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CHALLENGES IN MOTIVATING LANGUAGE TEACHERS TO INTEGRATE TECHNOLOGY INTO CLASSROOM PRACTICES FOR PROFESSIONAL DEVELOPMENT

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Abstract
The study aimed to analyse the challenges of motivating teachers to integrate technology into their classroom practices for professional development, and to examine whether such integration motivates or creates problems in classroom practice. The research is based on a descriptive survey. The population comprised teachers working as teaching assistants, lecturers, assistant professors, associate professors, and professors from 8 different public universities in Sind, Pakistan. The collected data was analysed through SPSS. The results show that 84% of respondents believed that a lack of awareness of educational technologies creates problems in motivating teachers to integrate technology into their classroom practices to support their professional development. However, the majority of teachers responded that the integration of technology has a significant role in professional development.
Keywords: *Challenges, motivation, technology, and professional development.*

Introduction

The integration of technology is certainly challenging; it requires a certain set of skills, knowledge, and competencies that are not easily acquired by educators (Winter et al., 2021). With the integration of technology, teachers must effectively tackle the diverse range of difficulties that lie ahead. Teachers must possess a wide range of abilities related to daily life and profession, academic achievement and creativity, as well as media and technology usage (Maddukelleng et al., 2023). The world has completely transformed due to the latest information and communication technology. With the help of these modern technologies, the world has become more borderless and interconnected. With a single button click, everything is now merely far away (Oliver, 2011). A collection of devices, various application types, and information-handling tools is essentially what information and communication technologies are. Moreover, it uses computers to process, store, and exchange data. Older ICTs known as analogue media include radio, television, telephones, tapes, and tape recorders. On the other hand, new ICTs, or digital media, include computers, laptops, satellite, wireless, internet, and mobile devices. Ben Youssef and Dahmani (2008) divulged that we live in a digital age and are known as the Internet generation. Every aspect of life is impacted by information and communication technologies, from the job to social settings

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to leisure and education. Technology intimidates students when they engage in online activities (Rasheed et al., 2020).

The flood of data and information brought about by breakthrough technology advancements fundamentally alters how individuals learn, educate themselves, manage enterprises, keep in touch, and obtain knowledge quickly and effectively (Szymkowiak et al., 2021). Ajit Mondal and Mete (2012) stated that to address the demands of a new period, the higher education system has undergone many good adjustments and new additions over the past 50 years. Higher education in this digital age has given its students access to the newest technology so they can function in the international community. Students today have a more comfortable learning environment because of the utilisation of technological devices by teachers starting in the early elementary school years (Spiteri and Chang Rundgren, 2020).

The use of ICT in the classroom improves the effectiveness of the learning process and inspires both teachers and students to perform better. Technology allows for learning to occur anywhere, at any time, but the student now chooses the location and time (Talebian et al., 2014). One of the biggest distinctions between classroom and online learning is the lack of face-to-face communication and interaction between teachers and students in online learning environments (Huang, 2020). Digital technologies are a representation of a new educational era. It presents fresh approaches to training and teaching. The most recent teaching techniques encourage students to be self-reliant, self-directed, and disciplined. These techniques also shift teacher-centred delivery methods from teacher-centred to student-centred, and they convert content-centred curricula to competency-based curricula. Talebian et al. (2014) further added that the development of digital technology is seen as a turning point for student performance and motivation in the field of education, particularly in higher education. Technology plays a major role in creating course materials, exchanging knowledge and materials, facilitating student-to-student communication, and facilitating contact with educators globally. Research also indicates that social media, mobile devices, and Internet access may have negative impacts on schooling today (Criollo et al., 2021).

Literature Review

In Pakistan, universities are the main source of higher education. It is thought that using fresh and innovative teaching methods can boost students' performance, which will have a significant positive impact on upcoming ICT applications (Samoon et al., 2023). As the age of transition gives way to the global and information technology age, technology appears to be a key factor in every part of life. As such, educational institutions must integrate technology into their curricula (Molina, 2021). Using ICT to enhance learning, teachers need to utilise English as a tool to aid students in learning, not the other way around, which would confuse students because teachers are not yet proficient in using technology. (Herdina and Ningrum, 2023).

Herdina and Ningrum (2023) further stated that the inclusion of ICT in language teaching can be impeded by several obstacles associated with its application in English language learning. Creative ICT use may support student-centred learning (Habibu et al., 2012). Teachers need to become more knowledgeable about ICT because it will be incorporated into English lessons. These challenges may arise from inadequate technological resources, as it might be difficult to integrate ICT into the teaching of the four English language skills (listening, speaking, reading, and writing), teachers must first improve their ICT proficiency (Boonmoh et al., 2021). Students now need to be ready for both in-person and virtual learning because ICT implementation has altered the way that education is delivered. Stockwell and Wang, 2023 expressed that the abrupt change in COVID-19

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drastically altered the way administrators, instructors, and students interacted with one another by highlighting the impediments to efficient instruction and learning and the use of educational technology. With the COVID-19 epidemic, many educators found it difficult to adjust to the new environment and felt unprepared to employ technology in their classrooms.

