## The Integration and Utilization of ICT in Learning English as a Second Language at University Level

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**ABSTRACT**

*Many university students cannot focus on learning English by depending solely on the classroom method, especially when the session is textbook-based and boring. The use of digital resources in students' daily lives can assist them learn vocabulary, pronunciation, and language growth. The study analyses how students and teachers view ICT integration and its impact on English language skills. Five undergraduate students and four English language instructors from a public Lahore university were interviewed qualitatively. Braun and Clarke (2006) used a thematic analysis to find ICT use themes. The results show that students who want to improve vocabulary, pronunciation, and writing use mobile apps, YouTube, online dictionaries, and Grammarly. Teachers use multimedia, videos, online exercises, and mobile-aided activities to promote speaking, listening, and reading. ICT improves interaction, provides real-life English, and makes learning more fun and flexible, according to both groups. However, unstable internet, difficulty in accessing paid apps, distractions, teacher training, and institutional assistance are also found. The article concludes that balanced integration, good infrastructure, and training instructions can improve language acquisition using ICT. Since ICT can enhance teaching approaches to make language acquisition meaningful and durable, it should not replace them in the classroom.*

*Keywords: ICT integration, ESL learning, thematic analysis, digital tools.*

**Introduction**

In today's globalized world, English is the most significant international language for educational purposes, communication, and career building. At this level, ESL is not just about learning basic grammar or words; it encompasses developing higher-level skills like academic writing, critical reading, presentation skills and the ability to engage in research and discussions in English. (Rahnuma, N.2023) The advancements made by information technology have redefined the concept, scope, and significance of communication. The barriers in the communication process have been wiped out by the recent advances in information and communication technology (ICT) backed by high-speed data connectivity. People are free to communicate without worrying about physical borders distancing them from one another. (Khalid A, & Khalid B 2022). "ICT also has the potential to become communication tools such as mobile, chat groups, discussion group, pals, clubs and other to conduct activities which require collaboration" (Yunus et al., 2009).

The ICT centre, established in late 2002, was created to promote the innovative use of technology in supporting the university's research, teaching, learning, and administrative functions. Its key responsibilities include formulating adaptive ICT policies that respond to emerging technologies, safeguarding ICT resources and work environments, enhancing skills for

effective use of ICT, providing reliable infrastructure to expand access for staff and students, ensuring business systems evolve with institutional needs, and securing sustainable funding while building capacity to attract external resources. (University of Nairobi, n.d.) Information and communication technology is defined by Mohamed (2003), Computers and ICT are Things we cannot do without today and tomorrow. This issue is also supported by Singh,R (2021), The term ICT is also applied to describe the convergence of telephone- networks and audio-visual with computer networks using a single link system. There are huge economic motivations to combine the telephone system with the computer system network within one unified system of cabling, signal distribution, and management.

According to Shafer n,d, Utilization can be understood as a process that extends from simply receiving information to applying it in ways that influence or address a particular problem. It goes beyond the direct use of information by individuals, encompassing broader ways in which information shapes decisions, practices, and outcomes. According to Gulledge,T. (2006), Integration is a word that is commonly used when discussing enterprise applications. The term integration is inserted in technical papers, e-mail messages, correspondence, proposals, and even casual conversations. According to Hoque (n.d., Second language is the systematic study of how people learn a language other than their mother tongue. Second language acquisition or SLA is the process of learning other languages in addition to the native language. Language learning refers to the formal learning of a language in the classroom.

Later, according to Akintunde & Angulu, (2015), Information and communication technology (ICT) is a broad term that covers the use of communication tools such as radios, televisions, mobile phones, computers, hardware and software, satellite systems, and related applications. The word technology comes from Greek and originally refers to the art of making or crafting; more generally, it includes the tools, skills, and knowledge people use to enhance their abilities and meet their needs and desires. ICT plays an important role in achieving quality education for all by supporting universal access to schooling. It helps attract and learning environments, and provides computer-assisted learning as well as essential digital and computer skills for students.

**Research Objectives**

1. To investigate the impact of the integration of ICT in learning English as a second language.
2. To investigate the impact of the utilization of ICT in learning English as a second language.

**Research Questions**

This critical study investigates the following research questions:

1. How integration of ICT impact students' learning of English as a second language?
2. How utilization of ICT impact students' learning of English as a second language?

