ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

Technology Integration in English Language Teaching and Technological Competencies of English Language Teachers

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Abstract

This research study attempts to investigate how ICT can be applied in the teaching of the English language with special emphasis on the improvement of the technological competencies of the teachers. The education sector, through the digital transformation that education has undergone and speeded since the COVID-19 campaign; there is a great imperative for sound sets of technological competencies among English language teachers. This encompasses elementary computer literacy, digital applications in teaching, online grading systems, and efficiency in managing digital content. The research supports the following: technological competencies can arouse and involve learners, personalized learning, and access to authentic information in ELT. This study employs a mixed-method approach with quantitative measurement of student reactions through large-scale online questionnaires, and interviews for qualitative inputs concerning the technological skills of college and university teachers of the English language. Generally, the findings suggest that the teachers have attained fundamental high digital operational and content preservation skills but are confronted with problems such as poor infrastructure, inadequate training, and lack of digital equipment.

Regarding this issue, the research has been calling for comprehensive professional development programs, better technological resources, and continued support in the form of clearing the challenges as described. Some of the insightful recommendations to be found in this proposed paper include targeted training programs on upgrading digital literacy, investments made into educational technology infrastructure, encouraging a community of practice among educators, and further research studies to assess if the integration of ICT in ELT holds significant long-term benefits. This paper will develop objectives that reflect an intention to create more inclusive digital learning environments within the area of English language education.

Keywords: Information and Communication Technology, English Language Teaching, technological skills, digital literacy, professional development, educational technology, online learning, digital content management, teacher training, COVID-19 pandemic

Introduction

Information and Communication Technology consists of a set of electronic tools and equipment for data transmission, processing, handling, and sharing of information in its digital form. These include internet, computers, digital application, broadcasting technologies live and recorded, telephony, video conferencing, and webinars. Technological competencies can be defined as the skills required to use effectively the tools that are determined to be available during teaching. In this study, technological competencies refer to the educators' skills in teaching and implementing the use of the English language through digital channels available in a classroom, such as

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
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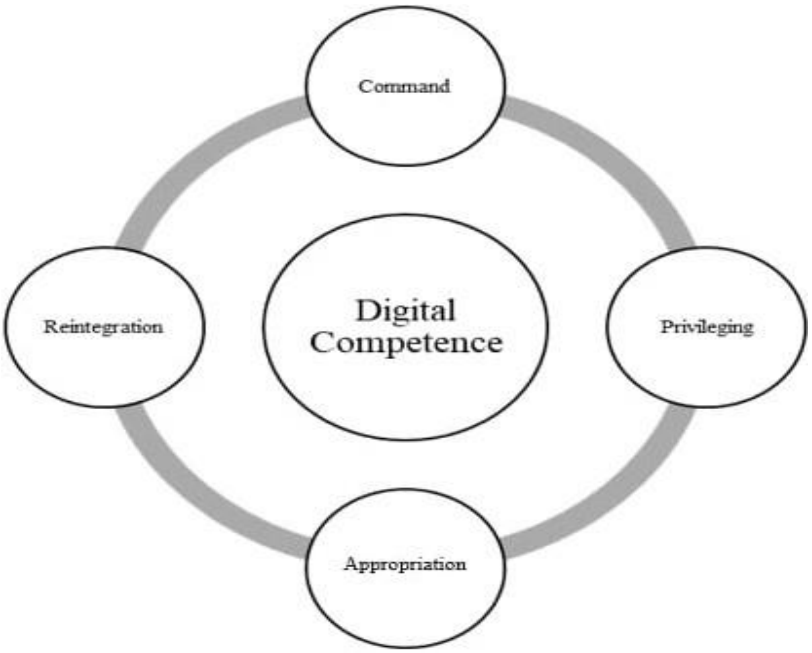
computers, software, applications, and web-based grading systems, assessment, and content management.

Technological competencies is the term that refers to the set of an individual's abilities to tackle technology. Here, the word referred to capabilities and expertise that the English language teachers



utilize for dealing with digital mediums in an English language classroom. The study in the technical competencies of English language teachers measures the very basic understanding and knowledge regarding computers, software applications, online grading systems, badging, assessment, task management, content management, and digital assessment through different channels that an English language instructor of the 21st century Bhattacharjee & Deb (2016)

Background of the Study

This is much recognised problem of incorporating ICT with education: its origin is an integral part of modern education. Its implication has been felt most importantly since 2004 because integrating technology into education was taken from then onwards as a prime educational policy. Policies had by 2010 been engineered for the avowed intents to make students' skills levels improve to be effective when teachers introduce such technological integration into classrooms. The digital age has changed education and ELT from the use of traditional tools to using new digital tools that aid learning experiences and outcomes as presented in Figure 1.1.

