



PROCEEDINGS

International Conference on Education
Faculty of Tarbiyah | UIN Syekh Wasil Kediri
E-ISSN: 3025-6828

Volume 4, 2026

Mapping Five Dimensions of Digital Literacy among EFL University Students

Angga Prasongko

Faculty of Languages and Arts, Universitas Negeri Semarang

Correspondence e-mail: anggaprasongko@students.unnes.ac.id

Abstract:

Digital literacy includes several competencies that may not be equally represented in students' academic practices. Identifying variations across these competencies can provide a more specific understanding of students perceived digital capabilities in higher education. This study presents a descriptive analysis of five digital literacy dimensions among university students enrolled in an English Education program. Data were obtained through a 25-item questionnaire adapted from the DigComp framework, covering information and data literacy, communication and collaboration, digital content creation, safety and digital ethics, and problem solving. The responses were analysed using descriptive statistics to examine the mean and standard deviation for each dimension and individual item. The findings offer a dimension-specific account of digital literacy within the participating cohort and suggest that academic tasks involving information retrieval and search-term selection deserve closer instructional attention. Since the study relies on self-reported data from a single group of students, the results should be interpreted within this context and should not be treated as a direct measure of demonstrated digital competence.

Keywords: Digital Literacy; EFL Higher Education; Digital Competence; Digcomp; Descriptive Quantitative Study

Introduction

Digital technologies have become part of many academic activities in higher education. University students use digital resources to search for information, communicate with others, prepare assignments, and solve problems related to their learning. However, frequent use of digital technology does not necessarily indicate that students have developed all the competencies needed to use it effectively. Students may be comfortable using digital tools but may still experience difficulties in identifying relevant information, evaluating online sources, or managing digital content responsibly. Smith & Storrs (2023), for example, examined undergraduate students' perceptions of digital literacies and found a gap between the importance students attached to digital literacy and the educational coverage they reported receiving. Similarly, Nabhan (2021) showed that students' conceptions of digital literacy could remain focused on the functional use of technological tools rather than a broader critical understanding. These findings indicate that digital literacy should be understood as a combination of competencies that support students' academic engagement with digital environments.

The DigComp framework offers a basis for examining digital competence through five areas: information and data literacy, communication and collaboration, digital content creation, safety, and problem solving (Abubakari et al., 2025, 2026; Mieg et al., 2024). These areas cover different aspects of digital activity, including information management, online interaction, content production, responsible technology use, and the ability to address technical challenges. Research on digital competence measurement has also highlighted the importance of developing instruments that can represent the different aspects of students' digital engagement (Mejías-Acosta et al., 2024). Examining these areas separately can therefore provide a more detailed account of digital literacy than reporting only an overall score. In English as a Foreign Language (EFL) higher education, this perspective is relevant because students engage with digital texts, online learning resources, and technology-supported academic tasks that require different forms of digital competence (Pertiwi & Rodliyah, 2022).

Previous studies have provided useful evidence about digital literacy in English language education. Afriani (2023) examined the digital literacy of 107 EFL students using a 36-item questionnaire and descriptive statistical analysis. The study reported an overall mean score of 3.01 and identified aspects such as critical thinking, connectedness, and creativity as areas requiring further attention. This finding illustrates the value of examining students' digital literacy through survey data rather than assuming that their use of technology reflects equally developed competencies. Febriani and Afriani (2025) also investigated digital literacy in English learning among Generation Z students in the context of Society 5.0, highlighting its relevance to learning and academic outcomes. However, the questionnaires, participant groups, and dimensions used in these studies differ from those applied in the present research.

Nabhan (2021) investigated digital literacy among 107 pre-service teachers in an EFL academic writing context. The study combined questionnaire data with a focus group discussion and examined several areas, including finding information, communication, online safety, collaboration, creativity, and functional skills. The results showed differences among the reported competency scores, with communication receiving the highest mean and digital culture the lowest. This study provides a relevant comparison because it demonstrates that digital literacy among future English teachers may vary across competency areas. In addition, Pertiwi & Rodliyah (2022) explored university students' digital literacy skills and perspectives in EFL learning, while (Rini & Nabhan, 2023) examined teachers' views and practices concerning critical digital literacy in a higher education EFL classroom. These studies extend the discussion from students' self-

reported competencies to the ways digital literacy is understood and incorporated into language learning. However, their research purposes and approaches differ from those of the present study, which focuses on a descriptive quantitative analysis of five dimensions measured through 25 questionnaire items.

