

ROLE OF TECHNOLOGY IN LANGUAGE LEARNING IN THE SECONDARY SCHOOLS OF ISLAMABAD

Muhammad Anwar

MA TEFL, Department of English Allama Iqbal Open University Islamabad

Email: m.anwarmayo1980@gmail.com

ABSTRACT

This study attempts to trace the use of technology in teaching English at the S.S.C. (Secondary School Certificate) level in schools of Islamabad. It also focuses on the impact of using technology in teaching and learning English. Fifty teachers from government schools in Islamabad city were selected to survey the use of technology in teaching the English Language. The researchers employed the mixed methods research to carry out the study where two sets of questionnaires for the teachers and the students and a semi-structured interview only for the teachers were used to collect data. The findings showed that using technology in teaching has both the positive and the negative impacts. Teachers like to use technology in their classroom but limited time and lack of training and technical support from the authority hamper the mode of teaching. In this paper, the researcher defined the term technology and technology integration, explained the use of technology in language classroom, reviewed previous studies on using technologies in improving language learning skills, and stated certain recommendations for the better use of these technologies, which assist learners in improving their learning skills.

Key words: technology, Education, English Language, ICT in English learning.

INTRODUCTION

This era is the era of Technology. Technology has been widely used in every field of life. Technology has been used in educational field as well. We see that language teachers prefer to teach through technology. Teachers believe that technology can help in enhancing language learning. In the present age acquisition of language of a student is measured by the ability to communicate in a language. There is no need to be competent in grammar. We see that not only in private institutes but in government sector, educational institutions have taken an extreme step by including a network of computers and related software. Multimedia rooms, projectors, these are the parts of English teaching methodology. This study tried to find out whether using technology for language learning at secondary level. This research will also find out the effectiveness of technology in students' behavior, motivation, and participation. According to **Bull and Ma (2001)**, technology provides offers unlimited resources to language. **Harmer (2007)** and **Gencelter (2015)** emphasized and teachers should encourage learner to find appropriate activities through using computer technology.

The use of the technology has been spreading worldwide and it has changed our lives and the form to communicate with others. This change has impacted on the field of the education, the needs and opportunities to learn in different forms to get the same goal to acquire knowledge for life. Nowadays, young students are known as digital natives and use technologies and digital communication as second nature (**Goodwin Jones, 2005**). It is possible to see digital natives in the field of education especially at university. Technology plays an important role in education. Technology has always been an important part of teaching and learning process. It is an essential part of education through which a teacher can facilitate learners' learning. If we talk about the role of technology in classroom, we can say it can play an important role to implement the school curriculum. New era brought challenges and duties to the modern teachers.

According to **Murray (2005)** the use of technologies with new generation students provide a natural context for learner autonomy, context for learner identity, new ways to use language and motivation for students creating in these forms new opportunities of collaboration and interaction between teachers and students. Besides, many students use a lot of digital devices such: the internet, blogs, chats, what's, computers, cell phones, tablets and some other technological devices are part of their everyday life. At the same time, they make a comparison with the time they spend reading, studying and writing about academic subjects, which is a minimal part of their everyday activities. Afterwards, this exposition of situations we could think that students enjoy reading, writing, listening although probably they just have a different form to do it. The use of technology is not a goal in and of itself; rather technology is one tool that supports language learners as they use the target language in culturally appropriate ways to accomplish authentic tasks. Further, all language learning opportunities whether facilitated through technology or in a classroom setting, should be standards-based, instructor-designed, learner-centered, and aimed at developing proficiency in the target language through interactive, meaningful, and cognitively engaging learning experiences. ACTFL acknowledges a role for hybrid, online and distance learning instructional models aligned with state and national standards and facilitated by language educators.

Objectives of the Study

To identify the most effective technological tools for supporting English language learning

To explore the challenges and barriers during implementation of technology in ELL Classroom

The Research Question/ Hypotheses

What are the most effective technological tools for supporting English language learning?

What are the challenges and barriers during implementation of technology in ELL Classroom?

Significance and scope of the Study

This research shows the importance of technology in English language learning class. This research shows that if we use technology in our classroom we find a significant improvement in all four domains, listening, speaking, writing, and reading. This research makes a significant contribution in enhancing the importance of technology in education system. This research shows how a teacher can motivate a student to learn English by using different technological tools in language class. This research helps to recognize how technology plays an important role in language learning. It also helps to identify which strategies and tools can be helpful in language learning. Which activities should be conduct in the class for language learning?