Figure 1.1: Systematic Cycle of Digital Competence

Therefore, the digital age, being founded on emerging technology on continuous basis, has already changed the courses of the world of education revolving around the four dimensions of reintegration-favor, appropriateness of content, and mastery of subject with relationship with technology being considered as one check list for the digital competencies of teachers. Information and communication technology has also changed the very process of education on a dramatic scale. ELT is by no exception to that chain. The educationalists realized that the great potential of

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
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technology across the world can improve the experience of learning the language for more engrossing results. From ICT, a rapid change was observed in teaching practices since the covid-19 pandemic. This medium comprises of digital mediums such as mobiles, devices, online software, and projectors that incorporate motivation, innovation, active engagements of students, and collaborative activities, digital exposure, and personalized learning experiences along with digital efficiency into the English language teachers and learners. Through the advancement of technology and its incorporation in the educational field, access to authentic information, visualization materials, and platforms in the domain of the learning of languages is plausible today. These combined advances have streamlined learning and pedagogic practices into a rich and extravagant projectory. For example, although it would be highly in demand for successful integration of technology in language classrooms, trainings, capabilities, and skills of the teachers who teach English language were of extreme importance. Tech-based pedagogy refers to the use of electronic or digital tools, media, and resources to enhance the learning experience of a student, as well as enhance the teaching experience of the teacher. A teacher will supervise and coordinate instructional assistants to enhance effective learning in addition to selecting the technology that has been based on a preference for learner's needs, according to Virtual technology.

Pedagogy Technology

The meaning of instructional technology has to do with related knowledge studied in an educational study. That is designed to enable teachers to know the implication of the connection, according to which, the technology implementation process deals with a series of inter-related operations thus a bit complicated. The aim of this article is to explore those processes and encourage thoughtful practice by teachers and others who are going to integrate technology. According to Lever-Duffy, McDonald, and Mizell (2005), educational technology can be "media, models, projected and non-projected visual, as well as audio, video, and digital media" (pp. 4, 5). The authors further advance the possibility that a subset of instructors may settle on a more constrained view, wherein only computers, computer peripherals, and ancillary software are to be regarded as educational technology that supports the work of instruction (pp. 4, 5). This definition excludes pedagogical concepts, which guide the integration of multiple technologies within educational investigation. Instructors need to apply multiple instructional

Strategies and students need to be primed to enact what they have learned, as well as to think critically in judging and revising what they have learned. In short, teachers need to be placed to put students into a learning situation that is exploratory and challenging. Teaching and learning should serve the function of enabling learners to learn and then apply what has been learned in generating new knowledge says Bruner in 1966.

Instructional software

Learning Management system: The learning management system is where a teacher stores and shares documents with other teachers, parents and their respective learning institutions.

Student information system: Teachers can monitor the progress and performance of their students through student information systems, or SIS technologies, which collects and maintains students' personal data.

Classroom Management software: It enables the teachers to develop some learning plans and increase students' participation through classroom management software.

ISSN E: 2709-8273
ISSN P:2709-8265
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Teachers Evaluation Software: Even through assessment software, the teachers can create and grade their exams over the internet to benefit the learner in getting better results in a class.
Digital Worksheets: this is special online software that comprises digital worksheets, handouts and homework assignments or any individual task assigned to the learners can be done smoothly and the instructors one the other hand evaluate and assess it directly through the system .

Importance of Technological Competencies

Technological competencies of English language teachers are important to operate and provide content nicely in digital classrooms. The range will be extremely rudimentary computer literacy to application and use of digital platforms with far more sophisticated abilities. Technological use in language teaching is a tool which indeed influences motivation, engagement, and information access about personalized learning, yet still limited to the effectiveness of a well-trained capable and skillful English language teacher.

Technology Integration Barriers

There are many barriers that stand before English language instructors as they try to integrate technology into their classrooms. First, among them is with regard to a limited number of digital equipment and inconsistencies with reliability in accessing the internet. Early accounts that relate to integration included establishing digital equipment; but most of the students today still do not have access to computers making it hard to enforce technology in classrooms. In addition, teachers should be trained to determine the good and bad use of technology.

Research Questions and Objectives

This paper answers the following research questions;
1. How well aware is it of the content of English language that knowledge of technology is applied in teaching ?
2. How effective do English language teachers teach material contents in virtual classrooms?
3. What is the technological skill for working English language teachers?

The objectives of the study are to measure technology competency as reported in the literature, to assess information technology literacy among English language teachers, determine the effectiveness of digital content delivery, solicit instructor feedback, and identify areas of professional training needed by the English language teachers.