Beyond digital literacy itself, the development of digital competence is also connected to broader twenty-first-century competencies in teacher education. Farikha et al. (2025) reported that pre-service teacher training had begun to incorporate technology use and creative learning activities, although implementation faced challenges related to limited facilities, time constraints, and differences between university training and classroom practice. Although their study focused on teacher preparation rather than directly measuring digital literacy dimensions, it provides a broader educational context for understanding the importance of preparing students to use technology effectively. This context further supports the need to examine EFL university students' self-reported digital literacy across different competency dimensions. A larger-scale perspective was provided by Budiman & Syafrony (2023), who examined digital literacy among 902 students participating in online English writing classes. Their study provides a broader context for understanding digital literacy in online English learning. However, its participant population and learning context differ from those of the present investigation, which describes self-reported digital literacy across five dimensions among a smaller group of EFL university students. At a broader level, Mahendra et al. (2024) reviewed research trends in digital literacy and English language learning. Their review discussed the growing attention given to digital literacy and its relevance to English learning. This work helps establish the wider research context, but a systematic review of publication trends does not provide the same type of evidence as a student-level survey that compares scores across individual competency dimensions and questionnaire items. Taken together, these studies demonstrate that digital literacy has been examined in several English language education contexts, using different instruments, participant groups, and research purposes.

Research in EFL classrooms has also considered how digital literacy is enacted through teaching practices. Kurniawati et al. (2018), for example, investigated the use of digital literacy by EFL teachers from different generations and students' responses to digital media in the classroom. Iskandar et al. (2022) examined how digital literacy was integrated into authentic academic digital practices in university English language teaching. Their work is relevant because it connects digital literacy with actual academic activities rather than treating technology use as an end in itself. More recently, Charisma et al. (2017) profiled prospective EFL teachers' digital literacies and reported differences between functional use of digital tools and more transformative practices. Together, these studies support the need to examine digital literacy as a multidimensional competence that may develop unevenly across different activities and educational contexts. Digital content creation and the responsible use of technology provide additional contexts for understanding digital competence. Jaelani et al. (2026) examined the use of a multimodal video project to assess communicative performance in English for tourism and hospitality, illustrating how digital production can be connected to language performance in a specific educational setting. Aini et al. (2026) investigated supervisors' perceived challenges and solutions related to the integration of generative artificial intelligence (GenAI) into students' final project writing in Indonesian higher education. Their study highlighted concerns including source accuracy, plagiarism, overreliance, and the need for institutional guidance. Although these studies do not directly measure the five DigComp dimensions used in the present study, they illustrate

why digital literacy can involve content production, critical engagement with information, and responsible technology use in academic work.

Despite these contributions, there remains a practical need for context-specific descriptions of how students' self-reported digital literacy is distributed across clearly defined competency areas and individual questionnaire items. Previous studies have already examined overall digital literacy levels and variations across competencies; therefore, the present study does not assume that measuring digital literacy or comparing dimensions is entirely new. Instead, it focuses on providing a detailed descriptive account based on a 25-item questionnaire adapted from the DigComp framework. By examining both dimension-level and item-level results, the study seeks to identify which aspects receive relatively higher or lower self-reported scores within the participating group. This approach may reveal more specific patterns than an overall mean alone and can help identify areas that deserve further investigation in EFL higher education. Digital literacy in language education involves more than the ability to operate digital tools. It also includes evaluating information, interpreting multimodal content, creating digital products, and participating responsibly in digital environments. Prasongko et al. (2026) illustrate these aspects through a qualitative study integrating SDG-themed digital authentic texts into Communicative Language Teaching. Their findings provide a pedagogical perspective on digital literacy development, complementing the present study's quantitative description of students' self-reported digital literacy across five dimensions.

