

ENHANCING SECOND LANGUAGE ACQUISITION: EXPLORING THE INTEGRATION AND INFLUENCE OF TECHNOLOGY ON LANGUAGE LEARNING AND ACQUISITION

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Abstract

The present research focuses on how students integrate technology in teaching and learning of English language and how does technology influence language learning and acquisition. A total of thirty students of English Department responded to the online non-probabilistic semi-structured questionnaire to obtain data through the qualitative research methods. The research focuses on the possibility of enhancing second language acquisition through the integration of technological tools such as the AI applications, virtual conference and language learning programs. The findings point to the fact that self-paced learning is highly aided by technology, that real resources are more easily accessed than fake and that using the assets increases terminology, speaking and general language proficiency. However, students and their responses also described the benefits of the technological factor, such as freedom and individual approach. The analysis shows areas for improvement and more research into increasing the use of innovation in learning languages, and at the same time demonstrates the potential of technology in creating vibrant and equitable learning environments.

Keywords: ICT, Second Language, learning technologies, computer-based tools, individual learning, real sources, openness, language ability.

1. Introduction

The enhancement of information technology (IT) has revolutionized different aspects in people's existence; education not being left behind. Another critical area of the present day's language teaching-learning process enthusiast is the application of technology that revolutionized languages' teaching. Technological advancement offers student's information, updated tools, technologists and varieties of ways in enhancing learning in an interrelated global society. According to Ahmadi (2017), the strategies that teachers use are central to how learners obtain a language and pedagogy is now unthinkable without reference to technologies. For instance, By observing the given concept of technology, Bull and Ma (2001) have pointed out that Language students have got to several opportunities since they make the students to practice number of exercises which in actual help the students to enhance their educational process and they get the real content.

Learners develop computer-based language exercises as they look for novel patterns and meanings as well as improve collaborative learning in the course, as observed by both Harmer (2007) and Genclter (2015). This moves towards integration of technology in language instruction has made creations such as Computer-Assisted Language Learning often integrated as a component of modern language instructional design possible. This development is apparent in the application of CALL as a show that more and more people are integrating technology into their language learning processes. The integration of technology is defined, by Eady and Lockyer (2013), as utilizing technological assets as part of a course of learning to assist in the learning process. It is used from planning phase up to

the concrete instructional process and enables the teachers to design more appealing and effective learning sessions.

Becker (2000) noted that computer science had a strong significant value as a teaching support material and specifically in context where educators have access to assets and can adapt the course material in any way they chose. Toven-Lindsey et. al., (2015) explained that recent technologies in teaching learning such as virtual reality, augmented reality, and games' applications provide deeper and more effective learning environment in order to comprehend complex concepts more virtually. Further, online educational networks such as Coursera and Khan Academy have played a significant role in breaking down barriers in accessing high quality language acquisition opportunities for anyone in the world. Furthermore, by providing adaptations in the form of software that is capable to deliver lessons based on the needs of the learner, these platforms have paved way for personalized educational opening. As for the teacher and others in the educational management, technology forms an important aspect in teaching and learning languages as it does for the learners themselves. The authors Larsen-Freeman and Anderson (2011, p.71) pointed out that, technology provides teaching aids and brings the classroom learning context closer to the students' world. Similarly, Tomlinson (2009) and Gençİlter (2015) support this by emphasizing that, through the use of teaching resources available on the Internet, students are actively involved in the learning process.

On balance, the application of technology in language instruction has revolutionized the sector and brought into existence unimaginable prospects for teachers, and students. Technology is now integrated into the modern classroom because of enhancing access to different resources, as well as designing appealing as well as targeted settings. There is a need to focus on the methodological rigidity and the optimal integration of these technologies enhancing the language learning process as academic institutions and other policymakers embrace continuing technological advancement.

1.1. Research Objectives:

- ✓ To explore the potential of technology that can assist the second and foreign languages learners to learn and acquire languages efficiently.
- ✓ Evaluating on the challenges and opportunities that surround the integration of technology in language acquisition learning environment.

