



EXPLORING EDUCATIONAL TECHNOLOGY TO IMPROVE ENGLISH LANGUAGE TEACHING AND LEARNING IN PAKISTAN

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Abstract

Technology provides different modes to enhance English language teaching and learning. As English is adopted as a lingua franca, it has a special relationship with technology since it plays a massive role in spreading and strengthening English. For many decades in Pakistan English language teachers in Pakistan have been experiencing difficulties while teaching English. Consequently, the present research aims to explore educational resources and their implications in English language learning classrooms. Current educational technology is accompanied in many ways to deliver enormous opportunities for teachers to teach the English Language effectively. The study is fundamentally contingent on qualitative exploratory research design, and it employs purposive sampling. Important previous studies are carefully considered for the cause of the study to bring forth final results. The findings of the research suggested that the use and practical implementation of digital tools can facilitate English language teachers and learners to become effective when it comes to grammar, vocabulary, reading, writing, listening, and speaking as well. Further research could explore socioeconomic and infrastructural challenges that affect the integration of educational technology in English language classrooms, particularly in Asian countries.

Keywords: Educational Technology, English Language Teaching, Learning, Digital Tools.

Introduction

In a modern world, where there is immense control of technology in people's lives, it has facilitated them with some crucial advantages that can make their tasks easy to accomplish. As a result of expeditious developments in the world, in both information and communication technology, there is visible progress in integrating technologies in the classroom, which can lead to reaching the desired goals of developing technologically dependent traditions. As per Holland and Escueta (2020), the existence of technology and its continuous developments have been divulged into the community by conveying the mode in which people collaborative with the use of technology by definition and via its tools.

Technology has greatly influenced the way language is taught as it ensures progress and gives instructors new paths to fulfill the classroom's required needs. Indeed, at entire levels, technology is extensively applied these days to enhance and improve the education system (Mudra, 2020; Solano et al., 2017; Shah et al., 2025); many states are introducing their faculties with modern modes of teaching English to achieve proficiency in language teaching. In



addition, to a great extent, it is acknowledged that recent advancements in pursuing science and information technology have given many chances to build ingenious, student-centered, alluring, collaborative, pliable, cheap, and well-organized e-learning environments (Al-Rikabi et al., 2024). Technology plays an important role in creating an effective environment for both teacher and learner, where they can use different techniques to develop an understanding of how to teach English as a language by keeping an eye on the current scenario of teaching the English language, in order to utilize multiple internet tools to form an ideal English language classroom.

Subsequently, Rintaningrum (2023) has highlighted the learning method as the most significant component of learning facilitators' practice in their classrooms to promote language learning courses. Furthermore, the internet provides engaging and astonishing online resources that can help teachers enter the classroom with innovative methods to deal with language learners more profoundly. These marvelous and crucial internet tools keep facilitators from learning new language teaching techniques and spreading information from one generation to the next. According to Ahmadi (2018) and Tomlinson (2011), learners swiftly learn details with the help of computer-based applications, and computer-based activities provide original material. They are also of the view that the material that is on the internet is exciting for students to acquire. It defines that internet material, handouts, websites, and other applications are useful to integrate modern technology to promote and improve English Language Teaching among language learners.

Technology has revolutionized English language teaching and learning by making it more interactive and easier to teach and learn. It has transformed the world from passive consumption of information to an active world of knowledge. But this transformation will be possible if proper guidance is provided to both teachers and learners, as the two are facing challenges while teaching and learning English as a second language. The practical implementations of modern educational tools are important to learn and practice. Nonetheless, there is currently a dearth of studies on technology use in Pakistani classrooms (Dahraj et al., 2020; Shah et al., 2025). Besides this, it is reported that students have limited knowledge of technological tools and skills for the digital tools for the purpose of using them in learning English (Dahraj et al., 2020). There have not been enough studies conducted in Pakistan to examine how educational technology can help with English language learning in language classrooms. In order to determine and gain insight into the stated problem, the current study provides awareness to ELTs about the application of educational technology for learning English. This study assumes that integrating technology into English language classrooms can result in improvement in the second language teaching and learning process, specifically in the Pakistani context, from beginning to advanced levels. The main goal of this present study is to explore the various educational tools to improve English language teaching and learning in Pakistan.

