

DIGITAL LITERACY PRACTICES OF ENGLISH AS A SECOND LANGUAGE  
STUDENTS: A CASE STUDY AT MARA UNIVERSITY OF TECHNOLOGY  
MALAYSIA

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### **Abstract**

The rapid development of information and technologies demanded that students be well-versed in using digital tools, particularly in higher education contexts, to evaluate and use digital tools wisely. Therefore, within the qualitative approach, the present study attempted to gauge ESL students' digital literacy practices by exploring their concepts of digital literacy, the use of digital tools, and the purposes of using digital tools. Two postgraduate students studying ESL at Universiti Teknologi Mara, Malaysia, were purposively selected as the selected participants in the interview since they were available and eligible to be the respondents as postgraduate ESL students and experienced using digital literacy tools. The finding highlighted that students viewed digital literacy as the ability to communicate and understand the language of technology and the ability to utilise digital tools. They believed that digital literacy was beneficial to support their academic achievement and work for professional development. They frequently employed Microsoft Office, e-dictionary, and journal database searches to surmount their task. In addition, they tried to generate Internet-based marketing for working. Besides, the students personally develop digital tools for building relationships through personal communication via social media. In this case, they claimed that digital literacy

enables them to appropriately filter, locate and disseminate information. Regarding digital tools, social media, and other platforms, such as YouTube, Facebook, Instagram, Twitter, etc., were heavily generated for academic and non-academic purposes. Knowing the suitable digital literacy tools for effective learning is pivotal for teachers to understand how their students learn.

*Keywords:* Academic achievement; digital tools; professional development; students digital literacy practices

### **Abstrak**

Perkembangan pesat maklumat dan teknologi menuntut pelajar untuk mahir dalam menggunakan alat digital, terutamanya dalam konteks pendidikan tinggi, untuk menilai dan menggunakan alat digital dengan bijak. Oleh itu, dalam pendekatan kualitatif, kajian ini cuba mengukur amalan literasi digital pelajar Bahasa Inggeris sebagai Bahasa kedua (ESL) dengan meneroka konsep literasi digital mereka, penggunaan alat digital, dan tujuan menggunakan alat digital. Dua pelajar pascasiswazah yang mengikuti kajian ESL di Universiti Teknologi Mara, Malaysia, dipilih sebagai peserta temuduga kerana mereka sedia ada dan layak menjadi responden sebagai pelajar ESL pascasiswazah dan berpengalaman menggunakan alat celik digital. Penemuan ini menekankan bahawa para pelajar melihat literasi digital sebagai keupayaan untuk berkomunikasi dan memahami bahasa teknologi dan keupayaan untuk menggunakan alat digital. Mereka percaya bahawa literasi digital bermanfaat untuk menyokong pencapaian akademik mereka dan bekerja untuk pembangunan profesional. Mereka sering menggunakan Microsoft Office, e-kamus dan carian pangkalan data jurnal untuk mengatasi tugas mereka. Di samping itu, mereka cuba menjana pemasaran berasaskan Internet untuk bekerja. Selain itu, pelajar secara peribadi membangunkan alat digital untuk membina hubungan melalui komunikasi peribadi melalui media sosial. Dalam kes ini, mereka mendakwa bahawa literasi digital membolehkan mereka menapis, mencari dan menyebarkan maklumat dengan sewajarnya. Mengenai alat digital, media sosial, dan platform lain, seperti YouTube, Facebook, Instagram, Twitter, dan lain-lain, telah banyak dihasilkan untuk tujuan akademik dan bukan akademik. Mengetahui alat literasi digital yang sesuai untuk pembelajaran yang efektif adalah penting bagi guru untuk memahami cara siswa mereka belajar

*Kata Kunci:* Pencapaian akademik; alat digital; pembangunan profesional; amalan literasi digital pelajar

## 1.0 INTRODUCTION

Digital literacy has been widespread following the advancement of technology that rapidly changes how people live. It also brings the transformation into the education system and pedagogy, where technological integration in teaching is associated with digital literacy. The shifting of this term not only covers the ability to read and write but also extensively expands the definition of the utilisation of technology beyond reading and writing (Nabhan, 2021). Digital literacy is the awareness, attitude, and ability to use digital tools to facilitate, access, organise, and evaluate digital resources to gain knowledge (Martin & Grudziecki, 2006). In a teaching context, digital literacy enables teachers to teach creatively through appropriate digital tools and combine traditional face-to-face classes with online learning. It has been revealed that technological competence will influence pedagogical ones (Almerich et al. 2016).