**Literature Review**

Integration of ICT in higher education is of great advantage but also poses a number of issues. Hence, before adopting ICT tools, proper investment, adequate teacher training, effective policies, and careful planning are necessary. It also redesigning teaching practices and adopt a systematic approach to gain the educational outcomes. ICT has become a strong medium for sharing knowledge and information. Its application in learning supports problem-based learning, makes students more independent and enhances their critical thinking abilities. (Mbodila, M., Jones, T., & Muhandji, K. 2013).

Shah (2022) analyzed how Information and Communication Technology (ICT) contribute to effective teaching and learning in schools. The study emphasized that the integration of ICT

supports educators in meeting global educational standards by moving away from traditional teaching approaches. In the Malaysian context, Shah emphasized that ICT plays a pivotal role in national educational transformation, serving as a key factor in advancing the country's future development through modernized teaching and learning environments The results indicate that adopting ICT integration is critical to preparing teachers and students to keep up with changing technology and educational requirements.

Makolo, Ishengoma, and Shao (2025) investigated how teachers in training are equipped to utilize information and communication technology (ICT) in their instruction. They described that such preparation mainly comes down to whether student teachers engage with ICT while in teacher colleges. The researchers assessed the teaching strategies of tutors and their levels of utilization of ICT using the Substitution, Augmentation, Modification, and Redefinition (SAMR) model. PowerPoint was found to be the most common tool used, showing limited use of other software for multimedia design. The research recommended that there should be frequent ICT training, ICT policy and syllabus updating, and the establishment of educational technology centers are needed to help improve ICT integration in teacher colleges and take it to levels of modification and redefinition.

Information and Communication Technology (ICT) has become an essential part of modern education, bringing both new opportunities and challenges. Kandel (2025) conducted research to comprehend how English teachers at the university level experience and perceive the use of ICT in teaching and learning. ICT helped increase student motivation and confidence, supported independent learning, encouraged collaboration among peers and mentors, and improved teachers' professional growth. The research also documented some of the challenges that included constant power outages, paucity of resources and ICT skills, and constraints in sustaining infrastructure. He suggested that the stakeholders reinforce ICT policies, raise funds for infrastructure, and conduct continuous teacher training. He also emphasized regular monitoring and further research to include students' and other stakeholders' perspectives to ensure ICT integration into education.

Suleiman, Yahya, and Tukur (2020) examined the increasing role of information and communication technologies (ICTs) in tertiary education and noted that their proper application has made classic pedagogical methods more learner-focused settings. They confirmed that ICT incorporation improves accessibility, usability, engagement, and overall quality of education. The authors suggested that to maximize these benefits, institutions should ensure consistent utilization of ICT tools, provide sufficient training for educators, and promote digital literacy among learners. Pathak, Raja, Sharma, and Ambala (2019) examined the role of information and communication technologies (ICTs) in higher education. They observed that ICT contributes significantly to improving students' learning performance and institutional efficiency. The authors suggested that applying data-driven approaches, such as data mining, can help analyze student outcomes and enhance the quality of education in technology.

Chandio (2021) carried out a study to evaluate the adoption of information and communication technology (ICT) in educational management and administration in Pakistan during the COVID-19 pandemic. According to him, ICT adoption supported learning and administrative activities in educational institutions with the aid of digital media like online teaching, electronic pedagogy, and virtual tests. The research further indicated that perceived usefulness, social influence, and users' expectations had a strong impact on technology adoption.

Purwanto (2025) studied the use of information and communication technologies (ICT) in English language learning and discovered that computers, the internet, and mobile apps

provide digital tools that enhance the learning process by making it interactive, flexible, and student oriented. Based on Vygotsky's Social Interaction Theory and Constructivism, the research stressed that ICT promotes interactions among teachers and learners while allowing students to construct knowledge through experience and technology-based interventions. He also added that methods like e-learning, mobile-assisted language learning (MALL), and blended learning boost literacy skills especially reading, writing, speaking, and listening by providing greater access, motivation, and participation in language learning. ICT usage significantly improves students' language literacy, especially in text comprehension and analysis. ICT has proven to be effective in enhancing both English language learning and literacy development and also plays a positive and influential role in supporting the development of students' language literacy.