The literature has examined the studies investigating the incorporation of technology in foreign language instruction. Numerous investigations have been conducted to explore the efficacy and significance of incorporating technology in the context of foreign language instruction. Particularly during the 2000s, when computer and internet usage became prevalent, scholarly investigations emerged in the literature (Zengin & Aksu, 2017). Therefore, the importance of the present research needs to be addressed as it focuses on the main applications of online tools



that can be implemented in English language classrooms to enhance the language learning and teaching process in Pakistan, specifically. As it will contribute to developing and evaluating teaching the English language with the help of modern educational tools.

Literature Review

The definition of educational technology largely depends on what the word technology means and where it originates. It is Greek in origin (technologia), which means 'systematic treatment.' Technology is the application of scientific knowledge to the practical objectives of human life. So, it can be named as a scientific methodology with profound ways of performing tasks. It is mostly used to demonstrate, as per its second meaning. (Rehmata et al., 2021). When it comes to educational technology, there are numerous concepts about it. As per Ipek and Ziatdinov (2018), educational technology is therefore more than just a collection of sets. But the latest concept about educational technology is given by the skilled focal persons of The American Association of Educational Communication & Technology (AECT), and according to Spector and Yuen (2016), Wei (2022) educational technology is theory as well as implementation of planning, generating, applying, with appraising learning developments and means. By carefully examining the stated concept of educational technology, it is perceived that it is fundamentally the field of philosophical science and knowing about something.

The role of educational technology is undeniable in increasing the possibilities of a much wider scope of language teaching. It brings some productive outcomes at the end of the day. Simultaneously, it connects teachers with the real world, which will be fruitful for their professional growth. Back when traditional methods of ELT were applied, language teaching was a challenging and interesting task in the classroom. But today, educational technology has made a visible difference between traditional methods of teaching and modern ones, where the classroom is provided with the required tools to stand out in the crowd of creative nations. (EdTech staff, 2018) suggested an environment that is technologically operated, a pliable climate of the classroom, which is facilitated with joined tools in addition to purposeful furnishing, all constructive interwoven engagements of learners, and some intermingled individualistic small groups of learners that are important for the student's success.

Building on the previous studies, the present study investigates the educational technology to improve English language teaching and learning in the context of Pakistan. It also gathers information about the use and practical implementations of internet resources in English language classrooms.

Research Questions

The Followings are research questions to which the research aims to answer:

1. What educational technologies are used in English language teaching and learning?
2. What are the applications of educational technology in English language classrooms?

Research Methodology

The current study employs a qualitative exploratory research design to examine the use of educational technology in order to improve English language teaching and learning in the context of Pakistan. The exploratory nature is suitable, provided the evolving landscape of various online tools to understand pedagogical implications in different educational



environments. This research is based on secondary data collection, dealing with the review and analysis of digital educational resources. Moreover, purposive sampling was employed to select online platforms that have played their valuable role in assisting both teachers and learners in enhancing English language proficiency.

Discussion and analysis

Freeman (2004) and Zhang (2022) claim that education is made simple by technology, which provides teachers with adequate educational resources and opens up the world of language learning to students. Technology can provide the learners with reliable information. It has been suggested that integrating technology-based English language education assignments in language learning classes can benefit both teachers and students by enhancing collaborative language learning and enabling proficient language use in communication (Harmer, 2007; Rintaningrum, 2023) because the world is connected with computer-based technology in all means. For real, contemporary technology provides a great range of affordances to improve the performance, teaching methodologies, and levels of passion for this cause.

However, along with technological tools, learning becomes interesting. It makes students proactive in acquiring skills in a series, in the company of their respective interests and abilities in English language learning. In this discussion section, the study deals with the areas of English language learning: vocabulary and grammar, reading, writing, listening, and speaking. All such areas of English language learning are tackled in the English language learning classroom. Students use to build meaning in the classroom by using all the mentioned areas of language. Therefore, all crucial areas of language teaching and learning are discussed below under the umbrella of educational technology to improve English Language Teaching among ELTs and learning among the learners in Pakistan, where the use of technology for education and learning English is still challenging for teachers and students as well.

