

Exploring Digital Literacy Skills of English Department Students in Using Mobile Devices at Universitas PGRI Sumatera Barat

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Abstract

This study aims to determine the digital literacy skills of English study program students at Universitas PGRI Sumatera Barat. Based on a web-based survey conducted to determine the current digital literacy skills among 4th, 7th, and 9th-semester students in the 2020-2022 academic year, special focus was given to students who were actively engaged in intense access to learning resources to complete final assignments. Data was collected through a survey questionnaire of 75 students from the 2020-2022 academic year using a one-stage cluster sampling technique where the entire population was divided into groups. Then, from the randomized results of several classes, the representative part of the group was class A. They answered the adaptation questionnaire through 20 statements referring to the use and understanding of the accessed learning resources. Data analysis was conducted to obtain responses calculated through statistical analysis in the form of frequency, mean, and percentage, assisted by (SPSS) 29. The results showed that overall students' digital literacy skills in internet search, hypertextual navigation, content evaluation, and knowledge assembly using mobile devices were in the proficient category with an overall mean score of 83. Therefore, it is suggested to lecturers and policymakers that digital literacy skills can be made a course for new students to focus more on prioritizing English language skills to prepare themselves for life in the increasingly powerful digital era in the future.

Keywords: *Digital literacy skills, digital learning, media platform.*

Introduction

Technological developments have impacted many fields, including culture, work, and education. Innovations from technology have led to transformational powers and tools that improve our quality of life (Fullan, 2013). Over the past 5 years, the growth of technology has reduced information barriers in many areas. Clearly, in the educational system, technology is seen as an effective tool to assist the learning process in the digital era (Ahmadi, 2018). This has been the influence of technology on English Language Teaching (ELT) that has been integrated into and outside the classroom, with the aim of teachers implementing digital literacy in learning by using technology as an important technical skill for students to gain knowledge through technology (Yulmiati et al., 2019). Then, there is a transformation of digital learning through the internet to obtain information from media sources and applications in learning in the 21st century.

In digital learning, especially in English language learning, technology that enables information through the internet is evidence of a change in consumer behavior of students who use mobile devices such as smartphones and laptops as a tool for learning English. This is supported by the results of data from Badan Pusat Statistik (BPS) in 2023 which shows the age range of 3-25 years as active users in internet access. However, this contrasts with students' internet use, where only 27.46% of students use the internet for online learning (muhamad, 2023). It is clear that, with the increasing accessibility and flexibility of mobile devices, mobile devices cause students in the context of higher education to become consumers of information to supplement their knowledge sources and fulfil assignments. Therefore, the changing factor of technological progress becomes a source of learning for the needs of students themselves. Thus, digital literacy skills are considered an important need for students to find information when writing, reading, and interacting with online content that may contain keywords and hyperlinks that require students to select appropriate in various media platforms (Atoy et al., 2020). This is supported due to digital literacy as a skill to be able to operate in using, but also understanding information accessed as a learning resource.

Digital literacy encompasses the complexity of not only understanding the use of the technology itself but also having the skills, competencies, and focus to make meaning of information, emphasizing the cognitive challenges associated with digital information. The importance of being critically involved in the use of digital technologies (Glister, 1997; Bawden, 2001; Jones & Hafner, 2012). In underlined, digital literacy skills also include the ability to understand the use of technology in accessing, searching, managing, and evaluating digital information, as well as participating in communication and editing digital information (Pratolo & Solikhati, 2020). These skills include technical aspects of searching for information and practical knowledge in processing information through mobile devices. In implementing these skills, students can use various internet sources as multimodal information sources to utilize various information sources to analyze, assess, and understand available information (Zhao et al., 2018).

Based on the explanation above, researchers found out what skills must be possessed by students to obtain learning resources in the form of digital information. Students have realized the use of mobile devices as a supporting tool in learning activities to get information sources. However, this is supported by the current gap in almost all paid digital content in the academic field. In addition, not all students majoring in English can use digital literacy, especially to understand information through digital English texts to summarize the content of information presented on the internet. In addition, with limited digital access and a lack of understanding of the information in these learning resources, students get most of the information making it difficult to sort and filter relevant information. Therefore, this study aims to investigate the digital literacy skills of English majors in using mobile devices.