REVIEW OF LITERATURE

This literature review examines the use of technology in English learning class at secondary level. It explores the benefits of the technology and strategies of implementation of technology in English class. The purpose and scope of literature review is to enhance the language skills, to increase the motivation, and engagement of learner through technology. Language is one of the significant element that affects international communication activities. Student utilize different parts of English language skills such as listening, speaking reading, and writing for their proficiency and communication (**Grabe & Stoller, 2002**). In addition, **Ahmadi (2017)** stated that one of the important elements for learning is the method that instructors use in their classes to facilitate language learning process. According to **Becker (2000)**, computers are regarded as an

important instructional instrument in language classes in which teachers have convenient access, are sufficiently prepared, and have some freedom in the curriculum. Computer technology is regarded by a lot of teachers to be a significant part of providing a high-quality education. According to **Bull and Ma (2001)**, technology provides offers unlimited resources to language learners. **Harmer (2007)** and **Genç İter (2015)** emphasized and teachers should encourage learners to find appropriate activities through using computer technology in order to be successful in language learning. **Clements and Sarama (2003)** declare that the use of suitable technological materials can be useful for learners. According to **Harmer (2007)**, using computer-based language activities improve cooperative learning in learners.

Furthermore, **Tomlison (2009)** and **Genç İter (2015)** say that computer-based activities provide learners rapid information and appropriate materials. They continue that internet materials motivate learners to learn more. In addition, **Larsen-Freeman and Anderson (2011)** supported the view that technology provides teaching resources and brings learning experience to the learners' world. Through using technology, many authentic materials can be provided to learners and they can be motivated in learning language

2.1 Importance of Technology

Technology is the best tool to help solve problems. It is one of the important factors of progress in the teaching/learning process for teaching English language. Technology is an essential part of teaching and learning, especially in developing countries. The use of English technology enhances an integrated approach to the digital media framework and other elements that help students achieve the desired outcomes. Cutter also explains the increase in involvement with technology. Students are more motivated when working on computers and using modern devices than when working with textbooks (**Cutter, 2015**). In the educational environment, technology has always been a major factor. It is important for the teaching profession, which can be used to make learning English easier for students. The use of next-generation technology gives the student a natural context for learner autonomy, a context for learner identity, new ways of using language, and motivation for students to create new opportunities for teacher-student collaboration and interaction in the form (**Murray, 2005**)

2.2 Integration of Technology in the classroom

Today we see that the use of the Internet increases the motivation of students. The use of film, news, drama in teaching English helps students understand and develop all four skills with enthusiasm. According to Hennessy, Ruthven, and **Brindley (2005)** and **Pourhosein Gilakjani (2007)**, technology integration is defined in terms of how teachers use technology to perform familiar activities more effectively and how this use can reshape those activities. **Dockstader(2008)** defined technology integration as the use of technology to improve the learning environment. It supports classroom learning by creating opportunities for the student to complete an assignment on a computer rather than with normal pencil and paper. **Erban, T. et al (2009)**, Technical aspects of learning have always been significant. It is an essential element of learning that will facilitate learning for students. The term "integration" is used to describe education and learning technology. It is time to focus on the concept of technological convergence in our daily life. Teaching teachers from start to finish is a critical part of technology. It is a big challenge for teachers.

2.3 Advantage of technology in language class

A review of this research reveals many important points of interest. **Zaho (2013)** conducted a study to assess the potential of technology in language education. Pronunciation is a key element of language learning. However, it is difficult to provide useful feedback. A teacher who may or may not be good at first assessing a student's statement often provides commentary and modeling in a traditional educational context. Typical feedback means that students should repeat the pronunciation or explain how the sound should be produced abstractly. The student can receive feedback more effectively and efficiently thanks to advanced speech recognition technology (**Zaho, 2013**). The study showed that reading and writing skills can be improved through the use of technology. Another result of this study was that the student learns more effectively using technology tools instead of traditional teaching methods because the Internet provides a conducive environment for the student to learn and provides a new platform for students to have convenient access to learning lessons (**Peregoy & Boyle, 2012**). The use of technology in teaching concepts found that there was a significant increase in student motivation. Before students had access to the Internet in school, they were limited to social studies in class books and books that could be found in the school library. Open access to the Internet offers students tools for today's research and for deeper learning (**Gustad, 2014**). **Hennessy (2005)** noted that the introduction of ICT could act as a catalyst in stimulating teachers and pupils to work in new ways. They are characterized by teacher-student and peer discussions, exploration, analysis and reflection, probing, help and feedback. Hennessy noted that as students become more autonomous, teachers feel they should encourage and support students who act and think independently.

