

Technology Integration in ESL Classroom: Advantages and Challenges

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ABSTRACT

This study aims at identifying the emerging trends of technology integration, and the potential advantages and contributing obstacles in the domain of English as a second language (ESL) learning and teaching. The advantages of technology integration in ESL learning were examined in the Pakistani context. The data was collected from 10 ESL teachers through semi-structured interviews. This qualitative study employed a thematic analysis technique to figure out the advantages and obstacles of using technology among participants. The findings of the study shed light on some advantages including opportunities to take online tests and quizzes, the ability to answer the question immediately, to improve grades in English tests and assignments, to foster collaboration and independent learning, and to improve English language in terms of receptive and productive skills. However, the current study also highlights some obstacles in relation to technology integration in ESL learning such as the evolutionary nature of technology, appropriateness of tools in use, availability of the resources, and familiarity with the rapid technological advancements.

Keywords: Technology, Advantages, Obstacles, ESL, Pakistan

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INTRODUCTION

In the English language classrooms, several technologies have been proven to be useful for practice. Several technologies can be used in English language classrooms. Furthermore, in order to expand the use of technology, education ministries and universities have made sizable investments. In his study within developing countries, Abbasi et al. (2021) focused on the prevalence of technology utilization in teaching practices and daily routines. The findings which established itself as a regular component of educational and daily activities suggest that the integration of technology has become commonplace. It has also been indicated in the study that the adoption of new technologies is perceived as beneficial by both students and educators. However, due to some obstacles, Cho Han et al. (2018) emphasized the reluctance of teachers to incorporate technology into their English as a Second Language (ESL) teaching and learning methodologies. Literacy instructors should carefully explore a range of pedagogical strategies to improve writing skills through the effective use of technology as a medium of instruction (Ganapathy & Kaur, 2013). In advanced countries, the integration of technology in English language acquisition is increasingly recognized as significant. The success of this integration however hinges largely upon the proficiency and familiarity of teachers in effectively aligning and incorporating technology with educational objectives (DeCoito & Richardson, 2018). Additionally, it is no longer a primary concern of whether or how much technology should be utilized in educational settings, given its widespread availability across various contexts. Instead, the focus has shifted towards determining how technology can be effectively employed to enhance student outcomes and experiences (Dahlstrom & Bichsel, 2014). Teachers today have a difficult task of increasing students' educational engagement through the use of technology that not only suits their needs but also their expectations. Identifying students and current technological environments and behaviors is the first stage in this process, which will allow decision-makers to be well-informed about the technologies, as well as the related infrastructure and support, that can help students succeed (Bichsel, 2014). As a result, conclusions from relevant studies cannot be applied to contexts in poor and less established countries, where ICT capabilities and infrastructure are scarcer. Pakistan is still a developing nation, ranking 142nd out of 166 economies in the worldwide ICT rating (Baloch, 2014).

ESL teachers in Pakistan infrequently incorporate technology (Islam, Ahmed, & Hassan, 2020). Despite innovative technology-integrated teaching applications, teachers are still relying on traditional teaching methods (Omar, 2014). A study conducted by Soomro et al. (2016) in Sindh, Pakistan, highlighted that educational institutes are still running based on traditional teaching practices. However, using technology in the classroom can never be done without problems. To benefit working teachers and researchers, this paper endeavors to examine both the advantages and challenges associated with the integration of technology in educational settings. It also provides them with some very important background information and useful tools. Technology integration motivates both learners and educators and also enhances their technological pedagogical knowledge (Bedr, 2019).

