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Digital Literacy and Language Learning: The Role of Information Technology in Enhancing English Proficiency

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ABSTRACT

The purpose of this study is to look at how digital literacy and information technology (IT) affect English language competency among Mindoro State University (MinSU) information technology students. Understanding the function of digital resources in language acquisition is critical as they become more integrated into education, especially in regions where access varies. The study used an exploratory research approach, using in-depth interviews to collect qualitative data from participants. The findings showed that digital literacy increases students' access to different learning resources, improves language fluency through practical application, and develops autonomy in tailored learning experiences. Participants also emphasized the importance of multimedia material in increasing engagement and motivation. Language learning programs, multimedia platforms, and online courses are among the key digital tools identified as useful for improving English skills. The study emphasizes the need for educational institutions to establish training programs that improve digital capabilities and promote the appropriate use of technology in language learning. Such approaches help students utilize digital resources successfully, resulting in better English proficiency and academic achievements. This study adds to the current literature by concentrating on the experiences of IT students at a university, providing useful insights into the convergence of digital literacy and language learning. Understanding these dynamics allows educators to better support students using digital technologies for language acquisition.

INTRODUCTION

In today's rapidly evolving digital landscape, information technology (IT) has become essential to educational processes, particularly in language acquisition. The rise of digital literacy, defined as the capacity to successfully use digital tools and resources for communication and knowledge acquisition, has transformed the way students approach language acquisition, particularly when studying English. English competence is an important ability because it is a worldwide language and a primary means of communication in academic and professional settings. For learners, particularly in non-native English-speaking countries like the Philippines, using digital tools opens up new avenues for improving language skills. While the promise of digital resources to improve English proficiency is widely acknowledged, the actual impact of these technologies on learners' language development remains unknown, particularly in regional university settings such as Mindoro State University (MinSU).

Globally, the incorporation of information technology into language learning has received significant attention, with studies emphasizing its ability to promote tailored learning experiences and improve language acquisition outcomes. Yim and Warschauer (2021) found that digital technologies such as language learning apps, online platforms, and multimedia materials give learners with quick access to interactive language practice, boosting English competence. However, despite the growing use of technology in education, there are still gaps

in understanding how digital literacy influences the successful use of these tools. According to research, kids with higher levels of digital literacy are better able to navigate and use digital technologies, which leads to better language learning results. Yet, little attention has been given to how this applies specifically to English proficiency, particularly in regions where access to digital tools may vary based on socioeconomic factors.

In the Philippines, where English is the official language and frequently utilized in academic settings, integrating IT into education has been a national priority, particularly in light of the COVID-19 pandemic's emphasis on flexible learning. The Commission on Higher Education (CHED) has urged the use of digital resources to aid language learning, recognizing the value of English competence for both domestic and foreign prospects (CHED, 2020). Despite these efforts, there are still issues in ensuring that all students, particularly those at rural universities such as MinSU have access to essential digital resources. Furthermore, studies such as those by David *et al.* (2021) point to a digital divide in the Philippines, where students in rural areas frequently do not have the same level of access to technology as their urban counterparts, stifling the development of digital literacy and, by extension, English language proficiency.

As a result, Mindoro State University serves a diverse student body, many of whom have particular obstacles linked to both computer literacy and language learning. IT students at MinSU are supposed to have a solid

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command of technology, making them ideal participants for investigating how digital literacy affects English ability. However, little study has been undertaken at MinSU to investigate how these students use digital resources for language learning, resulting in a research gap. While these students may have stronger digital literacy than other disciplines, it is unclear how this translates into successful language learning practices, particularly for enhancing English proficiency. Furthermore, it is important to understand how students view the significance of digital technologies in molding their confidence, motivation, and general involvement in learning.

The present literature emphasizes the potential of digital literacy to improve English proficiency, but there is a huge gap in knowing the specific experiences of IT students at regional universities. Most studies have focused on urban or foreign situations, where digital technologies are more widely available. Furthermore, while there is study on the general usage of digital tools for language learning, there is no investigation into how students' digital literacy levels influence their ability to use these resources effectively in the context of English language acquisition. This study seeks to fill these gaps by focusing on IT students at MinSU, investigating how their digital literacy affects their English proficiency, and exploring their perspectives on the importance of information technology in molding their language learning.

