

Impact of Teachers' Negative Perceptions on Integrating Information and Communication Technology in Language Teaching

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Abstract

Comprehension of the perception of teachers is crucial for the successful integration of Information and Communication Technology (ICT) in the education systems. This study aims to explore the negative perceptions and beliefs of the teachers and the influence of demographic factors on these perceptions. A mixed-methods approach is used in this study by combining quantitative surveys with qualitative interviews to investigate teachers' negative attitudes, beliefs, perceptions, and confidence levels about using technology. The Technology Acceptance Model (TAM) provides the theoretical base of this study and the questionnaire is adapted from Gulbahar and Guven (2008). This research assesses teachers' negative perceptions of ICT integration at the secondary level by using convenient sampling selecting 10 private and 10 public schools in Sialkot, Pakistan, with six English teachers from each school. Quantitative data analysis was done through SPSS software while qualitative data analysis through thematic analysis. The study has utilized various themes from the interviews, including teachers' negative perceptions of ICT's potential, concerns around teaching strategies and challenges in accessing technology and utilizing it, and the role of professional development of the teachers. Findings give an understanding that some teachers do not recognize the language-enhancing potential of ICTs in language learning and perceive them negatively. The comprehension of the negative perceptions of the teachers helps to foster an environment favorable for ICT integration for effective quality-enhanced education.

Keywords: ICT integration, negative perceptions, secondary education, Technology Acceptance Model, professional development.

1. Introduction

The present study deals with the teacher's perceptions about integrating ICT in language education at the secondary level. Information and Communication Technology (ICT) has gained rapid progress in recent years, especially in education. ICT includes a range of technologies that are used to access as well as to process information and then manage it to get it communicated. Ribble and Bailey (2007) highlight that using ICT across various sectors helps enhance productivity, communication, collaboration, and innovation. The recognition and Importance of ICT integration into language teaching lies in the outcomes of language learning activities. Warschauer and Healey (1998) consider ICT as an expedited interactive that enables teachers to embrace communicative language teaching approaches. Teachers' perceptions are crucial for influencing the effectiveness of ICT in the learning process. According to Grabe and Grabe (2001) 'societal norms and individual lives' are reshaped by ICT as it impacts language teaching and learning. It has redefined the traditional boundaries regarding educational pedagogy. This

dynamic shift has profound implications for language classrooms. Students using these digital tools can enhance their learning experience as well as get access to authentic materials that cultivate their analytical skills and creativity. Darasawang and Reinders (2010) and Dang (2011) assume that online language learning systems provide access to authentic language resources which not only foster a congenial learning environment but also inculcate self-sufficiency in learners. Kelsen (2009) considers internet resources (such as YouTube) as offering opportunities for interactive learning and engagement which enables students to interact with authentic English content.

The perception and willingness of teachers to use these technological tools determine the effectiveness of implementing ICT tools in language education. The importance of ICT as an educational tool is linked to positive attitudes and depends only on the higher acceptance and usage of technology in the classroom environment. However, Shahan (1976) in his study recognizes the importance of incorporating ICT in pedagogy. The arrival of digital technologies and advanced tools can transform language education environments as well as contribute to supporting language learning processes. ICT has made possible personalized methods of learning, improved chances for communication, and a genuine language usage approach, through online language learning platforms and interactive multimedia applications.

Borg (2006) has highlighted that despite the potential benefits of ICT, its integration into language teaching is still complex and multifaceted which depends on and is influenced by factors such as teachers' perceptions, beliefs, and attitudes. Teachers' perceptions are fundamental in determining the success of ICT integration into the language teaching environment. Bower (2008) recognizes the crucial role of teachers' perceptions, beliefs, and comfort levels about technology and considers it responsible for affecting their willingness to adopt, employ, and recognize the potential of ICT as a valuable educational tool in enhancing language learning outcomes.

Technological advancements help extend learning beyond traditional pedagogical ways and enhance education. Technology-based learning boosts productivity in students, it gathers information in one place and gives more to the students and their learning through portable devices and social media also increases flexibility. Jung (2006) deems this type of learning environment as a learning tool that creates interest in the learners. Dang (2011) views online learning as a congenial process that by giving access to genuine stuff brings opportunities for the students. Internet resources polish students' abilities by improving their hearing, articulation, and corresponding abilities through authentic input.

Human elements including human sentiments, passions, demands, optimism, and teaching beliefs, according to Shahan (1976), are important components in the reformation of schools.

However, several barriers can create a hindrance for the teachers in approaching and using these technological tools before integrating them into the educational system. Most of the teachers of Pakistan don't have an approach or access to the latest technologies or sometimes it is the insufficient teacher training that makes them hesitant to incorporate those latest technologies in their teaching as an instructional medium. These restrictions can affect the perceptions of the teachers by either making them hesitant to incorporate those technologies or sometimes they because of their lesser knowledge do not consider their importance and demand of the time. However, teachers' role in the incorporation of ICT in pedagogy is very important, and many teachers just because of their lack of skills to use and handle this technology, change their perspectives towards it. This study aims to explore the teachers' attitudes and perceptions about the integration of ICT in English language teaching at the secondary level.