Since its inception, technology has played a significant role in education. Technology's place in society demonstrates why using it in the classroom is essential. Contrary to popular belief, the abstract approach of an English lesson and the concrete nature of technology can coexist (Rahman, 2015). Taghizadeh and Hasani Yourdshahi (2020) point out, teaching has had a significant impact on the integration of technology. The emergence of new techniques, approaches, and technological resources in the language teaching and learning domain is a consequence of the wide range of resources made available by computers and the Internet. There has been the demand for educators in recent years to integrate technology into the classroom to transform education. Teachers throughout the world are not unfamiliar with the idea or practice of teaching English via technology, particularly when teaching English in non-native-speaking nations (Bingimlas, 2009). Students can enhance their language proficiency through two excellent methods: residing overseas and utilising multimedia. Over the past twenty years, there has been a global spread of information and communication technologies (ICT), which are now being used in education. ICT adoption in education around the world has frequently been predicated on the new technologies' ability to transform outdated educational systems, better educate students for the information age, and/or speed up national development initiatives (Katemba, 2020).

Early research revealed that teachers' enacted and proclaimed ideas were frequently at odds, especially when it came to using technology in the classroom. Researchers concluded that this was caused, at least in part, by a range of external obstacles that kept educators from utilising technological resources in ways that better matched their values. However, most schools have since removed a number of these obstacles (assistance, access, etc.). The purpose of this numerous case-study research project was to reexamine the following question: "How do teachers who are acknowledged for their technology use in the classroom align their pedagogical beliefs and practices?" Twelve educators were carefully chosen based on their innovative use of technology, as seen by their websites, both personal and instructional. To investigate the alignment between educators' educational principles and their classroom practices, follow-up interviews were carried out with teachers. The findings point to a close congruence between student-centred actions (collaboration, honesty, and student choice) and student-centred attitudes (Ertmer et al., 2012). Possibly the most influential aspect influencing today's educational scene is technology (Amy M et al, 2016). These days, technology is integral to the process of teaching and learning. Nonetheless, when instructing in the classroom, English teachers may make use of a wide variety of hardware (Dorkas, 2020). Sometimes technology isn't the solution. Pre-service educators have discussed how they prefer to write by hand rather than by typing, and they have noticed that they sometimes take twice as long to write notes. When students are expected to bring devices of their own to class, there may be significant disparities in the capabilities of the devices, for instance, the capabilities of an iPad and a cheap Android phone. Long-term writing on small devices may present challenges for students. For a wide variety of devices, teachers might need to give separate directions. Instead of using their gadgets for schoolwork, students frequently use them for social media, gaming, texting, instant messaging, and emailing (Hyndman, 2018). ICT use in the classroom is crucial in this digital age to provide students with the opportunity to acquire and apply

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the necessary 21st-century skills. Therefore, understanding the problems and difficulties associated with ICT use in education will help instructors get past these difficulties and become proficient users of technology (Ghavifekr et al., 2016).

Online education is predicted to eventually supplant traditional classroom instruction and the distribution of curriculum-based content. It is expected of the professors to reconsider their methods to accommodate the format of online learning. Redesigning the lesson plan to incorporate technology into classroom instruction is the teacher's task. Technology helps teachers with online instruction and delivery techniques (Zulkifli et al., 2021). The pedagogical and technical competencies of pre-service teachers in utilising ICT in the classroom have various dimensions because of the variety of ways that technology can be employed in education. For example, a test measuring pre-service teachers' ICT proficiency was created and administered to a sizable sample of teacher applicants in Belgium. The results show that ICT competencies have two dimensions: (1) ICT competencies that support students' use of ICT in the classroom, and (2) ICT competencies that involve using ICT to generate instructional materials. Studies have also revealed obstacles, such as faculty opinions and abilities that prevent the planning of appropriate teacher education to improve these competencies (Kaminskienė et al., 2022). Over the past few decades, as schooling teachers have struggled to effectively teach and model relevant technology integration methods to prepare their students, studies on technological incorporation have garnered a great deal of interest (Bakir, 2015). There is a growing trend in classrooms to have teacher dashboards due to the increased use of educational technologies. Dashboards give teachers real-time information about students' performance, speed, and progress while they are using educational technologies (Knoop-Van Campen and Molenaar, 2020). Data and digital technology are thought to be the main forces behind innovative teaching in the context of education's digital transformation. The digital awareness and digital teaching competency of teachers is becoming more and more crucial for enabling students' digital potential, responsible technology use, and teamwork or communication abilities in the classroom. It is necessary to investigate if teachers' data literacy and digital teaching proficiency can empower learners inside the classroom (Lin et al., 2023). Even though AI has a lot of potential to help EFL students learn, integrating new technology into the classroom usually requires teachers to go past multiple layers of restrictions. It may be difficult for EFL teachers to adjust to AI and fully utilise it to enhance their instruction. The use of AI-supported language learning requires teachers' cooperation and innovative lesson plans. Therefore, even though most foreign language teachers are in favor of using cutting-edge technology in the classroom, they are also generally worried about several internal and external factors, such as a lack of skills and expertise, a fear of losing their pedagogical roles, or a lack of resources such as a rigid curriculum or limited time (An et al., 2023).

