PROSIDING SEMINAR NASIONAL PEMANFAATAN SAINS DAN TEKNOLOGI INFORMASI 2023
Vol. 1 No. 1 (2023)165-170

Digital Literacy Unveiled: An Evaluation of English Department Students in the EFL Context

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Abstrak

Literasi digital diakui sebagai keterampilan mendasar bagi semua orang. Era digital saat ini telah menjadi topik yang menarik dan mendapat perhatian ditengah masyarakat. Namun, penelitian di lapangan yang menggali tingkat literasi digital siswa masih terbatas jumlahnya. Oleh karena itu, penelitian ini bertujuan untuk mengevaluasi tingkat literasi digital siswa EFL di tiga universitas berbeda yaitu UNY (Universitas Negeri Yogyakarta), UM (Universitas Negeri Malang), UGM (Universitas Gadjah Mada). Penelitian ini menggunakan desain penelitian kuantitatif untuk memperoleh data. Pengumpulan data dilakukan melalui kuesioner yang dibagikan secara acak kepada 30 mahasiswa dari ketiga institusi tersebut. Hasil penelitian menunjukkan bahwa sebagian besar responden memiliki pengetahuan yang memadai tentang pengoperasian teknologi digital dan sebagian besar dikategorikan memiliki keterampilan literasi digital yang ‘mayor’ dan hanya sedikit yang ‘sedang’ dalam mengoperasikan perangkat digital. Ditemukan juga bahwa tidak terdapat perbedaan yang signifikan skor literasi digital mahasiswa antara Universitas Negeri Malang, Universitas Negeri Yogyakarta, dan Universitas Gadjah Mada. Secara berurutan, penelitian ini menyarankan untuk menguji keterampilan literasi digital mahasiswa perguruan tinggi dalam lingkup yang lebih luas karena akan memberikan data yang lebih rinci dan komprehensif untuk generalisasi.

Kata kunci—kelas bahasa inggris, kemampuan literasi, literasi digital, tekhnologi digital

Abstract

Recognised as essential knowledge in the modern digital age, digital literacy has recently gained a lot of interest and focus. However, there is currently a dearth of studies investigating learners' levels of digital literacy. Therefore, the goal of this research was to assess the level of digital literacy amongst English as a Foreign Language (EFL) majors at three different institutions in Indonesia: UNY (Universitas Negeri Yogyakarta), UM (Universitas Negeri Malang), and UGM (Universitas Gadjah Mada). The researcher in this study used a quantitative approach to collect their information. Thirty learners from each of the three schools were selected at random to fill out the questionnaires. Most respondents had at least a'major' level of digital literacy, with only a small percentage having only a 'moderate' level of proficiency with digital tools, as shown by the results. I also found that the students' levels of digital literacy at Universitas Negeri Malang, Universitas Negeri Yogyakarta, and Universitas Gadjah Mada are not statistically different from one another. This study built on previous research by advocating for a more extensive investigation of students' digital literacy abilities at universities, as this would yield more generalizable data.

Keywords—digital literacy, digital technologies, efl classroom, literacy skills

1. INTRODUCTION

Its purpose in today's highly connected world, the idea of "digital literacy" has become a hot topic. Researcher have paid a lot of attention to the concept of digital literacy because of its apparent significance in modern settings. Many researcher have set out to

examine the far-reaching effects of digital literacy. Numerous research [1]-[3],[7],[9] have looked at the significance of digital literacy and its incorporation into classroom settings. The focus of these analyses was on how digital literacy can help students advance in their academics. The first step in preparing learners to succeed in today's digital community is to assess the value of digital literacy training in the classroom.

To successfully explore and employ digital technology [5],[8],[10],[27]. Common opinion held that the ability to find information among a plethora of websites and sources was only a small part of what it meant to be digitally literate. It also required the ability to evaluate tools and platforms critically to assure their safe, intelligent, and productive use and to make the most of the many opportunities afforded by digital technologies [30]. Digital literacy skills included the ability to use, understand, access, manage, acquire, and evaluate information derived from ICT-based sources [21]-[24].