Literature Review

ICT integration into educational environments has undergone a lot of scrutiny, and research has over and over emphasized the importance of digital literacy and technological competencies in teachers. Research reveals that digital competences are highly significant in teaching languages effectively before, during, and after the COVID-19 pandemic. TPACK has been cited as an invaluable framework in integrating technology into the learner-centric strategies. However, poor infrastructure and lack of training together with resistance to change remain as immense challenges; this especially holds for developing countries. Information and communication technology has made a tremendous impact upon the field of education.
Computer literacy generally means the ability to utilize and exploit computers and other technologies. Digital literacy uses digital technologies and resources for communication, creativity, and collaboration. Digital literacy refers to the capacity to discover, develop, and

ISSN E: 2709-8273
ISSN P:2709-8265
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leverage the digital content or information. There have been several research studies that took into consideration the relationship of technology in education with the digital competencies of the English language teacher. For example, Ng et al. (2023) showed how digital competency for teachers was essential during the pandemic and post-pandemic periods to achieve digital competencies and to create an accessible classroom. The process of language learning and teaching depends on providing and processing the appropriate information and material so that notions are clear.

The institutions and teachers were not prepared for virtual learning in the work by Asrizal et al (2022).The pandemic, Covid-19, has altogether turned the world upside down since it struck many areas of society, including education, back in March 2020. More than this, a survey showed that the teachers of the English program were very confident when they used digital technology to support their teaching inside and outside the classroom. The participants accepted that they needed a higher level of digital literacy status and even looked for more capabilities Nelson & Voithofer (2022).

The last research studies that were carried out in Abbottabad at the secondary level English language classroom, teachers were reported to have been found holding a very positive and welcoming attitude towards technology use within the classroom and were found trying to acquire and equip themselves with the digital skills Abbasi et al. (2022). While considering information and communication technology integration and technological understanding is necessary but content management in online learning or digital learning is a challenging task, keeping in view that many of the models are applied by the researchers to fit in the context and content digitally in equilibrium, for instance, a Technological and pedagogical content management knowledge TPACK is a multi-modal that involves motivation, engagement, content, and digital literacy in education system of twenty first century needs Anderson & Kyzar (2022). Owning this modal and keeping in view the COVID-19 pandemic, education trends rushed from traditional to an online mode which was a newly emergent state and the grounds of digital experimentation for teachers and students. Besides, research further suggested that the TPACK model should be adopted in professional development programs to help teachers enhance their TPACK in order to integrate information and communication technology into their teaching strategies. Aslam et al. (2021).

On literature, the 'emergency remote teaching" has attracted so much attention and emphasis during the Covid time. Emergency remote teaching refers to the diverse learning environment introduced by COVID-19. Hazaea et al. (2021).

This list contains integration of technology. It is noted that, while integrating mobile technology-goes in language learning, the feeling of autonomy and empowerment towards more motivation among learners were improved Insane (2021).

This study was conducted in the same stream with the purpose of developing an innovative curriculum for training learners to teach as a language teacher in a foreign language using several digital technologies. A descriptive and analytical approach to research was used in another study. For those who would become teachers of foreign languages, literature particularly prepared for a series of topics of researches and in-service courses for teachers were read. In addition to others, the year-round activity in English was introduced with aspiring foreign language teachers involved in curriculum development and ICT-based instruction delivery. A pilot study was conducted to validate these approaches. It has been demonstrated to the students that they can finish the assigned tasks much faster, and learn how to work with and manage digital media much better, if aided with such an all-embracing approach from the authors. Biletska et al., 2021

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ISSN P:2709-8265
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However, it has many resiliencies in developing countries especially Pakistan. These include lack of infrastructure relating to technology Akram et al. (2021), lack of electricity as well as internet, awareness and technological knowledge Asad et al. (2021), and inadequate training of the instructors in institutes Abbasi et al. (2022), Instructors opt for devices that make up their approaches, thus, changes in the system need pedagogical principles to be modified. As the contemporary, progressive pedagogical approaches suggest, knowledge of technology incorporation may be acquired by taking into consideration the views on technology application represented by faculties. In this context, the very aim of this investigation is to study the issues related to the fact that teaching instructors perceive benefits from the integration of ICT in their teaching and learning approaches, their willingness, attitudes, and problems J. H. Watson & Rockinson-Szapkiw (2021).

Pakistan has also been aware of the significance of ICT in education. This can be derived from the formal education policies wherein it can be asserted that there is a visible approach of the government for inducting ICT into the processes of teaching-learning and building up this activity according to global demands. Pakistan's Ministry of Education, Akram (2020).