Accordingly, this study examines the self-reported digital literacy of 38 university students enrolled in an English Education program in Indonesia. It uses a descriptive quantitative design to analyze five dimensions: information and data literacy, communication and collaboration, digital content creation, safety and digital ethics, and problem solving. The analysis considers the mean and standard deviation of each dimension and individual questionnaire item. The study is guided by two research questions: (1) What is the profile of EFL university students' self-reported digital literacy across five dimensions? and (2) How do students' mean scores vary across the five dimensions and individual questionnaire items? By answering these questions, the study provides a descriptive account of digital literacy within a specific EFL higher education context. Its contribution lies in the detailed presentation of dimension-level and item-level patterns, rather than in testing causal relationships or evaluating a teaching intervention. The findings may help educators identify areas for further instructional attention while recognizing that questionnaire responses represent students' perceptions of their competencies, not direct evidence of their performance in practical digital tasks.

Methods

This study employed a descriptive quantitative design to examine EFL university students' self-reported digital literacy across five dimensions. This design was appropriate because the study aimed to describe students' questionnaire responses, calculate average scores, and identify differences across digital literacy dimensions and individual questionnaire items. The study did not examine causal relationships or evaluate the effects of an instructional intervention. Instead, it provided a numerical description of the students reported digital literacy in an English language education context. The participants were 38 students enrolled in a Research in ELT course in an English Education program at an Indonesian higher education institution. The study used intact group sampling, in which an existing class was selected as the research group rather than selecting individual students randomly from a wider population. The use of

an intact group enabled the researcher to examine the digital literacy characteristics of students within their existing educational setting. The analysis included the questionnaire responses of the 38 participants.

The data were collected using a 25-item Digital Literacy Questionnaire (DLQ) adapted from the DigComp framework. The questionnaire covered five dimensions: information and data literacy, communication and collaboration, digital content creation, safety and digital ethics, and problem solving. Each dimension consisted of five items. The questionnaire used a five-point Likert scale. The instrument was reviewed by two experts in English language education and educational research to examine the relevance and clarity of the items. This expert review provided a basis for evaluating the content of the questionnaire. The questionnaire's internal consistency was also examined using Cronbach's alpha. Based on the responses of the 38 participants, the 25-item questionnaire produced a Cronbach's alpha coefficient of .979. This result indicated high internal consistency among the questionnaire items. However, internal consistency was treated as evidence of reliability rather than as sufficient proof of construct validity. The study therefore interpreted the questionnaire results as self-reported digital literacy rather than as direct evidence of students demonstrated digital competence. The dataset consisted of responses from 38 students to the 25 questionnaire items. Before calculating the scores, the responses were checked for data-entry errors and consistency with the intended response scale of 1 to 5. One entry for item DL22 from participant S01 was corrected from 33 to 3 after the researcher confirmed that the original value was a typographical error. All subsequent calculations were based on the corrected student-response data.

The analysis followed five steps. First, the responses were checked and organized according to the five dimensions of the questionnaire. Second, the mean score for each item was calculated across the 38 participants. Third, the mean and standard deviation were calculated for each dimension. Fourth, the dimension scores were compared descriptively to identify relatively higher and lower areas of self-reported digital literacy. Finally, each participant's overall mean score was classified into one of three descriptive categories: Emerging, Developing, or Advanced.

Results and Discussion

Findings

1. Overall Self-Reported Digital Literacy

The analysis included responses from 38 EFL university students to a 25-item Digital Literacy Questionnaire. The mean of the students' overall questionnaire scores was 3.057 (SD = 0.621), with individual mean scores ranging from 2.04 to 4.08. These statistics describe students' self-reported perceptions of their digital literacy rather than direct evidence of performance on digital tasks.

Table 1. Descriptive Statistics for Overall Self-Reported Digital Literacy

No	Statistic	Value
1	Number of participants	38
2	Number of questionnaire items	25
3	Overall mean score	3.057
4	Standard deviation of participant-level means	0.621
5	Minimum participant-level mean	2.040
6	Maximum participant-level mean	4.080

2. Mean Scores across the Five Dimensions

The five dimensions were scored by calculating each participant's mean across the five items assigned to that dimension, then summarizing those scores across participants. Problem Solving had the highest mean, while Information and Data Literacy had the lowest. The difference between these two dimensions means was small (0.158 points on the five-point scale), so the ranking should be interpreted descriptively rather than as evidence of a statistically significant difference.