Despite the increased adoption of technology across industries because of the COVID-19 outbreak, The Jakarta Post in 2020 reported that digital literacy in Indonesia remained low [11]. Based on results from a nationwide survey of over 10,000 adults, it appears that the digital literacy index rose slightly from 3.46 in 2020 to 3.49 in 2021. This improvement was attributable to the expanding digital competence and openness to new cultural experiences sub-indices. The digital literacy of Indonesian Internet users was rated as "average to good," 3.47 out of 5, in a study by Katadata in 2020. This included users aged 13 to 70 [29],[30]. According to the data I have, it was generally agreed that low levels of digital literacy are a continuing problem that requires greater study. Students' ability to understand, use, operate, and manage technology relied heavily on their degree of digital literacy, hence testing in this area is essential in Indonesia [17]-[20].

Therefore, the purpose of this research was to evaluate students' proficiency using digital tools while learning English as a foreign language (EFL). The study aimed to answer the following questions: (1) Where do English majors at Universitas Negeri Malang, Universitas Negeri Yogyakarta, and Universitas Gadjah Mada stand in terms of their familiarity with and comfort with digital tools and resources?; (2) Do learners at these three schools show statistically significant differences in their levels of digital literacy?

These questions were designed to aid in the study of digital literacy. This research intended to improve the understanding of digital literacy and evaluated the effectiveness of its implementation among a small group of students learning English as a foreign language (EFL). Thus, the researcher expected that this exploratory study, which zeroes in on a specific issue, could eventually blossom into a more thorough inquiry that could contribute significantly to the field of digital literacy.

2. RESEARCH METHOD

In this study, quantitative methods were used, specifically a survey format. The study's stated goals were to (1) determine how well students are doing in terms of digital literacy, (2) evaluate the various aspects of digital literacy, and (3) examine any significant differences in digital literacy performance. The researchers used both descriptive and inferential statistics in their analysis.

Participants

Thirty EFL students in Indonesia participated in the study. Each of the three universities represented here (Universitas Gadjah Mada, Universitas Negeri Yogyakarta, and Universitas Negeri Malang) provided some of the participants. Different sections of the country, the Special Region of Yogyakarta and East Java, were both under consideration. Random sampling was used to select individuals so as to collect more comprehensive empirical information. Table 1 showed the participants' demographic information.

Table 1. The demographic of the participants

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University	Total	Male	Female
Universitas Gadjah Mada	10	3	7
Universitas Negeri Yogyakarta	10	6	4
Universitas Negeri Malang	10	5	5

Instrument

The survey used to measure respondents' level of digital literacy was adapted from DigComp21 and used to compile the data for this study. A survey based on a Likert Scale was used as the metric of choice. Each statement on the Likert Scale form had a set of instructions and four possible responses. Respondents were asked to rate their level of agreement or disagreement with each statement on a scale from 1 (strongly agree) to 4 (strongly disagree). In Table 2 you may see some more details.

Table 2. Digital Literacy Instrumentation Assessment Scale

Answer Alternatives	Scale
Almost always	4
Always	3
Rarely	2
Never	1

The first phase in the instrument's development was to create a grid of questionnaire questions. Table 3 showed the grid with the digital literacy survey questions. The survey was five key categories—Data and Information Literacy; Communication and Collaboration; Digital Content Creation; E-Safety; and Problem Solving—were determined using a grid. Google Form was used to distribute the survey to the participants.

3. RESULT AND DISCUSSION

The discussion that followed will evaluate the findings in light of the established research questions. The results of the investigation were offered alongside a thorough discussion that draws on applicable ideas and previous studies on the same or related topics.

RQ1: What are the levels of English department students' digital literacy in Universitas Negeri Malang, Universitas Negeri Yogyakarta, and Universitas Gadjah Mada?

The following table displayed the interval and final scale based on the Likert Scale utilised for the study, as determined by the distribution of the Digital Literacy Questionnaire.

Table 3. Likert Scale

Category	Interval	Scale
1 = Insignificant	62-76	≤43%
2 = Minor	48-61	44-62%
3 = Moderate	34-47	63-80%
4 = Major	19-33	≥81%

A high level of digital literacy and competence in the use of digital technology was found among students at UNY, UM, and UGM. The percentage of students who can demonstrate competence in digital literacy was presented below, broken down by school. Totaling 88% throughout UNY, UM, and UGM. Most of them were comfortable and adept with digital tools.

All participants in this study were expected to be proficient in five basic areas of digital literacy: data and information literacy, communication and collaboration, digital content production, e-safety, and problem solving [2],[9],[13]. They were able to effectively use data and information, collaborate and communicate digitally, and produced original digital material. A lack of problem-solving abilities in regards to digital technology existed, despite the growing awareness of the importance of E-safety [6], [26],[28]. A large majority of respondents (76%) were found to have paid less attention to the aforementioned websites.