Through this research, the study sought to provide insights into the intersection of digital literacy and English proficiency in a regional context, contributing to a better understanding of how digital tools can be harnessed to enhance language learning outcomes for students at MinSU.

Research Objectives

The purpose of this research is to investigate how digital literacy and the use of information technology influence the improvement of English proficiency among learners, emphasizing the integration of digital resources into language learning processes specifically:

1. To look into how digital literacy skills affect students' capacity to study and enhance their English proficiency.
2. To investigate the types of digital tools and resources that students utilize to improve their English language abilities and effectiveness.
3. To investigate students' perspectives of how information technology influences their confidence, motivation, and engagement in English language learning

MATERIALS AND METHODS

This part presents the methodology the researcher employed in analyzing and interpreting the data about the variables in the study.

Research Design

Exploratory research design is used to study unsolved problems, allowing for exploring new ideas and identifying patterns without the limits of a formal

framework. According to Saunders *et al.* (2014), this strategy is especially useful when the researcher is unsure about the exact nature of the problem or phenomenon being examined, as it allows for the development of more explicit research questions and hypotheses for further examination. It is frequently the beginning point for expanding knowledge in areas where existing information is scarce.

Research Site

The study was conducted at Mindoro State University, Main Campus, Alcate, Victoria, Oriental Mindoro.

Participants

The participants are the selected Information Technology Students from the College of Computer Studies since they are naturally inclined to use digital tools and resources, making them an ideal group to investigate the link between digital literacy and English proficiency. IT students typically have excellent digital abilities and extensive experience with technology, allowing them to provide useful insights into how various digital platforms and technologies might be used for learning.

Instrumentation

In-depth interviews were conducted for the purpose of this research. The study utilized a researcher made interview guide with three parts as the main data gathering instrument. The first part is composed of questions on how digital literacy skills affect students' capacity to study and enhance their English proficiency. The second part dealt with students' assessment on the types of digital tools and resources that students utilize to improve their English language abilities and effectiveness. And lastly, it dealt with questions investigating students' perspectives of how information technology influences their confidence, motivation, and engagement in English language learning

Data Analysis Strategy

This study used thematic analysis. There are different approaches to thematic analysis. The researcher decided to use the inductive approach, as it involves deriving meaning and creating themes from data without any preconceptions. In doing a thematic data analysis, the researcher followed the steps of familiarization, coding, generating themes, reviewing themes, defining and naming themes, and writing up.

RESULTS AND DISCUSSIONS

Based from the analyzed responses of the respondents on the different questions assessing the three major objectives of the study, here are the generated themes:

How Digital Literacy Skills Affect Students' Capacity to Study and Enhance Their English Proficiency Access to Diverse Learning Resources

Participants commonly remarked that digital literacy

enables them to access a diverse range of materials, including online dictionaries, grammar tools, videos, podcasts, and language-learning platforms. These materials allow students to learn at their own speed and explore numerous facets of the English language, including grammar and pronunciation. Digital literacy improves access to diverse and high-quality resources, which is critical for language acquisition. According to Zou *et al.* (2021), effectively navigating online platforms enables learners to interact with materials that foster deeper language knowledge. This access allows students to augment their education outside of traditional classroom settings, fostering autonomy and self-regulation in language learning.

Improved Language Proficiency Through Practice

Participants reported that digital literacy abilities enable them to practice reading, writing, speaking, and listening in English using online tools and platforms. Social media, educational apps, and language exchange platforms enable real-time connection and offer a space for language practice. Studies highlight the importance of digital tools in enhancing language ability. According to Hamid *et al.* (2022), digital literacy not only improves access to materials but also creates dynamic environments in which students can practice language skills in real-world situations. Regular exposure and practice are essential for building language proficiency, especially in listening and speaking.

Enhanced Engagement Through Multimedia

Many participants emphasized the value of multimedia content like podcasts, videos, and movies in boosting their English comprehension. These materials provide more interesting and dynamic learning experiences, particularly for students looking to enhance their listening and speaking skills. Recent research strongly supports the use of multimedia in language learning. Yang *et al.* (2020) describe how multimedia resources, which frequently include visual, aural, and textual features, increase engagement and make language learning more dynamic. These tools also provide realistic language contexts, helping students strengthen their comprehension abilities through exposure to real-world English usage.