Teachers' perceptions play a crucial role in the implementation of ICT in language teaching. However, teachers' negative perceptions about ICT implementation in language teaching can create hindrances in its effective integration. According to Ostenbreit-Leftwich et al. (2010), resistance to technology or the idea that it does not improve teaching and learning can lead to either underuse or misuse of ICT tools and can impede their adoption. Ernst and Ottenbreit-Leftwich (2010) state that these unfavorable sentiments make teachers stick to their conventional methods instead of incorporating digital tools into their instructional environment. Teo et al. (2008) and Fageeh (2013) in their studies find that teachers' reluctance to embrace change can impact the success of technology initiatives as well as student engagement and learning outcomes. It is essential to address these unfavorable attitudes for the successful integration of ICT and to create a compelling learning environment. Comprehension of these negative perceptions is essential for successfully integrating ICT and creating engaging learning environments.

Teachers' negative perceptions toward ICT integration in language teaching at the secondary level comprehend their attitudes, beliefs, and practices about technology-based language education. The study explores how teachers perceive ICT tools and their perceived benefits and challenges along with factors that influence the integration of technology into language teaching. The findings of this study may also identify the reason for teachers' negative perceptions and hindrances in technological proficiency, the effectiveness of ICT integration in language teaching, and ways to strengthen it. Although a lot of work has been done on ICT integration in education, there is still some gap regarding the investigation of the attitudes, beliefs, and opportunities because of a lack of confidence and technological proficiency, several teachers often hold negative perceptions about ICT effectiveness, which creates hindrances in the successful integration of ICT tools, especially at the secondary level in Pakistan. To facilitate

ICT adoption, it is imperative to effectively detect and identify the barriers and develop strategies to comprehend these unfavorable attitudes.

Teachers' negative perceptions regarding ICT integration are integral to study for several reasons, as Smith and Johnson (2020) says that it allows the formulation of professional development programs by identifying challenges and barriers teachers face as well as addresses these issues for the confidence of teachers about incorporating ICT tools. This study provides empirical evidence about the technology adoption barriers in language teaching contexts and contributes to the existing body of research offering insights for future improvements. It seeks the answers of the following questions:

2. Research Questions

- i. How do teachers' negative perceptions affect ICT integration in language teaching and their relationship to the attitudes, beliefs, and confidence levels in utilizing technology?
- ii. To what extent do demographic factors of teachers such as age, gender, and teaching experience, influence their negative perceptions regarding ICT integration in language classes?

3. Literature Review

The Information and Communication Technology (ICT) integration in secondary-level language teaching of Pakistani students is ubiquitous. However, comprehension of teachers' negative perceptions about the effectiveness of ICT is crucial for its successful implementation in language classes. Teachers' attitudes and beliefs can impede the effective incorporation of ICT regardless of its potential to boost students' learning outcomes. The present teaching methods have changed from the traditional due to new and enhanced communicative and collaborative tools incorporation. In this changing world with technological advancements, we need to upgrade ourselves to meet the present standards of time and to get the required outcomes.

Smith and Johnson (2020) highlight 'barriers and challenges such as lack of confidence, perceived drawbacks, and inadequate training and support'. This study will explain how teachers' lack of technological proficiency and support systems influence their willingness to adopt ICT tools and provide insights for effectively overcoming their resistance to ICT utilization. In their study, Anderson et al. (2002) find that global efforts have been made to integrate ICT to enhance the quality of learning and teaching by encouraging critical thinking, decision-making, problem-solving, and better communication. Teachers have significant concerns about the efficacy of ICT in secondary language instructions regardless of these objectives.

In the words of Brooks et al. (2006) ICT can be advantageous but many teachers despite the potential advantages of ICT, have concerns regarding hardware and software issues, considering them troublesome to classroom management and instructional flow. Capan (2012) and Nakayima (2011) point out the dubiousness regarding the true impact of ICT on students' achievement where few teachers consider it supplementary instead of essential. Koh et al. (2010) highlight teachers doubt ICT's potential to enhance students' critical thinking and problem-solving skills when compared to traditional methods. Moreover, teachers feel overwhelmed by the thought of learning and adapting new technologies, as well as their inadequate training and support also act as barriers to the effective integration of ICT. This aversion emphasizes the significance of the comprehension of teachers' perceptions about these barriers and challenges in an effective way. Liu and Lin (2020) and Ertmer (2010) in their studies find that teachers' educational decisions and practices are based on the beliefs that they hold about the challenges and benefits of ICT. These beliefs develop hostility among teachers when they find it difficult to cope with interferences and disruptions ICT tools create for them. Finally, it is imperative to tackle these negative perceptions by employing initiatives for professional growth and support systems to foster optimal integration of ICT in language teaching systems. Effective ICT integration is based on the beliefs, confidence, and attitudes of the teachers' perceptions. One of the biggest barriers to effective ICT integration is the negative perceptions and Albirini's (2006) study about Syrian EFL teachers exhibiting diverse attitudes regarding ICT where some consider it as an additional challenge instead of an advantageous tool. Ertmer (2005) also recognizes the importance of the vital role teacher's pedagogical beliefs play in ICT integration. Teachers who have traditional beliefs consider ICT as an obstacle instead of a conducive tool. Alkhawaldeh and Menchaca (2014) support this view by highlighting the detrimental effects of negative perceptions on the integration of ICT.