Furthermore, students will be treated as independent or autonomous learners who can take responsibility for their learning, allowing them to focus more on improving learning outcomes (Richard, 2016). Independence will solve problems in an online learning environment (Cote & Milliner, 2013). In a higher education setting, digital competence or literacy ease students to understand and interpret lessons in online learning (Mosa et al. 2016), improves their English skills (Hamidah, 2021) and helps them achieve academic, personal, and professional progress through virtual collaboration (Gunawardena et al. 2001).

Sen (2017) views digital literacy as a person's ability to use technological devices and the Internet to search, analyse, use, share, and create content. Information and communication technology (ICT) has grown increasingly important in both classroom and home learning environments. The Internet gives us access to all of the information we need, and the ability to access, find, extract, analyse, organise, and present digital communication is becoming increasingly vital in the learning process. Therefore, knowledge of digital technology is required to succeed in modern increasingly digital environment (Eryansyah et al. 2019). It now has a significant impact on how individuals learn and teach. People who are digitally competent can use Internet resources to help them troubleshoot rather than or in addition to reading manuals as a study conducted by Nguyen and Habók (2022) most students can access Internet and digital resources. The individual will receive the relevant information by entering the right queries into the search engine. Digital literacy education involves learning how to use and keep antivirus software up to date to avoid spam and viruses (Ng, 2011).

One of the most important aspects of studying English for ESL students in higher education is digital literacy. Additionally, for students in higher education to succeed academically and professionally, digital literacy is essential (Sparks et al. 2016). In today's world of ubiquitous IT, digital literacy has emerged as a critical competency for sharing and communicating information. In the meanwhile, learning them is essential given the dynamic nature of educational practices. For instance, during the pandemic, education practices encouraged adaptation throughout all spheres of society, but particularly in schooling. Instructors must use online media to carry out their teaching strategies, and students must be actively involved. English language proficiency must complement digital literacy competency, particularly for EFL understudies, by giving it a purpose and relevance in all social contexts. Furthermore, the stakeholders must finish the facilities to enable the greatest exposure to cutting-edge digital technologies (Meurant, 2010; Pratolo & Solikhati, 2021). Consequently, the only thing the EFL has to do is deal with the complexity of knowledge (academic and non-academic) while also making sure it can be applied to demands in real life (Rinekso et al. 2021; Samuel & Nkechi, 2016).

Generally, Reyna et al. (2018) suggested the conceptual, functional, and audio-visual domains as a framework for teaching and learning that can direct digital literacy. The idea domain has to do with how well students organise, sort, and comprehend digital information. They can filter, disseminate, and apply knowledge in an appropriate and critical manner. Functional domain refers to students' ability to use digital technologies such as Google Forms, video conferencing, reference manager systems, educational software, social media platforms, and other learning media. The last domain is audio-visual, which deals with creating video presentations, infographics, podcasts, and other audio-video products.

In terms of practices, students in higher education utilise digital literacy to acquire and engage in a wide range of digital activities in the context of academics, such as doing homework, searching and disseminating information on the Internet, or in the context of social life such as interacting with peers through social media, YouTube and online games (Appel, 2012). One of the latest studies by Handayani et al. (2020) also reports that students mostly learn English through social media platforms such as YouTube, Instagram, WhatsApp, Twitter, etc. Apart from academic functions, for the sake of their social lives and pleasure, they may primarily use digital tools like email, social networking, video editing software, and search engines on the Internet (Gu et al. 2013; Johna & Sutherland, 2005) where they are autonomously skillful in using them. The autonomy is derived from adolescents' practices and

nature as digital natives without any request or instruction from their parents and schools (Ting, 2015).