Concerning the issue, of digital literacy skills needed by students in obtaining learning resources, in this process, students need to filter information through evaluation, synthesis, and collaboration with others through online facilities (Frisch et al., 2018). Therefore, students need to have digital literacy skills in finding various sources needed to support the learning process. Based on (Glister, 1997). there are several digital literacy skills needed by students. It consists of 4 skills, which are: a) Internet Searching, b) Hyper Textual Navigation, c) Content Evaluation, and d) Knowledge Assembly.

Methods

This research uses descriptive quantitative research with a survey method. The data collected is to find out how digital literacy skills in using mobile devices in 4th, 7th, and 9th-semester students in the academic years 2022, 2021, and 2020. The participants of this study were 75 students who were representatives of class A using the cluster sampling technique, with the total population of the 2020 academic year

consisting of 2 classes, 2021 consisting of 3 classes, and 2022 from 2 classes. The results of class selection are obtained by randomizing and obtaining representatives from classes in each academic year. The selection of respondents is based on them being active users in accessing learning resources to fulfil the needs of the assignment with various digital information sources. In this study, a questionnaire was used as a data collection instrument. This research uses questionnaires as a tool to obtain research data as well as to find out in detail, including opinions, attitudes, behaviours, or perspectives from the population (Creswell, 2014, p. 376). The instrument used in the statement items of skills in digital literacy was adapted from (Sudarti et al., 2022). There are 20 statements about digital literacy skills before being distributed to respondents, the questionnaire instrument conducted a pilot test with 15 students excluding the target sample. The statement items are divided into internet search, hypertextual navigation, content evaluation, and knowledge assembly using mobile devices. Then, with four main skills in the questionnaire. The subjects answered the statements with a five-point Likert scale ranging from 5: strongly agree, 4: agree, 3: undecided, 2: disagree, 1: strongly disagree. Thus, the digital literacy skill value category was adapted (Fahrurrozi et al. 2020). It specifically to determine from the statement results that the highest mean percentage is 71-100% is proficient, 31 70% the midpoint is less proficient, while the lowest value of 0.00-30% is not proficient.

Statistical analysis to calculate the mean frequency and standard deviation was used to identify the most strongly agreed and not strongly disagreed digital literacy skills. In this study, the researcher used Statistical Package for Social Science (SPSS) 29 for Windows to analyze the data. Descriptive statistics assist in presenting the findings from the survey questions in an easy-to-interpret form. This study used descriptive statistics to analyze digital literacy skills on percentage frequency, mean, and standard deviation. To determine the frequency of answers on digital literacy skills in using mobile devices, the interpretation of the average score was used. Responses from students with alternative answers that were already provided, the average score for each item was then calculated, and the frequency of use of each statement indicator item.

Result and Discussion

The following section discusses the findings obtained from the study:

Table 1. Frequency of Digital Literacy Skills

No	Skills	Total	%	Category
1.	Internet Searching	350	87.5%	Proficient
2.	Hyper Textual Navigation	414	82.7%	Proficient
3.	Content Evaluation	407	81.4%	Proficient
4.	Knowledge Assembly	483	80.5%	Proficient
Overall Total			83	

Based on Table 1, the results of this study show that of all skills in digital literacy, the highest skills obtained in internet searching are 87%. Then, the lowest skill acquisition was obtained at knowledge assembly at 80.5%, hypertextual navigation at 82.8%, and content evaluation at 81.4%. From these results, it can be concluded that the ability of digital literacy students majoring in English with 4 indicators included in the category of proficiency in operational technical skills operations using mobile devices to obtain digital literacy skills in searching and accessing. Students are proficient and accustomed to using these skills. Then, to filter content and build knowledge from information, students are more adaptable to the most needed information in understanding the learning resources accessed.