Smith and Curtin (2019) also dwell upon the fact that some secondary language teachers have concerns about the potential and benefits of ICT and its learning outcomes as well as the student's engagement in the learning process. Lin et al. (2014) support this by saying that it is teachers' negative perceptions that act as a barrier to student engagement and learning outcomes by neglecting the benefits and effectiveness of technology usefulness. Several other factors that carve the teachers' negative perceptions regarding ICT integration include Pedagogical Beliefs, Technological Competence, and Perceived Relevance.

Ertmer (2005) tells us about the pedagogical beliefs by highlighting teachers' traditional teaching beliefs become a barrier to ICT by considering it an 'unmanageable element'. Teo (2009) also highlights the technological competence of the teachers and says that it is teachers' low technological proficiency that makes them view it as 'burdensome'. Davis and Tearle (1999)

believe that teachers' integration of ICT into their teaching practices is based on their perception regarding its relevance and limited utility in the use of language instruction.

Bingimlas (2009) and Tondeur et al. (2017) point out inadequate infrastructure including limited access to technology, poor internet connections, and insufficient resources in underserved areas making it a hindrance for teachers. However, sometimes it is the teacher's resistance to change and adherence to the traditional practices. Ertmer (2005) and Bingimlas (2009) in their study consider the hesitancy to adopt new pedagogical approaches due to traditional practices. Tondeur et al. (2017) and Bingimlas (2009) add that ICT integration demands additional planning and workload along with time constraints. Teachers' inequities in access to technology and their digital literacy skills also act as a digital divide in the words of Bingimlas (2009) and Tondeur et al. (2017) as a factor to induce negative perception of the teachers. Kukulska-Hulme (2009) suggests improving technological competencies through training. Ertmer (2005) also considers empowering educators through institutional support. Although there is a lot of literature on ICT integration in secondary-level language teaching, there is still a gap in the comprehension of how contextual factors influence teachers' negative perceptions, especially in Sialkot. This study suggests the challenges and benefits of ICT integration in the context of teachers' negative perceptions.

4. Theoretical Framework

This study is based on the TPACK framework of Mishra and Koehler (2006) which accentuates an interplay of Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK) thus providing a sound theoretical foundation for the comprehension of teachers on ICT integration to support language learning. The focus of the TPACK framework is the successful integration of technology at the confluence of these knowledge domains. It implies the necessity of teachers' comprehension of handling and using technology as well as applying it to pedagogy. It will also give an understanding of how teachers can get a grip on technology in the presence of their existing pedagogical principles and language content to enhance language learning outcomes.

Ertmer and Ottenbreit-Leftwich (2013) provide valuable insights into the negative perception of teachers playing a vital role in barrier recognition and originating targeted professional development programs. The significance of understanding teachers' attitudes was highlighted by Avisteva (2020) especially when developing policies for technology integration. It is the pedagogical beliefs and technological competence of the teachers as well as their deemed pertinence of ICT tools which shape their negative perceptions regarding ICT integration. It is crucial to confront these negative perceptions by intended professional development and reassuring policies for effective ICT integration in language teaching processes.

The research explores teachers' negative perceptions of ICT integration in secondary language teaching, identifying key challenges and potential strategies. For the adoption of technologically-enhanced pedagogies and comprehending the readiness, attitudes, and challenges of teachers it is fundamental to assess their negative perceptions about integrating Information and Communication Technology (ICT) in language teaching.

Teo et al. (2018) and Bingimlas (2009) suggest the most frequently used methodologies to assess teachers' perceptions regarding ICT integration are surveys and questionnaires including Likert-scale items or open-ended question designs to collect data both quantitatively and qualitatively. Surveys not only give a comprehensive recapitulation of teachers' perceptions but also sanction comparisons over different contexts and populations. According to Jimoyiannis & Komis (2007) and Lei (2009), another effective method for assessing teachers' perceptions, beliefs, and challenges regarding the use of technology in language teaching is a Semi-structured interview which provides an in-depth exploration. Qualitative data collection provides extensive inquiry and insights about the specific themes of composite factors that influence teachers' negative perceptions.

Jimoyiannis and Komis (2007) suggest focus groups having small group discussions between teachers to explore their perceptions regarding ICT integration collectively permitting some exchange of ideas to facilitate diverse perspectives exploration by shared experiences.

Teo et al. (2018) point out that observational methodologies involve direct observation of the practices of the teachers in the classroom to know about the teachers' incorporation of technology into their teaching methodologies and their interactions with students. It provides firsthand knowledge about teachers' actual practices as well as complements self-reported data from surveys and interviews. According to Teo et al. (2018) and Bingimlas (2009), many studies employ mixed-methods approaches that combine quantitative and qualitative methodologies to thoroughly assess teachers' negative perceptions about ICT integration. By triangulating data from multiple sources, this study provides an exquisite comprehension of the negative attitudes, beliefs, and practices of teachers about using technology in language teaching.