Autonomy and Personalized Learning

Participants stated that their digital literacy enables them to take charge of their education by determining when and how they study. Many people reported using apps that provide rapid feedback, like as Grammarly or Duolingo, to track their progress and improve consistently. Digital literacy promotes autonomy by allowing students to personalize their language learning experiences. According to Lim and Yunus (2021), students with greater levels of digital literacy are more likely to take the initiative in their studies, tailoring their learning to their strengths and shortcomings. This personalized approach to learning is especially useful for language acquisition since it allows pupils to focus on the areas where they need the most help.

Barriers and Challenges

While most participants stressed the benefits of digital literacy in their English learning, a few mentioned difficulties, such as managing sophisticated digital tools or platforms that are not user-friendly. Others observed that, while social media is important, it might create distractions and limit possibilities for focused language study. If students fail to direct digital tools or are sidetracked by non-educational content, their language acquisition may suffer. Lee and Frazier (2019) underline the importance of well-designed educational systems that facilitate language learning without overloading the user. They claim that, while digital technologies are useful, poorly designed platforms or distractions from non-academic information can reduce their usefulness.

Types of Digital Tools and Resources That Students Utilize to Improve Their English Language Abilities and Effectiveness

Language Learning Applications

Many participants emphasized the usage of popular language learning apps like Duolingo, Grammarly, and Merriam-Webster Dictionary to enhance grammar, vocabulary, and pronunciation. These tools offer interactive lectures, exercises, and rapid feedback, allowing students to enhance their language skills over time. Language study applications have become vital tools for improving pupils' language skills. According to Li and Rosson (2020), these applications offer planned lessons with gamification aspects, making learning more engaging and successful. Grammarly, which provides real-time feedback, has been demonstrated to greatly increase pupils' writing accuracy and grammatical proficiency.

Multimedia Platforms (YouTube, Spotify, Netflix)

Participants regularly acknowledged using YouTube, Spotify, and Netflix to improve their listening and speaking abilities. Students increase their comprehension, pronunciation, and conversational skills in real-world scenarios by watching movies, listening to podcasts, and watching training videos in English. Multimedia platforms offer a wealth of authentic language information, which improves learners' listening and speaking skills. According to Benson and Chik (2021), these platforms expose students to various accents, dialects, and idiomatic expressions, improving their comprehension of spoken English. The usage of videos and podcasts encourages contextual learning, which is essential for developing language abilities in real-world circumstances.

Social Media and Online Communities

Some participants underlined the importance of using social media sites like Facebook, Instagram, and TikTok to engage in English conversations and build online communities. These platforms provide possibilities for informal language practice by facilitating real-time conversation and engagement with native speakers and other learners. Social media platforms provide engaging areas for language learners to practice English in authentic

settings. According to Lamy and Hampel (2019), learners who participate in online groups or discussions via social media on a regular basis enhance their fluency, vocabulary, and confidence significantly. These platforms also offer cultural insights, which are necessary for language proficiency.

Educational Websites and Online Courses

Several participants used educational websites and online courses like Coursera, EdX, and BBC Learning English to gain access to structured instruction on various parts of the English language, such as grammar, vocabulary, and writing. Online educational platforms offer formalized learning possibilities to language learners. According to Godwin-Jones (2020), these platforms let students to participate in structured sessions that address grammar, reading, writing, and speaking skills. These courses are flexible, allowing students to learn at their own pace and review lessons as needed, which is critical for language learning.

Grammar and Writing Tools

Many students reported relying on grammar and writing programs such as Grammarly and QuillBot to improve their writing correctness. These tools assist students with grammatical checking, paraphrasing, and citation generation, so improving the polish and academic appropriateness of their writing. Writing tools have been widely embraced to help pupils improve their written communication skills. According to Kim and Park (2022), technologies like Grammarly fix grammatical problems while also providing extensive explanations to assist learners understand their faults. This type of automated feedback encourages individual learning and increases the overall quality of student writing.

Challenges and Barriers

Despite the benefits, some participants cited issues with digital tools, such as confusing interfaces, overwhelming information, and the usage of slang on social media platforms. These impediments impede effective learning, particularly for novices. While digital tools are excellent resources for language acquisition, their complexity can be challenging. Zhang and Zou (2023) found that beginners or students with low digital literacy may struggle to use particular platforms, lowering their learning efficiency. Addressing these hurdles is critical to ensuring that digital resources are available to all students.

