

EURASIAN EXPERIMENT JOURNAL OF SCIENTIFIC AND APPLIED RESEARCH	
(EEJSAR)	ISSN: 2992-4146
©EEJSAR Publications	Volume 5 Issue 2 2024

# The Role of Technology in Language Learning: Tools and Techniques

Kakembo Aisha Annet

Faculty of Education, Kampala International University, Uganda

## ABSTRACT

This paper examines the significant role that technology plays in modern language learning, particularly in the context of English as a Second Language (ESL) and English for Specific Purposes (ESP). It provides a historical overview of the evolution of technology in language education, from the early days of Computer-Assisted Language Learning (CALL) to the current trends in technology-assisted language learning. The paper explores various types of technology tools, including hardware, software, mobile applications, online language courses, and language exchange platforms, and discusses their impact on the language learning process. The discussion also addresses effective techniques for integrating these technologies into language education, with a focus on maximizing pedagogical benefits. The paper concludes with recommendations for educators on how to creatively incorporate technology into language lessons to enhance learning outcomes.

**Keywords:** Technology in language learning, Computer-Assisted Language Learning (CALL), mobile language learning, online language courses, language exchange platforms.

## INTRODUCTION

The last decade has witnessed the rapid growth of Information Technology (IT) which has brought a media revolution leading to social changes in everyday life. One change is the widespread use of English as a lingua franca of communication among those who speak different first languages. Because English is a worldwide language, the needs to learn and use English well have rapidly increased in today's technology-driven societies. In addition to exceptional learning environments, teachers and researchers are also called to develop their diversity of methods and materials in order to meet or come close to learners' expectations and needs. This paper describes an attempt to explore the potential impact of technological materials, particularly computer-based media, on foreign language education including ESP or EAP. The paper concludes with some suggestions on how to enrich the language learning process and assist teachers in making their lessons more creative by integrating technology into the foreign language classes [1]. The use of Information and Communication Technologies (ICTs) has made them a part of everyday life. It has also become a challenge for educational institutions around the world. There is an increasing tendency to view the new technologies as tools that will provide educational solutions. There is also a need to make use of the Internet and networks in teaching and learning foreign languages (L2). By technology, the emphasis has shifted away from the use of films, videos, and audio-visions as equipment to teach a language as a process and a need for computer-mediated communication among people who speak L2. These changes affect foreign language instruction and call for more intellectual effort to understand the processes involved in technology-based communication [2].

## HISTORICAL OVERVIEW OF TECHNOLOGY IN LANGUAGE LEARNING

The exploration of Technology in Language Learning (TELL) and the integration of computers in language education began in the late 1950s and early 1960s. With the development of linguistics by Saussure in the early 1900s and Chomsky in the 1950s, the field focused on structural rules behind the generation, comprehension, and parsing of sentences. The theory progressed to psycholinguistics, cognitive, and communicative approaches. Language learning strategies were also explored in second language acquisition. By the late 1960s, computer-aided language learning was recognized worldwide as an influential language teaching and learning approach. The first Computer-Assisted Language Learning

(CALL) system, PLATO, emerged shortly after the first university computers were available. By the late 1990s, the internet was installed in most universities and language schools worldwide, leading to e-tools, web pages, and websites being developed for language learning [3]. In the early 2000s, distance learning gained popularity with various providers. In the late 1990s, the term "Technology in Language Learning" was used to encompass all tools beyond computers and the internet. Technological tools have since been studied in the context of foreign language education, cross-linguistic and cross-cultural educational studies, culturally relevant pedagogical practices, and the impact of globalization on foreign language education. At the beginning of the year 2000, teachers were encouraged to integrate technology into foreign language education and explore sustainable technological practices. The development of the TELL (Technology in Language) sub-field paved the way for international research cooperation [4].