2.4 The Impact of Technology on Language Learning

Technology offers teaching resources and provides children with learning experience in the world. Technology also offers many authentic materials and young learners in a long language learning atmosphere can easily become motivated. **Mart (2017)** argues that authentic materials are good models for learners to process real language in context. **Larsen-Freeman and Anderson (2011)** mention that for language learners electronic chat, games, and pan-pals and podcasts may be interesting. In general, children are visual students. They want to see as they learn. Internet and computer-based activities provide children's worlds with visual materials. Children can improve their listening, reading, and writing abilities in the media and the Internet.

Technology can provide young language learners with a genuine and enjoyable atmosphere and increase the awareness of their language when it is used correctly. Increasing awareness and understanding of language encourages learners to arrive at accurate meaningful interpretations of text (**Mart, 2011**). The technology also enables young learners who interact actively to acquire language skills outside the classroom (**Larimer & Schleicher, 1999; Brewster, Ellis, & Girard, 2004**). The fact that kids can lose their concentration in a short time. Often this period can be longer with the use of fun and authentic materials.

2.5 Benefits of Technology in Improving Language Skills

Some studies have been done on the advantages of using technology in English language teaching and learning. **Hennessy (2005)** stated the use of ICT acts as a catalyst in motivating teachers and learners to work in new ways. The researcher understood that as learners become more autonomous, teachers feel that they should urge and support their learners to act and think independently. The application of Computer Assisted Language Learning (CALL) changes learners' learning attitudes and enhances their self-confidence (**Lee, 2001**). According to Bull and Ma (2001), technology provides offers unlimited resources to language learners. Harmer (2007) and Genç İter (2015) emphasized and teachers should encourage learners to find appropriate

activities through using computer technology in order to be successful in language learning. Clements and Sarama (2003) declare that the use of suitable technological materials can be useful for learners. According to **Harmer (2007)**, using computer-based language activities improve cooperative learning in learners. Furthermore, **Tomlison (2009)** and **Genç İter (2015)** say that computer-based activities provide learners rapid information and appropriate materials. They continue that internet materials motivate learners to learn more. In addition, **Larsen-Freeman and Anderson (2011)** supported the view that technology provides teaching resources and brings learning experience to the learners' world. Through using technology, many authentic materials can be provided to learners and they can be motivated in learning language. Information and communication technologies (ICTs) have some benefits for teaching and learning. First, learners play an active role, which can help them retain more information. Next, follow-up discussions involve more information where learners can become more independent. Finally, learners can process new learner-based educational materials and their language learning skills can increase (**Costley, 2014; Tutkun, 2011**).

RESEARCH METHODOLOGY

This section describes the methodologies, encompassing aspects such as research design, population, sampling techniques, sample size, devices used, methods of data collection, and data analysis procedures.

3.1 Research Design

The nature of this study was descriptive, utilizing a quantitative approach. Data collection was carried out through a survey.

3.2 The population of the Study

The population of the study consisted of all English teachers of secondary school from Islamabad city.

3.3 Sample of the Study

The sample of the study consisted of 50 English teachers from 10 secondary schools of Islamabad city.

3.4 Research Instrument

The questionnaire was developed by the researcher focusing on Role of Technology in Language Learning in the Secondary Schools of Islamabad. The questionnaire was based on the objectives of the study. The first part was about demographic information such as school and teachers' name etc. The second part consisted of the 24 close-ended statements based on five points Likert scale about Role of Technology in Language Learning in the Secondary Schools of Islamabad. This scale has 24 items.

