as users of digital media are expected to be able to fortify themselves from exposure to information from various digital sources (Ulum Bahrul; Delora Hati Amelia, 2019).

In the Communicative Abilities category, students' ability to understand the content and function of media, have knowledge of media and media rules or regulations, and behavior of media users in utilizing media. Criteria for critical understanding include the informant's trust in the mass media or the internet; able to distinguish the truth of news site content; ability to understand government regulations related to media; and check news sources. In this category it can be emphasized that learning activities will always use and utilize the internet. This is in accordance with Kurniawati's opinion in her research which states 'The cyber era, the digital media era, or the era of media congestion have been felt in the last few years. Humans who live in this century like it or not, like it or not, have to follow this development' (Kurniawati & Baroroh, 2016). The use of new media in the form of e-learning in the learning process is the implementation of communication and collaboration elements in digital literacy, in which there is an individual competence component consisting of use skills, critical understanding, and communicative abilities. Increasing these three components through the use of e-learning will make communicators' digital literacy skills even stronger.

CONCLUSION

The results of this study found a way to use digital literacy at UIN Sunan Ampel of Surabaya. Increasing digital literacy at UIN Sunan Ampel of Surabaya is the implementation of communication and collaboration elements consisting of three components of individual competence, namely use skills, critical understanding, and communicative abilities.

Communication and collaboration is an element of digital literacy in the form of active participation in learning activities carried out by utilizing e-learning.

The use of e-learning in learning activities at UIN Sunan Ampel of Surabaya is one of the models for increasing digital literacy. The existence of e-learning makes students and lecturers required to master new media so that they can indirectly improve their individual digital literacy skills. The contribution of this research is a model of increasing digital literacy by utilizing e-learning at UIN Sunan Ampel of Surabaya as best as possible. Research recommendations are also intended for policy makers at UIN Sunan Ampel of Surabaya to maximize the use of e-learning as an effort to increase the use of digital literacy.

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