Table 2. Descriptive Statistics across the Five Digital Literacy Dimensions

No	Digital literacy dimension	Mean	SD
1	Information and Data Literacy	2.979	0.558
2	Communication and Collaboration	3.042	0.646
3	Digital Content Creation	3.042	0.716
4	Safety and Digital Ethics	3.084	0.712
5	Problem Solving	3.137	0.648

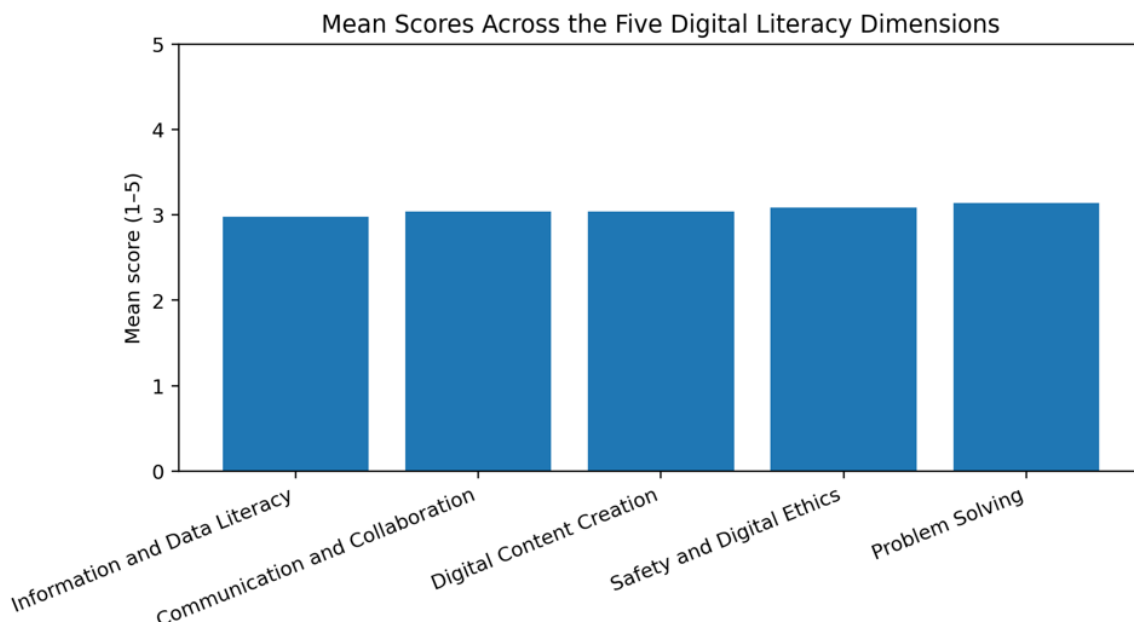


Figure 1. Mean Scores across the Five Digital Literacy Dimensions

3. Item-Level Patterns

At the item level, DL25 had the highest mean ($M = 3.342$), whereas DL1 had the lowest mean ($M = 2.868$). The difference between these item means was 0.474 points. The item codes alone do not identify the specific abilities represented; therefore, interpretations of these differences should be connected to the exact wording of each item.

Table 3. Item-Level Descriptive Statistics for the Digital Literacy Questionnaire

No	Item	Mean	SD
1	DL1	2.868	0.741
2	DL2	2.921	0.673

3	DL3	2.947	0.655
4	DL4	3.132	0.811
5	DL5	3.026	0.753
6	DL6	3.105	0.727
7	DL7	3.000	0.735
8	DL8	2.947	0.733
9	DL9	3.105	0.924
10	DL10	3.053	0.928
11	DL11	3.053	0.695
12	DL12	3.053	0.769
13	DL13	3.026	0.788
14	DL14	3.026	0.716
15	DL15	3.053	0.769
16	DL16	3.105	0.727
17	DL17	3.132	0.844
18	DL18	3.105	0.764
19	DL19	3.053	0.695
20	DL20	3.026	0.716
21	DL21	3.053	0.695
22	DL22	3.105	0.764
23	DL23	3.132	0.741
24	DL24	3.053	0.899
25	DL25	3.342	0.708

