Level of Self Efficacy of Student Computer Skills on Digital Literacy

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Abstract. The purpose of this study was to determine the level of self-efficacy of computer skills on digital literacy in Educational Technology students of Indonesian Christian University of Toraja. This research is a qualitative research with a type of descriptive research with a research focus on students. Data collection uses questionnaires as a tool to measure the level of self-efficacy of computer skills as well as interviews and documentation. With qualitative descriptive statistical analysis techniques by looking at the percentage of research results. The results of the study using questionnaires showed that the level of self-efficacy of computer skills on student digital literacy was significantly increased by looking at the results of questionnaires and interviews conducted on students. The response of larger students who agree with many of the problems encountered when using a computer can be resolved and agree with using a computer is very easy, Students are very happy and passionate about using computers and are very interested in learning new programs in computer applications. Educational technology students are very confident in the ability to use computers, showing high self-efficacy of computer skills on digital literacy.

Keywords: Self Efficacy, Digital Literacy, Student

1 Introduction

Learning in the 21st century is connected to technology and driven by appropriate learning models and tools. As technology advances, learning methods and approaches must change to match the skills needed to learn with new technology. The education system has fully realized the potential of information and communication technology as a valuable aid in teaching and learning. The digital-based learning revolution is a learning process that uses electronic tools, namely the development of the internet network as a tool in teacher learning to improve the quality of education. The beliefs you have encourage someone to try to get what they want.

The educational landscape of the fourth industrial revolution has altered how students and teachers learn, think, and behave in order to foster creativity and innovation across a range of subject areas. For educators, both lecturers and teachers, maintaining their competency is a major task. so they can keep up with developments in science and technology [1]. Digital literacy appears to assess basic concepts and

skills related to computers [2]. In order to promote communication and interaction in daily life, digital literacy refers to the knowledge and abilities to use digital media, communication tools, or networks for the purpose of finding, assessing, using, creating, and utilizing information in a way that is healthy, wise, intelligent, careful, precise, and legal.

The use of digital technology initiated by students focuses on socialization and communication. It was also mentioned how to use the internet for information searches, music downloads, and picture and video viewing. Efforts initiated by researchers or educators to improve and digital literacy. Digital literacy refers to the desire and ability to use technology, such as communications, to gather information [3]. Refers to how information is managed, analyzed and evaluated, leading to the formation of new information. Gaining this knowledge allows individuals to communicate with others and participate effectively in society.

Self-Efficacy is a person's belief in his or her skills and abilities in organizing and solving problems for the best results in a particular task [4]. A person with a high level of literacy will understand the information correctly so that problems in life can be solved. Because today's students are required to search for various sources of information and evaluate the growing amount of information they acquire, self-efficacy is stated to be a crucial component of academic accomplishment in today's digital information world [5]. A highly educated person, with critical thinking and creative intelligence and good at communicating both orally and in writing.

Making decisions often requires decision makers to draw on both their personal experiences and contextual data. When decision makers interpret and analyze all the data thoroughly, they can run into timing-related problems. Effective and efficient data handling is essential for decision makers, particularly in situations that are changing quickly and leave them with little time. Because decision makers do not necessarily have access to more or better information when it comes to analysis and interpretation [6].

Digital technology continues to complement everyday life and that doesn't stop, both parents and children are becoming users of various forms of digital media, such as computers, smartphones, gaming devices, and the internet. Digital literacy cannot be separated from a person's ability to use and utilize media. To investigate the effectiveness of using digital technologies to enhance the language and literacy skills necessary for college students' employment and for indigenous people learning (secondary or additional) the language and literacy skills required in school communications and the workforce. The American Association of School Librarians [7] defines digital literacy as the capacity to use digital literacy to locate, assess, produce, and communicate information [8]. This process calls for both technical and cognitive skills.

People with digital technology must have digital skills. Information literacy consists of the following seven elements: the ability to identify, evaluate, and use necessary information effectively [9]. Active participation of consumers of digital media in learning activities to investigate fresh information from these platforms. This can be accomplished by conducting research or completing training in study skills, which is defined as the ability to effectively understand the many technologies required to participate in both formal and informal learning activities. Digital literacy skills are

comprised of three categories of competencies. Cognitive, technical, and socioemotional skills are all necessary for using technological tools and applications, make important contributions to technology integration [10]. In the educational context the Internet and the new student culture is heavily reliant on instructional technology, which has both benefits and drawbacks. As already mentioned, the disadvantages of using the Internet are borne by the user.

All activities use technology to complete various tasks. The condition of students who experience difficulties or obstacles, but can still succeed well in the academic field is one way of strengthening a person's computer self-efficacy. The skill that a person must have in the digital era is mastery of technology. Students who use technology extensively and intensively tend to easily adopt learning strategies by using various technology to aid in the educational process. Digital literacy cannot be separated from a person's ability to use and utilize media [11]. Therefore, judging from students' readiness in digital literacy in learning, the level of self-efficacy in computer skills will be measured. The aim of this research is to describe the level of self-efficacy of computer skills towards digital literacy of students majoring in educational technology at the Indonesian Christian University of Toraja.