LITERATURE REVIEW

In Pakistan, there exists a notable gap in research pertaining to the adoption of innovative teaching methodologies and Technology-enhanced learning practices. Previous studies conducted in this domain (Hussain et al.; Zaheer, 2016; Arif; Kanwal, 2016; Javed; Bhatti, 2015) predominantly focus on the utilization of social networking platforms by students and teachers, both within educational and non-educational contexts. Additionally, the general

internet usage patterns among tertiary students were further explored in these studies (Mahmood, Shafique; Bashir, 2016). Furthermore, digital competencies are not only based on ICT but also skills, proficiencies, and the right training for effective use (Shanab & Al-Jamal, 2015). According to the data provided by the United Nations, only 10% population in Pakistan has access to basic internet facilities. Despite English being designated as the second official language in the country, it is spoken by only a small minority of the population. In most of the Pakistani educational institutes, students come from two separate educational backgrounds; Learners are exposed to a variety of stimuli that encourage activity-based learning when technology is used for teaching. Technology makes learning more interesting and helps teachers and students have better understanding of the media. It expands what students can learn in the classroom and gives them reasons to create things. Educators must be familiar with the technology to engage the learners in the classroom and teach language effectively (Ali & Azhar, 2018). Content for education based on technology knowledge characterizes this new hybrid educator, who must find their place between the intersections of these traits. Innovative methods that are almost entirely focused on technological integration in language teaching are used to teach technology in the most efficient way possible, (Hussain, Nawaz, & Bhatti, 2022).

All of these learning styles task-based learning, project-based learning, computer-mediated learning, content-based learning, and vice versa require teachers to have a broad knowledge of their subject areas. Numerous academics, (Piyush, 2018; Moubayed et al., 2018; Almukhalafi et al., 2024), have focused on improving and streamlining the currently used practices and methodology in addition to presenting and testing out current teaching techniques. Technology helps teachers to give prompt feedback to the students; mainly to teach writing skills (Nawaz, Hussain, & Qureshi 2022).

As globalization advances, teachers must be able to adapt to new technology developments and meet the heightened expectations for handling complex problems. In educational environments, it is imperative to shift away from fact-based traditional lecturing and toward participatory teaching. Electronic feedback is gaining significance drastically, particularly in language acquisition this feature of technology is assisting teachers to replace traditional assessment methods with innovative techniques and tools in the ESL landscape (Nawaz, Hussain, & Bughio, 2022). In this connection, Khokhar and Javaid (2016) underlined related results in Pakistani settings and reported that due to unclear policy on technology integration and teachers training and the dearth of technological support in educational institutes could be a contributing factor in the minimal use of technology in educational practices.

RESEARCH OBJECTIVES

- 1: To explore the advantages and experiences acquired by English teachers through technology integration in language teaching
- 2: To identify and analyze the obstacles confronted by teachers integrating technology for English language instruction.
- 3: To formulate strategies and solutions for overcoming obstacles in the technology integration in the ESL classes.

RESEARCH QUESTIONS

1. What advantages and experiences have English teachers gained through the integration of technology in ESL education?

2. What obstacles do teachers encounter in integrating technology for English language instruction, and how can these challenges be analyzed?
3. How can strategies and solutions be formulated to overcome the obstacles towards the integration of technology in ESL classes?

RESEARCH METHODOLOGY

This study employed a qualitative design based on face-to-face interviews to gather the data. The teachers teaching an Academic ESL course at a public sector university in Pakistan were included as participants in the study.

PARTICIPANT SELECTION

A purposive sampling technique was used in the study to collect the data. Participants of the study were informed that they needed to answer questions regarding their experience, challenges faced, and advantages of utilizing technology-integrated teaching. All responses of the participants were recorded and later modified to clarify participants' responses. The total number of participants was ten (English lecturers). The choice of the participants was based on the inclusion and exclusion criteria:

