

Learning Beyond Borders: The Role of Digital Technologies in Second Language Acquisition (A Case Study Based on HNDE Students of the Hardy ATI, During 2023 – 2025)

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Abstract: The expeditious advancement of digital technology has considerably transformed approaches to Second Language Acquisition (SLA) in coexistent educational contexts. This study scrutinizes the role of modern technological devices such as mobile applications, online learning platforms and digital communication media in expediting Second Language Learning among learners of English as a Second Language (ESL). Implementing a qualitative research approach, the study observes learner's perceptions, experiences and engagement with technology-mediated language learning environments. The data are collected by sending well-developed questionnaire to the targeted population. The data were analyzed using structural analysis. The findings reveal that digital technologies boost learner motivation, promote self-reliant learning and provide increased exposure to original language use.

Keywords: Acquisition, English as a Second Language (ESL), Second Language Acquisition (SLA).

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I. INTRODUCTION

In recent decades, rapid advances in digital technology have significantly converted panorama of education, particularly in the field of Second Language Acquisition (SLA). Learning is no longer restricted to physical classroom or limited by geographical boundaries, instead, digital technologies have enabled learners to access real language input, interact with native and non-native speakers and engage in significant language practice across borders. As a result, language learning has become more flexible, communicative and learner-centered than ever before.

Digital technologies such as mobile applications, online learning platforms, social media, virtual classrooms and multimedia resources play a pivotal role in supporting second language progress. These tools provide learners with opportunities for disclosure to real-life language use, immediate feedback and self-learning at their own place. Moreover, technology communication mediated environments stimulate cooperation, communication and cultural exchange, which are key elements of effective language acquisition.

➤ Significance of the Study

As it was mentioned before, use of the technological devices in the modern world can be regarded as an inevitable process which has to be observed in relation to the Higher Educational sector, paying attention on the Second Language (English) as an international language.

Not only in Sri Lanka, but also in internationally the phenomena is unique in the process of learning and teaching (especially English Language).

The reality is, most of the students are able to manage English language easily, unlike previous decades. What is the secret of this sudden success of the students? No one knows the reality of this success. So, it is a responsibility to observe this paradoxical reality, which is applicable to the modern society. In the modern world, various types of technological devices are used by the students for academic purposes compelled to observe "The role of digital technologies in second language acquisition"

➤ *Research Questions*

How could new technologies be adequately integrated in Second Language Acquisition.

What sort of academic progress (especially English language), the students have achieved with the modern technological devices? (on vocabulary development and pedagogy).

What are the positive and negative aspects of the modern technological devices, in relation to the Second Language (English) Acquisition?

Identify the types of modern technological devices used by the students for academic purposes?

➤ *Expected Results*

It is expected that the findings of this study will contemplate that modern technology has a significant positive impact on second language acquisition. The study is expected to show that technological tools such as mobile applications, online learning platforms, educational websites, social media, and artificial intelligence-based language learning applications improve learners' language proficiency by enhancing vocabulary, grammar, pronunciation, listening, speaking, reading, and writing skills. Furthermore, the results are anticipated to reflect that technology increases learners' motivation, engagement, confidence, and opportunities for autonomous learning through easy access to authentic learning materials and interactive activities. However, the study may also identify certain challenges, including internet connectivity issues, digital distractions, unequal access to technological resources, and inadequate digital literacy among learners. Overall, the research is expected to foresee that when integrated effectively into language teaching and learning, modern technology serves as a valuable tool for improving second language acquisition.

II. METHODOLOGY

This study sets out to investigate the second language acquisition and what sorts of impacts have been affected for the betterment of the students in relation to the modern technology. This is a case study based on 32 HNDE students of the Hardy Advanced Technological Institute, during 2023-2025 period, which means study adopted qualitative research paradigm, since the study is focussed attention on participants at a case study level and analysed its data through a descriptive frame work.

The data are collected by sending well-developed questionnaire to the targeted population.

