The Effect of Technology on Learning English as a Second Language

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Abstract: **This paper outlines how technology affects English learning as a second language. Modern technology has become an integral part of the language learning process, within and outside the classroom. It has been applied to improve students' learning experiences and help teachers facilitate language learning. The goal of this essay is to (1) understand how various forms of technology and software have been used over time to support English as a second language (ESL) learning and (2) detail how technology can enhance English language skills (writing, reading, listening, speaking) acquisition. The paper further explores the potential benefits and pitfalls of integrating technology into ESL teaching and learning. It finally ends with certain recommendations, particularly for judicious and balanced use of technology to achieve the desired ESL teaching and learning outcomes.**

Keywords: **Educational Technology; English as a foreign language; Language learning; Language skills.**

1. INTRODUCTION

Technology's ubiquitous nature in this era of globalization has ushered in new opportunities and expectations among teachers and students alike [1]. Technology has become a significant part of human existence today and contemporary social practices, facilitating social and linguistic change. It plays a decisive role in human development, affecting education, work, and culture. Many individuals are users of at least one of the great technological tools, practices, and resources that may help improve language teaching and learning. The new era of technological advancements naturally confronts the modern English teacher with new challenges and duties. More than ever, educators must acquire knowledge of computer-assisted language learning (CALL) practices, skills, and principles and adapt them to classroom settings to aid and facilitate English language education [2]. The role of the English teacher has drastically changed along with the approaches and methods of teaching the English language. The emerging technologies provide abundant options for making English teaching and learning more interesting, productive, and innovative, particularly in teaching English as a second language (ESL). ESL is a special context: Students learning English as a foreign or second language require specialized language support [3]. They want to practice hearing, writing, speaking, reading, and comprehending the English language to develop their skills and competencies [4]. Students must carry out various linguistic tasks and activities in each of the five language skills to develop their language competence. As such, they must effectively use various technological tools to acquire linguistic competence easily. Therefore, this paper's primary task is to explore how technology impacts learning English as a second language. The abbreviation ESL denotes English as a second language. The technologies examined in the review include computer-based technology used in the ESL classroom, including CALL, the internet, and multimedia technology.

2. EFFECT OF TECHNOLOGY

Historical Background

Technology has traditionally been integral to English language education. Technology is positively related to English language education. In the 1960s and 1970s, numerous institutions of higher learning established language laboratories consisting of many cabinets with microphones, cassette players, and headphones, among others [4]. The teacher's role was

to monitor students' interactions using a central control panel. The technology's main utility was that students' verbal interactions aided in learning the second language quickly. The student's language skills could be improved by providing maximum practical drill exercises. The language laboratory was an encouraging strategy for incorporating technology into language teaching and learning. However, the technique was tedious and boring for learners [5]. Besides, it only allowed minimal teacher-student interactions, impeding language education. During the audio-lingual age, the technology used in teaching education was audio labs. In the 1980s and 1990s, the concept of 'New Technology' emerged, focusing on communicative techniques for language teaching and learning in which the personal computer played a central role [6]. The transition to communicative language teaching (CLT) altered the role of technology in language teaching. According to [4] various technologies that can enhance linguistic competence include (1) text-reconstruction software, (2) telecommunication software, (3) multimedia simulation software, (4) concordance software, and (5) speech-recognition software. CALL is a very powerful language teaching and learning tool. Computer use in the language classroom benefits teachers and learners [1]. Currently, there exist numerous software application programs, including vocabulary, pronunciation, and grammar programs, electric workbooks, and spelling checks. Writing and reading programs [7]. Many other learning packages that assist teachers in executing tutorial classes also exist.

Earlier generations' application of technology in language classrooms included radio, television, film, language labs with video/audio clips, computers, and interactive videos. Currently, various types of CALL have become commonplace. Computer technologies are becoming more and more accessible to individuals and schools [8]. Society's growing understanding of the potential of computer technology has encouraged a shift in emphasis from the technology to its applications, i.e., finding how best the computers can be used to enhance teaching and learning has prominently featured in the research. Today, the interest in using the internet, multimedia, and various forms of online learning as tools to support language learning is widespread. Given such interests, it's important to examine how computer technology can be (and has been) used to support teaching and learning ESL [2]. Besides, computers have numerous other technological tools that can be used in language teaching. All technological mediums have specific benefits and utilities vis-à-vis the four language skills -writing, reading, listening, and speaking. Hence, learners and teachers must familiarize themselves with the technological tools to acquire the requisite linguistic competence in English. The technological impact on the teaching and learning of the English language is phenomenal [5]. Thus, amalgamating the teachers' role with technology would amount to more advanced and targeted learning outcomes among ESL students.