INCLUSION CRITERIA

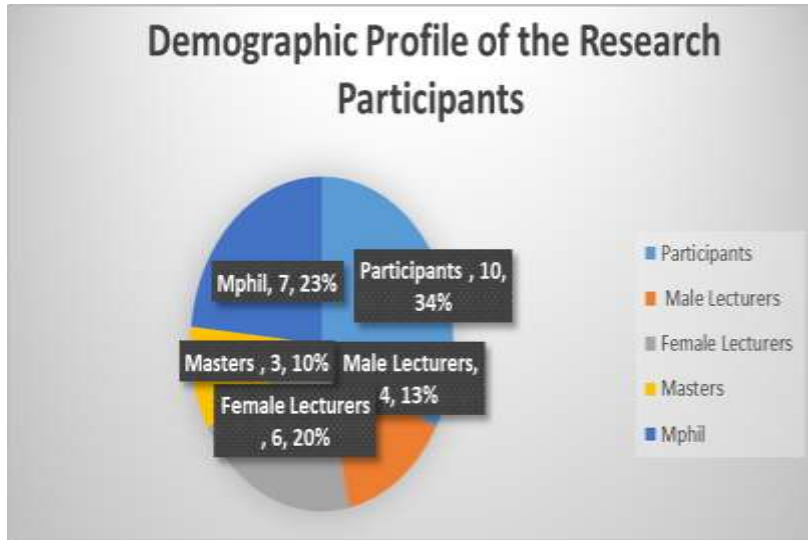
Minimum of 4 years of teaching experience.
Relevant qualification and educational background in English Language teaching and learning.
Currently employed in a public sector university.
Demonstrated experience in utilizing technology in English as a Second Language (ESL) classes.
Capable of answering questions related to the study.
Willingness to participate in the study.

EXCLUSION CRITERIA

Less than 4 years of teaching experience.
Employment in a non-public sector university.
Lack of experience in integrating technology in ESL classes.
Inability to answer questions related to the study.
Unwillingness to participate in the study.

Figure 1

Demographic profile of the research participants



RESEARCH TOOLS AND DATA COLLECTION

Recordings and interview forms were used as the main instruments for the study. The face-to-face interview technique was used to collect information, opinions, and perceptions of the target respondents. The face-to-face semi-structured interview technique was used to collect the data for the study. Additionally, a recording device was used to record interviews of the lecturers. To test the reliability and validity of the instrument expert judgment was employed. All the collected data underwent transcription and a coding technique was applied. The collected data is elucidated systematically and presented in the discussion and findings section.

RESULTS AND DISCUSSION

1. What advantages and experiences have English teachers gained through technology integration in language teaching?

The interview results revealed that there are numerous ways to use technology in the ESL classroom. Detailed information is provided in Table 1, and is based on the respondents' perceptions and experiences with technology-integrated instruction in ESL classes.

Table 1

Experiences and -benefits of Technology-integrated ESL instruction

Table 1: Experiences and -benefits of Technology-integrated ESL instruction	Indicator	Freq. *	%*
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E-Learning Platforms	E-learning platforms provide innovative and advanced ways of practicing all four language skills and also give quick feedback to the students.	7	70
Online tests and quizzes	Creating different kinds of tests online, having new features than traditional tests.	3	30
Optimized speed in answering questions	Awareness and practice of online tests and quizzes eventually improve the speed of the students to answer the online questions	4	40
Elevating performance and scores	Frequent use of online platforms helps enhance performance and boosts scores in the English language	3	30
Improved writing proficiency	Writing proficiency is improved by communicating online using different social media platforms, emailing, and watching movies or serials in the English language.	4	40
Improved proficiency Speaking	Having discussions with friends in English from different nations.	5	50
Improving reading and listening skills	Listening to the news in local accents and original pronunciation helps the students practice sounds, also reading textbooks and journals available with sound helps them improve both skills simultaneously.	2	20
Emailing	sending and receiving emails in English	4	40
Digital interactive presentation	sharing information using multimedia and other supporting material to deliver the topic in English	1	10
Virtual Learning /LMS	Through online or distance learning students can access the learning management platforms to learn the language that can be synchronous or asynchronous.	4	40
E-dictionaries and online applications for vocabulary search	With the help of different online E-dictionaries and mobile apps, students can enhance their vocabulary and search for unknown words.	3	30

In the context of language learning, seven out of ten respondents reported that the E-learning platforms provide great opportunities to practice all four language skills and get instant feedback regarding performance. These platforms introduce interactive platforms for the learners. Writing skills are refined through online communication tools. Consistent engagement enhanced overall language performance. The combination of different media outlets helps students improve their reading and listening abilities. Four respondents out of ten emphasized learning management systems to build language proficiency. It can also help the learners to equip themselves to learn independently. Finally, these multifaceted digital tools support vocabulary expansion and overall language development.