Studies about the assimilation of information and communication technologies into the technological competencies of teachers in Iran show to what extent choices have been exponentially increased for language teachers to take up online applications and instrumental proficiency in demanding contexts such as in the case of the Coronavirus. The EFL teachers have thus been exposed to a myriad of problems while teaching languages due to the developments in technology. The study completely explored the issues EFL teachers faced while implementing virtual classrooms in the midst of the coronavirus pandemic, especially about Iran. Almost 30 EFL teachers from schools for English languages in Iran were considered to be respondents in the research study. According to the research study, two prominent domains are focused: the efficacy of online learning under coronavirus pandemic predictions and integration of technology. The findings revealed that although Iranian EFL instructors, in theory, were able to successfully execute the applications and hone a variety of intricate exercises which they experienced while facing a number of obstructions such as the fund and support for langu age schools, learners' apathy, and lack of motivation toward online learning, in addition to the school instructional resources not being suitable.

But on the other hand, however, most Iranian teachers have accepted the technology and have also commented that it is sometimes useful to fill in the gap between students and lecturers. Khatoony & Nezhadmehr 2020

In the United States, many studies have been conducted to show how educators' pedagogical modeling impacts great changes in improving the preparedness of teachers in using technology for learning among students through the TPACK model within educator technology integration educational practices. Existing programs on teaching and training teachers into technology integration practices and how educators are practicing the TPACK model, which interprets technological, pedagogical, and content knowledge. Conclusion, to this paper was provided much-needed evidence to be able to investigate these inquires through analyses of 843 survey responses made by teacher educators from almost half of the country's authorized teacher education programs. The results indicate that teacher educators are now increasingly using technology in the classroom Voithofer & Nelson, 2020.

And other problems of the poor or uncompleted internet connection, old technology, low students' motivation, and inattentions, despite all problems, many language teachers supported application

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
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of the technology in online EFL classes. Conclusion The findings of this research are very important to help understand how to apply modern tools into online EFL classes, focusing on skill-based learning methods and setting up a reliable virtual connection with students and instructors. Hakim (2020).

A Turkish study aimed to discover, evaluate, adapt, and assess technology and content management for TPACK. Investigating attitudes of preservice teachers toward techniques of teacher education. Productive methods applying TPACK. In this research, 215 pre-service teachers who were involved in the last year of the teaching education and certificate teaching courses of three Turkish universities. TPACK practical scale and qualitative evidence scale which was validated in the Turkish context for this study, and the data sources. The model of the Qualitative evidence scale assimilated the patterns such as using teacher educators as role models, inculcating and integrating technology in education, designing advance digital curriculum, teamwork and patching up of peers and giving continuous feedback and assessment mechanisms. The study reflected uniform regression analysis with a positive correlation between the pre-service teachers' TPACK and the techniques of teacher education. The study proved that modeling and equipping language teachers came with more improved outputs and Technological and Pedagogical Content Knowledge (TPACK) proved to be most accurate and intelligent framework for implementing, evaluating, assessing, and executing in the digitally equipped classrooms Baran et al. (2019).

There is enough evidence that ICT has impacts on the outcome of language learning in a positive manner. For example, S. Li et al. 2019. proved that leveraging multimedia tools including interactive videos and online resources has been used in enhancing students listening skills and applications online about speaking. In the similar context, research has indicated that mobile integration used students' writing skills positively Lee et al. 2018. It has demonstrated some of the most significant developments which include sophisticated digital literacy, effective extrinsic motivators, and enhanced learning Ali & Azhar 2018).

Digital training in the teacher education programs for English instructors has been recorded as inadequate despite the clamor to modernize the English instructor with high abilities in digital literacy Kessler & Hubbard (2017). Additionally, the research suggests that games-based learning in the linguists learning platforms made the students highly active and intrinsically motivated Klimova & Kacet (2017). The subjects come from different walks of life by Gender and background experiences Al Khateeb (2017).

A research was conducted at Aagha Khan University in Karachi, Pakistan, Baluchistan province. Since its inception in 1947, the institute has been a trendsetter in modernizing and modernizing education in such a manner as to contribute to better engagement of students and make the learning process more rewarding. This paper focuses on the practices of SBSs, the head teacher, teachers, and students, concerning the integration of technology into secondary English language classes in Baluchistan. As the author concluded in the assessment, proper technical training should be given to dedicated educators (Higher Education Commission, 2012). It was earlier stated in the National Education Policy that all teachers should be ICT-enabled to enable them to effectively integrate technology into teaching their subjects (MOE-GOP, 2009). The ICT policy supported this and underlined the point (MoIT-GOP, 2012). Technological competencies are the knowledge, skills, and attitudes necessary for integration into the practice of teaching/pedagogic practices and learning.