1.2. Research Questions:

The relevant research questions were attempted to be addressed with the aim to meet the purposes of the study:

1. What impact does integrate technology have on language acquisition?
2. In what way can the achievement of language learning results be optimally enhanced by employing developing technologies strategically?
3. What challenges or barriers are faced when integrating technology in teaching and learning of language?

2. Literature Review

2.1. Theoretical Foundations of Technology-Enhanced Language Learning: The use of Technology in learning and second language acquisition is anchored on some of the existing theories of learning and acquisition. According to constructivism espoused by Pea (2004) learning occurs as an activity through which the learner acquires new knowledge by interacting with the environment. Technology can be defined as an agent that supports learning in the context of language acquisition which enable learners to construct meaning through technologies like media environments and multimedia. Social constructivism taking this a notch further stresses on the social practice for learning to occur. Vygotsky's, Zone of Proximal Development (1978) bemoans that learners perform with better results during social

and collaborative activities. This can be enhanced by using technology to provide tools that would enable learners to use structured discussions, video conferences, as well as collaborative group projects as they participate in meaningful language exchanges as constructed by Hymes. CLT focuses on communication involving the use of the target language throughout the learning process. Features of such applications, which include chat applications, video calls, and language learning applications provide realistic interaction and communication that are closest to the CLT (Chapelle & Jamieson, 2008). Nunan (2004) also discusses the meaning orientation of task-based language teaching, in a way that meaningful is the keyword for language learning. Technology augments this approach through simulations, via games approach and project-based learning. The interactionist theories like those worked on by Ellis, (2017) in learning language focus on the interaction in the process. There are ways where technology comes handy include chatbots, AI driven tutors and virtual language partner. Here, cognitive load theory by Sweller (1988) applies as technology enables control of cognitive loads since it includes multimedia and other materials to present information in smoothly resistant platforms. All these theoretical frameworks taken together underscore the fact and potential best symbolizing how, properly integrated technology can offer learner-centered, engaging and efficacious language acquisition and use.

2.2. Influence of Technology on Language Learning and Acquisition:

The impact of technology on second language and acquisition is a complex one with the cons as well as pros of technology use. On the positive side for example, speech recognition and pronunciation applications, which give feedback on pronunciation and fluency of the learners thus improving their oral performance (Chun & Plass, 1996; Wang & Chen, 2016). Mobile-assisted language learning applications and programs, gamification and interactivity enhance word learning and recall by using spaced refresher interventions (Chen & Day, 2014; Godwin-Jones, 2018). Furthermore, technology allows learners to work with real-life material, for instance, podcasts, newscasts, and video lectures that familiarize learners with different language and cultural environments (Satar, 2017; Stockwell, 2007). Such resources do not only enhance the listening skills but also provide a deeper insight of language usage in different contexts. Besides, the use of technology in learning implies that the learners engage in meaningful interactions using the language through communication in online groups for language exchanges, and use of social media platforms to interact (Kukulska Hulme & Shield, 2008; Meskill et. al., 2015). However, risk factors have also been identified, including; technicalities, demoralization, and overdependency on technology learning and teaching, which reduces learning achievement (Anderson & Simpson, 2017; Warschauer & Healey, 1998).

As much as this is the case, it's important to note that there are several issues related to the application of technology in language learning. Applying only the digital learning approaches hinders a learner to apply the traditional method or gain independent learning skills (Warschauer and Healey, 1998). Moreover, the patterns of technology mediated communication are less rich compare to the face-to-face interaction, they may not readily include paralinguistic features, body language, idiomatic expressions and other culturally defined attributes that are critical for one to be able to converse fully and naturally (Barrett, 2006; Darhower, 2002). Problems like a crash of educational software, or instability of internet connection might hinder the process of learning and lead to frustration (Anderson and Simpson, 2017). In addition, technology-based learning involves high ego-investments which translate to motivation, self-discipline that some learners lack particularly in self-paced learning modality Hartoyo & Pratiwi, 2020). Another consequence of inequalities is often related to the difference in the availability of and the access to devices and the internet, also referred to as the digital divide, which results in differences in learning outcomes as well

(Warschauer, 2003). Also, teachers and learners on their own might not have adequate capacity or skill to apply the tools and technology; and the chances of distraction or misuse of the tool add to the problem (Teo, 2006). Solving these issues is crucial to improving the outcomes related to the technology-enhanced language acquisition. In general, it can be stated that technology in language learning greatly improves pronunciation, word acquisition, listening skills and communication practices; nevertheless, in order to reap the benefits of integrated technologies it is crucial to overcome the difficulties mentioned in this paper.