The study randomly sampled thirty-two students enrolled for the Higher National Diploma in English second year full time students during 2023-2025 of the Hardy ATI, Ampara. The ages of the participants ranged from 18-23 years and the English language is used as a second language.

III. LITERATURE REVIEW

New technologies are directly linked to information and communication technologies (ICTS). They are defined in terms of capability to acquire, to process and to transmit information and they are in constantly change with time (Steinmueller, 2000).

So, different types of research papers are available applicable to the modern technological devices and second language acquisition.

A research paper on “The use of technologies in second language learning: The case study of a Mexican University” has been published by MA Maria del Cermen, Hernandez cueto (2017). According to the writer, “Even tough, students make use of technologies for academic purposes, it is reduced only to internet searches and the use of computers to specific software such as official purposes: word processing programs, power point and excel. There is a noticeable contrast between the use that students make of technologies for academic and personal aspects that could be concluded that students are not interested in using technologies to learn a foreign language that they only use these resources to their homework or achieve college subject goals”. So, it can be identified, as a prominent feature in the modern society, which has to be observed in the Sri Lankan point of view.

Furthermore, another research paper was compiled by M. Rafael Salaberry (2020) on the title of “The use of technology for second language learning and teaching: A Retrospective”. It reflects that “whereas most new technologies may have been revolutionary in the overall context of human interaction. It is not clear whether they have achieved parallel degrees of pedagogical benefit in the realm of teaching.

A research paper named “Second language learning in the teaching-mediated environments” was published by Zhonghao Zhon (2017). It emphasizes that, “Technology represents a growing and rapidly evolving practice with potential benefits on students. In situations where the teacher and the classroom represent the only environment for second language acquisition and practice, asynchronous web 2.0 tools offer students an alternative venue for additional interesting and engaging activities, ensure student-centeredness and autonomy as well as interaction and connectivity and provide opportunities to practice Reading, Writing, Speaking and Listening outside the classroom walls at their own place, in real life-semblance and safe environment second language teachers were among the first to recognize the benefits directing from employment of the social networking tools in second language acquisition and established the first communities of practice for continuous professional development and dissemination of best practice.

So, it is clear that, different kinds of advantages and disadvantages can be identified in the event of using modern technology, in relation to the second language acquisition. Actually, acquisition is seen as a native process of growth of knowledge without metaknowledge.

Apart from them, it is important to review some of the research publications applicable to the field. “Second language acquisition: An advanced resource book, psychology press” (2005) by De Bot, Kees, Wande, Lowie and Marjoyn Verspoor and “Introducing second language acquisition” Cambridge University press (2009).

➤ *Hypothesis*

The students who are using technological devices in the modern society, are more talented than those who were studying language in the past decades.

IV. RESULTS AND DISCUSSION

The result proposes that students are highly bosom with digital tools and technological devices. Since the technology is already implanted in their life styles, it can be effectively utilized to reinforcement second Language acquisition. The trendiness of smart phones, social media platforms, educational websites and language learning applications may furnish to students ‘positive attitudes towards technology assisted learning.