Technical competencies in language teaching/instruction can be put into four aspects: computer pertaining literacy or hardware, digital literacy or software, and media or mass communication

ISSN E: 2709-8273
ISSN P:2709-8265
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related literacy. Therefore, the new or modern digital era comes along with technology within the classroom in which acquiring them is more important. Similarly, Buabeng-Andoh (2012) reported that the teaching and learning outcomes of the English language were positively related to teachers' computer and digital competencies. Studies in this area have set up a background to the discussions over the relationship between ICT and education with the establishment of a benchmark that has been based on discussion following almost forty years. There has been a rapid shift in the views surrounding this relationship and the discussions over it, which is commonly characterized as a shift in reliance from technology to learning. Even in this move forward into the future, however, many perennial problems persist and continue to thrive: identification of the process of learning, experience with or use of technology, and the teacher's involvement in professional development. More recent studies reveal how national policies and software support the learning environments aside from those issues, and all of them are about growing complexities of the situation and how the "take-off" is ironically not achieved. Future discussions should embrace lifelong learning, the ubiquitousness of Information and com- medication technologies in society, the digital world of youth, and ethical dilemmas of the said age D.

Watson (2006). A recommendation put forward by the National Committee on English established in 2003 was that the teaching of modern languages in Pakistani higher education should be assessed. The chapter relies on the outcome of an empirical study based on the effects and impact of the ELTR 2004 initiative, specifically within the context of English Language Teaching (ELT) in Pakistan. It is specifically focused on the practices and attitudes of English language teachers within the context of Pakistani higher education settings. More than a hundred English language teachers in public colleges and universities received training on CALL by HEC during this study. This study has used the method approach, which encompasses both the quantitative survey and qualitative methods, namely interview and document analysis, to assess the effectiveness of CALL training. As for the findings of this research, it may be concluded that educators in general have positive influences on the incorporation of technology into ELT. However, they mention some challenges they are going to face. Similarly, the chapter gives some recommendations for future working and studying activity. Inspiration is the key to success. Moreover, it is also desirable to obtain or expand its proficiency in another, foreign language. With these objectives, the students develop a positive attitude towards technology. Although the technology is a two-edged sword, its benefits more than offset its drawbacks. Surely, technology has affected English language teachers very positively. A few of these benefits are briefly discussed here, such as the availability of information and communication technology materials and reviving the educational field by making its content available on computers, the internet, and CDs. The students excel in the classroom setup where children are provoked or motivated to learn through technology and computer-based training packages on character and values.

This was particularly true if the learners could have control of their learning about technology. Similarly, Student Autonomy: technology offers a great chance. Students can choose any preferred or favorite language element(s) for effective learning through technology. In this context, technology supports a student-centered approach because these resources are provided to the students, which cannot be done with other approaches. In such a context, a language learner can practice at his or her own pace and way. Besides, authenticity provides a more authentic learning environment since there is a scope for a student to interact with others all over the world and, hence, impels them for language learning. This environment pushes them to use the language sincerely rather than cynically. The other effect which also makes it supportive for promoting

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
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teachers in the same stream is that it provides for relatively easy and quick due diligence, production, or storage of their contents. Here, time and effort can easily be saved as this data may be used for tests, quizzes, and exercises of the learners. The learner may expose himself clock-wise to language development. They will surely benefit by writing or editing their work correctly to produce a well-published piece. The investigation further asserts that computers encourage and challenge students to work beyond the classroom, introducing them to a setting where they can play language games, acquire more exposure to the language, and develop their language proficiency. Students would be able to reach into individuals from the rest of the world through technology and the internet. It also enables quieter or shy students to get involved more in class. Third, the increased contact between the instructor and the students increases the possibility of teaching being much easier in the addition of modern technology in class. The integration of technology in the classroom enhanced critical thinking and learning cooperatively. The inclusion of ICT increased self-assessment. Thirdly, most of the assessments test students' ability to write and read but pay no attention to their oral and aural skills. Computer-based programmes can help assess the listening ability of a student by assigning several tasks that require keen and in-depth listening. It has empowered their critical thinking and listening capabilities and motivated them to undertake the standard scoreboard tests like Tofel, Ilets, cert since many competitive examinations follow similar formats to test a student's command over the subject matter. The term "multimedia" has different meanings. Multimedia vices, according to some thinkers, are those that incorporate text and images. According to Stemler (1997) as quoted by Parveen and Rajesh (2011), multimedia devices include text, images, animations, or real video in English lessons. Chunjian (2009) defined multimedia as a group of pictures, video, text, animation, and sonic elements that were managed and controlled by computing. Given the wide and immense space of thoughts by scholars on the topic, multi-media is defined as computer-controlled machines that include text, sound, and images. It brings reality into the classroom. The use of multi-media in teaching English provides an opportunity for almost real-life scenario presentation in a classroom environment. Jayanthi & Kumar (2016). Methodology The current research work is adopted with a mixed-method approach, where both methods of gathering quantitative and qualitative data are applied. A survey questionnaire based on the TPACK model was administered to assess technological competency levels of English language teachers. Surveys were distributed among the instructors of the English language in colleges and universities, and the statistics for it was analyzed as descriptive and inferential statistics. In-depth interviews on issues and influencers for the integration of technology into the English language classrooms.