Table 2. Digital Literacy Skills of English Department

No	Indicator	2020	2021	2022
1.	Internet Searching	89	91	87.75
2.	Hyper Textual Navigation	81.4	89.4	81
3.	Content Evaluation	79.4	87.6	81.6
4.	Knowledge Assembly	80.6	85	79.8
Mean		82.6	88.23	82.5
Category		Proficient	Proficient	Proficient

Furthermore, in this study from the results of specific digital literacy indicators, the researcher provides more detailed data results for each academic year in the English department to illustrate the results of digital literacy that have been obtained. Based on Table 6, the results of the overall total in each academic year of 2020, 2021, and 2022 are not very significant and can be explained by 4 indicators. In the first indicator of the 3 senior semester classes, the skill of internet searching has the highest value 8- 9 in each academic year, then items no. 3 and 4 have the lowest value at 79.4 and knowledge assembly with a value of 79.8. Then, it can be said that in skills 1 and 2 referring to operational technical in digital, students are very proficient in the use and access of learning resources on the internet.

The first discussion is related to internet searching skills, where students in the digital literacy skills category are proficient in using tools and searching for information available digitally. This is also supported by the research of (Reyna et al., 2018), where students use various media platforms by engaging in activities in the operational use of mobile devices by searching and understanding digitally directed instructions. However, the combination of comprehending, validating, evaluating, creating, and sharing which refers to digital literacy activities in internet searching is important to understand the keywords to be entered to obtain the information needed. In addition, this is also supported by the fact that most senior students use 1-2 devices to find learning resources and are often involved in internet searching in digital operational systems to complement their needs in accessing learning resources.

In the second discussion of hypertextual navigation with the skills that students have to obtain learning resource information, students indeed involve applications as a form of mediator in navigation such as links or keywords that have been entered. One of the factors that students have adapted to hypertextual navigation is in the first semester with a system of using applications and technology that has been implemented in the English department, both in terms of communicating and supporting learning resources. Therefore, it means that from the second skill, students are already capable and familiar with the instructions shared through the application. Nevertheless, to analyze the web pages obtained, students tend not to pay much attention to the web, they focus only on the links obtained as a signal to get the wanted information. However, this contrasts with the research found (Mega, 2020), on the aspect of hypertextual navigation, where the category of students is low on hypertextual navigation in the perception of these skills.

The third discussion is content evaluation skills in the proficient category, where students have carried out content analysis through the first skill, namely access from internet searching and sorting out the keywords they want to enter on the search engine. It can be concluded that students of content evaluation are indeed able to check and collect information sources that are appropriate to their needs.

Regarding the explanation above, this is similar to the findings (Yeşilyurt & Vezne, 2023) . Gathering information on digital literacy shows a significant attitude toward a positive perspective to support education. This was also found (Wu, 2024). Digital literacy in content evaluation involves operational skills, thinking, and awareness of the performance of contribution task evaluation in higher education.

The fourth discussion is knowledge assembly. In this study, knowledge assembly falls into the proficient category. It can be concluded that students' attitudes and initiatives indeed agree that online information on learning resources can increase knowledge. This is similar to the findings of (Diani & Amiruddin, 2023) on knowledge assembly, where respondents' answers in the good category show that students can be critical and evaluate the learning resources they get. However, this contrasts with (Indah et al., 2022), where critical thinking, and information sources between digital literacy are not always automatically supported to improve critical thinking skills. It can be concluded that in knowledge assembly, the information obtained can add knowledge, however, this emphasizes the critical analysis of information on the background of the information chosen as a learning resource, because this is practical for understanding information in the thinking process itself for students

Conclusion

From the findings of this study, the majority of digital literacy skills students are generally active digital users and participate in utilizing access to learning resources whose digital literacy category is proficient in both internet searching, hypertextual navigation, content evaluation, and knowledge assembly. From the average results of the academic year 2020, 2021, and 2022. Then, in operational technical and understanding various sources of information, students show a fairly good attitude towards digital literacy.

The following are the contributions of this study and suggestions for future research on language learning strategies based on the present research study:

1. Future studies for educators and policymakers are suggested at the freshman level to focus on creating digital-specific courses, especially in English education, with specific writing and speaking skills to promote the updated media platforms and how to operate these media technologies. Due these two skills will also have an impact on the life career for digital literacy in the future.

In future studies, it is recommended to continue digital literacy research in qualitative related to competence in students who are categorized as digital natives to get more up-to-date results on metacognitive in a deep result of digital literacy

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