2. What obstacles do teachers encounter while integrating technology for English language instruction, and how can these challenges be analyzed?

Learning through technology offers several advantages to ESL learners. However, certain challenges obstruct the implementation of technology for language learning. Table 2 indicates

some of the obstacles faced by ESL teachers. The outcomes of the interviews are based on six themes: a) different kinds of technology b) Time allocation, c) Class size, d) rapid progress of technology, e), Reachability, and f) Attitude.

Table 2

Themes related to obstacles to technology integration

Table 2. Obstacles to Technology Integration	Indicator	Fre q.*	%*
Different types of technology	Selection and incorporation of technology pose challenges for ESL teachers.	4	40
Time allocation	Due to time limitations, ESL teachers seek a balance between teaching workload and integration of advanced technology.	3	30
Class size	Conducting and managing a large class with technological integration can be problematic.	4	40
Lack of Access to technological amenities	There is no equitable access to online material and other resources provided to the lecturers and students	7	70
The rapid progress of technology	As technology evolves it demands continual progress for ESL teachers. Updating knowledge and adapting the latest teaching strategies	8	80
Reluctance/ attitude of ESL teachers	Due to a lack of digital literacy ESL teachers are reluctant to adopt dynamic teaching strategies. However, teachers with a technological-oriented mindset explore creative ways to incorporate technology	6	60

OBSTACLES TO TECHNOLOGY INTEGRATION IN ESL CLASSROOM

Despite the fact that the advantages of using technology in the classroom are regularly emphasized, it would be impossible to believe technology fully adjusts the way that individuals learn or teach languages without first facing and surmounting some challenges.

DIFFERENT TYPES OF TECHNOLOGY

The nature of technology is crucial and due to its evolving nature, the selection of appropriate technology always creates a challenge for ESL teachers. As selection of language learning sites, tools, and platforms is a problematic part. The sustainability of technological integration in the classroom is sometimes hindered by the complexity or unfamiliarity of the tools utilized.

TIME ALLOCATION AND CLASS SIZE

The experiences recounted by respondents regarding time allocation and class size underscore the notion that smaller class sizes afford educators sufficient time to plan activities and learning resources. Furthermore, smaller classes offer multiple opportunities for the seamless integration of technology. Lecturers find it difficult to use any innovative technique due to limited time allocation and responsibility to complete the syllabus. Most of the lecturers emphasized dividing the class strength into sections. Large classes refer to less individualized attention, small class sizes and adequate time allocation allow educators to familiarize themselves with technology and incorporate the classes.

LACK OF ACCESS TO TECHNOLOGICAL AMENITIES

Since most of the students and teachers are deprived of basic technological facilities in the schools, they cannot afford to have stable access to a computer with an internet connection. This is a dilemma and a significant disadvantage for the learners and the instructors (Coghlan, 2004). Additionally, if they have access, sometimes teachers who are not trained and updated to use the technology can create a negative impact and students can suffer badly. According to (Gips et al., 2004; Lai & Kritsonis, 2006 & Meskill, 2000). The lack of knowledge on the teacher's part can also lead to the low frequency of technology use.

RAPID PROGRESS OF TECHNOLOGY

The rapid progress of technology demands a transformation in the way we learn and work. Technological advancement is introducing innovative technological tools in the field of education. Educational technology is changing frequently and validating professional training for teachers. This progress in technology underscores and highlights the value of fostering a culture of continuous teaching and learning with some courses or programs for ESL teachers to stay abreast of contemporary trends.