ICT has been widely adopted in higer education, it's integration and utilization for advanced ESL skils at university level remain underexplored. Existing study focuses on basic tools like power point, learning management system platforms and online resources with little attention to methods that enhance academic writing, critical reading, presentation and oral communication. Few studies examine both teacher integration and student utilization together, there is limited research in the context of Pakistani universities, where infrastructure, training and cultural factors may influence ICT effectiveness. This gap is especially evident in Pakistani Universities, highlighting the need for research that investigates effective ICT-supported ESL learning practices in the context.

**Methodology**

This study used a qualitative approach to examine participant's experiences and perspectives in a naturalist context. In this study, a semi-structured interview was used as a tool to encourage participants to share their experiences about the Integration and Utilization of Information and communication technology (ICT) in learning English as a Second language in their own words. This study is conducted at a public sector university in Lahore, among the teachers and students. A qualitative approach was chosen because it helps understand real experiences, opinions and challenges from the perspective of teachers and students. Braun and Clarke's (2006) thematic analysis was used to interpret the data and identify recurring patterns in ICT use.

This study includes Nine participants includes five students and four teaches in the English department at a public sector university. They were selected through purpose sampling, ensuring that each individual had direct experience with ICT based ESL instructions. Interviews were conducted until data saturation point was reached that was observed after conducting with these students and teachers no additional points were required. Teachers selected for the study had prior exposure to using digital tools such as Learning management system, multimedia resources, online platforms and language learning applications in their English classes. Students selected because they actively participated in class where ICT was regularly integrated into English language learning activities. Informed consent was obtained before conducting the interviews. Participants were informed about the purpose of the study. The interview questions based on the integration and utilization of ICT in learning English as a second language, the use and effectiveness of ICT tools, challenges and suggestions for improving ICT supported English learning.

The interview questions for students include:

1. What kind of technology (Like mobile apps, Youtube, websites, online games) do you use to learn English?

2.  How does using technology help you improve your English language skills?   What difficulties do you face when using ICT for learning English?
3.  What suggestions do you have for teachers and universities to make ICT use more helpful for learning English?
4.  Do you think learning English through ICT is more effective than traditional classroom methods? Why or why not?

The interview questions for teachers include:

1.  How do you usually integrate ICT tools (Multimedia, online learning platforms, mobile applications) in your English lessons? Can you describe specific examples of ICT tools you find most affective?
2.  How do you think ICT influences students' language skills (speaking. Reading, writing listening)? Which skills do you benefit most for ICT use and why?
3.  How do you use of ICT affects students' motivation in learning behavior?
4.  What suggestions would you give to make ICT more affective in university Language teaching?
5.  What challenges do you face when using ICT in university level English teaching?

**Findings and Discussions:**

This chapter summarizes the major discoveries made on the basis of performing semi structured interviews. The data were analyzed through the six-phase thematic analysis model of Braun and Clarke (2006), which offers a methodological systematic review mechanism to achieve consistency and congruency with the objectives of the research. The analysis was initiated through examination of the transcripts of the interviews and coding of the initial codes to the data segmentations of relevance. A pattern was then analyzed on these codes and they were grouped into general themes according to their conceptual resemblances. This thematic analysis is done step by step as discussed below:

**Table1: student's themes, codes and insights**

| Theme | Codes | Insights |
|---|---|---|
| **1.  ICT tools and strategies** | 1.PowerPoint presentation<br>2.Group discussion<br>3.Mobile Assisted learning<br>4.Quizzes<br>5.YouTube channels<br>6.Six minutes BBC<br>7.English and podcasts | Teachers integrate ICT via multimedia presentations, mobile apps, online platforms, and AI tools. Tools are chosen based on lesson type, classroom resources, and internet availability. |
| **2. Skills enhancement** | 1.  Online dictionaries<br>2.  Speaking, reading, writing, listening<br>3.  Task based learning<br>4.  AI tools | ICT improves speaking, listening, and reading the most. Writing can be negatively Impacted due to AI dependency. ICT also aids vocabulary and pronunciation development |
| **3.  Motivation and engagement** | 1. Positive use of AI<br>2. Engagement through multimedia<br>3. Gamified learning<br>4.Assessment driven motivation<br>5. Visualization<br>6. Self-directed learning | Multimedia and interactive apps increase motivation and engagement. Students are motivated by visual content and tasks with assessments. Ease of use (mobile, AI) encourages participation. |