Figure 2 compares the mean score for each questionnaire item. It highlights variation at item level, including the relatively higher mean for DL25 and lower mean for DL1. The figure identifies response patterns but does not explain their causes; interpretation requires reference to the wording of the items

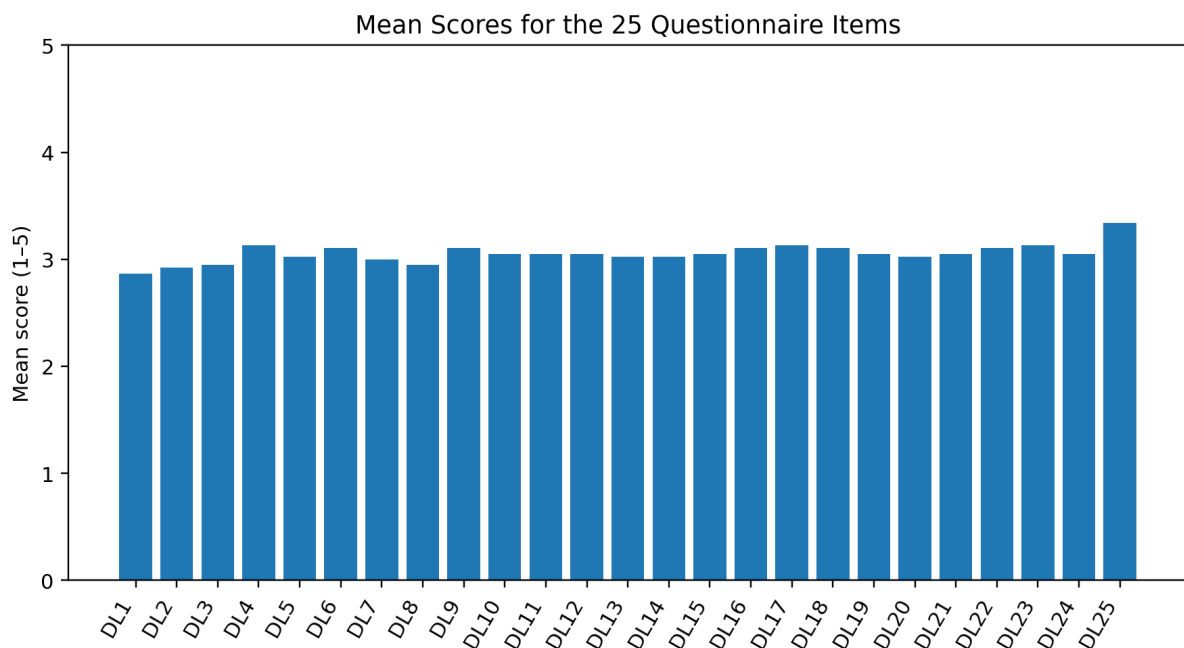


Figure 2. Mean scores for the 25 questionnaire items.

4. Descriptive Digital Literacy Profiles

For descriptive reporting, participant-level overall means were grouped into three researcher-defined bands: Emerging (1.00–2.33), Developing (2.34–3.67), and Advanced (3.68–5.00). These bands were created by dividing the four-point range of the five-point response scale into approximately equal intervals. They are not official DigComp proficiency levels and should not be treated as externally validated classifications.

Table 4. Distribution of Students across the Researcher-Defined Digital Literacy Profiles

No	Descriptive profile	n	Percentage
1	Emerging	7	18.4%
2	Developing	21	55.3%
3	Advanced	10	26.3%

Figure 3 presents the same profile distribution as Table 4 in graphical form. It makes clear that the Developing category is the largest group in this sample. The chart is descriptive, and the profile labels reflect the study's own score bands rather than official DigComp classifications.