RELUCTANCE/ ATTITUDE OF ESL TEACHERS

Based on the results of the studies on challenges inhibiting the incorporation of technology in ESL instruction, the attitude and reluctance due to insufficient training of teachers was a substantial obstacle in the academic world (Saxena, 2017). As they perceived technology as a disruptive force, some instructors were resistant to any reforms (McGrail, 2005). Teachers' dearth of self-confidence was a consequence of their anxiety about failure or their absence of familiarity with technology. Teachers in the relevant studies stated that they were reluctant to use the technology as they felt students were not capable of grasping it. The educators stated that there was hesitation to employ technology in the ESL classes if they could not trust its impact on the students.

LEARNERS' MINDSET

In response to the obstacles, four lecturers said that sometimes it is difficult to mold the behavior and mindset of the students regarding the use of technology in the classroom. Additionally, there is a need to look into this matter and identify ways to encourage students to learn in a technology-based classroom. However, in today's digital world, most of learners react positively toward technological integration. Many academics, in contrast, are more worried about students' responses regarding the application of technology in ESL classes. That concern is valid because technology has a deeper impact on students' motivation and reaction in the learning practice. The use of technology demands time, and keeping in view the latest advancements in the education field which can never be neglected. This shift is more positive while coming up with achievements and success in academics.

1. How can strategies and solutions be formulated to overcome obstacles integrating technology in ESL classes?

The incorporation of digital technologies in ESL instruction is crucial. This shift is not sudden, but an intimation to promote diversity and change in the teaching and learning process. Furthermore, Covid-19 has acted as a catalyst and accelerated the integration of digital tools in teaching. The current landscape of education necessitates the usage of digital technologies for both learners and teachers. Despite numerous obstacles and benefits, certain barriers need to be discussed to propose solutions.

Table 3 is based on strategies and solutions to overcome challenges in incorporating technology in ESL classrooms. The themes are related to a) professional development b) LMS/ Synchronous and Asynchronous learning/self-assessment, c) the Long-term impact of technology, d) Technology enhances student motivation and can resolve various language learning issues, e) Resistance to Change, f) Insufficient technological structure, g) literacy gaps, h) A move in ESL teaching and learning, i) Fun activities for motivation, j) Reduce anxiety level of the students

Table 3

Strategies and solutions to overcome obstacles in the integration of technology

Table 3. Strategies and solutions to overcome obstacles in the integration of technology	Indicators	Freq. *	%*
Professional development	Teacher training programs should be arranged by the university.	8	80
AI integration in ESL education	Integration of AI language learning platforms	7	70
LMS/ Synchronous and Asynchronous learning/self-assessment	LMS facilitates both synchronous and asynchronous teaching and learning and provides a self-paced learning platform.	4	40
Long-term impact of technology		5	50
Students Motivation	Various issues related to learners' motivation and interest can be overcome with the integration of technology language learning issues.	4	40
Digital Labs	Digital learning labs provide advanced tailored and adaptive learning	9	90
Lifelong learning /Holistic technological literacy	Technology integration requires lifelong learning and effort so most of the teachers are reluctant to embrace change.	3	30
Adequate technological tools	There is a need to improve the infrastructure and suffice the technological necessities of the learners and the teachers.	7	70
literacy gaps	The literacy gap affects teachers' ability to access information and hinders quality education.	4	40
A move in ESL teaching and learning/ Shifting paradigms	Technology integration is a swift move in ESL education and its importance should be recognized.	7	70
	Shifting from old to innovative teaching reduces the language learning anxiety level among the students. Using technology is a compulsion, a shift from traditional to advanced teaching methods.	5	50
Contemporary techniques	Contemporary techniques facilitate effective teaching and learning process.		

Electronic feedback

Technology can be used to assess and provide feedback to the students.