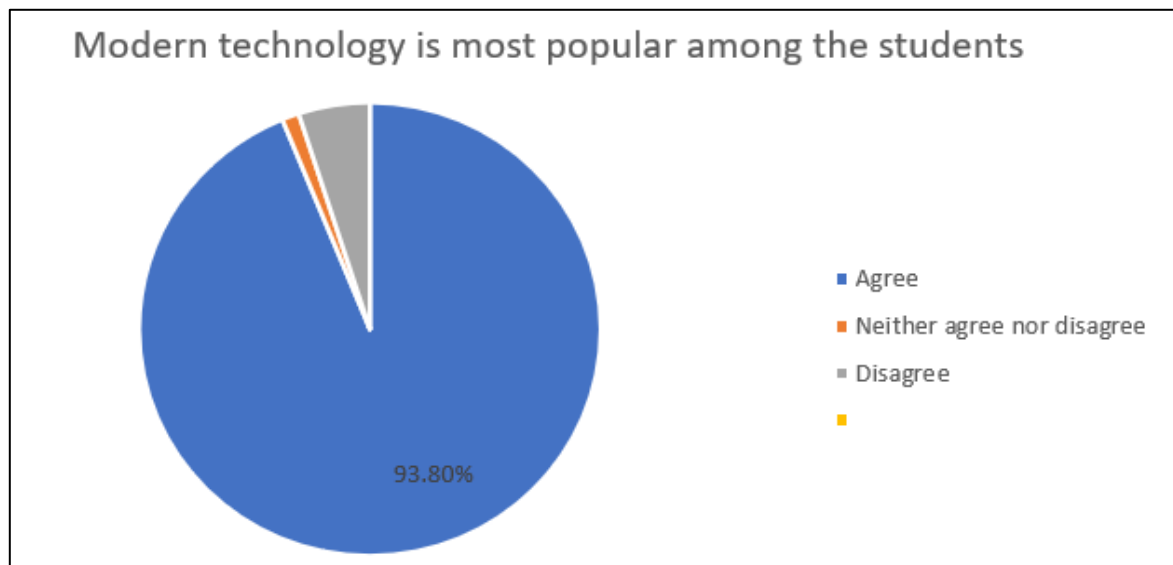


Fig 1 Modern Technology is Most Popular Among the Students

Figure 1 illustrates students' understanding of the popularity of modern technology. The findings indicate that modern technology is highly popular among the students, with 93.8% of the respondents agreeing that it is the most important choice. Only a small number of respondents selected the other options. This result highlights the pivotal popularity and relevance of modern technology among students.

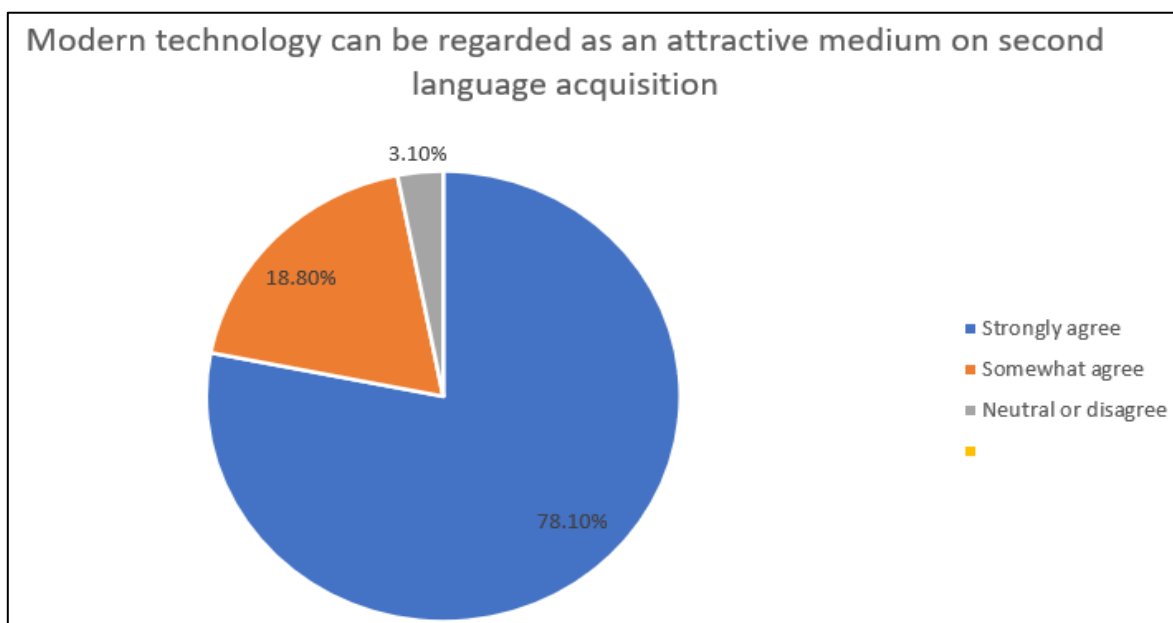


Fig 2 Modern Technology can be Regarded as an Attractive Medium on Second Language Acquisition

According to the data, 78.1% strongly agreed and 18.8% somewhat agreed with the given statement. Only a very small percentage remained neutral or disagreed.