2   Research Results

This research uses a qualitative approach with descriptive methods that focus on describing a situation objectively [12]. The descriptive research method completes the in-depth research by describing the conditions in the field to be compared with the conditions that should be in order to obtain a comparison of the level of self-efficacy of computer skills towards students' digital literacy.

The location of the research was at the Indonesian Christian University of Toraja, Faculty of Education, Educational Technology Study Program. The focus of the research was educational technology students, totaling 49 students. The research was carried out for 3 months, namely January – March 2023.

In order to collect data for this study, a Google Form was utilized to distribute a questionnaire with a qualitative data type that respondents may complete online. This questionnaire contains statements regarding understanding digital literacy and a self-efficacy questionnaire regarding computer skills. The questionnaire in this research is assumed to be answered honestly and truthfully. Apart from questionnaires, documentation, observation, and interviews were used in the data collection process.

Additionally, descriptive analysis is the method of data analysis that is employed, along with data reduction, presentation, conclusion-making, and verification [13]. Following collection, the data is reduced by analysis of many responses, compilation of all the data, organization, selection, and concentration on the subject under study. After the data is presented and the phenomena is understood, the researcher prepares additional actions depending on the significance of the phenomenon. Conclusions made during the data verification stage are provisional and subject to change if additional data gathering yields compelling evidence. Only when the data is backed by reliable and consistent evidence can a definitive conclusion be made.

3   Research Results

The research results show that the level of self-efficacy of computer skills on students' digital literacy is very significant. Data analysis shows that the level of self-efficacy of students' computer skills towards digital literacy is at a high conceptual level. From the results of the questionnaire distributed, the following results were obtained.

The greater response from students was those who agreed that many of the problems faced when using computers could be overcome. And a million by holding a computer is very easy. However, there is uncertainty regarding the ability to use computers based on the results of the questionnaire. It can be seen from the many difficulties experienced in using many computer programs, but educational technology students are very interested in learning new computer programs. Therefore, students really enjoy using computers.

Judging from the results of student respondents who explained that using computers makes them more productive even though they often experience difficulties when learning to use new programs. Therefore, educational technology students are very confident in their ability to use computers, seen from the results of respondents. Learning to use computers makes students think more critically even though they experience difficulties in using the desired computer programs and think that using computers is very confusing.

Computers are a good tool for learning because with computers educational technology students really enjoy completing assignments using computers. Even when using a computer, students do not consider themselves very capable. Because the responses given by students do not agree with the assumption that they are skilled computer users. When using a computer, there is anxiety about pressing the wrong buttons and ultimately damaging the computer.

Using new software on the computer makes students more motivated to learn and confident that they can make good use of the menus and icons on the computer and feel that learning ends quickly when using a computer so that students are very confident that they can complete assignments easily when using a computer.

When it comes to using technology and communication tools to access, coordinate, organize, estimate, and provide information in society, digital literacy is the most crucial skill [14]. The results of learning outcomes on students' academic achievement can be influenced by digital literacy. Self-efficacy computer skills play an important function in pupils' educational development and, consequently, in their digital literacy.

The role of motivating belief strategies in digital learning is invaluable. In recent years, the use of self-efficacy (SE) as a means of evaluating information literacy skills has grown in popularity. Computer ability self-efficacy is a successful driver because it can encourage more efficient and intelligent use of digital tools [15]. In today's technologically connected world, digital literacy has become essential for survival, and students must prepare for the inevitable as technology becomes an integral part of society [16].

Motivational techniques are required to raise digital literacy and get students ready for the digital future in light of the prevalence of technology and digital gadgets. Students that are driven advance their knowledge and abilities and are able to complete

assignments as easily as possible. The mentality is a crucial component of motivation. Positive conduct in digital learning can be sustained and even energized by a driven mentality. Literacy practices taught through digital technology involve interactions with resources in various representations that require different literacy skills. Four major themes emerged from content analysis related to digital literacy practices, namely language barriers, speed, motivation, and preferences for multimodal forms [17].

In digital literacy, students can play a very significant role in three main aspects, namely (1) being directly responsible for digital literacy as a tool for conducting lectures. (2) As a supporter in lectures (3) as a reference source for students which can make it easier to obtain information as well as data and learning theories. Therefore, the more proficient a person is in using digital literacy, the higher the level of self-efficacy in his or her computer skills.

4   Conclusion

This research revealed that the results of the respondent's analysis, in this case the educational technology students at the Indonesian Christian University of Toraja, showed that the results of computer ability self-efficacy for students' digital literacy were very high by looking at the results of various digital skills in learning and in using social media in everyday life.

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