Globalization has played a vital role in enhancing the English language's global stature and significance. Consequently, the importance of English language teaching keeps growing, stimulated partially by the internet revolution. By 2000, there were about a billion English learners - the numbers had doubled by 2010 [7]. Nearly 80% of the information stored on the internet is documented in English, implying the number of English learners as a second or foreign language will keep increasing in the future. Thus, the number of non-native English users currently exceeds that of native English speakers. Accordingly, a wide diversity of contexts based on learners' nationality, age, educational, cultural, and social background are currently the striking feature of English language teaching/learning in the contemporary world [9]. Rapid science and technological development have provided numerous technological tools that facilitate English teaching. Such tools include electronic dictionaries, online English learning websites, chatting and email messaging programs, CALL programs, virtual conferences, course management software (like Web CT, Blackboard, etc.), language-enhancing 3D virtual world programs, mobile-assisted language learning (MALL), and listening CD players [6]. Other software application programs include electronic workbooks and grammar, vocabulary, pronunciation, writing, and reading programs, among other packages that help instructors create tutorial exercises to enhance English language teaching.

Word processing (WP) software is perhaps the most accepted and universal computer use in education today [5]. It offers spelling, grammar, style checkers, dictionaries, and thesauri. WP transforms traditional learning tasks into novel ones, making students enjoy and appreciate routine assignments. It also helps augment the curriculum by focusing on the writing process. The class can use the WP app to create, share, and turn in soft copy assignments via a flash disk or email [2]. Such a type of composition process facilitates the formation of communicative writing communities, transforming instructors' directive role into a facilitator of class discourse. Moreover, internet-based tools that facilitate English language teaching and learning include email, HTML, bulletin boards, XML, digital video, synchronous chat, simulated emersions, and web publishing [4]. Such tools expose ESL students to authentic, culture-laden contexts to communicate/respond by speaking or writing in English (the target language). For instance, email is generally facilitative; it's a realistic communication/conversation about relevant topics with real people. Besides, email and synchronous chat can help students

develop communicative language skills, creating a chance to share and collaborate. The tools also help develop critical thinking skills; for example, chat cultivates ESL students' ability to think and compose spontaneously.

Multimedia technology is also another powerful and effective tool for teaching the English language, mainly in the context of ESL [9]. Its visual, animation, and audio effects offer an interesting and engaging platform for innovation in the contemporary English classroom. Therefore, multimedia technology promotes language learning activities and innovative initiatives for ESL teachers and students. Besides, the internet revolution has continuously boosted the growth of the English language. Internet-enabled computers, tablets, and computers proliferate the entire English teaching and learning process. In English literature, technology has been recognized as the quintessential part of teaching and learning [2]. More effort is being directed toward reinforcing the role of technology in language pedagogy, thus, obliterating the human teaching role. Thus, English language teachers must familiarize themselves with the latest technological developments. Such an awareness will help them handle the emerging technological revolution and yield maximum outcomes in the English language classroom.

3. BENEFITS OF TECHNOLOGY IN ESL TEACHING & LEARNING

Today, computer technology has continuously become more accessible to schools and students. Given the growing interest in the use and potential of computer technology for language learning, it's important to analyze how a computer can support ESL students [9]. The potential of computer technology as a tool could include increasing English learners' language proficiency, creativity, self-esteem, vocational preparedness, and overall academic skills. Pro-technology educators are most interested in technology's interactive abilities, e.g., providing immediate feedback, increasing learner autonomy, and stimulating real-world simulations via video, graphics, and audio. Furthermore, discussions about the benefits of computer technology revolve around how certain technologies can be applied to specific language areas. Hypermedia technology's linking and interactive capabilities enhance vocabulary learning and comprehension reading. Video and audio support text comprehension [4]. Besides, multimedia technology provides authentic cultural contexts significant to language learning. CALL programs, particularly voice interactive CALL, improve learners' speaking skills. It's an excellent medium for cultivating new social relationships within and across the ESL classroom, creating collaborative, meaningful, and cross-cultural interactions among members of a discourse community created in cyberspace [9]. Generally, computer technology integrated with the conference system provides goal-oriented writing courses tailored to different learning styles. Notably, technology has numerous benefits that can facilitate English learners. The benefits are not limited to the ones outlined below:

1. Enhancing English Language Skills

English language skills, in this case, imply the main language elements that ESL students need to develop, including input and output skills (listening & reading) and (speaking & writing).
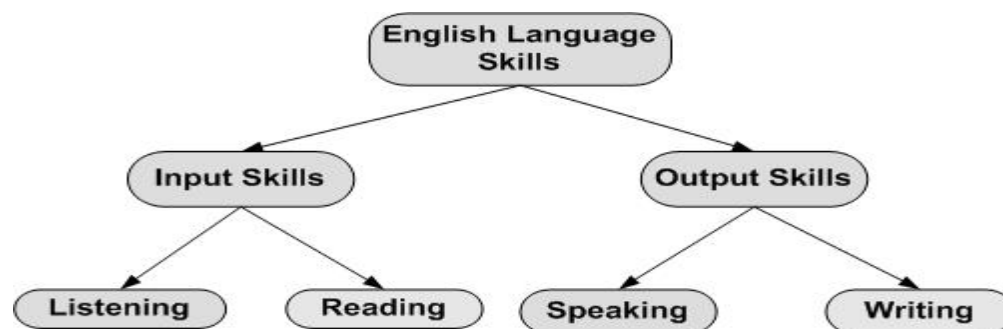

Figure 1: English Language skills [7]

1.1. Listening

Listening is a principal language skill that plays a significant role in students' language development. When people speak of listening, they mean listening and understanding what they hear [8]. Listening is a process of identifying and understanding speakers' speech, involving understanding the speakers' accent or pronunciation, vocabulary, grammar, and comprehension of meaning [7]. An effective listener does the four things simultaneously. Thus, listening is a critical element in second language education and student language development as an input tool. The technical ways of improving listening

skills are as follows: (a) Using CD players, modern electronic devices used specifically to run/play audio CD-ROMs, where lectures can be saved for future listening. (b) A significant technical listening tool is attached to certain English language learning textbooks using tape recorders. (c) through broadcasting, students listen to TV or radio educational language programs to develop their understanding capability [10]. However, listening students must carefully select the specific program relevant to their needs. New satellite TV channels, such as BBC, are useful for practicing with video and audio media. (d) Another technical way to develop listening ability is using computers which provide ESL students with voice and visual inputs that can enhance and develop their ideas and listening skills [9]. Computer-based listening tests reinforce the listener's understanding skills. CD-ROM-based learning films and internet voice chatting (using the second language) would also significantly improve students' communication capabilities.

1.2. Reading

Reading is a significant input skill developed through various technical means: (a) through multimedia software, a mixture of texts, sounds, videos, graphics, and animation that motivates learners to develop their vocabulary and learning skills [5]. (b) Learners can read CD-ROM-based newspapers to enhance their background knowledge and vocabulary of words. Compact CDs often a vast amount of information digitally. For instance, a single CD can be used to store all articles published in a newspaper for a whole year. A computer search program can be initiated to locate any article or subject on the CD instantly. (c) Students can also browse the internet to read. Internet technology can certainly develop students' English language skills. Several internet websites are prepared to enhance English language learners' abilities [2]. Many resources, including magazines, journals, newspapers, encyclopedias, electronic libraries, dictionaries, and newsletters, are available online and can help develop learners' vocabulary and reading ability. (d) Besides, computer reading-based programs also help improve ESL students' word vocabulary, fluency, and comprehension [9]. Through computers, students can increasingly interact with texts and enhance their reading capabilities of texts they would be otherwise unable to read. Computers perform several tasks simultaneously and run programs very quickly, moving students gradually from easy to more difficult problems based on their abilities. It's thus an important English reading tool.

1.3. Speaking

Speakers and listeners must understand each other to facilitate proper human communication [7]. The speaker must convert his/her message into spoken language, whereas the listener must understand the speaker's language. Technology can be applied to learn the English language speaking through various means: (a) internet voice chatting. While chatting, the speaker and listener engage in voice communication through the internet [2]. The process may benefit the learner if the respondent is a native language talker. (b) Consequently, speech synthesis programs and artificial intelligence computer programs can help improve ESL students' speaking, vocabulary, and pronunciation capabilities.

1.4. Writing

Writing might be daunting for English language learners as they are compelled to perform tasks, including generating ideas and perfect grammar and vocabulary use [7]. The writing skills of ESL students can be improved through various technical ways: (a) computer use. ESL students can use computers to develop their writing skills. Using a foreign language to write statements and paragraphs can be challenging for students [6]. Nonetheless, computers and graphic-based programs can ease the writing task and make it enjoyable, making students express their thoughts more clearly [10]. Word processing programs can help improve ESL students' grammar skills. A learner can underline, italicize, bold, or change text sizes and color and automatically check spelling and grammar. Thus, computer as grammar studying tool motivates students more than traditional paper and pencil writing. (b) besides, internet-text chatting can also help develop ESL students' writing abilities. It's a quick online tool for writing and expressing thoughts, instantly transferring ideas, and interacting with other side writers. (c) Lastly, students can develop their wring skills by practicing email writing and transferring messages through the internet [11]. Emails can make students learn to respond to incoming messages using formal and meaningful language and statements.