#### **CURRENT TRENDS IN TECHNOLOGY-ASSISTED LANGUAGE LEARNING**

As technology has become part of everyday life, it is considered critical in all areas of education. Since the 1990s, a variety of computer-based products have been developed for language learning and teaching, and decisions to buy or not to buy have usually been made on economic and technical grounds rather than on grounds of pedagogical quality. A study titled "Toward Integrative CALL: A Progressive Outlook on the History, Trends, and Issues of CALL" attempts to address this gap in the context of computer-assisted language learning (CALL). The paper begins by briefly outlining the background on CALL from historical and pedagogical points of view. It then moves on to the current developments in CALL as one of the applications of technology in the area of language education [5]. Currently, there are many different community language programs using new technology. Satellite technology has been found particularly useful in some remote situations. Television and computer use is becoming common in many schools as computers become cheaper and small enough to fit into the classroom. The Internet and other containerless delivery systems are presenting new opportunities for both teachers and students at all levels. These quick innovations have taken place very quickly, often with little professional development on how to incorporate technology into the classroom. However, as new technology becomes available, teachers and educational policymakers must be prepared to keep the changes from being just faddish. What is needed is knowledge of current trends in technology-assisted language learning (CALL) and teaching. Thus, the purpose of this paper is to summarize current trends in technology-assisted language learning by looking at the modern landscape of technology integration in language education. Recent developments, innovations, and approaches being adopted worldwide in the field of language learning and teaching with technology will be briefly examined [6].

#### **TYPES OF TECHNOLOGY TOOLS FOR LANGUAGE LEARNING**

Based on the types of technology used in language learning, technology and its usage in practice can be figured out by broadly classifying as follows.

There are two basic categories of technology tools: hardware tools and software tools. These two basic categories can be further divided. Hardware tools can be divided into two types: sound hardware technology and visual technology. The sound hardware technology includes recordings like cassette recorders and videos to help learners improve their speaking and listening. Tape recorders allow learners to record their voices in a repeated way, enabling them to improve their pronunciation and detect their mistakes. Videos, with their harmonious combination of sounds and pictures, can create real-life imaginary scenes to enhance language learning. There are now numerous films available on videotape, and using televisions in class is an easy way to integrate this media technology [7]. Visual technology includes overhead projectors and multimedia projectors. Overhead projectors present visual aids such as pictures, maps, and charts to learners at once, thus saving time and improving efficiency. These instruments enhance learners' comprehension by collaborating and reinforcing their listening and speaking. The use of pictures is recognized as a good way to overcome misunderstandings. Multimedia projectors can project still images, moving images, cartoons, graphs, and tables. It is superior to the overhead projector because the screen is larger and brighter [8]. Software tools can be classified into five types: computer-assisted instruction, computer-assisted language learning, intelligent computer-assisted language learning, web-based language learning, and mobile-assisted language learning (MALL). Computer-assisted instruction covers programs that present things to learners or give skills to them. In computer-assisted language learning (CALL), everything from worksheets to games, listening and writing exercises, and conversation practice is included. Intelligent computer-assisted language learning offers programs that deduce and save learners' pictures of comprehension and knowledge states. Web-based language learning relates to all technologies and programs for the Internet. MALL is defined as language learning with the assistance of mobile technology [9].

### LANGUAGE LEARNING APPS

Mobile applications have come to play an essential role in shaping and delivering foreign language learning. Duolingo might be the most prevalent mobile application for language learning, but certainly not the only one. Busuu joining the world of MOOCs, Babbel's uniqueness stems from the fact that they write their own language curriculums. Babbel offers 14 learning languages at different levels. The first lesson in Babbel is completely free and is a dedication to give an experience to the user. The app provides the learners with different aspects of language such as listening, writing, reading, and speaking [10]. Rosetta Stone is known for being one of the first innovators in the language learning technology when it was founded in 1988. The app applies the highly successful immersive learning technique where the users are encouraged to learn as a result of natural behavior and language use, in a completely immersive manner without translation. Rosetta Stone has numerous functions that help the learners grasp one language faster. There are pronunciation comparison systems and other tools that help the learner grasp the concepts. There is the adaptive recall that works to test the learner at intervals while the review is in progress. There is the speech recognition that judges and corrects the pronunciations of the French or German you may be speaking [11].