These findings contemplate that students make out technology as an engaging and motivating medium for

language learning. Interactive applications, multimedia resources, videos, online quiz and virtual communication opportunities make learning more attractive than traditional methods. Since, the technology appears to increase learners' encouragement and participation in second language acquisition.

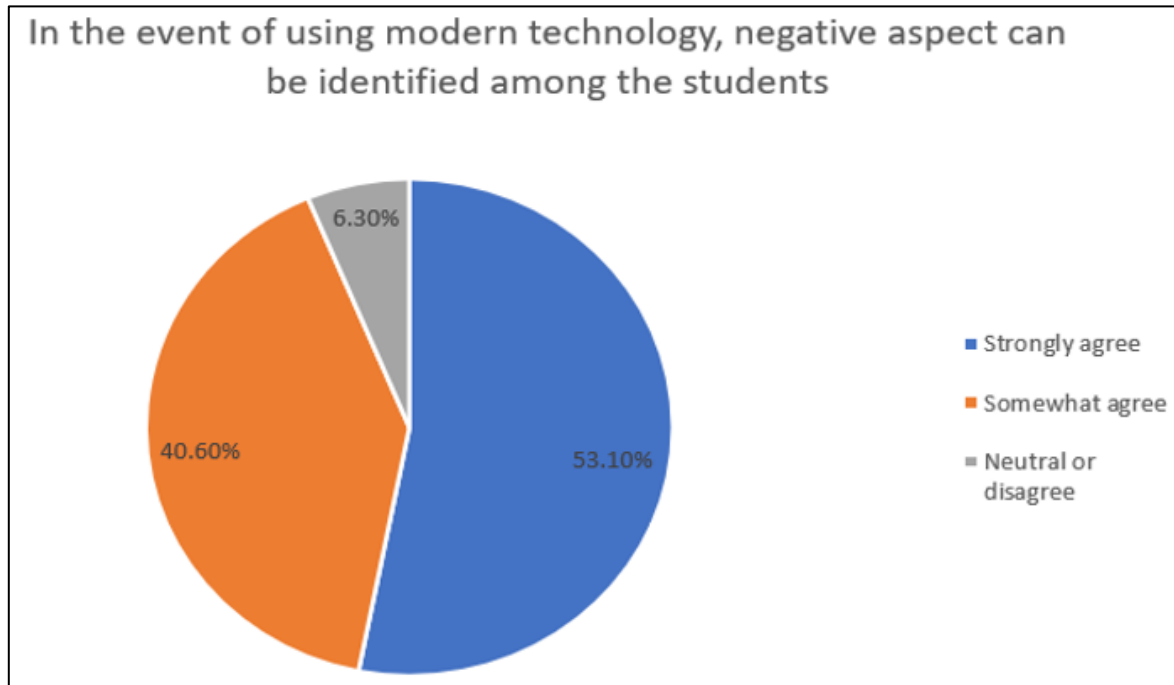


Fig 3 In the Event of Using Modern Technology, Negative Aspect can be Identified Among the Students

The result reflects that 53.1% strongly agreed and 40.6% somewhat agreed that the use of technology also has negative aspects. Only a limited number of respondents remained neutral or disagreed. Although students aware the importance of technology, they have some ideas of the negative aspects in the context as well. Common negative effects may include perplexity through social media,

excessive dependence on technology, lack of face-to-face communication, misinformation, and problems in maintaining mental concentration. So, educators should be able to guide students in using technology responsibly and effectively for the purpose of achieving the educational purposes.