2. Technology Enhance Students' Interest and Motivation level

The traditional English language teaching methods are sometimes dull and boring, especially in the ESL context [7]. Besides, stereotyped teaching methods and environment hardly sustain learners' motivation and interest in language learning. In contrast, technology like multimedia includes visual, audio, and animation effects, which captivate students' imagination and attention. Multimedia contains abundant information and can transcend space and time, offering a sense of

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plausibility and uniqueness [4]. It, thus, creates an engaging classroom atmosphere that creates and sustains motivation and interest among students.

3. Technology Promotes Students' Communication Abilities

Earlier English language teaching models rendered students passive knowledge recipients, hampering their pragmatic and comprehensive understanding of language's structure, meaning, and function. Hence, the model rarely enhances communicative competence. Multimedia technology integrates teaching and learning, offering greater communication opportunities to students [11]. Moreover, technological tools such as Blackboard Web CT stimulate students' cognitive abilities, transforming English learning into capacity building. Thus, integrating multimedia technology into teaching has immensely developed ESL students' positive thinking and communicative ability in English.

4. Technology Makes the Course Context Flexible

Technology, such as multimedia, is flexible in delivering the course content. It helps teachers develop the curriculum [6]. Accordingly, English language teachers can use technology to tailor assignments and instructions to develop sustainable positive interactions, enhancing learners' interest and motivation. Teaching through technology is not limited to the classroom since technologies such as WebCT and Blackboard guarantee students ample time and scope to interrogate and understand the course content [5]. Learners also rely on the network to consult with their instructors and receive instructions and answers.

5. Technology Promotes Teacher-Students Interactions

Teaching ESL through a multimedia medium is student-centric. Multimedia teaching's primary objective is to enhance students' interactive and communicative abilities [11]. During training, the teacher takes the facilitator role, creating a language-learning context and a solid interaction platform between teachers and students. Utilizing media in such a context also creates a target language environment, promoting two-way teachers-students exchanges [10].

6. Technology Enhances Students' Understanding of Native Culture

Generally, language and its culture are integrally related, i.e., language cannot be comprehensively understood without delving into its culture [11]. Multimedia technology contains abundant information about the English language as well as the culture and background of the native countries. The video and audio language materials can comprehensively understand the target language's native culture.

7. Technology Improves Teaching Efficacy and Quality

Integrating multimedia technology in ESL teaching can successfully replace the traditional teacher-centered approach, enhancing the quality and efficacy of teaching ESL. Technology enriches teaching content, enhancing class efficiency [5]. Essentially, multimedia labs used effectively can enhance better individualized and quality teaching. Multimedia technology provides experiences beyond space and time, creating a more vivid and authentic learning environment. It triggers students' imagination and involvement, making the ESL classroom more efficient for teaching and learning.

8. Online Learning

Online learning (e-learning) is an educative approach inherently tied to technology, i.e., online learning and teaching would be impossible without technology, particularly the internet and related digital platforms, resources, and applications [2]. Its gains are well discussed and documented in literature: Online learning creates an environment that encourages even withdrawn individuals/students to express their ideas and participate in discussions. It also provides greater instructor-student (or student-student) collaboration and communication opportunities. Online education is categorized as synchronous and asynchronous. The synchronous e-learning is delivered in real-time – it's done life, and the class is hosted digitally [6]. The participants, instructors, or students interact online via the web. However, in an asynchronous delivery system, information is transmitted intermittently – not in a steady stream. In such a mode, learning is self-regulated and student-centric. Students control the process and learn at their convenience, for instance, while on vacation, having lunch, or on a break [5]. Hence, students learn at their own determined time and convenience. Notably, e-learning, synchronized or synchronized, is performed with or through technology [6]. Thus, individuals who aspire to perform effectively in such a learning approach must be technologically competent and understand the relevant use of information communications technology (ICT), gadgets, and platforms required for digital classes.