2.3. Challenges and Concerns in Technology-Enhanced Language Learning:

Nevertheless, technology enhanced language learning has some drawbacks and concerns that are explained in the following sections. Some of the challenges emanate from pure technicality, including the freezing of various applications, issues with connection, which affects learning and motivation of the learners (Anderson & Simpson, 2017). Students need to be motivated and regulate another's behavior to perform well in the tech-enhanced context. Moreover, asynchronous or self-paced courses are especially problematic for learners with poor self-discipline (Hartoyo & Pratiwi, 2020; Jones & Carter, 2019). The study also raises a question about the presence of genuine communication: Another important issue that should also be mentioned is the absence of actual interaction among people. Technology, however, enables interaction and can hardly capture all the face-to-face features of interaction, such as gestures, body language and cultural differences (Barrett, 2006; Darhower, 2002). Also, the teachers and the learners are unlikely to possess the technological competency to efficiently employ the technology on language acquisition. Inadequate training and technical assistance will therefore complicate the integration of technology (Teo, 2006; Warschauer and Healey, 1998). The following complications arise where; The digital divide exacerbates all these as some students lack devices and / or internet access (Warschauer, 2003) A bad side effect of technology can also result in a lack of practice and focus on traditional effective strategies. In conclusion,]From this work, it is crystal clear that huge opportunities exist for technology in the learning and acquisition of languages, but problems like technical difficulties, lack of motivation, unfair distribution of devices, and inadequate training must be tackled. But addressing of these issues shows educators and institutions how to develop better learning environments in the future.

2.4. Recommendations for the Successful Integration of Technology:

In the following section, the researcher presents some recommendations for learners to improve their language skills through using technology:

- Teachers should implement a technology plan that considers integration strategies along with purchasing decisions (Pourhossein Gilakjani, Leong, & Hairul, 2013).
- Professional development should be specifically considered in order to assure learners' learning and to change the attitudes of teachers unfamiliar with the advantages that technology provides (Pourhossein Gilakjani, Leong, & Hairul, 2013).
- The technology plan must be closely aligned with the curriculum standards. Teachers should know what educational approach is the most effective one when integrating technologies in the classroom (Pourhossein Gilakjani, Leong, & Hairul, 2013).
- The computer technology is an integral part of the learning activity through which skills are transferred to learners.
- Language teachers should urge their learners to use technology in developing their language skills.
- Universities should regard technology as a significant part of teaching and learning programs.

- Technology experts should provide extra assistance for teachers who use it in teaching their English courses.
- Teachers should be a pattern for their learners in using computer technology (MEB, 2008; Pourhossein Gilakjani & Sabouri, 2017).
- Teachers should create technology-integrated lesson materials. These materials should concentrate on teaching and learning, not just on technology issues.
- Teachers should find the ways that technology can help them towards learnercentered instruction as opposed to teacher-centered instruction.
- Teachers should be aware of their roles as guides and facilitators of their learners' learning (Molaei & Riasati, 2013; Pourhossein Gilakjani & Sabouri, 2017).
- In order to facilitate the integration of technology, enough support and technical assistance should be provided for teachers.
- Training should be provided for teachers to learn how to use and teach it effectively.
- Teachers should seek the guidance from their colleagues who can help them teach better through using technology.
- Technology is one of the important tools of language learning activity; it helps learners to improve their language learning skills.
- Teachers should encourage their learners to use technology in increasing their language abilities.

3. Research Methodology

This secondary research study aimed at conducting analysis of usage, integration and influence of innovative technology on English Language Learning ELL and acquisition among learners at Quest University, Nawabshah employing qualitative research method to make confirmation check. Focus group information was obtained from thirty pupils selected from the English Department. The key method of data collection was an online self-completion survey with semi-structured questions developed to be completed using Google Forms software. The design of the questionnaire included several questions in order to assess a several issues concerning the influence of the technology on the results; language competence; general learning and acquisition processes.