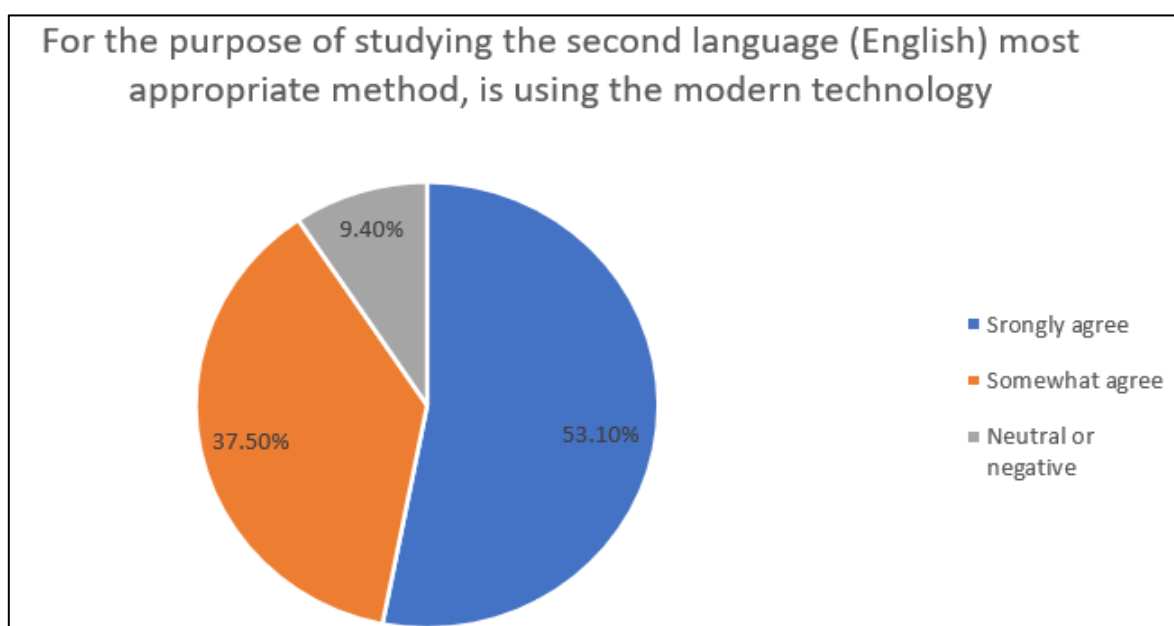


Fig 4 For the Purpose of Studying the Second Language (English) Most Appropriate Method, is Using the Modern Technology

The majority of respondents expressed green light this statement with 53.1% strongly agreeing and 37.5% somewhat agreeing. Only a small number of students reflected neutral or negative opinions.

The findings show that students consider technology to be one of the most effective approaches for learning English.

Access to real materials, online dictionaries, pronunciation activities, language learning and communication with native speakers may contribute to this positive effect. Technology empowers learners to practice listening, speaking, reading and writing skills beyond the classroom environment.