Technology, Vocabulary learning, and Grammar

Vocabulary learning is of two types: the first one is incidental, and the second one is intentional. Incidental learning occurs when the students are doing something else, like reading. Intentional learning occurs when the learners are studying vocabulary intentionally. To improve learners' vocabulary learning, the research has explored websites that will help teachers guide the students to understand both types of vocabulary learning.

Voice of America (VOA) and vocabulary learning

The development of vocabulary is crucial to language learning, and poor or improper vocabulary can make communication difficult (Cons, 2012; Guo & Li, 2022). As critical as the four primary fundamental skills of reading, writing, speaking, and listening are, vocabulary has been seen as an essential component of teaching and learning second languages (Darancık, 2018; Li & Hafner, 2022). There are multiple websites on the internet, but among them, *Voice of America's* 'Learning English', a multimedia source, is the easiest approach for teachers and students. ELTs in Pakistan are facing difficulties in providing different pedagogical materials to the learners who can find useful material here that will make teaching and learning the English language process easy and interesting. VOA, Learning English offers programs from beginning level to advanced. This website presents both audio and video clips on different teaching materials, along with terms in new stories. ELTs can implement such practices in the classroom to meet with needs of teaching and vocabulary learning.

Corpus Linguistics and Grammar



As part of this research, it was found that *corpus linguistics* can use technology and computers to go through huge collections of some languages. It will also give insights into variations in the grammatical structures of the language. In other words, a large collection of data in the form of text is stored in the computers; the teacher or learner can then search the specific text to see how those distinct words and grammar structures are practiced in the real world. As per online resources, the Corpus of Contemporary American English is the first reliable monitor corpus of English (Davies, 2010; Tuckute et al., 2024). This software ensures teachers use material produced by native speakers of the language in their classroom to teach grammar, and is equally beneficial for using vocabulary, expressions, and all language skills. Here, the best option is to integrate teaching material rather than using examples to create an understanding of language teaching and learning.

Technology and Reading Skills

Many theories have been presented to define reading; however, in the field of research, *reading* is defined as an interactional phenomenon in which previous knowledge of the reader about the world collaborates with a conveyed message from the text directly or indirectly in written form (Stahl et al., 2020). Subsequently, reading is perceived as a complex process that is not only taught in the classroom but is practiced daily. Technology has helped teachers to teach reading technically. It ensures the development of an understanding of how to read. One of the key factors that teachers need to understand is that motivation is key for proactive readers to read material that the internet provides in the form of books, stories, magazines, and much more in English.

American English and Reading Skills

The American English website provides different resources for teaching and learning English. This website also provides a huge variety of eye-catching and interesting material that will support ELT professionals to develop professionally development. It also helps teachers and students to find new ways to practice English reading. This online resource includes various books, poems, articles, and other interactive material related to cultural backgrounds that will eventually catch the attention of both teachers and readers to improve strategies for teaching reading skills to the readers.

Fan Fiction and Reading Skills

Online fan fiction is among the modern techniques practiced to teach literacy by contemporary instructors in EFL classrooms. In Pakistan, this technique can be practiced to teach language as per modern and recent perspectives. Fan fiction is basically a class of text composed of real tales composed by fans of a work and embodies a canon of elements no less than a single fictional world (Rodríguez-Fuentes & Ulloa, 2022). Fan fiction includes powerful fandoms to motivate readers to read fiction. While visiting this online resource, it was found that this includes interaction with other students passionate about reading the same text through the internet. Online fan fiction is helpful for teachers who are interested in being trained for elementary, middle, secondary, and higher secondary classes. At the tertiary level, online fan fiction in EFL classrooms can influence the enhancement of literacy skills equally in reading and writing (Black, 2006; Kessler, 2018). This will lead to transforming the teaching method of teachers, and at the same time, it will also support readers to learn digital literacy and develop technological skills. The researcher has also investigated that interactive fan fiction, dependent



on The Hobbit and Sherlock Holmes's mysterious stories, can help with advanced digital skills and English language teaching and learning.