The urgency of digital literacy for students in higher education is inevitable, especially for those EFL students who potentially become English educators. As future teachers, their attitudes toward technology for teaching and learning take a significant role in forming their identities and perspectives to have professional identities as teachers at all school levels (McLay & Reyes, 2019), including the need for teachers to have literacy in teaching students at elementary school level (Mardiana, 2021). This literacy enables teachers to generate a digital platform for giving constructive feedback, increasing students' motivation, and engaging them during remote teaching (Nugroho et al. 2021). Several techniques can be used to engage students, such as providing integrated conversation, impromptu writing, and many other creative activities where it is possible to be supported by digital technology (Ginting, 2021).

Several studies have been conducted on digital literacy practices in both ESL and EFL contexts. First, Akayoglu et al. (2020) surveyed digital literacy practices by pre-service teachers in Turkey. This qualitative study aims to discover the concept of digital literacy, the most frequently used digital tools, and the ultimate purpose of using specific digital tools. They concluded that digital literacy included several levels of conception, from knowledge of use, the critical and creative skill of use, and collaborative skill of use. Furthermore, it was explored that social media such as Facebook, Instagram, and Twitter became the most favoured digital tools employed by the respondents, while Edmodo and Google Classroom remained the most frequently used digital tools for learning management systems. In addition to the purpose, most respondents argued that the digital platforms benefited their professional and academic development as English teachers or educators. They expected that using those platforms would enable them to teach speaking, reading, listening, and writing and ease them into conducting an adequate assessment. In terms of academic achievement, López-Meneses et al. (2020) in their study showed that students exposed to the frequent use of the Internet for searching and disseminating information and understanding the context of the information as they were able to access the Internet performed better academically. Students might find that digital literacy helps them develop positive attitudes toward learning English as a foreign language (EFL) (Al-Qallaf & Al-Mutairi, 2016).

In addition, Mantiri et al. (2019) proposed several activities. In an interactive classroom, teachers can use an online interactive whiteboard and generate an email or video conference

to exchange the language with students from other countries to foster students' confidence in using English. Furthermore, various media such as Facebook or blog sites can be employed by students to actively participate in the class toward a student-centred approach by posting or creating content such as storytelling, conversation, poetry etc. A study on digital practice experienced by ESL higher education was also done by Ganapathy et al. (2015) in higher education in Malaysia. The finding confirmed that students were exposed extensively to digital tools such as hardware and software and university websites, which was supported by ample access to the Internet and digital devices. Students also highlighted that digital tools helped keep their academic tasks to research and submit assignments. They could search for references and evidence and write their paper appropriately. Furthermore, digital tools were also generated for consultation with their instructors, mentors, peers, and experts.

One of the most prominent findings on digital literacy in higher education was carried out by Rinekso et al. (2021), who explored EFL students' practice using digital tools in higher education in Indonesia. The result indicated that students conceptualised digital literacy for digital information management purposes, such as seeking for, understanding, assessing, producing, and disseminating information. Many of them created technology for learning English and its cultures and for academic or research purposes. Examples of this include looking up e-books and journal articles using databases like Google Scholar, Taylor, and Francis, as well as other resources that primarily focused on finding references and enhancing their vocabulary and cultural competences. Apart from those purposes, they also used digital tools for online classes through Google Meet, Zoom, and Edmodo. Lastly, the students employed digital tools for personal communication and interaction through social media such as Facebook, Twitter, WhatsApp, etc. Finally, this study suggested that tertiary education institutions would conduct more training to increase digital literacy skills, enabling students to use digital tools for academic writing and gaining broader access to prepaid journal articles.

Most of the previous studies mentioned above rely on the digital practices experienced by both EFL and ESL students. Little was exposed to the students' views on digital literacy, including the types of platforms they utilise in their learning as ESL students. By examining ESL students' digital literacy practices in the university setting—specifically, at the University of Technology MARA in Malaysia—the current study aimed to address this gap. Data regarding the perceptions of digital literacy held by ESL students is another goal of this study. Compared to the state of digital literacy theory at the moment, their opinions, concepts, and convictions result in an empirically based definition of digital literacy. Lastly, the purpose of this study was

to find out how ESL students use digital tools and how they manage them. In the framework of future English language instruction and postsecondary education, the study's findings should aid academics in navigating other pertinent problems associated with digital literacy practices.