| | 7. Quizzes | |
|---|---|---|
| **4.  Suggestions to make ICT integration more effective** | 1.  Workshops<br>2.  Language labs<br>3.  Stable internet<br>4.  Corpus tools<br>5.  Infrastructure<br>6.  ICT gadgets<br>7.  Feedback<br>8.  Structured activities | Effective ICT integration requires a combination of teacher training, blended teaching, reliable infrastructure, access to language labs and tools, and structured activities |
| **5. Challenge faced in using ICT** | 1.Electricity cuts<br>2.Internet issues<br>3.Hardware failure<br>4.Lack of institutional support<br>5.Limited training | Due to technical problems, lack of faculty development support, limited ICT infrastructure, internet issues, teachers face many challenges in their teaching process. |

The interviews conducted with students showed that ICT tools are important in facilitating the English language learning. Students have shared an extensive range of online materials, including mobile applications, including Duolingo, Grammarly, YouTube, online dictionaries, podcasts, and social media mediums. Such tools were appreciated to provide a so-called structured lesson, grammar correction, vocabulary training, pronunciation training, and contact with real language input. As an example, Student 1 mentioned,

Grammarly can be used to make me recognize the grammatical errors that I committed... It takes me time to make such mistakes unconsciously, which emphasizes the roles of repetition in strengthening the learning process.

The students overall saw ICT as developing their language skills in listening, speaking, reading, and writing. They were interested in learning by means of video, movies, and posts on the Internet. Student 2 highlighted that, using such apps as Duolingo, learning would be fun and develop all four language skills, and Student 4 also noted that communication with videos and podcasts would develop speaking and listening confidence. This interactive tool mix of self-directed learning was perceived as inspirational, adaptable, and supportive of self-paced learning.

Nonetheless, the students also claimed that there were difficulties in utilizing ICT. Several technical problems including poor internet connectivity, poor accessibility to premium applications and social media distraction were common. Student 5 commented,

I find that you lose focus when you study language online using digital means or ICT that is the most negative thing with me.

More so, there was a lack of adequate directions or teaching on how to use these tools to maximize their usefulness which implied that the availability of technology alone does not imply effective learning. Learners provided recommendations on how to enhance ICT in learning. They proposed the frequent application of visual aids, interactive lessons and teacher guidance to ensure learning is more meaningful and interesting. The accesses to paid apps as well as the stable connection were also mentioned as valuable actions. In general, though ICT was viewed as more interactive and flexible compared to the traditional systems, students were able to recognize the presence of classroom interactions as an important factor in terms of feedback and communication practice. Overall, the results indicate that ICT tools can be of a great help in the English learning process with the help of the authentic exposure and interactive options. However, they need to be guided, systematically used, and their technical and motivational dissatisfaction reduced to be effective.

**Table 2: Teacher's themes, codes and insights**

| Theme | Codes | Insights |
|---|---|---|
| **1. ICT tools and strategies** | 1.PowerPoint presentation 2.Group discussion 3.Mobile Assisted learning 4.Quizzes 5.YouTube channels 6.Six minutes BBC 7.English and podcasts | Teachers integrate ICT via multimedia presentations, mobile apps, online platforms, and AI tools. Tools are chosen based on lesson type, classroom resources, and internet availability. |
| **2. Skills enhancement** | 1.Online dictionaries 2.Speaking, reading, 3.writing, listening 4.Task based learning AI tools | ICT improves speaking, listening, and reading the most. Writing can be negatively impacted due to AI dependency. ICT also aids vocabulary and pronunciation development |
| **3. Motivation and engagement** | 1.Positive use of AI 2.Engagement through multimedia 3. Gamified learning. 4.Assessment driven motivation 5.Visualization 6.Self-directed learning 7.Quizzes | Multimedia and interactive apps increase motivation and engagement. Students are motivated by visual content and tasks with assessments. Ease of use (mobile, AI) encourages participation. |
| **4. Suggestions to make ICT integration more effective** | 1.Workshops 2.Language labs 3.Stable internet 4.Corpus tools 5.Infrastructure 6.ICT gadgets 7.Feedback 8.Structured activities | Effective ICT integration requires a combination of teacher training, blended teaching, reliable infrastructure, access to language labs and tools, and structured activities |
| **5. Challenge faced in using ICT** | 1.Electricity cuts 2.Internet issues 3.Hardware failure 4.Lack of institutional support 5.Limited training | Due to technical problems, lack of faculty development support, limited ICT infrastructure, internet issues, teachers face many challenges in their teaching process. |

The interviews with teachers revealed the fact that ICT integration in English classes at the university level is a prevalent practice which takes different forms and is supported by different rates of infrastructure provisions. Multimedia presentations, PowerPoint slides, online platforms, mobile-assisted learning, quizzes, and YouTube channels with language content as Six-Minute BBC English and podcasts were listed by teachers. Teacher 1 said,

As far as group discussions are concerned, I attempt to transmit slides to my students... and I also use multimedia, power-point presentations to present my lecture.