3.5 Reliability and Validity of the Instrument

The questionnaire was piloted by the 10 teachers' of Govt secondary Schools to check the reliability by using Cronbach Alpha. Reliability of the Scale having 24 was 0.938. The questionnaire was validated by experts of relevant field.

Table 3.5.1

Reliability of the Questionnaire on Role of Technology in Language Learning in the Secondary Schools of Islamabad.

Name of Scale	Cronbach's Alpha
Questionnaire	.938

3.6 Data Collection

The data was collected through a convenience sampling technique. The researcher herself visited 10 secondary schools of Islamabad city. The Public school of both genders was used for data collection.

3.7 Data Analysis

This section covers the data analysis procedure, wherein the data were analyzed using descriptive statistics. The analysis included the presentation of means and standard deviations for all statements. An independent t-test was employed to determine significant differences in demographic variables such as gender.

3.8 Ethical Consideration

All ethical considerations were adhered to during the data collection process. Participants were guaranteed the confidentiality and privacy of their responses. They were provided with information about the study's objectives and invited to participate voluntarily, based on their personal choices. All gathered data were treated confidentially and utilized exclusively for research purposes.

DATA ANALYSIS AND INTERPRETATION

Research Question 1

What are the most effective technological tools for supporting English language learning?

Table 4.1

Mean score of effective technological tools for supporting English language learning

Sr. No	Statements	<i>M</i>	<i>SD</i>
1.	Technology plays an important role in education.	4.01.	.786
2.	Technology has always been an important part of teaching and learning process.	4.29	.998
3.	Technology has been widely used in every field of life.	4.04	1.150
4.	Teachers believe that technology can help in enhancing language learning.	4.16	.944
5.	The effectiveness of these tools may depend on the learner's preferences, proficiency level.	4.14	.917
6.	CALL is best app to improve writing skills.	4.16	.969
7.	Information and communication technologies (ICTs) have some benefits for teaching and learning.	4.27	.893
8.	Online writing and grammar tools help users improve grammar, spelling, and writing style.	4.28	.896

9.	E-books and audible book provide a vast collection of English-language to learners.	4.11	956
10.	E-books and audible book help learners to improve reading and listening skills.	3.98	1.053
11	Language learning games like quiz let or spelling city can make learning vocabulary and spelling more engaging.	4.01	.687
12	Language learning apps are best tools for supporting English language learning.	4.04	.555

Total N = 50

This table 4.1 shows the descriptive scores about most effective technological tools for supporting English language learning. Findings of the study revealed that the highest mean score ($M=4.29$) of the statement.2 Technology has always been an important part of teaching and learning process. The result of this study indicated that majority of teachers were strongly agree at this statement.

Research question 2

What are the challenges and barriers during implementation of technology in ELL classroom?

Table 4.2

Descriptive Scores of challenges and barriers during implementation of technology in ELL classroom.

Sr. No	Statements	<i>M</i>	<i>SD</i>
1.	Many schools and students may not have equal access to technology.	4.01	876
2.	Technical glitches and system downtimes can disrupt lessons.	3.72	1.182
3.	Teachers may not be adequately trained to use technology in the classroom.	4.01	.665
4.	Lack of ongoing professional development can exacerbate this issue.	3.85	1.206
5.	The absence of quality educational resources tailored to language learning goals can limit the effectiveness of technology integration.	3.88	1.197
6.	Inadequate technical support within the school can create frustration for teachers and students.	4.01	8.65
7.	Students with varying levels of English proficiency may struggle with technology-mediated learning.	4.10	1.086
8.	English language learners may face challenges using technology if the instructions or content are not provided in a language-appropriate manner.	4.06	.776

9.	Acquiring and maintaining technology resources can be expensive.	3.80	1.298
10.	Schools may face budget constraints when trying to invest in the latest devices, software, or online platform.	3.79	1.237
11.	Limited budgets can restrict the acquisition of new technology or the maintenance of existing devices.	4.16	.956
12.	Lack of cultural sensitivity in digital content and tools can affect their relevance and effectiveness for English language learners.	4.12	.887

Total N= 50

This table 4.2 shows the descriptive scores about the descriptive scores of challenges and barriers during implementation of technology in ELL classroom. Findings of the study revealed that the highest mean score ($M=4.16$) of the statement. 11 “Limited budgets can restrict the acquisition of new technology or the maintenance of existing devices”. It means that majority of teachers were strongly agree at this statement.