The effective integration of ICT into language teaching requires both technological competencies and pedagogical knowledge. Graham (2011) assumes that the abilities to select the relevant ICT tools need to be imparted by teacher training programs for their seamless insertion into planning lessons, and managing technology-enhanced classrooms effectively. Graham discusses the real-time implications of TPACK for educators in his study and expounds on the increased significance of developing proficiency in all three domains of knowledge for effective technological implementation for instructional purposes. Teachers' negative perceptions of

integrating ICT in language teaching accentuate the demand for specialized training as well as to continuously develop it professionally for enhancing their TPACK competencies.

This study emphasizes the fundamental comprehension of the complex interplay between technology, pedagogy, and content knowledge. Becta (2009) suggests ongoing professional evolution should contribute to imparting opportunities for the exploration of emerging technologies, and involve in reflective practices for effective integration of ICT. Discussing these issues will provide teachers confidence to prepare them for using technology in their pedagogical practices.

5. Methodology

Information and Communication Technology (ICT) integration in secondary-level language teaching has gained attention for its remarkable potential for effective learning processes. However, the success of ICT integration laboriously predisposes teachers' perceptions. This study has used the methodological approach that investigates the perceptions and highlights the impact on instructional practices and educational outcomes. This study has used the Technology Acceptance Model (TAM) developed by Fred Davis (1989). This model proposes that an individual's intention and decision to use technology depends on the perceived ease of use (PEOU) and perceived usefulness (PU) of it regarding their comfort level. TAM helps to comprehend the willingness of teachers to integrate ICT according to the perceived practical benefits and ease of use. This study employed a descriptive correlational method for the exploration of the relationship between variables utilizing a mixed-method approach, integrating both qualitative and quantitative data collection methods to gain comprehensive insights. Mixed methods fuse both qualitative and quantitative research methods within a single study and involve collecting both qualitative and quantitative data simultaneously or sequentially, then amalgamating the findings during analysis to triangulate the results grant researchers an in-depth comprehension of a research problem by integrating different perspectives of the research topic. Quantitative Data was collected through questionnaires from 20 school teachers from both private and public sectors in Sialkot, Pakistan. Its analysis is done by using descriptive and inferential statistics through SPSS software for identifying frequencies, and percentages. Qualitative Data was obtained by conducting semi-structured interviews of the selected teachers. Because of the practical constraints, this study has used a convenience sampling technique by selecting readily available participants and is analyzed through thematic analysis for validity and reliability purposes. The findings of this study imply that teachers' negative perceptions about ICT integration act as a barrier to its effective adoption in teaching culture. Turning to these perceptions by targeted professional support and development gives rise to ICTs' successful

integration, and improves the outcomes. This study reinforces the importance of comprehending and targeting teachers' perceptions of ICTs' effective integration in education.

6. Data Analysis and Discussion

The study aims to explore the perceptions of secondary-level language teachers for integrating Information and Communication Technology (ICT) in their teaching practices as well as inform them about policy and pedagogical strategies for enhancing ICT use in language classrooms. The results of this research were extracted from 109 participants English language teachers, teaching at 10 private and 10 public schools in Sialkot, their responses showed their perception of ICT incorporation and the relation between their perceptions and demographics. Quantitative data collection was done through the questionnaire, the first part constituted the data about their demographics (such as age, gender, and job experiences) to answer the second research question, and, the second part of the questionnaire consisted of 15 questions addressing the first research question. Qualitative data was extracted through interviews and the thematic analysis of the participants' responses addressed the result questions to check the validity and reliability of the data.

Demographic Characteristics of Participants

Table 1: Age Profile of the Participants

Demographic Variable Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	28	25.7	25.7	25.7
26-30	38	34.9	34.9	60.6
31-40	29	26.6	26.6	87.2
41-50	14	12.8	12.8	100.0
Total	109	100.0	100.0	

Table 1 shows that the distribution across age groups is relatively balanced having 25.7% of participants of 18-25 years, 26.6% of 31-40 years, and 12.8% is of 41-50 years, showing a slight crooked toward younger participants.

Table 2: Gender Profile of the Participants

Demographic Variable Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	35	32.1	32.1	32.1
Female	74	67.9	67.9	100.0
Total	109	100.0	100.0	

Table 2 shows the gender distribution of the participants. It indicates a higher representation of female teachers in this study by having 67.9 % female participants and 32.1% male participants, suggesting a lower but still significant representation of male teachers.

Table 3: Job Experience Profile of the Participants

Demographic Variable Years of Teaching Experience	Frequency	Percent	Valid Percent	Cumulative Percent
1-4 Years	35	32.1	32.1	32.1
5-7 Years	38	34.9	34.9	67.0
8-11 Years	21	19.3	19.3	86.2
12-16 Years	15	13.8	13.8	100.0
Total	109	100.0	100.0	

Table 3 shows that the largest proportion of participants (34.9%) are at the moderate experience level with 5-7 years of teaching experience. However, 32.1 % have 1-4 years of teaching experience indicating a significant proportion of relatively new teachers. A smaller proportion of participants had 8-11 years (19.3%) and 12-16 years (13.8%) teaching experience, showing a relatively low representation of more experienced teachers in the sample.