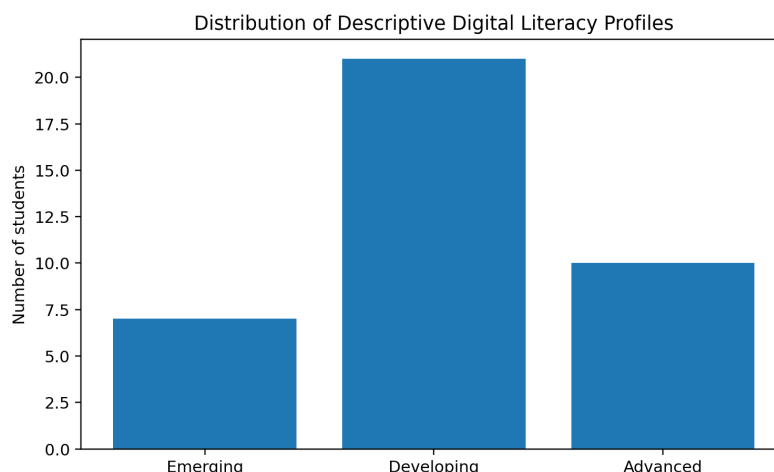


Figure 3. Distribution of students across the researcher-defined descriptive profiles.

Analysis

1. Overall Digital Literacy among EFL Students

The overall pattern suggests that the participating students perceived their digital literacy as developing, rather than consistently high across all areas. This is important because digital literacy in higher education involves more than being able to access devices or use familiar applications. Students may feel comfortable with some digital activities while still needing support to evaluate information, make responsible decisions, and use digital resources for academic purposes. Smith & Storrs (2023), reported that undergraduate students recognized the importance of digital literacies but also perceived gaps in the educational opportunities available to develop them. This provides a useful context for interpreting self-reported digital literacy as a competence that requires continued development rather than an automatic consequence of using technology.

Earlier research has also examined digital literacy as a competence that extends beyond basic technology use. Afriani (2023), for example, investigated digital literacy among EFL students, while Nabhan (2021) explored pre-service teachers' conceptions and competences in an EFL academic writing setting. Although these studies reported

generally positive aspects of students' digital literacy, they also identified areas that required further attention. Febriani & Liska Afriani (2025) further situated digital literacy within the context of English learning in Society 5.0. These studies provide relevant context for viewing digital literacy as part of language education and academic practice. The present study contributes a descriptive account of self-reported digital literacy across five dimensions in one EFL university class. Its contribution is not to establish a universal level of digital literacy among EFL students, but to show how a multidimensional questionnaire can reveal patterns within a particular learning context.

The overall results should be interpreted with two cautions. First, the participants came from one intact class, so the pattern may not represent students in other institutions, programs, or semesters. Second, the questionnaire recorded students' perceptions of their own abilities. Self-assessment can provide valuable information about how students view their competence, but it may differ from performance on practical tasks. Mejías-Acosta et al. (2024) demonstrated the importance of developing and validating measurement scales when assessing digital competencies in higher education. Mieg et al. (2024) likewise examined a short DigComp2.1-based digital competence measure using a large international student sample. These studies reinforce the need to distinguish between students' reported perceptions and competencies demonstrated through validated measures or practical tasks. For this reason, the present results are best understood as a profile of perceived digital literacy and as a basis for further inquiry, rather than as direct proof of what students can do in every digital learning situation.

2. Differences across the Five Dimensions

The dimension-level results show that students did not rate all areas of digital literacy in exactly the same way. Problem Solving had the highest mean, while Information and Data Literacy had the lowest; however, the difference between these means was modest. The pattern is therefore better understood as a relative ordering within this sample than as a strong separation between areas of competence. Because the study used descriptive statistics and did not conduct inferential tests, it cannot establish whether the observed differences are statistically significant.

Reporting the dimensions separately is still useful because an overall score can conceal differences among the areas included in a multidimensional construct. Information and Data Literacy, Communication and Collaboration, Digital Content Creation, Safety and Digital Ethics, and Problem Solving represent different kinds of digital engagement. A student's overall score may not show whether the student feels more confident in evaluating information, communicating online, producing digital content, acting safely, or responding to digital problems. Abubakari et al. (2025) examined the validity and applicability of the DigComp framework across different educational systems and reported variations in students' self-assessments across competency areas. Their subsequent comparative assessment also considered digital competence among university students using DigComp 2.1 (Abubakari et al., 2026). These studies support the value of examining the dimensions separately, although their findings should not be assumed to match those of the present sample.