RQ2: Are there significant differences in students' digital literacy score between Universitas Negeri Malang, Universitas Negeri Yogyakarta, and Universitas Gadjah Mada?

No statistically significant differences were found using the MANOVA between the institutions and the five indicators of digital literacy. Wilks' Lambda = 0.737, F (10, 46) = 0.757, and p = 0.668 were the significant results; whereas, Pilai's Trace = 0.279, F (10, 48) = 0.778, and p = 0.649 were the significant results.

When comparing the three universities (UGM, UM, UNY), there was no statistically significant difference in the areas of information and data literacy (p = 0.588), communication and collaboration (p = 0.299), digital content creation (p =.984), safety (p =.0762), and problem solving (p =.0363). Despite the lack of statistical significance in the data, it was notable that the element of communication and collaboration has the highest association with the other dimensions [14]-[17].

After using the Bonferroni test, I found no evidence of statistically significant differences across any of the five dimensions of digital

literacy (information and data literacy; communication and cooperation; digital content production; safety; problem solving).

The p-value for the relationship between UM and UGM was much lower than that of the other variables (p = 0.375), indicating a stronger association between the two. This finding was predicated on the fact that the vast majority of UGM contributors were educators, with most having taught for longer than three years [7],[22],[26]. Cloud-based file sharing and storage solutions like Google Drive and Zoom should be made available to students and teachers. Individuals become educators as a result of their reactions to these stimuli [9],[13],[21]-[24]. According to research conducted at the University of Michigan, people were proficient in the use of technological tools for effective teamwork and communication. This assertion was supported by the widespread use of group projects in college, which illustrated how instructors promoted online collaboration among students [1],[5],[28]-[30].

The significance value (p = 0.476) indicated that there was a more significant association between UNY and UGM than there was between any of the other variables. This finding assumed that most participants from UNY and UGM were highly tech-savvy individuals with an interest in content production. People were then better equipped to use technology, think creatively, and assess their own digital competence as a result [4]-[8],[12].

4. CONCLUSION

The results of this study showed that the majority of English majors' digital literacy was high, with only seven respondents scoring in the moderate competency range. There was a high degree of competence with digital tools and sufficient digital literacy skills in the EFL classroom, as implied by this statement. However, the participants reported lower levels of confidence in themselves when it came to problem-solving and online security. It was also worth noting that there is not a huge gap between how well students at Universitas Negeri Malang, Universitas Negeri Yogyakarta, and Universitas Gadjah Mada do on a test of digital literacy. Since the participants were selected using a random sample strategy that was implemented at three different universities, care should be used in extrapolating from the results of this study. In order to get empirical data that is representative of several demographic parameters like semester, gender, and age, it is recommended that future research attempts employ a larger sample size. The results of this research should add to our understanding of college students' digital literacy. Despite these limitations, the study's findings provided important insights into the idea of digital literacy levels and have substantial consequences for the digital literacy scores of students in the English departments of various universities.

5. SUGGESTION

In the EFL classroom, students in the English department can considerably improve their digital literacy by implementing some of the many helpful suggestions that arise from a close evaluation of the study's findings [18],[19]. With the hope of producing students with higher levels of digital competency and engagement, the following suggestions are aimed at teachers, institutions, curriculum designers, and legislators.

Build in opportunities to test students' digital literacy at regular intervals during their schooling [25]. Evaluating pupils on a consistent basis is crucial because it allows teachers to keep tabs on their development, pinpoint problem areas, and adjust their teaching methods accordingly.

Incorporate a digital literacy programme that was carefully crafted to align with the established goals for language acquisition [27]. Including lessons or entire courses that stress the need of developing students' digital literacy skills from the ground up, giving them the tools, they need to confidently navigate the digital world.

The researcher encouraged students to be kind enough to share their thoughts on the digital literacy programmes that have been so carefully developed and implemented. The use of this feedback loop has the ability to act as a guiding force for educators, allowing them to carefully refine their methods, skillfully adjust their information, and expertly solve any difficulties that may arise during the complex learning process [25]-[30].

ACKNOWLEDGEMENT

The researcher would like to express my most heartfelt gratitude to those persons who have made significant contributions towards the successful completion of this scientific undertaking. Without the wonderful support, unshakable commitment, and synergistic efforts of a large number of different people and organisations, it would not have been possible to finish this work.

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