Demographic Break-Up

184 questionnaire survey with the English departments and faculty was split half across 19 institutions and 93 colleges.

Follow-up Emails were done along with phone calls to maximize responses, responses accuracy and nudging the concerned people to expedite and accelerate the data accumulating process.

It can be assumed that 70% English language college professors in general, and 64% university lecturers in which this counts trainers of language subjects at academies, successfully returned the questionnaire. Therefore, it is estimated that about 3 incomplete college instructor questionnaires were excluded from the final count. For purposes of the conclusion, the last statistical method used 69 college instructor returns and 61 from university lecturers. Hence, 129-130 questionnaires that were completely and collected without any problem amounts to 70 percent of the total have been

ISSN E: 2709-8273
ISSN P:2709-8265
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considered for final analysis. The information necessary for this study regarding the response rate can be seen in Table 4.2.

Table 4.2: Demographic Distribution of the Respondents and response rate of the study

Target areas (sample)	Response Rate	Applicable Response Rate
College ELT'S	70 (38.54%)	69 (40.35%)
University ELT'S	64 (34.26%)	61 (30.30%)
Total	134 (72.82%)	130 (70.65%)

Gender based categorization of the respondents
The gender-based distribution of the respondents with information and communication technology integration and application in general in English language classrooms is presented in Table 4.3 Here, in this questionnaire, the percentage of male respondents was 77, whereas the percentage of female respondents was just 23.

Table 4.3: Gender based categorization of the Respondents

Gender	Frequency	Percent
Male	101	77%
Female	29	23%
Total	130	100%

Table 2: Qualification-Based Categorization of Respondents
The distribution based on qualification or degree, showing whether the English teachers a Masters, M.Phil. /MS or PhD in English, in the following table. This information indicates that 82% of English language instructors had master's degrees in the subject, with 21.46 respondents having an M.Phil. Remarkably, the lowest proportion of English language instructors holding a PhD was 2.54% out of over all respondents.

Qualification	Frequency	Percent
MA English	106	82%
MPhil	26	21.46%
PhD	2	2.54%
Total	130	100%

Findings and Discussion
Technological Proficiency for Developing Digital English Language Classrooms
The competency statements in the category of Technological Proficiency for Developing Digital English Language Classrooms totaled 21. Fourteen of those skills were endorsed by English language teachers, who assigned mean scores over 4. The top-ranked competencies included knowledge of how digital systems operate and are automated, the ability to digitize photographs through scanning print materials, and both saving digital content to appropriate storage devices and retrieving that same content from storage devices.

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JOURNAL OF APPLIED LINGUISTICS AND TESOL (JALT)
Vol.7. No.4 2024

Table 3: Technological Competency for Developing Digital English Language Classrooms

S No	Competency Statements	Mean	SD
1	Knowledge of digital operations and system automation	4.11	1.73
2	To create digital photos from print items via scanner	4.09	.74
3	To preserve digital content using various storage mediums	4.07	.97
4	Development of electronic learning resources	3.81	1.03
5	Use application software efficiently and effectively	3.73	.72
6	E-Resource evaluation and assessment	3.30	.98
7	Credibility and purpose of the source provider	3.29	.89
8	Selection of appropriate resolution for digital contents	3.24	.80
9	Understanding digital ethics, policies, and copyright policies	3.25	.89
10	Digital archiving and cybersecurity	3.18	.78
11	Ability to plan a budget for digital content development	3.12	.98
12	Software licensing, installation, and customization	3.01	.96
13	Technology integration and content development	2.98	1.27
14	Creating an efficient system for locating information	2.96	.87
15	Employ full-text indexing and data transfer techniques	2.84	.96
16	Integrate language and domain vocabulary	2.79	1.13
17	Design user-friendly interfaces between teachers and students	2.79	.79
18	Creating routes for accessing digital contents	2.69	.76
19	Creating main server rooms for content protection and security	2.56	.76

Technological Competency on Digital Content Protection

The Competency Statements for the Technological Expertise in Safeguarding Digital Content totaled nine. Teachers acknowledged the importance of IP-based access security, their awareness of digital data protection, and knowledge of backup processes for digital content.

Table 4: Technological Expertise in Safeguarding Digital Content

S No	Competency Statements	Mean	SD
1	Security to accessing digital content using passwords/IP-based	4.12	.84
2	Security software usage and knowledge	3.90	.81
3	Knowledge for digital data and information protection	3.88	.76
4	Understanding network access points and security nodes	3.78	.74
5	Knowledge about backup procedures for digital content	3.67	.92
6	Creating digital learning environments and security regulations	3.64	.79
7	Establishing norms and limits for digital content access	3.55	.79
8	Designing administrative and control systems	2.86	.70
9	Implementing router filters, firewalls, encryption techniques	2.83	.84

Pedagogical Skills for Managing Learning Management Systems

The group of Pedagogical Skills for Managing Learning Management Systems consisted of seven competency statements. The highest rated competencies included the ability to manage educational methods with digitally automated systems and knowledge of integrated systems for teaching English.