Students' Perspectives of How Information Technology Influences Their Confidence, Motivation, and Engagement in English Language Learning

Access to Learning Tools Enhances Confidence

Students believe that IT increases their confidence in learning and using English by offering access to a variety of tools, including language study apps (e.g., Duolingo, Babbel), grammar checkers (e.g., Grammarly), and online dictionaries. These tools allow kids to practice

independently, receive rapid feedback, and track progress, resulting in increased confidence in their language skills. Chen and Hwang (2020) discovered that individualized, technology-mediated feedback promotes self-regulation and increases learners' confidence in language acquisition. In a similar study, Van Batenburg *et al.* (2021) found that language learners who use interactive tools with rapid feedback, such as AI-powered writing helpers, have large confidence gains since they may practice without fear of criticism.

Gamification and Multimedia Content Increase Motivation

Students say that IT tools, especially those with gamified components (such as points, badges, and challenges), encourage them to be more consistent with their English language learning. Multimedia platforms (e.g., YouTube, Netflix) provide a fun and interactive way to practice language skills, improving students' willingness to learn. Hsu and Tsai (2021) found that gamification in educational technologies increases intrinsic motivation among students by making the learning process more enjoyable. Lee and Hao (2022) discovered that multimedia platforms expose learners to authentic language environments, which not only improves their language skills but also motivates them to keep learning.

Enhanced Participation via Digital Collaboration and Real-World Exposure

Many participants believe that IT promotes increased involvement by encouraging collaboration through online platforms (e.g., Microsoft Teams, Zoom) and exposing students to real-world language use (blogs, social media, podcasts). These tools enable learners to interact with global communities, participate in discussions, and use their language abilities in real-world situations. Alghasab *et al.* (2021) discovered that technology-driven collaborative learning increases students' involvement in language learning by providing a variety of interaction options. This is consistent with Vanderhoven *et al.* (2022), who argue that the usage of social media and real-time communication platforms promotes meaningful engagement with authentic English information, ultimately leading to increased involvement and active learning.

Technology as a Double-Edged Sword

While many students emphasize the benefits of IT in increasing their involvement, others point to technology-related distractions such as excessive social media use or overwhelming information. Despite these obstacles, students who manage their distractions discover that IT technologies help them stay focused in their learning path. Vanderhoven *et al.* (2022) also investigate the paradoxical function of technology in language learning. Their research found that, while technology has enormous promise for engagement, it may also present distractions that impede focus and participation. Self-regulation and controlled learning environments are recommended strategies for addressing these difficulties.

CONCLUSION

The findings of this study highlight the importance of digital literacy on students' ability to learn and improve their English language. According to the responses, access to a variety of learning resources, greater language practice through digital tools, increased engagement through multimedia, and the promotion of autonomy in tailored learning all help students learn languages better. However, difficulties such as digital tool complexity and potential diversions from social media underline the importance of taking a balanced approach. Finally, using technology in language learning can boost students' confidence, motivation, and engagement as long as they have the essential skills to navigate these resources successfully.

Recommendations

To maximize the full benefits of digital literacy in language learning, educational institutions should create comprehensive training programs that improve students' digital skills and encourage effective use of technology in their studies. This includes lessons on using various digital technologies, addressing potential obstacles, and developing self-regulation skills to handle distractions. Furthermore, creating user-friendly platforms and resources can help alleviate the challenges associated with complex digital tools, ensuring that all students, regardless of their initial level of digital literacy, can fully participate in and benefit from their English language learning experience.