Independent Sample t-test on effective technologies tools for Gender Difference

Gender	N	M	SD	T	Df	Sig. (2tailed)
Female	23	3.83	.589	2.268	163	.02
Male	27	4.03	.543			

Table 4.3 indicates a statistically significant difference between males and females regarding the effective technologies tools for supporting English language learning $<0.05>$. To calculate the difference between male and female students through a data analysis t-test was applied to check the teacher’ perceptions about effective technological tools for supporting English language learning in learning English scores. It was concluded that “there was significant difference ($t=2.268$, $p= 0.025$) found between male and female ($F = 3.83$, $SD= .589$) and Male, ($M =4.03$, $SD= .543$); $t (2.268)$, $p= .02$ (two-tailed).

DISCUSSION

5.1 Summary

The main purpose of this research was to find out the Role of Technology in Language Learning in the Secondary School. The study was quantitative in nature and a survey was used to collect the data from selected sample. The questionnaire comprised 24 items close-ended statement was developed on 5 points Likert type scale. The questionnaire was piloted testing by 10 teachers and the reliability was measure by Cronbach Alpha formula and it was found 0.938. . A convenient sampling technique was used to select the sample for data collection. Descriptive statistics were

applied to analyze the data from secondary school teachers. Mean and Standard-Deviation were used for analysis. To find out the difference between gender and tehsil wise t-test was applied.

5.2 Findings of the Study

1. The finding of the study tell the results of 12 statements where are relevant to 1st objective of the study. Eleven types statements were gone into strong agree options with mean more than 4.00 and only one statement gone into agree option mean more than 3.9 The mean scores 4.29 is fall in high category score.
2. The finding of the study tell the results of 12 statements where are relevant to 2nd objective of the study. Seven types statements were gone into strong agree options with mean more than 4.00 and five type statements were gone into agree option mean more than 3.9 The mean scores 4.16 is fall in high category score.
3. The findings of the study reflect that there was no significant difference ($p > .05$) between gender Female ($M=3.83$, $SD=.589$) and male ($M=4.01$, $SD=.543$); $t (.2268)$, $p=.02$ (two-tailed).

5.3 Conclusion

The current study was designed to investigate the role of technology in language learning in the secondary school. The first objective of this research was to identify the most effective technological tools for supporting English language learning. The finding of the study indicates that there are many effective technological tools are existed like CALL, ICT, E-Books, and Audio-Books, Online writing and grammar tools and Quiz let or Spelling City. These are all very effective technological tools which plays an important role in learning English language. The benefit of technology explore in this study is that it played a crucial role in enhancing student learning by making lessons more interesting while providing opportunities for visualization, interactivity and individualization. Second objective of the study was to explore the challenges and barriers during implementation of technology in ELL classroom. The findings of the study describes that there are lot of barriers and challenges are being existed like limited access to technology, technological infrastructure issues, teacher training and professional development, resistances to change, lack of quality educational content, inequitable use of technology, cost and sustainability. These are all have a strong effect on English.

References:

- Becta, 2004. A review of the research literature on barriers to the uptake of ICT by teachers. <http://www.becta.org.uk>
- Braul, B 2006, ESL teacher perceptions and attitudes toward using computer-assisted language learning (CALL): Recommendations for effective CALL practice, MA Dissertation, Department of Secondary Education, Edmonton, Alberta
- Davies, T. L., Lavin, A. M., & Korte, L 2010, 'Student perceptions of how technology impacts the quality of instruction and learning', *Journal of Instructional Pedagogies*, vol. 2, pp. 3-16.
- Gips, A., Di Mattia, P., & Gips, J 2004, 'The effect of assistive technology on educational costs: Two case studies', in K. Miesenberger, J. Klaus, W. Zagler, D. Burger (eds.), *Computers Helping People with Special Needs*, Springer. pp. 20-213.
- Lai, C. C., & Kritsonis, W. A 2006, 'The advantages and disadvantages of computer technology in second language acquisition', *Doctoral Forum: National Journal For Publishing And Mentoring Doctoral Student Research*, vol. 3, no. 1, pp. 1-6.

Romano, M. T2003, Empowering teachers with technology: Making it happen, Scarecrow Press, Oxford