Even though educators seem to recognise the importance of technological advances in the classroom, they nevertheless run into challenges when integrating these tools into their instruction. As a result, a key component of teacher education curricula (pre- and in-service teacher education) is now training teachers in the use and integration of technology. After completing their education, educators should be able to show that they can use programs to teach the curriculum, run a computer system, use modern instructional principles, and use suitable assessment techniques when using digital technology (Moses et al., 2022). In the current digital era that we live in, the use of gadgets in education becomes more widespread. To raise understanding of the attitudes that teachers and students have concerning the use of technology in the classroom. Many beneficial

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approaches to including technology in the classroom were found. Digital storytelling, game-based learning, blogs, coding, robotics, and virtual field excursions are a few examples of how technology can be used in the classroom (Dyhrkopp, 2021). Modern educational technology development presents both a problem and a hope for the delivery of education. Since educational technology may be both a source and a channel for learning, it is anticipated that it will facilitate learning. However, because educational technology encompasses a variety of elements such as software and hardware, it also presents unique obstacles (Ketut Sudarsana et al., 2019). These days, computer use is widespread around the world and is expected of teachers, students, and administrators at educational institutions. Information and communication technology's (ICT) rapid development is essential to economic growth because it makes knowledge and information easily and quickly accessible to everyone (Binti & Raman, 2020). We are currently living in a time of "cyberlearning," which refers to a combination of increased technological use and a qualitative change in the way that education and technology are combined. We are witnessing an increasing number of micro-revolutions in the way that learning is affected by the introduction of new technologies, especially with the introduction of the internet. The idea that technology may bring about revolutions in education is not new; it existed before computers and information technology. Technology has brought about several significant, paradigm-shifting innovations in education that are unique to this era—differences in kind rather than degree. In the same way, cyberinfrastructure has developed into a necessary component of society's infrastructure in areas like governance and energy (Hoadley and Uttamchandani, 2021). With the recent significant integration of technology into daily life, access to a great amount of data is now easily available. Students of today have grown up with an ever-increasing amount of technology surrounding them. A modern teacher must take into account both the impact of technology on inclusionary education and the motivation of their pupils to study to design an efficient 21st-century classroom that suits their demands (Francis, 2017). The most significant obstacles are inadequate ICT infrastructure (100%), restricted access to ICT hardware and software (61.5%), a lack of qualified ICT personnel (61.5%), a lack of government funding (53.8%), a lack of practical training (53.8%), and poor institutional cooperation in learning and instruction and curriculum variations (Galan and Mashenene, 2015).

Research Objectives

This research aims to find challenges in motivating language teachers to integrate technology into their classroom practice for their professional development.

Methodology

There are numerous methodological options available to those who want to do research. The aim of the study, the kinds of issues that need to be addressed, and the resources available all play a role in the research approach selection process. This article aims to provide readers with a critical assessment of the suitability of the findings from studies that use survey data as one method of doing research. Surveys are widely utilised in psychological and social studies because they provide an exploration and description of human behaviour (Ponto, 2015). The descriptive character of the study sheds light on the function of ICTs in performance, motivation, and information and communication. The survey was deemed appropriate in light of the trustworthy findings. Both observation sheets and questionnaires were utilised to obtain qualitative and quantitative data. Data analysis was done using SPSS-2022.

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Population and Sample

The questionnaire was filled out by the university teachers (lecturers, assistant professors, associate professors, and professors). A cluster sampling technique was carried out for data collection. The number of participants was 82. The data was collected from the Aror University of Art, Architecture, Design and Heritage Sukkur, Benazir Bhutto Shaheed University Lyari Karachi, Forman Christian College University, Government College University Hyderabad, University of Sindh, Jamshoro, Isra University, Hyderabad, Mehran University of Engineering and Technology, Jamshoro, Quaid-e-Awam University of Engineering, Sciences & Technology, Nawabshah, Shah Abdul Latif University, Khairpur, Shaheed Benazir Bhutto University of Veterinary and Animal Science, Shaikh Ayaz University, Shikarpur, IBA University, Sukkur, and The Begum Nusrat Bhutto Women University Sukkur.