The differences across dimensions should also be considered in relation to the educational context and the instruments used. Nabhan (2021), reported that communication was the highest-rated dimension in the study of pre-service teachers, whereas digital culture received the lowest mean. Afriani (2023), identified critical thinking, connectedness, and creativity as areas requiring attention among EFL students. These patterns illustrate that the relative strengths and challenges identified in digital

literacy research may depend on the competencies included in the instrument and the population being studied. Therefore, the highest mean in the present study should not automatically be interpreted as evidence that Problem Solving is objectively the strongest competence among the participants. Similarly, the lowest mean for Information and Data Literacy should be treated as an indication for further investigation rather than a definitive diagnosis of student weakness.

This approach is consistent with the broader argument that digital literacy should be considered in relation to the practices and contexts in which technology is used. Mahendra et al. (2024), in their systematic literature review of digital literacy in English language learning, provide a relevant overview of the field and its research directions. Smith & Storrs (2023), also emphasized the importance of understanding digital literacies in relation to students' learning practices and disciplinary contexts. The present study adds a focused descriptive profile from an EFL higher education context. For teaching, the dimension results may help instructors consider whether learning activities provide opportunities across all five areas, rather than emphasizing only communication tools or basic access to online materials. Any instructional priorities, however, should be informed by the actual questionnaire items and additional evidence about students' learning needs.

3. Item-Level Patterns and Areas for Further Development

The item-level analysis adds detail to the dimension averages by showing how responses varied across the 25 questionnaire statements. The difference between the highest-mean item, DL25, and the lowest-mean item, DL1, suggests that students' self-assessments were not uniform across all statements. Item-level information can be useful because two dimensions with similar means may still contain individual statements that receive different response patterns. In this way, the item analysis helps identify where more careful examination may be useful.

Nevertheless, item means should not be interpreted without reference to the wording of the statements. The labels DL1 and DL25 are codes, not descriptions of the skills being assessed. It would therefore be inappropriate to claim that a specific digital skill is a strength or weakness based only on these codes. The standard deviations also matter: an item mean summarizes the group's central tendency, whereas the standard deviation indicates how varied students' responses were. A similar mean can arise from different response distributions, so both statistics should be considered when interpreting an item. The work of Mejías-Acosta et al. (2024), on the development and validation of a digital competence measurement scale is relevant here because it highlights the importance of the instrument used to represent digital competencies. Mieg et al. (2024), similarly developed and evaluated a short measure based on DigComp2.1, demonstrating that measurement design is an important consideration when interpreting digital competence data.

Previous work has considered digital literacy in English language learning and academic digital practices. Mahendra et al. (2024), reviewed research trends in this area, while Iskandar et al. (2022) examined the infusion of digital literacy into authentic academic digital practices in university English language teaching. Rini & Nabhan (2023) also explored critical digital literacy in a higher education EFL classroom, including teachers' practices involving online materials, internet sources, and multimodal texts. These studies offer a useful rationale for connecting digital literacy with meaningful learning activities and critical engagement with digital information. However, they do not provide a basis for assigning specific meanings to DL1 or DL25 in the present questionnaire. Such interpretations must be grounded in the actual wording of the items.

In the present study, the item-level results can serve as a preliminary guide for selecting follow-up questions, reviewing questionnaire wording, or planning classroom activities. They should not be treated as a diagnostic instrument on their own. Future studies could connect item responses with interviews, observations, or task-based evidence to explore why students respond differently to particular statements. This combination would also help researchers examine whether students' self-reported confidence corresponds with their performance in locating, evaluating, creating, and using digital information.

4. Descriptive Profiles and Educational Implications

The descriptive profiles provide a compact way to summarize variation in the class. The largest group falls within the Developing band, while smaller groups fall within the Emerging and Advanced bands. This distribution suggests that the class includes students with different levels of self-reported confidence, which may be relevant when planning learning activities. However, these bands were created by the researcher for descriptive reporting; they are not official DigComp proficiency levels and have not been validated as classifications of digital competence. They should therefore be understood as a way to summarize the distribution of questionnaire scores in this sample, not as standardized categories that can be compared directly with classifications in other studies.