Technology and Writing Skills

In applied research, many researchers are working to explore the connection between technology and writing. Pool et al (2023) point out that in the whole process of writing, technology helps to create an environment in which learners perceive a sense of being motivated and freedom to get engaged fully. Technology plays playing vital part in fostering the writing skills of students. Across the globe, it can be seen that learners get amused when they connect with other learners via the Internet. To improve and enhance students' writing skills, teachers can find numerous resources that will lead them to create a connection between their classroom and others. To build such an innovative environment, the research explores two technologies, i.e., word processing software and collaborative software.

Word Processing and writing skills

The most practiced software in word processing is Microsoft Word. It is used worldwide. After the introduction of MS Word, it has become easy for learners to write a text that will ensure a physical sense of engagement in work. Nevertheless, a word processor transforms text to impact teaching writing strongly. It serves as an application package for producing text forms with marvelous features. Owing to the same notion (Tony-Okeme, 2021) reported, the application of MS Word is fundamentally used to edit, create, transform, store, format, make corrections in documents, and help to provide future information, from building to managing a wide range of documents like magazines, simple text, or other forms of writing. Writing is thought to be the most challenging talent; thus, when an English language teacher uses various media to make writing instruction engaging and exciting, students will be more motivated to write (Pangestu et al., 2021). Teachers need to simplify and enjoy teaching writing.

Moreover, writing is an ongoing process in which teachers must understand how they can help students improve their writing skills. In previous attempts, in which the effect of word processing on writing skills of the students was investigated, the goal of Van der Steen et al. (2017)'s study was to address the ongoing discussion over the advantages of word processing software for students with varying working memories while they are writing academically, particularly in terms of their capacity to demonstrate higher-level conceptual thinking. The research brings forth that by the help of giving feedback to students on that specific text and motivating them for future improvements, teachers can implement and enhance the use of MS Word in English language classrooms in Pakistan because, for second language learners, writing is considered one of the most challenging tasks to accomplish.

Collaboration Software and Writing Skills

It is one of the greatest and invaluable developments to beautify writing skills by collaborating with other students. The world is progressing daily, and new software is enabling abilities to flourish and work effectively. So, the collaboration software supports the idea of connecting different minds to share other ideas about writing. This sharing of ideas builds creative text in which students can connect with real-world problems, and teachers can facilitate them to work on getting connected with the world. Such integration of ideas brings variety to the text. ELTs can use collaboration software to promote a focus on writing social context in the text. In the same vein, Fitria et al. (2023) opined that collaborative tools work as a knowledge communal



medium in a social community where members of the community can share their knowledge with other group members, ensure their work in collaboration, and consequently discuss problems. In other words, for Pakistani teachers and students, it prepares future generations to collaborate and appreciate others' ideas, as there is a need to shift from rote learning and a teacher-centered approach to a cooperative or collaborative approach. It will allow us to create a space where the students can work with freedom and enjoy autonomy. Another important aspect explored about Collaboration Software is that it brings feedback from different peers while drafting a text, and from teachers and computers. Collaboration software also brings conceptualization and newness while writing, drafting, and revising. More specifically, during the survey, it was found that collaboration software is the second most developed in instructing how to write and create something new and face the real world collaboratively.

Technology and Listening Skills:

Technology has opened up the world of spoken English everywhere. Similarly, it is providing. The study explores how teachers can use a blended approach (Nadziroh, 2022) to integrate technology in the classroom to meet the desire to produce the best listeners. Many examples are explored to direct teachers to encourage students to listen to become effective. Different opportunities exist to train teachers to teach students to become better listeners. Special attention is needed by L2 listeners so that they can be directed to a certain process of listening to L2 that will subsequently lead to improved listening capabilities (Xu & Luo, 2024). The Internet is full of listening material to integrate into the classroom through technology. By keeping such an idea, the research discloses that excellent content, like *TED Talks*, is very interesting and, at the same time, popular in the world to improve the listening capabilities of learners. Also, the instructor can guide students to listen to the news and other talk shows to improve listening skills. For this reason, *The Voice of America* (VOA) is a great resource to lead progressive classrooms by making them the best listeners. As Anita (2021) states, using the VOA program as a source of listening comprehension resources can inspire and help students in the classroom as they learn to listen. Such practices and their implementation can function collectively to give effective results for the listeners whose second language is English, as in Pakistan, students find difficulty while listening to English, so talk shows like TED Talks can facilitate listeners to improve their English in their own space.