ISSN E: 2709-8273
ISSN P:2709-8265
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Table 5: Pedagogical Skills for Administering Learning Management Systems

S No	Competency Statements	Mean	SD
1	Ability of tackling educational methods with digitally automated systems	4.03	.85
2	Understanding integrated systems for teaching English	3.83	.41
3	Scheduling evaluation and assessment	3.71	.83
4	Knowledge of content management in digital classrooms	2.99	.89
5	Knowledge about rules and policies for content management	2.91	.94
6	Familiarity with administration of technology-assisted instruction	2.81	.98
7	Compatibility with learning management system software	2.80	.55

Technological Competencies for System Administration

The category of Technological Competencies for System Administration had nine statements, all focusing on skills related to the maintenance of hardware and software, troubleshooting, and networking. Teachers showed extremely high familiarity with internet use and browsing skills.

Table 6: Technological Competencies for System Administration

S No	Competency Statements	Mean	SD
1	Familiarity with internet (email, discussion boards, resources)	4.46	.71
2	Knowledge of browsing skills	4.19	.71
3	Leveraging digital search engines	4.05	.71
4	Data retrieval and sharing via LAN/MAN/WAN	4.03	.71
5	Performing basic I/O operations	3.97	.97
6	System/software updates and up-gradation	3.86	.97
7	Knowledge of computer networks	3.73	.97
8	Expertise in network security systems	3.53	.97
9	Familiarity with networking and telecommunications	3.48	.97

Proficiency with Microsoft Office and Social Media Tools

The subcategory of Proficiency with Microsoft Office and Social Media Tools had competency statements of seven in number. Teachers certified competencies like knowledge about applications of Microsoft Office and their understanding of the use of social media tools in teaching.

Table 7: Proficiency with Microsoft Office and Social Media Tools

S No	Competency Statements	Mean	SD
1	Knowledge and comprehension of Microsoft Office applications	4.34	.97
2	Understanding Facebook and Instagram for educational use	4.21	.90
3	Integrating Web 2.0 technologies in the classroom	3.03	.97
4	Using MS Excel for maintaining digital progress records	3.01	.90
5	Developing automated software using Microsoft Office tools	3.00	.97
6	Implementing user policies during digital learning	2.99	.87
7	Policies related to social networking	2.91	.76

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
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Conclusion and Recommendations

The paper contains the technological competencies required for successful and efficient incorporation of ICT into English language classes. There will be professional development, infrastructure improvement, and continuous research work in order to incorporate technology. Some of the notable recommendations are:

1. Professional Development: Host intensive training programs on developing digital skills by the teachers.
2. Infrastructure Investment: Support facilities to upgrade technological tools and access internet facilities in school and educational setups
3. Community of Practice: Allow collaboration on best practices by teachers while also assisting each other to attain operational excellence.
4. Ongoing Research and Evaluation: Consistent research for assessing the effectiveness of technology integration used for training programs updates
5. Incentive and Recognition Programs: Design incentives and recognition programs to encourage the teachers to adopt new approaches towards teaching and learn and develop knowledge and skills constantly

Future Research Directions

Other educational domains should replicate this research in such a way that the long-term effects of technology integration could be followed up, and further action research support could be administered to address specific issues. Studies for comparison would bring forth effective strategies for each context, and policy development research could then support some frameworks that would help integrate technologies within the learning processes.

In addition, continued technology exploration and the resolution of technology-based challenges based on education lead to developing more effective, engaging, and inclusive learning environments in order to enhance the quality of education in the digital age.

Conclusion

The use of Information and Communication Technology in teaching the English language as a Second Language is now one of the constructive processes among the new educational praxis. This research utilized the activation of Information and Communication Technology competencies of the teachers of English and its impacts on teaching and learning. Thus, findings showed that Information and Communication Technology is a change-maker that enhances the quality of education but presents tremendous challenges for its final realization.

Key Findings The study revealed that technological competencies are a basic requirement for effective practice of digital tools and platforms in ELT. The innovation and dynamism introduced by the teachers who possess ICT skills impacted the motivation and participation of the students in a very significant manner. Web-based grading, Content management systems, and applications make it possible to render teaching more personalized and efficient in responding to the diversified needs of students.

Thus, the survey confirmed the conclusion that most teachers have absolutely elementary ICT skills although significant differences exist at the level of competencies. Only some of the teachers had higher-order skills in relation to the creation of digital content, cybersecurity, and much more complex applications of educational software. This would imply that there is a need gap for more professional activities in terms of development, especially not only basic ICT skills but higher-

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

order competencies as well. The nature of professional development should be continuous, developing with the changing world of technology.