Research on digital literacy in EFL education provides several examples of why context and evidence matter when interpreting such profiles. Charisma et al. (2026) , for instance, examined prospective EFL teachers' digital literacies using questionnaire, test, and interview data. Their study distinguished functional use of digital tools from more transformative practices and found that the participants' development was uneven across areas. This suggests that a single profile label may not fully capture the range of practices a student can perform. Similarly, Kurniawati et al. (2018) examined how digital literacy was enacted in EFL classrooms and how students responded to teachers' use of digital media. Their study underscores that digital literacy in educational settings involves not only familiarity with tools but also the ways those tools are incorporated into teaching and learning.

From an educational perspective, the findings support providing opportunities to engage with digital literacy in authentic EFL tasks. For example, students might locate and evaluate digital sources for a language assignment, communicate and collaborate through appropriate digital platforms, create digital products for an academic audience, consider safety and ethical issues, and solve problems that arise while using digital tools. Iskandar et al. (2022) is relevant to this emphasis on embedding digital literacy in authentic academic practices. Jaelani et al. (2026) , through their examination of a multimodal video project in English for tourism and hospitality, also illustrate how digital production can be incorporated into language-related performance tasks. Although their research context differs from the present study, it provides an example of how digital products can be connected to communicative objectives.

Responsible technology use is another consideration for educational practice. Aini et al., 2026) reported perceived challenges associated with integrating GenAI into students' final project writing, including concerns about source accuracy, plagiarism, and overreliance. Although their study focuses specifically on GenAI and academic writing rather than the five-dimensional questionnaire used here, it highlights the relevance of critical and responsible engagement with digital tools. In the context of the present findings, this suggests that digital literacy activities could include evaluating information sources, acknowledging digital assistance appropriately, and making informed decisions

about the use of technology. Such activities should be adapted to course goals and students' access to technology, and their effectiveness should be evaluated rather than assumed. If instructors use the questionnaire to inform grouping or differentiated support, they should combine self-report results with classroom observation and evidence of students' actual work.

The educational implications should remain proportionate to the evidence. The present study describes self-reported scores in one class and does not test whether a particular teaching strategy improves digital literacy. Therefore, the findings can inform reflection and the design of future instructional activities, but they cannot establish that a specific intervention will be effective. Further research should examine whether authentic digital tasks, structured collaboration, or explicit instruction in information evaluation and digital safety lead to measurable changes in students' digital literacy.

Conclusion

This study highlights the importance of understanding digital literacy as a multidimensional competence in EFL higher education. Rather than treating digital literacy as a general ability to use digital technology, educators need to consider how students perceive their abilities to access and evaluate information, communicate and collaborate, create digital content, maintain safety and ethical practices, and solve problems. Understanding these dimensions can help educators design learning activities that respond more closely to students' learning needs. Digital literacy development should therefore extend beyond technical familiarity and provide opportunities for students to evaluate digital information critically, use digital resources responsibly, and apply technology to academic tasks.

This study contributes to EFL education by providing a descriptive account of students' self-reported digital literacy using a questionnaire adapted from the DigComp framework. However, the findings should be interpreted within the context of the participating class and should not be generalized to all EFL university students. In addition, self-reported responses indicate students' perceptions of their abilities rather than directly demonstrating their digital competence.

Future researchers are encouraged to involve larger and more diverse samples from different universities and educational contexts to examine whether similar patterns emerge. They could combine self-report questionnaires with performance-based tasks, digital artefact analysis, or classroom observations to obtain a more comprehensive understanding of students' digital literacy. Further studies may investigate how digital literacy relates to academic performance, critical thinking, and participation in collaborative learning. Longitudinal or intervention-based research could also examine how specific instructional approaches support the development of different digital literacy dimensions over time. Such research would extend the descriptive findings of this study and provide stronger evidence for developing effective digital literacy practices in EFL higher education.

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