Technology and Speaking Skills

As part of the research, the study also discusses how technology can build a connection to develop oral communication to the world in English. This study will assist ELTs of Pakistan to understand what kind of help their students need to improve their speaking skills. The major focus of the study is to make teachers familiar with websites that will help teachers improve their teaching strategies while instructing their learners to develop speaking abilities in English. Goh (2016) illustrated language fluency, accuracy, and, at the time, complexity. Technology can help teachers improve language fluency and pronunciation among learners to promote speaking skills in the English Language classroom. *YouGlish* is one of the examples of websites on the internet intended to help students learn the correct pronunciation of words, phrases, or sentences. Students or teachers can search for this website on the internet and type any word, phrase, or sentence to hear the pronunciation. There will be several videos for that single search. *YouGlish* aims to give fast, impartial replays of questions that are being searched



in the search box, spoken by native language speakers who are real. Instead of providing the correct perspective, it focuses on the context of spoken language. Ultimately, when the teacher engages the students to learn pronunciation and listen to different videos, it will improve their fluency by practicing language speaking with their peer groups and teachers. Motivation plays a key role in boosting confidence in language speakers. As per (Rodrigues Vethamani, 2015), there is greater language proficiency and self-confidence through the development of speaking abilities in L2 learners.

Conclusion

The current study brings forth the results that Educational technology provides a way to know what is happening in the world of English language speaking and how modern techniques are promoting the transformation of traditional methods of teaching and learning to modern ones for the betterment of the professional growth of teachers, academic and social growth of learners, too. In addition, the investigation uncovers that technology encourages data collection from various internet tools and the progress of both vocabulary development and learning grammar and grammatical analysis. Other language learning domains can benefit from the research on vocabulary knowledge since it is crucial for both SLA and reading comprehension. Moreover, Educational Technology massively offers opportunities to Pakistani teachers to train themselves to inspire the world of English language teaching. Besides, the research unearths that technology strengthens communication when learners come in contact with the world around them.

Furthermore, implementing Educational Technology in the classroom builds self-confidence, courage, motivation, empowerment, and self-improvement among efficient English Language Teaching and Learning instructors and learners. Nevertheless, it uplifts the concept of self-help for learners that teachers will integrate to experience their role of facilitators in English Language Teaching classrooms.

Modern educational technology and its applications in the contemporary world hold a firm position, as their significance is unmatched. Technology and its correct use are valuable and versatile in elevating the standard of teaching and learning. It is paramount in improving the English language teaching and learning process. The study finds that using online tools helps teachers and students explore contemporary trends of integrating technology in the second language learning classroom. However, the study confirms that technology plays a role in building strong communication among students of Pakistan from one corner of the world to the other by connecting them. It ensures the versatility of teaching strategies to teach a second language with immense and notable techniques to make language teaching and learning easy, informative, productive, and constructive in developing an understanding of a second language. Overall, it is concluded that educational technology positively impacts improving English language teaching and learning. Technology can transform how teachers teach and students learn in English language classrooms, from ensuring facilitation, providing flexibility, and personalizing learning to collaborating with various online tools and other people worldwide. The research concludes that educational technology is playing a vital role in improving English language teaching and learning in Pakistan. Because integrating technology in English language classrooms makes teaching and learning processes efficient and productive, it will also allow the empowerment of English language teachers, along with a huge selection of



English language material from online resources, websites, and software. In the same way, the research confirms that educational technology permits teachers and learners to teach and learn new language teaching and learning approaches that can be implemented in the context of Pakistan. Such invaluable websites as Voice of America, The American English help to upgrade English language teaching strategies among ELTs of Pakistan.

Recommendations

Future studies could examine the infrastructure and socioeconomic issues that influence the use of educational technology, especially in underdeveloped or rural locations. Research on access and equality can help create a more comprehensive knowledge of how technology can either close or increase educational gaps.

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