### ONLINE LANGUAGE COURSES

Several professional academic organizations, including the National Council of Teachers of English (NCTE) and Teachers of English to Speakers of Other Languages (TESOL), have developed language standards in the United States to guide the revision of second language (L2) curricula at the elementary, secondary, and post-secondary levels, have adopted the Common Core Standards that are being implemented nationwide to raise the education and language literacy of all students, and are moving rapidly to develop performance-based assessments that can measure proficiency in English and the ability to communicate using higher-level thinking skill. Outside the USA, English has spread and continues to spread worldwide as an international lingua franca, and as a result, ESL (English as a Second Language), EFL (English as a Foreign Language), EIL (English as an International Language), and ELF (English as a Lingua Franca) have emerged as global phenomena that are fundamentally reshaping English education across the world [12]. In response to all the forcing movements and changes, universities need to move drastically and quickly to change how they teach, how they will modify their programs and how they will alter the profile of their graduates. In parallel, language instructors who are tasked with realizing the 'big picture' curricular and instructional goals have some "big puzzle" to address: how do we best equip our students to meet the social, educational, political, and economic changes, developments, and demands that they face? The answer to the "big puzzle" is complicated and requires language instructors to critically rethink the motivations and rationales underlying their long-held beliefs, assumptions, and practices in language education about: (a) the nature of language, (b) purposes of language teaching, (c) the role of teachers and students, and (d) the processes of language learning and teaching [13].

### LANGUAGE EXCHANGE PLATFORMS

Language exchange platforms have proliferated in recent years and are now around one hundred. The attractiveness of a language exchange is that it enables language learners to meet in a special kind of social space with primary or competent language users, engage in mutual language practice, and try to enhance their abilities to express themselves in the language they need. Language exchange platforms begin by providing users with a questionnaire to fill in that describes the languages they speak and wish to practice, their age and gender, the dialects, and the motivations for learning the language. Afterward, users are offered a list of other members who fit these criteria. Members can choose the people they want to meet via chat, email, or phone, by either sending a personal letter or simply relying on reinterpretations in a more public letter, on a bulletin board [14]. Language exchange platforms consist of three modes of interaction. Many platforms only permit the exchange of emails, and sometimes only a few members who regularly translate letters can correct the exchanges of other members, and one of the most developed platforms, the Mixer, is supervised by pedagogues and language teachers. Other platforms let users continue with a simpler type of interaction, chat, and in the case of Initium, users fill in a contract specifying how much time they will spend with each of the languages, are marked if they fail to comply, and the member uses a language not specified in the contract is automatically cut off the chat. This kind of interaction continues until there is a misunderstanding and each partner interprets more or less consciously the same situation in the two languages, and this disparity may help language acquisition. On voice exchanges, users discuss in real time via a microphone and the computer's audio card [15].

### EFFECTIVE TECHNIQUES FOR INTEGRATING TECHNOLOGY INTO LANGUAGE LEARNING

Despite the range of technology tools available for language learning, selecting the right ones and using them effectively in the right context remains a challenge. There are various pedagogical approaches and

practices that can maximize the benefits of technology tools in language learning environments. Many language teachers incorporate these approaches into their curriculums, offering best practices and activities for different language areas such as listening, reading, writing, speaking, and vocabulary learning. These practices explain how technology tools are used to enhance language learning [16]. Proclaiming strategies or models for effective technology-enhanced language learning should not only help teachers, but also guide students or language learners at an introductory level to adopt a right path, in the sense of how to make appropriate use of technology tools based on the guidelines or pedagogical approaches proposed in the domain. The strategies accompanying the teaching approaches or models are necessary and inevitable. Understanding the underlying language learning strategies may also help the language model designers to identify language learning tasks or activities that maximize the efficiency and effectiveness of language learning with technology use [17].

### CONCLUSION

Technology has become an indispensable part of language learning, offering diverse tools and techniques that cater to various learning styles and contexts. From the early days of CALL to the current landscape of mobile apps and online platforms, technology has continuously shaped and enhanced language education. Effective integration of these tools into the curriculum requires careful consideration of pedagogical approaches and the specific needs of learners. By adopting innovative strategies and staying informed about the latest trends, educators can make language learning more engaging, accessible, and effective. The future of language education lies in the thoughtful fusion of traditional methods with cutting-edge technology, ultimately leading to more dynamic and successful language acquisition experiences.