Technology Pitfalls in ESL Teaching & Learning

Many limitations are associated with the implementation of technology in language classroom settings. For instance, According to [7] that technology-enabled classrooms lack humane and psychological conditioning. Language learning requires the teacher to deploy a humanistic approach, particularly in ESL classrooms. Technology cannot provide essential linguistic and psychological support to learners. Technological mediums' immediate mechanical feedback cannot outmatch the teachers' warm explanations and humanized feedback. The teachers naturally enhance students' satisfaction and learning levels. Besides, over-dependence on technology may render the teacher subservient to technology, hampering teachers leading role in the teaching process [11]. Technology is an assisting tool that facilitates language teaching and learning to yield desirable teaching objectives. Overreliance on technology can make the entire language teaching mechanical and technologically-oriented, neutralizing the very essence of the teachers' leading role. Generally, modern educational technologies are mere assisting tools. They must be used judiciously, maintaining the teachers' leading role in creative education.

Consequently, certain modern technologies minimize speaking communication among language learners [7]. English teaching must objectively enhance all four language skills. Despite enhancing learners' motivation and interest, multimedia technology (including video, audio, and animation) amounts to a lack of speaking/communication among learners. The mechanical sounds replace teachers' voices, minimizing opportunities for speaking. The fading mutual communication between learners and teachers may be disastrous for ESL classrooms. It's the negative outcome of overindulging in multimedia. Learners turn into passive viewers instead of participating actively in linguistic activities.

4.   DATA ANALYSIS AND FINDINGS

The study found that participants supported training on the use of technology before its use in learning English as a second language. The results affirm that training on technology is critical for optimal performance and productivity; however, some disagree on training before using modern technology because they have experience with most of the tools. Despite the challenges of using online learning, participants preferred it over traditional physical classrooms because of their benefits. The findings are tabulated below:

Table 1: *Participants Age*

Age	Level	Number	Percentages
14-17	High School	2	2%
18-24	College	11	11.1%
25 and Above	Employees	86	86.9%

Table 2: *Did you get any field training or a training course for your future job before you graduate?*

Answer	Responses	Percentages
No	49	49.5%
Yes	41	41.4%
Didn't get a chance	9	9.1%

Table 3: *Do you have a training plan to get your future job?*

Yes	36.4%
No	63.6%

Table 4: *Do you think that training can affect students to get their dream job after graduation?*

Yes	85.9%
Not Really	8.1%
No	6.1%

Table 5: *Training should be after being employed not before. Do you agree?*

Yes	43.4%
No	56.6%

Table 6: *Choose your favorite way of training is:*

In a classroom with a teacher lecturing face-to-face.	74.7%
Through online classes to save time and focus more	25.3%

Table 7: *How difficult do you find online training? (0 No difficult - 10 means too difficult)*

0	1	2	3	4	5	6	7	8	9	10
16.5%	5.2%	4.1%	7.2%	8.2%	19.6%	9.3%	12.4%	12.4%	2.1%	3.1%

Table 8: *Do you prefer to be trained by professors in your country or by contacting professors abroad?*

Professors in my country	64.6%
Abroad professors	35.4%

5. DISCUSSION, CONCLUSION & RECOMMENDATION

Language is a significant communication ingredient globally. Students use different English language skills and competencies such as writing, listening, writing, and reading for their proficiency and communication. Besides, one of the vital learning elements is the method instructors use to facilitate the language learning process. Accordingly, computers are important instructional instruments in language classes. They are a significant part of providing high-quality education. Generally, technology offers unlimited educational resources to language learners aiming to learn various English language skills as their second language. Colleges that lack the technical capabilities to embrace emerging learning technologies discourage students from using technology in the classroom – this must be resolved promptly. Technology is continuously developing and influencing all aspects of human life, including communication, interaction, education, and work. It must be integral to learning activities and transfer skills to learners. Its incorporation into the instruction/teaching process is necessary. Besides, modern technology augments theory and practice in ESL learning; thus, modern technical ways should not be ignored. Educational institutions and teachers must modernize their technical instruction capabilities, using new equipment and labs that support the ESL teaching process.

Most importantly, ESL students should feel encouraged to embrace technology to develop and sustain their language skills. Teachers must judiciously apply technology to avoid reducing learners to passive viewers. There must be a judicious balance between the lively audio-visual impact of technology and allowing students to engage in meaningful linguistic activities, such as language games and group work. The idea is to ensure ESL students access a comprehensive language learning package, achieving all-around language skills development. The computer is an integral part of ESL learning activity and a means by which teachers can transfer skills to students. ESL teachers must encourage students to apply technology to develop their language skills. All educational institutions should consider modernizing their technical capabilities using new/emerging technological equipment and labs to support learning and teaching.

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