This study identifies some of the major impediments to the integration of ICT into the teaching and learning practices. Poor infrastructures in the current context include fewer computer accesses or fewer dependable internet connections; however, also possess trainers and supporting teachers. Most of the teachers face challenges on their own because of the digital tools employed in practice and consequently, frustration in the uses of technology in the classroom. It requires a tremendous investment into the infrastructures of educational technology and elaborate support systems for teachers.

Most importantly, however, what the findings suggest is that efforts toward collaboration support in the integration of ICTs may well be adequately entrenched. This would be because the source of communities of practice will initiate a culture of continuous improvement and innovation through the sharing of best practices, resources, and experience. Not least, in this regard, is consideration of how peer support and mentorship will help teachers come out of their difficulties and better their technological competencies.

In particular, the research study aims to continue studying and monitoring to learn in more detail the long-run effects of ICT integration upon teaching and learning outcomes. The involvement of teachers in action research: How teachers may engage as problem solvers will prove useful information and pragmatic recommendations targeted for specific contexts of education. Cross-regional and cross-educational settings may provide an opportunity for identifying most effective policies for development.

ICT integration into ELT appears to reflect a great challenge, yet opportunity, and educational institutions must find a way to put teachers proficiently in touch with modern technological competencies, invest in infrastructure, and encourage collaborative support systems. The rapid shift toward digital education set by the COVID-19 pandemic hastened this requirement. It is worth starting to walk, exploring new avenues of action, tearing down barriers toward integration with ICT, and ensure that every child succeeds in the realization of transformative power of digital technologies in education.

References

Li, B. (2023). Design and research on computer-aided English language teaching methods. *International journal of humanoid robotics*, *20*(02n03), 2240004.

Li, S., Yamaguchi, S., Sukhbaatar, J., & Takada, J.-i. (2019). the influence of teachers' professional development activities on the factors promoting information and communication technology integration in schools in Mongolia. *Education Sciences*, *9*(2), 78.

Masadeh, T. S. Y., & Elfeky, A. I. M. (2016). Efficacy of open-source learning management systems in developing the teaching skills of English language teachers. *American Journal of Educational Research*, *4*(4), 329–337.

Mondal, A., Saha, A., & Baidya, M. N. (2015). National curriculum framework for teacher

ISSN E: 2709-8273
ISSN P:2709-8265
JOURNAL OF APPLIED LINGUISTICS AND TESOL
JALT

education, 2009: A review of its perspectives and relevancies. *International Journal of Applied Research*, *1*(9), 776–778.

Nelson, M. J., & Voithofer, R. (2022). Coursework, field experiences and the technological perceptions and practices of English language teachers. *Computers & Education*, *186*, 104547.

Ng, D. T. K., Leung, J. K. L., Su, J., Ng, R. C. W., & Chu, S. K. W. (2023). Teachers' digital competencies and required twenty-first century skills in the post-pandemic world. *Educational technologyresearch and development*, *71*(1), 137–161.

Oberländer, M., Beinicke, A., & Bipp, T. (2020). Digital competencies: A review of the literature and applications in the workplace. *Computers & Education*, *146*, 103752.

Rafiq, M., Ameen, K., & Jabeen, M. (2018). Barriers to digitization in university libraries of Pakistan: A developing country's perspective. *The Electronic Library*, *36*(3), 457–470.

Richey, R. C., Fields, D. C., & Foxon, M. (2001). *Instructional design competencies: The standards*. Syracuse, NY.

Saglam, A. L. G., & Sert, S. (2012). Perceptions of in-service teachers regarding technology integrated English language teaching. *Turkish Online Journal of Qualitative Inquiry*, *3*(3), 1–14.

SELVI, K. (2010). Teachers 'competencies. *Cultura. International Journal of Philosophy of Culture and Axiology*, *7*(1).

Suakanto, S., Supangkat, S. H., Saragih, R., et al. (2013). Smart city dashboard for integrating various data of sensor networks. In *International conference on ict for smart society* (pp. 1–5).

Voithofer, R., & Nelson, M. J. (2020). Teacher educator technology integration preparation practices around TPACK in the United States. *Journal of Teacher Education*, *72*, 314 - 328. Retrieved from https://api.semanticscholar.org/CorpusID:225423961

Watson, D. (2006). Understanding the relationship between information and communication technology and education means exploring innovation and change. *Education and Information Technologies*, *11*, 199–216.

Watson, J. H., & Rockinson-Szapkiw, A. (2021). Assessing pre service teachers' intention to use -technology enabled learning. *Computers & Education*, *168*, 104207.