### REFERENCES

1. Pastrana B, Tobón S. Emerging needs of human talent training in leading information technology companies, a socioformative analysis. *World Review of Science, Technology and Sustainable Development*. 2020;16(4):303-19. [researchgate.net](https://www.researchgate.net)
2. Liesa-Orús M, Latorre-Coscolluela C, Vázquez-Toledo S, Sierra-Sánchez V. The technological challenge facing higher education professors: Perceptions of ICT tools for developing 21st century skills. *Sustainability*. 2020 Jul 1;12(13):5339. [mdpi.com](https://www.mdpi.com)
3. Budiman A. ICT and foreign language learning: An overview. *Tarling: Journal of Language Education*. 2020. [uinsaizu.ac.id](https://www.uinsaizu.ac.id)
4. Anderson T, Rivera Vargas P. A critical look at educational technology from a distance education perspective. *Digital Education Review*, 2020, num. 37, p. 208-229. 2020. [ub.edu](https://www.ub.edu)
5. Lim MH, Aryadoust V. A scientometric review of research trends in computer-assisted language learning (1977–2020). *Computer Assisted Language Learning*. 2022. [HTML]
6. Crompton H, Burke D, Jordan K, Wilson SW. Learning with technology during emergencies: A systematic review of K-12 education. *British journal of educational technology*. 2021 Jul;52(4):1554-75. [wiley.com](https://www.wiley.com)
7. Zhang R, Zou D. A state-of-the-art review of the modes and effectiveness of multimedia input for second and foreign language learning. *Computer Assisted Language Learning*. 2022. [HTML]
8. Tosheva N. ... technologies to increase the effectiveness of language learning: use of modern information technologies to increase the effectiveness of language learning. *Buxoro davlat pedagogika instituti jurnali*. 2021. [buxdupi.uz](https://www.buxdupi.uz)
9. Onah EN, Ugwuanyi CS, Okeke CI, Nworgu BG, Agwagah UV, Ugwuanyi CC, Obe PI, Nwoye MN, Okeke AO. Evaluation of the impact of computer-assisted instruction on mathematics and physics students' achievement: implication for industrial technical education. *International Journal of Engineering Research and Technology*. 2020;13(7):1786-94. [researchgate.net](https://www.researchgate.net)
10. Booton SA, Hodgkiss A, Murphy VA. The impact of mobile application features on children's language and literacy learning: a systematic review. *Computer Assisted Language Learning*. 2023 Mar 4;36(3):400-29. [tandfonline.com](https://www.tandfonline.com)
11. Namaziandost E, Alekasir S, Dehkordi ES, Tilwani SA. An account of EFL learners' vocabulary learning in a mobile-assisted language environment: the case of Rosetta stone application. *Computer-Assisted Language Learning Electronic Journal*. 2021;22(1):80-110. [callej.org](https://www.callej.org)
12. Sehlaoui AS. Creating more equitable and socially-just quality education for English learners through esol and bilingual teacher professional development services: The case .... OF TEACHER EDUCATION. 2022. [txate.org](https://www.txate.org)
13. Scott T. Higher Education's Marketization Impact on EFL Instructor Moral Stress, Identity, and Agency. *English Language Teaching*. 2021. [ed.gov](https://www.ed.gov)

14. Rehm G, Marheinecke K, Hegele S, Piperidis S, Bontcheva K, Hajič J, Choukri K, Vasiljevs A, Backfried G, Prinz C, Pérez JM. The European language technology landscape in 2020: Language-centric and human-centric AI for cross-cultural communication in multilingual Europe. arXiv preprint arXiv:2003.13833. 2020 Mar 30. [\[PDF\]](#)
15. Zuña Tenemaza MS, Yupangui Aimacaña NM. Ways of integrating e-tandem mode in the language curriculum in the English career at Technical University of Cotopaxi. 2022. [utc.edu.ec](http://utc.edu.ec)
16. Shadiev R, Yang M. Review of studies on technology-enhanced language learning and teaching. Sustainability. 2020. [mdpi.com](http://mdpi.com)
17. Ortikov UK. THE EFFECTIVENESS OF TECHNOLOGY-ENHANCED LANGUAGE LEARNING METHODS. Oriental renaissance: Innovative, educational, natural and social sciences. 2024;4(3):162-79. [cyberleninka.ru](http://cyberleninka.ru)

**CITE AS: Kakembo Aisha Annet. (2024). The Role of Technology in Language Learning: Tools and Techniques. EURASIAN EXPERIMENT JOURNAL OF SCIENTIFIC AND APPLIED RESEARCH, 5(2):26-30**