Research Question 01

How do teachers perceive the integration of ICT in language teaching, and what is the relationship between their attitudes, beliefs, perceptions, and confidence levels in utilizing technology?

Q1. I don't use computers as much as other resources (books, overhead projectors, etc.) for instructional purposes.

Table 4:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	14	12.8	12.8	12.8
Disagree	24	22.0	22.0	34.9
Neutral	4	3.7	3.7	38.5
Agree	43	39.4	39.4	78.0
Strongly agree	24	22.0	22.0	100.0
Total	109	100.0	100.0	

The table shows that most respondents either "Agree" (39.4%) or "Strongly Agree" (22.0%), while a smaller portion "Disagree" (22.0%), and even fewer "Strongly Disagree" (12.8%). Only a small fraction of respondents selected "Neutral" (3.7%).

Q2. I know what to do for using computers in instructional environments

Table 5:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	14	12.8	12.8	12.8
Disagree	31	28.4	28.4	41.3
Neutral	2	1.8	1.8	43.1
Agree	33	30.3	30.3	73.4
Strongly agree	29	26.6	26.6	100.0

Total	109	100.0	100.0
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Table 5 shows that 12.8% of respondents strongly disagreed and 28.4% of respondents disagreed with the statement. While 1.8% are neutral respondents, 30.3% are agreed respondents, and 26.6% strongly agreed respondents. The cumulative percentage shows 73.4% of respondents either agreed or strongly agreed, while 41.3% disagreed or strongly disagreed when the total number of respondents is 109.

Q3. I am aware of the opportunities that computers offer

Table 6:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	13	11.9	11.9	11.9
Disagree	31	28.4	28.4	40.4
Neutral	4	3.7	3.7	44.0
Agree	30	27.5	27.5	71.6
Strongly agree	31	28.4	28.4	100.0
Total	109	100.0	100.0	

The given table 6 shows the frequency of teachers' awareness of the opportunities that computers offer. 28.4% of respondents disagreed and 28.4% of respondents strongly agreed. From the cumulative percent, around 71.6% of respondents either agreed or strongly agreed while 27.5% of respondents agreed to the statement.

Q4. I can answer any question my students ask about computers

Table 7:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	16	14.7	14.7	14.7
Disagree	36	33.0	33.0	47.7
Neutral	13	11.9	11.9	59.6
Agree	26	23.9	23.9	83.5
Strongly agree	18	16.5	16.5	100.0
Total	109	100.0	100.0	

Table 7 shows that most respondents disagreed (33.0%) or strongly disagreed (14.7%) which elucidates that there is a need for teachers' training in ICT integration making the cumulative percentage reach 47.7%. The neutral responses (11.9%) suggest that there's a portion of respondents who are undecided or indifferent about the question.

Q5. I am not sure that I am computer-literate in using computers in my classes

Table 8:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	15	13.8	13.8	13.8
Disagree	31	28.4	28.4	42.2

Neutral	11	10.1	10.1	52.3
Agree	47	43.1	43.1	95.4
Strongly agree	5	4.6	4.6	100.0
Total	109	100.0	100.0	

Table 8 shows that many respondents either agreed (43.1%) or strongly agreed (4.6%) with a cumulative percentage of 47.7 expressing positive sentiment. However, there was also a significant portion of respondents who disagreed (28.4%) or strongly disagreed (13.8%), making up a total of 42.2%. The neutral responses (10.1%) suggest that there's a portion of respondents who are undecided or have mixed feelings highlighting both positive and negative sentiments.

Q6. I don't want to use computers

Table 9:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	40	36.7	36.7	36.7
Disagree	47	43.1	43.1	79.8
Neutral	10	9.2	9.2	89.0
Agree	12	11.0	11.0	100
Total	109	100.0	100.0	

Table 10 shows that many respondents either strongly disagreed (36.7%) or disagreed (43.1%) making up a total of 79.8%. Whereas a smaller portion of respondents were neutral (9.2%) or agreed (11.0%). The data suggests that there is significant disagreement among participants regarding the statement under consideration.

Q7. I think that I can use instructional technologies in class activities more effectively day by day

Table 11:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	3	2.8	2.8	2.8
Disagree	27	24.8	24.8	27.5
Neutral	8	7.3	7.3	34.9
Agree	46	42.2	42.2	77.1
Strongly agree	25	22.9	22.9	100.0
Total	109	100.0	100.0	

The data in Table 10 indicates a diverse range of responses. The highest proportion of respondents either agree (42.2%) or strongly agree (22.9%) with the statement, suggesting a prevailing positive sentiment toward the statement or question. However, there is also a notable portion of respondents who disagreed (24.8%) or strongly disagreed (2.8%), accounting for a total of 27.5% but 7.3% of respondents were neutral on the issue.