REFERENCES

- Alghasab, M., Hardman, J., & Schartner, A. (2021). Technology-mediated collaboration and its impact on student engagement in English language learning. *Computers & Education, 168*, 104191. <https://doi.org/10.1016/j.compedu.2021.104191>
- Benson, P., & Chik, A. (2021). The role of multimedia in language learning: A focus on YouTube and podcasts. *Language Learning & Technology, 25*(2), 15–30. <https://doi.org/10.1007/s11423-020-09756-0>
- CHED. (2020). Flexible learning options in the Philippine higher education system. <https://ched.gov.ph/>
- Chen, C. M., & Hwang, G. J. (2020). Effects of digital feedback on learner confidence in language acquisition. *Interactive Learning Environments, 28*(6), 703–715. <https://doi.org/10.1080/10494820.2020.1703012>
- David, C. C., Perez, C., & Tuazon, M. (2021). The digital divide and flexible learning: Challenges in the Philippine higher education system. *Journal of Educational Technology, 32*(1), 89–102. <https://journals.sagepub.com>
- Godwin-Jones, R. (2020). Learning language online: Strategies for success in online courses. *Language Learning & Technology, 24*(3), 1–13. <https://doi.org/10.1177/1469787420963351>
- Hamid, M. O., & Nguyen, H. (2022). Digital literacy and its impact on English language proficiency: Evidence from developing countries. *Journal of Language Learning Technologies, 39*(2), 110–125. <https://doi.org/10.1016/j.langtech.2022.02.005>
- Hsu, L., & Tsai, C. C. (2021). The impact of gamified language learning on student motivation: A case study in a digital environment. *Educational Technology & Society, 24*(4), 45–59. <https://www.jstor.org/stable/486100>
- Joo, Y. J., Lee, C. H., & Kim, S. H. (2020). The impact of digital literacy on English language learning through technology. *Educational Technology & Society, 23*(3), 22–34. <https://www.j-ets.net>
- Kim, H., & Park, S. (2022). The use of automated writing feedback tools in English language learning: An empirical study on Grammarly and its effectiveness. *Educational Technology & Society, 25*(1), 55–68. <https://doi.org/10.1177/1469787420973093>
- Lamy, M. N., & Hampel, R. (2019). Online interaction and the development of L2 proficiency: The impact of social media on language learning. *ReCALL, 31*(2), 183–201. <https://doi.org/10.1017/S0958344019000045>
- Lee, J., & Frazier, K. (2019). Digital distractions in language learning: Balancing opportunities and challenges. *Language Learning in Higher Education, 9*(1), 71–85. <https://doi.org/10.1515/cercles-2019-0005>
- Lee, S., & Hao, Y. (2022). Multimedia learning in English as a second language: Enhancing motivation and engagement through digital platforms. *Language Learning & Technology, 26*(1), 1–17. <https://doi.org/10.125/LLT.22.07>
- Li, D., & Rosson, M. (2020). The effectiveness of gamification in language learning apps: A case study of Duolingo. *Journal of Computer-Assisted Learning, 36*(5), 567–579. <https://doi.org/10.1111/jcal.12401>
- Lim, K. Y., & Yunus, M. M. (2021). Autonomy in language learning through digital literacy: A case study of university students. *Journal of Educational Multimedia and Hypermedia, 30*(1), 101–119. <https://www.learnedtechlib.org/primary/p/216730/>
- Van Batenburg, E. S., Oostdam, R. J., & Wopereis, I. G. (2021). The effects of technology-enhanced feedback on the confidence and competence of language learners. *Computers & Education, 165*, 104119. <https://doi.org/10.1016/j.compedu.2021.104119>
- Vanderhoven, E., Schellens, T., & Valcke, M. (2022). Digital distraction during language learning: Managing engagement and focus. *Journal of Educational Technology Development and Exchange, 15*(1), 23–39. <https://doi.org/10.18785/jetde.1501.03>
- Yim, S., & Warschauer, M. (2021). The role of digital tools in second language acquisition: Current trends and future directions. *Language Learning & Technology, 25*(2), 12–28. <https://llt.msu.edu>
- Yang, Y., Zou, D., & Cheng, G. (2020). The impact of multimedia resources on language learning outcomes: A systematic review. *Educational Technology Research*

- Development*, 68(5), 2199–2218. <https://doi.org/10.1007/s11423-020-09798-2>
- Zhang, Z., & Zou, D. (2023). Barriers to effective use of digital tools in language learning: A focus on user interface and learner preferences. *Journal of Educational Technology Research*, 48(1), 135-150. <https://doi.org/10.1007/s11423-022-09902-4>
- Zou, D., Xie, H., & Wang, F. (2021). Digital literacy and language learning: A meta-analysis. *Educational Technology & Society*, 24(3), 55-68. https://www.j-ets.net/ETS/journals/24_3/4.pdf