PROFESSIONAL DEVELOPMENT OF TEACHERS

Several teachers are of the view that factors such as an absence of teacher preparation, expertise, and experience are obstacles to effective internet usage as a web-based knowledge platform. Numerous scholars reached a decision that instructors need to increase their computer literacy to competently use technology. Admittance to technology does not guarantee and increase learning if teachers are allowed the liberty to utilize technology as a teaching tool. Technology will be underutilized, according to the study on professional mobility of teachers it requires the teachers to be proficient in English to use technology. Teachers lack the skills, knowledge, and attitudes required to integrate it into the syllabus. Most of the teacher training programs are not focusing on the integration of technology in ESL teaching. Eight respondents pointed out that there are gaps in the training provided to the teachers, there should be separate training and professional development programs for ESL teachers to cope with diverse literacy demands.

AI INTEGRATION IN ESL EDUCATION

AI-integrated learning platforms can tailor the lessons and exercises according to the needs of the students. Students and teachers should be encouraged to use them to enhance language learning abilities. It facilitates language understanding and rectification. Seven out of ten teachers emphasized that these tools can reduce the workload of the teachers and facilitate the teaching and learning process.

ASYNCHRONOUS AND SYNCHRONOUS LEARNING/ LMS

Students now require "modified," "pleasing," and "valuable" responses in actual time that give them and their teachers the chance to recognize their learning grid. Traditional teachers were more focused on hit-and-trial methods and consequences, whereas systems were teacher-centric. Teachers can construct online quizzes and upload learning materials for the students in a synchronous and asynchronous class.

Technology and real-time feedback help both the teachers and the students to understand their current abilities as well as to plan better to overcome their learning disabilities in the future. Teachers can also design and plan their lessons keeping in view of the specific needs of the students and upload worksheets and assignments in learning management systems (LMS). Technology enables teachers to use a variety of tools in the classroom, they can also create individualized learning plans. Technology not only supports or assists teachers in delivering lectures but it also facilitates them to go for innovative assessment methods that eventually motivate the students.

SHIFTING PARADIGMS

Most of the respondents were of the view that there is a shift in pedagogical approaches and methods. Due to the lack of digital proficiency, teachers are unable to cope with ongoing pedagogical changes. Fear of losing familiar methods and learning new methods is hindering the ability of teachers to integrate technology into their language classes. In this connection to

resolve the issue, it is important to plan strategically to integrate technology into the ESL classes. Educators should be enabled to share their concerns and problems easing the transition into technological-integrated classes. Technical support should be provided to the teachers. Additionally, different teachers should be highlighted to inspire and motivate them with success stories.

LONG-TERM IMPACT OF TECHNOLOGY

Technology is leaving a lasting impact on the educational landscape. Its long-term impact is exceeding and shaping the future of teaching and learning in multidimensional ways. Technology facilitates teachers and students to connect and collaborate globally. Keeping in view the evolving nature of technology, respondents of the study emphasized that, teachers and students should engage themselves in life-long learning by staying abreast of innovation in the arena of ESL teaching and learning.

STUDENT MOTIVATION

According to Morat, Shaari, & Abidin, 2016, most ESL teachers adopted engaging teaching strategies based on rapid technological growth. The purpose was to provide engaging classes by utilizing innovative technological approaches. It was observed that motivation is the biggest factor affecting the success of ESL education. Motivation is playing the role of a stimulant to achieve any particular goal. It was found that intrinsic motivation is linked with the well-being of a person, however, extrinsic motivation originates from outside sources (Ng & Ng, 2015). Similarly, lecturers in the current study emphasized that” Technology can provide fun-based classroom activities for language learners to cope with issues related to language motivation.” Technology improves the enthusiasm level among the students since fun and games based on technology are introduced into classroom teaching. Fun and games are essential while learning a language as they enhance the motivation and boost the interest level of the students. It can also increase students’ performance and participation in the classroom.

DIGITAL LABS

Nine out of ten respondents stressed the need for Digital labs for language learning in public sector universities in Pakistan. These labs can benefit both teachers and the students where they can progress at their own pace. Learning can receive pertinent instruction. Digital labs can offer several materials and tools for the learners’ understanding and use in different contexts. These tools can also provide platforms for virtual communication practice.