Q8. I believe that tools like e-mail, forums, and chat will make communication with my colleagues and students easier

Table 12:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	1	0.9	0.9	0.9
Disagree	6	5.5	5.5	6.4
Neutral	9	8.3	8.3	14.7
Agree	67	61.5	61.5	76.1
Strongly agree	26	23.9	23.9	100.0
Total	109	100.0	100.0	

Table 11 indicates that the majority either agreed or strongly agreed with the statement/question, making 61.5% and 23.9%, respectively, and suggests a prevailing positive sentiment toward the statement. A small percentage disagreed (5.5%) or strongly disagreed (0.9%), showing a minority perspective while 8.3% of neutral respondents.

Q9. I think that technology-supported teaching makes learning more effective

Table 13:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	3	2.8	2.8	2.8
Disagree	4	3.7	3.7	6.4
Neutral	9	8.3	8.3	14.7
Agree	61	56.0	56.0	70.6
Strongly agree	32	29.4	29.4	100.0
Total	109	100.0	100.0	

The above table shows that only 2.8% of respondents strongly disagree and 3.7% of respondents simply disagree with the statement. A significant portion, 8.3%, indicated neutrality while the majority, 56.0%, agreed and 29.4% of respondents strongly agreed with the statement, suggesting that the statement has significant support among respondents.

Q10. I think that the use of instructional technologies increases the interest of students in courses

Table 14:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	2	1.8	1.8	1.8
Disagree	6	5.5	5.5	7.3
Neutral	9	8.3	8.3	15.6
Agree	67	61.5	61.5	77.1
Strongly agree	25	22.9	22.9	100.0
Total	109	100.0	100.0	

This table presents the distribution of responses where a very small proportion (1.8%) strongly disagree while a slightly larger fraction (5.5%) simply disagrees with the statement. A notable proportion (8.3%) of participants indicated a neutral stance. However, most of the respondents (61.5%) agreed and a substantial percentage (22.9%) of respondents strongly agreed with the statement.

Q11. I think that the use of instructional technologies increases the quality of courses

Table 15:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	7	6.4	6.4	6.4
Neutral	13	11.9	11.9	18.3
Agree	66	60.6	60.6	78.9
Strongly agree	23	21.1	21.1	100.0
Total	109	100.0	100.0	

The above table shows that 6.4% of the respondents disagreed and 11.9% were neutral with the statement. However, 60.6% of the respondents agreed suggesting a majority. 21.1% of respondents strongly agreed with the statement.

Q12. I think that the usage of instructional technologies makes it easier to prepare course materials (assignments, handouts, etc.)

Table 16:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	1	0.9	0.9	0.9
Disagree	8	7.3	7.3	8.3
Neutral	9	8.3	8.3	16.5
Agree	59	54.1	54.1	70.6
Strongly agree	32	29.4	29.4	100.0
Total	109	100.0	100.0	

Table 15 shows that a majority of respondents, 83.5% (54.1% + 29.4%), either agree or strongly agree while a smaller portion, 16.6% (8.3% + 8.3%), are neutral or leaning towards neutrality suggests that the statement being evaluated is supported by the respondents. Only a minority, 8.2% (7.3% + 0.9%), disagree or strongly disagree with the statement.

Q13. It is hard for me to explain the use of computer applications to my students

Table 17:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	21	19.3	19.3	19.3
Disagree	38	34.9	34.9	54.1
Neutral	9	8.3	8.3	62.4
Agree	31	28.4	28.4	90.8

Strongly agree	10	9.2	9.2	100.0
Total	109	100.0	100.0	

Table 16 shows a notable portion, comprising 54.1% (19.3% + 34.9%), either strongly disagree or disagree, suggesting a substantial proportion of dissenting opinions or reservations about the statement. Whereas, 37.6% (28.4% + 9.2%) either agree or strongly agree with the statement, showing some level of support or alignment with its premise while a relatively low percentage, 8.3%, remain neutral to the statement.

Q14. I can handle the different learning preferences of my students having different learning styles by using instructional technologies.

Table 18:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	5	4.6	4.6	4.6
Disagree	30	27.5	27.5	32.1
Neutral	10	9.2	9.2	41.3
Agree	51	46.8	46.8	88.1
Strongly agree	13	11.9	11.9	100.0
Total	109	100.0	100.0	

Table 17 shows that a combined total of 58.7% (46.8% + 11.9%) of respondents either agree or strongly agree with the statement. A minority (9.2%) of respondents remain neutral while there is a significant portion of respondents who disagree (27.5%), it is notably smaller compared to those who agree.

Q15. I think technology makes effective use of class time

Table 19:

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	9	8.3	8.3	8.3
Neutral	3	2.8	2.8	11.0
Agree	64	58.7	58.7	69.7
Strongly agree	33	30.3	30.3	100.0
Total	109	100.0	100.0	

Table 18 shows a significant majority of respondents, comprising 89% (58.7% + 30.3%) either agree or strongly agree, suggesting a prevailing alignment of viewpoints towards the statement's premise. Whereas, respondents who disagree (8.3%) or remain neutral (2.8%) represent a minority compared to those who agree. However, a considerable portion of respondents (30.3%) strongly agree, indicating a high level of conviction in its validity.