Data Analysis

The quantitative data were analysed using the Social Science Statistics Package (SPSS-22). The responses were weighted based on their respective positions. Standard deviation, mean, frequency, and percentage were used to achieve the desired outcomes. After coding each observation, the observation sheet was subjected to a thematic analysis using an Excel sheet, after which frequency and percentage were determined. Table 1 shows the demographic information of the participants.

Results

Table 1: Demographic Information

Variable	Category	Frequency	Percentage
Age	21-25	25	30.5
	26-29	22	26.8
	30-33	17	20.7
	Above 33	18	22.0
Total		**82**	**100**
Gender	Male	53	35.4
	Female	29	64.5
Total		**82**	**100**
Education	Bachelor	12	14.6
	M.Phil.	50	61.0
	Master	16	19.5
	Ph.D.	4	4.9
Total		**82**	**100**

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The quantitative part (Questionnaire)

Table 2: Motivating Teachers to Integrate Technology in Their Professional Development.

Items	Formula	[a]SDA	[b]DA	[c]N	[d]A	[e]SA	Mean	[f]S.D
Fully functional IT lab	F	29	25	8	8	12	2.37	1.42
	%	35.4	30.5	9.8	9.8	14.6		
Availability of the latest computers	F	23	11	5	16	27	3.15	1.66
	%	28.0	13.4	6.1	19.5	32.9		
Appropriate speed of the Internet	F	37	7	13	10	15	2.50	1.58
	%	45.1	8.5	15.9	12.2	18.3		
Availability of the latest technologies	F	16	15	12	14	25	3.20	1.52
	%	19.5	18.3	14.6	17.1	30.5		
Overall opinion of the quality of ICT service that your institution has received up to now	F	11	16	21	22	12	3.09	1.26
	%	13.4	19.5	25.6	26.8	14.6		
Lack of ICT training is one of the challenges that I face in my professional career development	F	5	11	18	22	26	3.64	1.23
	%	6.1	13.4	22.0	26.8	31.7		
Educational technologies improve teachers' Skills in ICTs	F	4	6	7	28	37	4.07	1.13
	%	4.9	7.3	8.5	34.1	45.1		
Educational technologies make teaching an easier task	F	4	6	8	24	40	4.098	1.1505
	%	4.9	7.3	9.8	29.3	48.8		

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Awareness about educational technologies creates motivation and reduces problems and issues of ICTs	F	5	4	4	36	33	4.073	1.0975
	%	6.1	4.9	4.9	43.9	40.2		
I develop technical skills among students through digital technologies	F	8	10	15	34	15	3.46	1.20
	%	9.8	12.2	18.3	41.5	18.3		
I perform well through digital technologies	F	4	7	12	30	29	3.89	1.13
	%	4.9	8.5	14.6	36.6	35.4		
I develop professional skills through digital technologies	F	5	6	13	36	22	3.78	1.11
	%	6.1	7.3	15.9	43.9	26.8		
I deliver lectures through educational technologies effectively	F	3	8	15	32	24	3.80	1.08
	%	3.7	9.8	18.3	39.0	29.3		
I prefer the use of multimedia/ projector	F	2	10	10	30	30	3.92	1.09
	%	2.4	12.2	12.2	36.6	36.6		
ICT tools are technically too complicated to use	F	14	23	25	13	7	2.70	1.18
	%	17.1	28.0	30.5	15.9	8.5		
Total	82							
	100							

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Table 3 Item Statistics Summary

Item Statistics Summary							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.454	2.378	4.098	1.720	1.723	.340	15

Table 4 shows the reliability statistics.

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.829	.834	15

Discussion

This discussion is based on Table 2. The SPSS analysis of received data suggests that teachers face the following challenges in their professional development: universities lack fully functional IT labs, universities have the availability of the latest computers, the speed of the internet is poor, on the other hand, most of the teachers responded positively about latest technologies in their institutes, the overall quality of ICT is also good enough. Furthermore, teachers believed that a Lack of ICT training is one of the challenges that they face in their professional career development. The results of responses show that educational technologies improve teachers' Skills in ICTs, whereas they were positive about Educational technologies making teaching an easier task. The SPSS analysis shows that awareness about educational technologies *creates* motivation and *reduces* problems and issues with ICTs. On the other hand, their responses showed that they develop technical skills among students through digital technologies.

Overall, the findings demonstrated that digital technologies had a major effect on university teachers' performance. A predisposition towards agreement with the study's domain was an inclination towards the mean score.

Conclusion

Keeping the above results and discussion in mind, it is concluded that there are several challenges in motivating teachers to integrate technology into their classroom practices for their professional development. Teachers can be motivated to integrate technology when they receive training about the usage of new technologies, the latest computers and technologies are available, and there is enough speed of internet speed in their institutes. It is also noted that bringing awareness about the latest technology creates motivation and reduces several problems in a classroom context.

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