LIFELONG LEARNING /HOLISTIC TECHNOLOGICAL LITERACY

Teachers should realize the crucial role of technology in ESL classes. Competency in using technology requires proficiency in technologically integrated teaching instructions. They must know how to monitor students while using technology in the classroom. Teachers’ holistic development of in technology facilitates alignment with pedagogical goals.

ADEQUATE TECHNOLOGICAL TOOLS

Most of the respondents shared that access to technological tools is the main barrier and for its eradication, adequate tools must be provided to learners and students in an ESL learning environment.

LITERACY GAPS

The literacy gap is a challenge in achieving preferred teaching outcomes. These gaps should be addressed and it requires the targeted intervention of the educational institution to ensure that all ESL teachers hold relevant degrees in their respective fields. Most of the senior teachers have limited exposure to diverse ESL teaching methods in public sector institutes in Pakistan.

A MOVE IN ESL TEACHING AND LEARNING

Recent advancements in education and technology have greatly accelerated the language teaching and learning approach from teacher-centered to student-centered. It is very important to meet the needs of the students who are digitally advanced and mature. Therefore, as there is a shift or move in the role of a teacher; they must act as facilitators and guides rather than the traditional bench-bound teachers.

INTERVIEW RESPONSES

A respondent shared that:

"I felt demotivated and tired because I spent too much time selecting appropriate technology to use in the classroom. I had never used any tools in the classroom, and the opportunity to practice and incorporate technology is limited when there is an excessive workload and no training is arranged by the university. Additionally, there is a lack of encouragement for ESL teachers to utilize evolving technology." (Lecturer 7).

This statement highlights the feeling of dissatisfaction and demotivation, outlines challenges to incorporating technology in ESL classrooms, and also emphasizes the issue of limited support and facilitation from the university for ESL teachers in terms of teacher training.

A respondent specified that:

"In the realm of ESL teaching, teachers face a myriad of obstacles in integrating technology. Usage and selection of appropriate technology become a critical aspect, particularly in diverse Pakistani English classes". (Lecturer 5).

A respondent highlighted that:

"I feel challenged to select the technological tools because I have a lack of knowledge about the tools. As technology integration requires thoughtful planning and consideration, I always try to balance the workload and manage time to learn about the latest technological tools, unfortunately, it's challenging without institutional support".

A response discussed that:

"Due to the teaching workload, there is not enough time to integrate technology in the classroom" (Lecturer, 1).

Five respondents said that “*the class size also creates hurdles to incorporate technology in ESL classrooms*”. They have shared that “*in some courses, there are 100 students in a single classroom varying level of students in terms of age, and ability to use technology and it’s challenging to integrate technology as well as monitor each student*”. (Lecturer 3, 5, 8, 9, 10).

Seven out of ten lecturers were of the view that “*financial limitations including the cost of acquiring technological tools at public sector universities present constant obstacles for ESL teachers to get proper access to technology. Furthermore, most of the lecturers are incapable of using technology. They are reluctant to use technology due to a lack of knowledge and training about technological tools. Educators feel that they should be provided with training to enhance their understanding of the tools*”.

CONCLUSION AND RECOMMENDATIONS

The current study has made an effort to summarize the benefits and obstacles of using technology in today’s language classrooms to make the best use of its benefits for language learning and teaching. Adequate provision of technological tools is paramount in the development of digital literacy for ESL teaching and learning and individualized learning. The paper emphasizes language practice through innovative tools to foster a dynamic learning environment. Finally, while a scalable and sustainable approach ensures the adaptability and longevity of technology integration, English language classes can be shaped into engaging and effective spaces for language acquisition through technological adaptation. The outcomes emphasized the need for stakeholders to take necessary steps to upgrade technology-based infrastructure and assistance for educators and learners. Furthermore, the findings of the study provided the direction for ESL researchers and relevant stakeholders to address the barriers.

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