3.1. Data Collection:

The questionnaire link was shared with the English Department undergraduates through networking sites such as Facebook, through the whatsapp group and through email. This study aimed, the fact that the respondents' participation was voluntary, and the fact that their answers would remain anonymous were also made clear to the respondents. Once they were notified, the online questionnaire was presented to them. The rationale why the data was being collected was to establish the perception that learners had on use of technology in their English learning and teaching. Based on the statements, useful information into the role of technology in teaching languages in Quest University in Nawabshah was analyzed using qualitative analysis.

3.2. Students' Responses on the Influence of Technology on Language Learning and Acquisition:

The participants' ideas and attitudes toward the role of technology in learning the English language and teaching it were assessed quantitatively based on the material collected in the online survey. The below criteria were used to evaluate the pupils' answers:

Questionnaire:

1. What is your idea of the place and use of technology in learning English and second language acquisition?

2. To what extent does the use of such tools as video conferencing and various online tools have impacted on your possibility to achieve proper speaking and listening skills in English?
3. How has technology aided you in procuring proper and varied English language resources for proper learning?
4. In what ways has technology help you to practice and obtain English language outside the classroom?
5. In what ways has technology helped you improve your English overall as compared to conventional forms of learning?
6. To what extent does the usage of language learning apps and online tools influence the manner in which you acquire your English language skills?
7. In what ways has the flexibility of the media as applied to language learning closed the gap for students with different learning styles?
8. What, in your opinion and experience, can be said about the amount of efficiency of using technologically advanced teaching learning in languages rather than the conventional techniques?
9. In your case, as a learner, what are your attitudes and perceptions towards learning English through the help of technology?
10. Can you describe some of the difficulties as well as benefits realized when implementing technology in the process of second language acquisition?

3.3. Collective Responses of students are stated:

Role of Technology: Interviewees referred to technology as relevant and stressed on the role of technology in the development of language. It helps make a vast range of resources easily obtainable and let the students quickly and efficiently learn language skills. As for learning grammar rules, expanding one's vocabulary, and improving the speech, technology proves is useful.

Speaking and Listening Skills: One of the areas that learning and development especially in listening and speaking skills has been affected by the need to embrace Internet-based tools including zoom and video conferencing. While using these resources in practicing movie watching, podcast listening, and live discussions, such tools enhance receptive and efficiency skills as they allow people to connect in real time.

Access to Authentic Resources: There are technologies such as ChatGPT, Google Search, and TED to help people get easy access to real English materials. These services fast track the process of learning and enables the students to master a number of pronunciation of words and correct grammar as well as correct use of language.

Practice Outside of the Classroom: Because of technology, programs like Duolingo and Babbel offer students a way to practice a language at any time and from any place; they are also useful for grammar review, syntax, and terminology. Through the use of mobile devices laptops and other multimedia resources learners can practice alone or in groups with teammates outside the classroom.

Efficiency and Motivation: Some of the points that participants concerned that they could not learn languages before trial of technology because they were poor and were using conventional methods like library investigations. It may now talk to native presenters, get answers within seconds, and enhance its speaking and listening skills with multimedia.

Inclusivity and Flexibility: Learning a language is now easier and possible due to the integration of technology into learning process. Due to the help of applications, online classes, and videos, the participants can adjust the amount of knowledge needed for them, so the procedure can be as unique as needed.

Challenges: Despite these benefits, the participants' weaknesses observed were poor access to the internet, distractions and overreliance on technology. Other challenges highlighted as hindering effective language learning were; technical difficulty, electricity black out and lack of proper training on the use of technology.

In these replies, there is consensus regarding the role of technology in language learning and acquisition, noting advantages and disadvantages.

3.4. Results and Findings:

The gender distribution of the students is the information presented in table 1. Out of 30 students that have been selected for the study, 18 are male, which is (60%) of the sample size and 12 are female, which is (40%) of the sample size. For the gender composition of within the participant the following table provides a very clear scenario.