## **2.0 MATERIALS AND METHODS**

The goal of the current study was to explore how ESL students perceived and conceptualised digital literacy, as well as the usage and purpose of digital tools. It sought to investigate how ESL postgraduate students perceived digital literacy, as well as how they used digital tools and what kinds of resources were available at Malaysia's MARA University of Technology.

This study employed a qualitative research design where researchers' descriptions of the respondent's experiences, actions, feelings, and opinions should be detailed. Furthermore, it produces more detailed answers and responses as respondents elaborate on their solutions. Two ESL postgraduate students studying TESL at the University of Technology MARA, Malaysia, participated in this study. They were purposively selected based on the researchers' purpose. They were involved due to the availability and eligibility of the participants. Moreover, the data were collected amidst the Covid-19 Pandemic. An interview served as the study's instrument. The interview questions were modified based on previously conducted related and current research (Allatt & Tett, 2018; Rinekso et al. 2021). The interview questions addressed the use of digital technologies, their function, and the opinions of ESL students regarding digital literacy.

In addition, the data were gathered using semi-structured interviews. The researchers conducted virtual interviews with participants using the WhatsApp and Zoom programmes. Prior to conducting the interview, the researchers obtained consent forms from the participants. During the interviews, audio and video recordings were employed to record the data of the interview. For the data analysis, this study employed thematic analysis, utilising Braun and Clarke's (2021) six phases of data analysis, which included familiarisation with the data, building codes, producing initial themes, developing, and reviewing the themes, defining and recognising the themes, and reporting.

Three main themes emerged from the coding process: students' perception or concept of digital literacy, the purpose of digital tools, and the use of digital tools.

### 3.0 RESULTS AND DISCUSSION

The interview was conducted with two ESL students at MARA University of Technology, Malaysia. Three main questions were addressed to them: their perceptions of digital literacy, the purpose of digital literacy, and the use of digital literacy. The findings from the interview are presented in the following table.

Table 1. Themes, subthemes and responses from the students

Theme	Subtheme	Responses
Students' perception of digital literacy	1. Definition	a) Skill to communicate, interact and understand the language of technology.
	2. Perception	b) Skill to use digital platforms.
		c) Skill to get information from online resources.
		d) Skill to operate software for academic purposes.
Purpose of the use of digital literacy	1. Daily life	a) Communication
	2. Work	b) Blogging
	3. Academic	c) Attending an online course or workshop
	4. Media literacy	d) Online Meeting
		e) Video presentation
		f) Internet Marketing
		g) Writing articles
		h) Picture editing
		i) Assignment
		j) Google slide for presentation
		k) Validate the information
Use of digital tools	1. Social media	a) Twitter, Facebook, Instagram, and WhatsApp
		b) YouTube
	2. Web	c) Google docs
		d) Google Classroom
		e) Gmail
		f) Google slide
		g) Canva
		h) E-dictionary
		i) Webex

Initially, the participants endeavoured to provide their opinions regarding digital literacy. According to their definition, digital literacy is the capacity to interact with, comprehend, and make use of digital instruments. This concept is in line with the idea proposed by Janssen et al. (2013) and Spante et al. (2018), where the idea or definition of digital literacy is beyond just the ability to read and write; instead, it is more contemporary to the ability to access a wide range of information by using the digital tools. Understanding and maximising the use of the technology tools that are accessible to all people is the focus of digital literacy. Technology is not limited to its role in managing personal finances, for instance.



Moreover, it is being applied in fields where it has not historically been associated. Furthermore, the definition of digital literacy given by the study's respondents aligns with the preceding definition, which defines it as the capacity to apply different degrees of digital literacy and effectively understand and utilise information on digital platforms (Akayoglu et al. 2020). The participants' perception of digital literacy establishes a connection between the teaching and learning process and the breadth of social literacy and academic purpose. Furthermore, people must be digitally literate due to the demands of the modern world, particularly for working adults and students. People presently use digital tools on a daily basis; thus, anyone who cannot use these tools will find it difficult to cope with the age in where technology has become an absolute necessity for humankind. Adults and students alike must so be able to acquire the fundamentals of digital literacy. To educate them as future ESL teachers who can use technology towards practical and interactive learning in their teaching method, exposure to digital technologies becomes vital in the context of ESL classrooms, as noted by Røkenes and Krumsvik (2016).