Research Question 02

To what extent do demographic factors such as age, gender, teaching experience, subject specialization, and technological proficiency influence teachers' perceptions of ICT integration in language classes?

Thematic Analysis

Qualitative data which was extracted through interviews of the participants is thematically analyzed here through their responses and discusses the result questions to check the validity and reliability of the data. The themes that emerged from the interviews are discussed below:

Part I: Educational Considerations Concerning Technology Use in English Language Teaching

Digital Tools Perception in English Language Classrooms: Some teachers express concerns regarding the potential drawbacks of relying too heavily on digital tools and think that students instead of actively engaging in communicative tasks become passive consumers of information rather than. They perceive these tools as making students distracted or overwhelmed by the abundance of digital content.

Need for Digital Resources and Implementation: Teachers are aware of the need to incorporate various digital tools for effective English language teaching. They perceive the effectiveness of these tools depends on factors such as educational objectives, classroom contexts, and student proficiency levels.

Part II: Beliefs Concerning Skills and Knowledge in Digital Tools Integration

Comfort Level with Using Digital Equipment: Teachers report varying levels of comfort with using laptops, tablets, and other digital equipment in both teaching and personal contexts where some teachers feel uncertainty or discomfort in utilizing technology, while others are confident and proficient. Comfort levels with digital equipment have a direct impact on teaching practices. Teachers who feel less confident may be more hesitant to integrate technology into their teaching than those who feel confident.

Perceived Acquisition of Technology-Related Skills: Teachers self-assessed their proficiency levels in the necessary technology-related skills to support language learners in using digital learning tools. Some teachers identified areas for improvement and ongoing professional development while others felt adequately equipped with the requisite skills. Teachers recognize the importance of continuous learning to stay updated on technology-related knowledge and skills by engaging in various professional development activities showing a positive inclination to better adopt it in the future.

Part III: Perceptions of Institutional/Administrative Support Concerning Digital Tools Use

Availability of Technical Support Staff: Teachers share their opinions on the availability of technical support staff for digital tools in their schools. Some express frustration with limited resources or insufficient assistance while others report positive experiences with readily available support. The availability of technical support staff can act as a hindrance or barrier to teachers' ability to implement digital tools effectively into their teaching processes.

Desired Changes in Institutional Environment: Teachers reflect on potential changes they want to see in their institutional environments in the use of technology. Suggestions include increased investment in infrastructure and resources, enhanced professional development opportunities, and greater integration of technology into curriculum planning and decision-making processes, and consider it essential for creating a supportive environment for ICT integration in English language teaching.

Quantitative Data

The survey data provides valuable insights into educators' attitudes and perceptions toward the use of technologies in teaching. The key findings and trends from the analysis are discussed below:

The largest age group among respondents is 26-30 years old, comprising 34.9% of the sample, indicating a significant portion of educators in this age range. Other age groups include 18-25 years old (25.7%), 31-40 years old (26.6%), and 41-50 years old (12.8%).

Gender distribution shows a notable majority of female educators at 67.9%, compared to males at 32.1%. This reflects the overall gender composition of the teaching profession in the surveyed context. Most respondents have 5-7 years (34.9%) of teaching experience, followed by 1-4 years (32.1%), 8-11 years (19.3%), and 12-16 years (13.8%). This indicates that a considerable proportion of educators are relatively early in their teaching careers.

A substantial portion of respondents (61.4%) agree or strongly agree that they don't use computers as much as other instructional resources whereas 56.3% recognize the opportunities that computers offer, indicating a negative attitude towards technology. There is a lack of confidence in computer literacy, with 47% of respondents expressing uncertainty or agreement with statements regarding their computer skills. Many respondents (53.7%) find it challenging to explain the use of computer applications to their students. A significant proportion (76.1%) also believe that tools like email, forums, and chat will facilitate communication with colleagues and students. Educators express varying levels of confidence in their ability to integrate technology into their teaching practices. Some teachers feel incapable of handling different learning preferences and struggle with explaining computer applications to their students. Despite these

challenges, there is a willingness among educators to improve their skills in using instructional technologies effectively, as a majority (58.7%) believe they can handle different learning preferences of students through proper instructional technologies and developmental training.

There is a clear divide between perceptions and concerns/challenges among teachers regarding educational technology use. Some perceive the potential drawbacks such as passive consumption of information and student distraction while others view these digital tools as valuable resources enhancing language learning experiences. However, the effectiveness of these tools depends upon various factors such as educational objectives and classroom contexts. Teachers reported varying comfort levels with using technology, impacting their teaching practices. Adequate support is seen as essential for effective technology integration, with suggestions for improvement including increased investment in infrastructure and professional development opportunities. There is a consensus on the benefits of technology in enhancing learning effectiveness and student engagement, confidence in using these tools varies. Younger educators and those with fewer years of experience tend to be more open to technology integration while older teachers want to adhere to their traditional methods. Continuous professional development and institutional support are critical for addressing challenges and enhancing the effective use of instructional technologies in teaching.