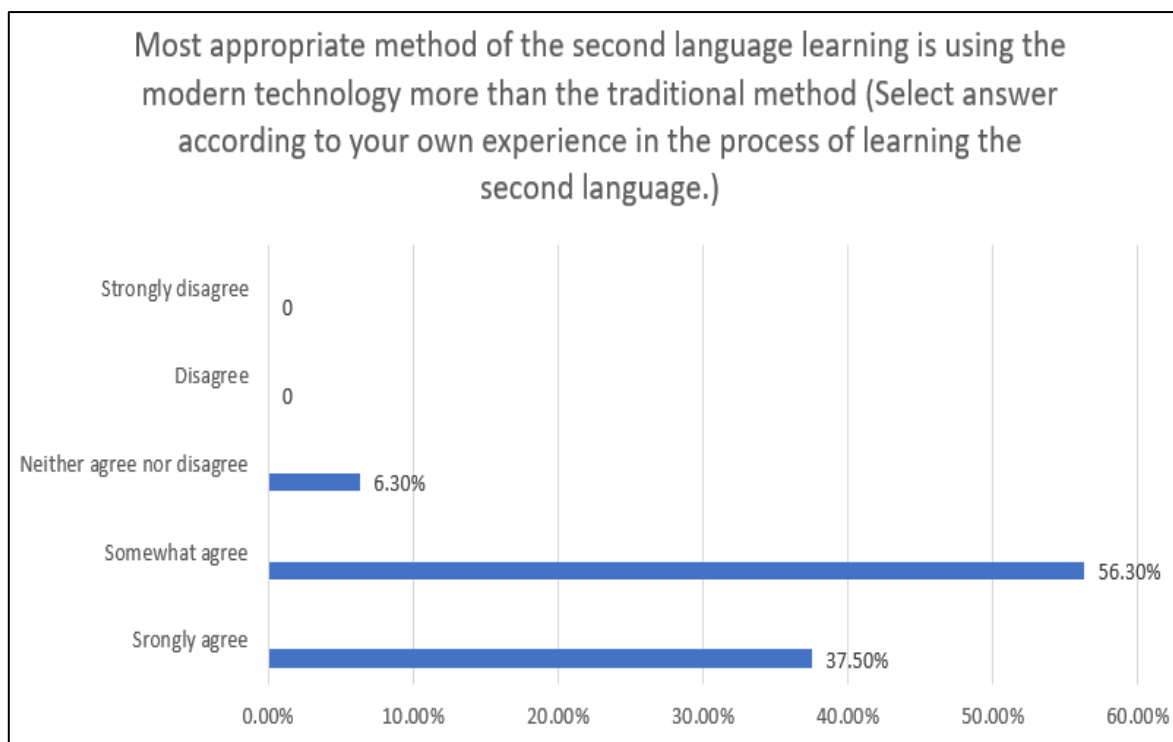


Fig 5 Most Appropriate Method of the Second Language Learning is Using the Modern Technology more than the Traditional Method (Select Answer According to your Own Experience in the Process of Learning the Second Language.)

The data expose that 56.3% somewhat agreed and 37.5% strongly agreed with this statement, while only 6.3% remained neutral. No respondents disagree.

The overall findings of the study contemplate that students hold a highly positive perception of modern technology in second language acquisition. Majority of the respondents agreed that technology is popular, attractive, and effective for learning English. The findings suggest that technology boosts learner motivation, attainability to learning materials, and opportunities for language practice.

However, the respondents acknowledge several negative effects associated with technology use, including distractions and overdependency on digital tools. Therefore, while technology plays an important role in assisting second language acquisition, its success depends on appropriate implementation and supervision.

V. CONCLUSION

The findings of this study reflect that modern technology has mainly a positive influence on second language acquisition, especially in the context of learning English as a second language. The survey results depict that technology has become an important and effective resource

for language learners by providing them with greater access to learning materials, interactive activities, and authentic language input. Digital platforms, online learning resources, educational applications, social media, and digital media applications enable students to engage with the English language beyond the traditional classroom environment. As a result, learners have more opportunities to improve their vocabulary, grammar, pronunciation, listening, reading, writing, and communication skills at their own pace and according to their individual learning needs.

Furthermore, the findings consolidate that modern technology can increase students' motivation, interest, and active participation in the language-learning process. The availability of videos, audio materials, interactive exercises, language-learning applications, and online communication platforms makes the learning experience more interesting and learner-centred. Technology also provides learners with opportunities to interact with native and real speakers of English, thereby exposing them to different accents, varieties of English, and original forms of communication. This exposure can contribute substantially to improving learners' confidence and overall communicative competence.