Additionally, the responders used digital technologies in various contexts. Initially, people employed digital devices for media literacy, employment, school, and personal use. R1 respondents frequently enrol in online workshops and courses to advance their digital literacy. The other participants used digital technologies for online classes and meetings in the meantime. In addition, the participants produced a range of material for their academic tasks, including articles, videos, and digital documents. The students might mostly use digital tools for educational purposes due to the demand for success in their academic field. Sparks et al. (2016) highlighted that digital literacy is necessary for higher education students' professional and academic success. They can achieve better academic results once exposed to accessed and disseminated information using various digital tools as long as they understand how to transfer that information to support their academics (Ganapathy et al. 2015). Apart from academic activities, the students also generated technology for entertainment or personal purposes through chatting on social media with peers. In terms of working, the students maximised their online marketing through digital tools such as social media. This finding aligns with Samuel and Nkechi's (2016) study, which claimed that digital tools could be applied to real-life demands. Digital technology enables us to work effectively and efficiently; as Prior et al. (2016) stated, technology is created to ease work and solve problems. In addition to the purposes, the participants attempted to verify the accuracy of the information when it came to sharing digital content. It indicates that having sufficient digital literacy knowledge enables students to locate and consume digital content appropriately. This skill is urgently needed in

today's era, where hoaxes and misinformation have become one of the main challenges in digital life.

Finally, the students upgraded their knowledge by using social media platforms like YouTube as their learning tool. Similar findings were also observed in a related study by Rinekso et al. (2021): most the participants' digital technology-related tasks came from social media platforms. Similarly, digital tools like journal databases, Microsoft Office, and e-dictionaries were employed for purposes. The results additionally demonstrated the participants' use of many digital tools or applications. For academic purposes, the majority of them made extensive use of digital platforms like YouTube, Google Meet, Webex, Zoom, Canva, and Zoom. Those digital tools can be implemented in the classroom to create a web page and other online learning platforms (Tour, 2020).

They also employed social media for personal relationships, communication, and academic purposes, such as posting and sharing their task and discussing with peers. To put it briefly, digital gadgets are incredibly helpful to students these days and can make their schoolwork easier. The ESL postgraduate students, like the respondents in this survey, appear to understand the importance of digital literacy to support their profession and education and to be able to create technology tools for personal use in a secure and responsible manner.

#### **4.0 CONCLUSION**

Students defined digital literacy as the ability to utilise and grasp technology gadgets as a means of communicating with others. Furthermore, respondents stated that mastering digital literacy is critical today because they interact with it on a daily basis. Furthermore, because postgraduate sessions are held online, students must use digital resources into their teaching and learning activities. The findings revealed that participants used a variety of tools and applications when working with digital tools. The participants utilised digital apps mostly for academic, social media, and other objectives because they were postgraduate students in a university setting. They engaged in such digital technology-related tasks as creating content that was relevant to the assignments given by the instructors. Digital information such as articles, documents, presentations, and Google slides are frequently created by both participants. Additionally, both responders took part in online seminars, conferences, and workshops with their friends and professors.

Meanwhile, in terms of digital material sharing, participants verify the legitimacy and content of the information before sharing it. They also used social media platforms like YouTube to study English and about different cultures. As postgraduate students, the participants understood the importance of digital tools. They used them mostly for personal, academic, and other objectives. Their comments indicate that they are skilled and digitally literate. The students used several digital platforms, including Google Docs, Google Platforms, Canva, YouTube, and Google Slides. In addition to using the learning platform, the participants used social media such as Facebook, Twitter, Instagram, and WhatsApp.

This study shed insight on how ESL students perceive digital literacy, practise it, and use the resources available. It gives information on digital literacy practices in ESL settings. It can also serve as advice for university instructors regarding the use of learning platforms in the teaching-learning process. Furthermore, when performing teaching and learning activities, university lecturers can try to diversify or combine the learning platforms employed to avoid boredom among students.

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