		Frequency	Percentage
Valid	Male	18	60.0
	Female	12	40.0
	Total	30	100.0

Table: Gender of Students

4. Discussion and Conclusions

This study looked at the effects of implementing and integrating technology in the learning process and the subsequent understanding. From the findings of the research, it was seen that technology is now indispensable tool needed in the learning process as it provides the learners with such interesting methods of learning English. In terms of efficacy most participants considered technology enhanced schooling to be efficient and more enjoyable compared to traditional approaches. With multimedia resources, artificial intelligence and applications, language acquisition is now easier, more flexible, and more efficient. Students enjoyed the possibility to find the vocabulary and have a possibility to use the language not in the classroom and to get access to the real material which may help them. Nonetheless, it was underlined the barriers such as the internet instability, the technical difficulty, and the interruption also need to be considered in order to maximize the benefits of applying technology in learning languages. In other words, the process of learning a language has become more open, developed and focused on the learner due to inclusion of technology. Thus technology and particularly AI application and online language studying tools becomes even more important in enhancing learners' English language instruction and development process.

Conclusions:

The research concludes by highlighting the increasing significance of technology, especially AI-driven applications and online language studying resources, in improving learners' English language education and development. Therefore, the results pointing the positive impact of technology application on motivation, language improvement and general education. Some examples of technology are mobile devices, computers, and learning systems that have become a tool that is important and integrated into the use of students, so they can learn languages that are required effectively as well as at appropriate learning intervals. Despite the role of the technology in benefiting students in learning a second language, the findings indicated the necessity for the adoption of personalized and elastic technological resources for the attainment of the goal and desire of different learners. When

technology is integrated into the language learning procedures it goes a long way in preparing the learners in an evolving and interesting manner, to handle challenges of language acquisition.

4.1. Limitations and Recommendations for Future Research:

Of course, there were some restrictions of this research that should be addressed in other researches. First it focused only on a certain university and had a rather small pool of participants which indeed is not enough to expose all the possible difficulties and problems that may occur in different learning contexts. Hence, future studies should extend its inclusiveness and include more universities and greater and diverse number of samples. Moreover, the perception of learners was the focal interest of this study. To investigate a broader knowledge of how technology influences the second language acquisition, future studies might consider views from the executives and the teachers. It is also suggested that correlational research should be conducted over time to compare changes in the results obtained in language learning as a result of its technology. To check the role of technology in studying the language, the below suggestions are implemented:

Balanced Approach: To ensure effective mastery of skills acquired as well as encourage efficient harmonized use of technology as well as traditional methods. **Content Relevance:** Apply sociocultural relevant and social content and this will enhance learning outcome and interest.

Advanced Tools: To make the learning process more appealing and personalized, it is necessary to integrate additional state of the art language learning media including AI applications and contemporary technology tools, such as the virtual reality. **Mindful Use:** Promote the deliberate use of technology for it to be fully beneficial and to avoid interruptions on reliance on it.

Future researches/practice can create a less costly, time-saving and flexible environment for Language Learning and Acquisition using technology by eradicating these demerits and implementing the suggestions.

References

- Ahmadi, M. R. (2017). The impact of motivation on reading comprehension. International Journal of Research in English Education. <http://www.ijreeonline.com>.
- Anderson, T. & Simpson, M. (2017). Educational technology platforms: What are universities' strategic investments? EDUCAUSE Review, 52(2), 58-68.
- Becker, H. J. (2000). Findings from the teaching, learning, and computing survey: Is Larry-C Cuban right? Education Policy Analysis Archives, 8(51). Doi:<http://dx.doi.org/10.14507/epaa.v8n51.2000>.
- Bull, S. & Ma, Y. (2001). Raising learner awareness of language learning strategies in situations of limited resources. Interactive Learning Environments, 9(2), 171-200. Doi: 10.1076/ilee.9.2.171.7439.
- Chapelle, C. A. & Jamieson, J. M. (2008). Tips for teaching with CALL: Practical approaches to computer-assisted Language learning. Pearson.
- Chen, C. J. & Day, R. R. (2014). Integrating technology into vocabulary learning. The Reading Teacher, 67(6), 435-445.
- Chun, D. M. & Plass, J. L. (1996). Effects of multimedia annotations on vocabulary acquisition. The Modern Language Journal, 80(2), 183-198.
- Darhower, M. (2002). Interactional features of synchronous computer-mediated communication in the intermediate L2 Class: A sociocultural case study. CALICO Journal, 20(2), 347-367.