However, the study also contemplates that the use of modern technology in second language acquisition is not

without challenges. Students may experience disadvantages such as distractions, excessive dependence on digital tools, lack of face-to-face interaction, technical issues, unequal access to digital resources, and the possibility of encountering inaccurate or unreliable information online. Since, technology should not be considered a complete replacement for teachers or traditional language-learning methods. Instead, it should be effectively integrated with classroom instruction and guided by teachers to ensure that learners use digital resources appropriately and suitably.

Overall, the findings of this research reveal that the advantages of modern technology in second language acquisition generally overshadow its limitations. When used appropriately and purposefully, technology can create a flexible, accessible, interactive, and motivating environment for learning English as a second language. It can support both independent learning and collaborative communication while facilitating students to take greater responsibility for their own learning.

RECOMMENDATIONS

- Incorporate modern technology in to language learning programs.
- Prorate training on the effective use of technology.
- Assert a balance between technology and traditional teaching methods.
- Depreciate the negative effects of technology.
- Boost critical evaluation of online resources.
- Upgrade access to technological facilities.
- Encourage independent learning.

REFERENCES

- [1]. De Bot, K., Lowie, W., & Verspoor, M. (2005). *Second language acquisition: An advanced resource book*. Routledge.
- [2]. Hernández Cueto, M. del C. (2017). *The use of technologies in second language learning: The case study of a Mexican university*.
- [3]. Salaberry, M. R. (2020). The use of technology for second language learning and teaching: A retrospective.
- [4]. Steinmueller, W. E. (2000). ICTs and the possibilities for development. *UNRISD Discussion Paper*.
- [5]. Verspoor, M., Lowie, W., & De Bot, K. (2009). *Introducing second language acquisition*. Cambridge University Press.
- [6]. Zhong, Z. (2017). *Second language learning in technology-mediated environments*.
- [7]. Chang, M.-M., & Hung, H.-T. (2019). Effects of technology-enhanced language learning on second language acquisition: A meta-analysis. *Educational Technology & Society*, 22(4), 1–17.
- [8]. Figueiredo, S. (2023). The effect of mobile-assisted learning in real language attainment: A systematic review. *Journal of Computer Assisted Learning*, 39(4), 1083–1102. <https://doi.org/10.1111/jcal.12811>
- [9]. Grgurović, M., Chapelle, C. A., & Shelley, M. C. (2013). A meta-analysis of effectiveness studies on computer technology-supported language learning. *ReCALL*, 25(2), 165–198.
- [10]. Guo, P., Jeyaraj, J. J., & Razali, A. B. (2024). A systematic review of collaborative mobile-assisted language learning (C-MALL) practices using bibliometric, content, and scientometric analyses. *Humanities and Social Sciences Communications*, 11, 1435.
- [11]. Huang, H., & Li, M. (2024). The impact of technology-enhanced language learning environments on second language learners' willingness to communicate: A systematic review of empirical studies from 2012 to 2023. *Language Learning & Technology*, 28(1), 1–22. <https://doi.org/10.64152/10125/73593>
- [12]. Lee, S.-M. (2022). A systematic review of context-aware technology use in foreign language learning. *Computer Assisted Language Learning*, 35(3), 294–318.
- [13]. Macaro, E., Handley, Z., & Walter, C. (2012). A systematic review of CALL in English as a second language: Focus on primary and secondary education. *Language Teaching*, 45(1), 1–43.
- [14]. Persson, V., & Nouri, J. (2018). A systematic review of second language learning with mobile technologies. *International Journal of Emerging Technologies in Learning*, 13(2), 188–210. <https://doi.org/10.3991/ijet.v13i02.8094>
- [15]. Stockwell, G. (2013). Technology and motivation in English-language teaching and learning. In E. Ushioda (Ed.), *International perspectives on motivation: Language learning and professional challenges* (pp. 156–175). Palgrave Macmillan.
- [16]. Zhao, Y. (2005). Technology and second language learning: Promises and problems. *Computer Assisted Language Learning*, 18(2–3), 99–112.