Likewise, Teacher 4 focused on the application of mobile applications and projectors particularly in a local classroom setting where internet or electricity problems are the norm, which underscored the local application of ICTs in local classroom settings. The teachers believed that ICT was especially useful in improving listening, speaking, and reading abilities. However, writing was occasionally a negative impact because it was over reliant on AI-assisted tools as Teacher 3 noted:

As regards writing, writing is getting hampered a bit with the use of AI apps because students have found it very easy to get the information through the AI apps and write down the things.

ICT was also regarded as effective in vocabulary and pronunciation training, and the use of online dictionaries and task activities aided in training the skills. ICT was also found to increase student engagement and motivation using visual content, games, and gamified activities as well as assessment-based activities. Teacher 1 observed that a documentary and animated video can be used to explain the concepts and encourage students:

In case of the discussion of the concepts which are not clear to the students, I can simply play the documentary or animated video... it truly is able to make the students understand the clear concept and he/she gets motivated.

Ease of mobile and AI tools is promoted by teachers as it promotes self-directed learning and classroom engagement. Irrespective of these advantages, there are a number of challenges to which teachers encountered to integrate ICT. The most common barriers included frequent electricity power interruptions, poor internet connectivity, hardware failures, and institutional support. Teacher 4 emphasized the need to train teachers and infrastructure:

You cannot use it unless you are well equipped or trained enough, and the classroom must be according to the ICT tool or it will not be effective.

The most common recommendations that teachers provided are the use of structured workshops, well equipped language laboratories, use of ICT gadgets, and corpus tools to improve the quality of integrating ICT. In short, ICT was regarded as a potent instrument of the enhancement of English language learning, namely in the aspects of listening, speaking, and reading as well as motivation and engagement. Its practicality, however, requires adequate training, infrastructure and balanced incorporation with the conventional teaching methodologies in order to surmount the challenges encountered in practice.

**Conclusion:**

This research aimed to explore how integration and utilization of ICT support English as a second languages (ESL) learning at university level. By conducting semi structured interviews with teacher and students at Public Sector University, this study examined both the instructional practices of teacher and the learning strategies of students to determine how ICT influences the development of advanced English language skills.

This study was motivated by the growing digitalization of higher education and the increasing expectation that students develop not only basic communication skills but also advanced abilities such as academic writing, critical reading, effective presentations and research orientated communication. Although ICT is become very common in universities around the world, its role in supporting ESL competencies especially in the Pakistani context has not been studied in depth. To address this gap, the study focused on understanding how ICT is integrated into classroom instructions and how learners utilize technology independently to support their language growth.

The findings showed that students rely on a variety of digital resources including mobile apps, online dictionaries, YouTube videos, podcasts and social media content to improve vocabulary, grammar, and pronunciation. Teachers also use ICT in several ways such as multimedia presentation, mobile based activities, online material and AI tools to make lessons more engaging and effective. Both teachers and students agreed that ICT boost motivation, provides exposure to authentic English and encourage personalized and self-directed learning. At the same time, challenges such as weak internet connection, power outages, lack of training and over dependency on AI tools and limited institutional support were commonly reported.

This research contributes to the field of Applied Linguistics by providing context specific evidence on how ICT support English language learning at university level. By looking at both teachers' integration and students' utilization, this study provided a holistic view of how technology shapes modern language learning and where improvements are needed.

Overall, this study suggests that ICT has strong potential to enhance ESL proficiency when supported by appropriate infrastructure, training and pedagogical planning. University should invest in reliable technological resources offer continuous professional development for teachers, establish modern language laboratories, and promote blended learning approached that combine traditional instruction with digital tools. Strengthening institutional policies and ensuring equal access to ICT resources will help make technology a meaningful and sustainable component of English language education at the university level.

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