- Eady, M. J. & Lockyer, L. (2013). Tools for learning: technology and teaching strategies: Learning to teach in the Primary school. Queensland University of Technology, Australia. Pp. 71-89.
<https://scholars.uow.edu.au/display/publication76376>.
- Ellis, N. C. (2017). Interaction, feedback, and communication. In B. VanPatten & J. Williams (Eds.), Theories in Second Language Acquisition: An Introduction (2nd ed., pp. 231-252). Routledge.
- Genclter, B. (2015). How does technology affect language learning process at an early age? Procedia, Social and Behavioral Sciences, 199(2015), 311-316. Doi: 10.1016/j.sbspro.2015.07.552
- Godwin-Jones, R. (2018). Language proficiency and technology use. In J. I. Lontas (Ed.), The TESOL Encyclopedia of English Language Teaching (pp. 1-7). John Wiley & Sons.
- Harmer, J. (2007). The practice of English language teaching. England: Pearson.
www.worldcat.org/title/practice-of-English-languageteaching/oclc/149005881.
- Hartoyo, E. & Pratiwi, W. A. (2020). Investigating the effects of online English language learning on students' Motivation. Studies in Learning and Teaching, 1(1), 27-38.
- Hubbard, P. & Levy, M. (2016). Theory in computer-assisted language learning research and Practice. The Routledge Handbook of Language Learning and Technology, 24-38.
- Jones, C. & Carter, L. (2019). Investigating motivation and self-regulation in selfdirected online language learning. Language Learning & Technology, 23(2), 123-143.
- Kukulska-Hulme, A. & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to Supported collaboration and interaction. ReCALL, 20(3), 271-289.
- Larsen Freeman, D. & Anderson, M. (2011). Techniques and principles in language teaching. Oxford: OUP.
- Meskill, C. Mossop, J. DiAngelo, S. & Pasquale, R. (2015). Globalizing online: Telecollaboration, task design, and Language learners' development of intercultural communicative competence. Foreign Language Annals, 48(2), 231-251.
- Nunan, D. (2004). Task-based language teaching. Cambridge University Press.
- Pea, R. D. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, Education, and human activity. Journal of the Learning Sciences, 13(3), 423-451.
- Pourhossein Gilakjani, A. (2013). Factors contributing to teachers' use of computer technology in the classroom. Universal Journal of Educational Research, 1(3), 262-267. Doi: 10.13189/ujer.2013.010317.
- Pourhossein Gilakjani, A. (2017). A review of the literature on the integration of technology into the learning and Teaching of English language skills. International Journal of English Linguistic S,7(5), 95-106.
 Doi:<https://doi.org/10.5539/ijel.v7n5p95>.
- Satar, H. M. (2017). Podcasting: A study on enhancing listening skills of EFL learners. Turkish Online Journal of Distance Education, 18(4), 43-56.
- Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. Computer Assisted Language Learning, 20(4), 365-383.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. Cognitive Science, 12(2), 257-285.
- Teo, T. (2006). Pre-service teachers' attitudes towards computer use: A Singapore survey. Australasian Journal of Educational Technology, 22(4), 511-530.

- Tomlinson, B. (2009). Materials development in language teaching. Cambridge: Cambridge University Press.
- Toven-Lindsey, B. Rhoads, R. A. & Lozano, J. B. (2015). Virtually unlimited classrooms: Pedagogical practices in massive open online courses. *The internet and higher Education*, 24, 1-12.
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.
- Wang, M. & Chen, X. (2016). The effects of speech recognition technology on L2 pronunciation. *Language Learning & Technology*, 20(1), 88-103.
- Warschauer, M. (2003). Technology and social inclusion: Rethinking the digital divide. The MIT Press.
- Warschauer, M. & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57-71.