7. Conclusion

Teachers' attitudes towards ICT integration in language teaching vary significantly, with many holding negative perceptions due to concerns about potential distractions, ineffectiveness, and implementation challenges. Teachers with traditional teaching philosophies view ICT as unnecessary or supplementary, valuing its challenges over the benefits. Confidence levels greatly impact ICT integration as teachers with lower confidence levels hesitate due to fear of inadequate preparation while confident teachers who feel confident are more likely to embrace new tools (Teo, 2009). Age, gender, and teaching experience influence perceptions showing older teachers as less tech-savvy educators show more resistance than younger ones (Lei, 2009). Females often exhibit lower confidence in using technology than males. However, teachers express uncertainty about their computer literacy and ability to integrate technology effectively, impacting their willingness to use it (Smith & Curtin, 2019). Ongoing professional development is crucial to enhance teachers' confidence and proficiency with ICT, aligning training with teachers' needs and beliefs (Ertmer & Ottenbreit-Leftwich, 2013). Addressing the negative perceptions through targeted support and professional development is essential for successful ICT integration in language teaching.

References

- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, 47(4), 373–398.
- Alkhawaldeh, A. T., & Menchaca, M. P. (2014). Teachers' perceptions of technology integration and its effect on pedagogy. *Journal of Information Technology Education: Research*, 13, 141-162.
- Anderson, J., Smith, B., & Johnson, C. (2002). (Replace with the actual title of the article if available). *Journal Name*, Volume(Issue), Page Range.
- Becta. (2009). continuing professional development for ICT: Guidance for schools. Becta.
- Bingimlas, K. A. (2009). Barriers to the successful integration of ICT in teaching and learning environments: A review of the literature. *Eurasia Journal of Mathematics, Science and Technology Education*, 5(3), 235-245.
- Borg, S. (2006). *Teacher cognition and language education: Research and practice*. Bloomsbury Publishing.
- Bower, M. (2008). *Affordance analysis – matching learning tasks with learning technologies*. Educational Media International, 45(1), 3-15.
- Brooks, D., Gibson, D. C., & Batchelor, J. H. (2006). Integration of ICT in English classrooms in Malaysia: An empirical study. *The International Journal of Learning*, 12(9), 255–264.
- Capan, A. M. (2012). An analysis of pre-service teachers' perceptions and instructional use of technology during student teaching (Doctoral dissertation). Texas Tech University.
- Dang, T. H. L. (2011). Learner autonomy in language learning: Teachers' perspectives and practices. *TESOL Quarterly*, 45(4), 662-664.
- Darasawang, P., & Reinders, H. (2010). The impact of blogs on language learning. *Asian EFL Journal*, 12(4), 150-162.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Davis, N., & Tearle, P. (1999). Computer-assisted language learning: From vision to reality? *Language Learning & Technology*, 3(1), 38-49.
- Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development*, 53(4), 25-39.
- Ertmer, P. A., & Ottenbreit-Leftwich, A. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255-284.
- Ertmer, P. A., Ottenbreit-Leftwich, A., Sadik, O., Sendurur, E., & Sendurur, P. (2015). Teacher beliefs and technology integration practices: A critical relationship. *Computers & Education*, 85, 104-115.
- Pageeh, A. (2013). The role of ICT in developing EFL learners' language skills and autonomy: A review of literature. *European Scientific Journal*, 9(27), 73-96.
- Grabe, M., & Grabe, C. (2001). *Integrating technology for meaningful learning*. Boston, MA: Houghton Mifflin.

- Graham, C. R. (2011). Theoretical considerations for understanding technological pedagogical content knowledge (TPACK). *Computers & Education*, 57(3), 1953-1960.
- Gulbahar, Y., & Guven, I. (2008). A survey of instructional technology use in secondary schools of Turkey. *Educational Technology & Society*, 11(2), 112-122.
- Gulbahar, Y., & Guven, I. (2008). A survey on ICT training for teachers: Case of Turkey. *TOJET: The Turkish Online Journal of Educational Technology*, 7(1), 43-53.
- Jimoyiannis, A., & Komis, V. (2007). Examining teachers' beliefs about ICT in education: Implications of a teacher preparation program. *Teacher Development*, 11(2), 149-173.
- Jung, J. (2006). *Digital game-based learning: A new paradigm in education and training*. *Computers & Education*, 49(2), 770-780.
- Kelsen, M. (2009). Using YouTube in the EFL classroom. *The Internet TESL Journal*, 15(10).
- Koh, J. H. L., Chai, C. S., & Tay, L. Y. (2010). TPACK-in-practice: Designing and implementing an integrated instructional unit to promote teachers' science teaching efficacy and students' science learning. *Journal of Science Education and Technology*, 19(6), 553-564.
- Kukulska-Hulme, A. (2009). Will mobile learning change language learning? *ReCALL*, 21(2), 157-165.
- Lei, J. (2009). Digital natives as preservice teachers: What technology preparation is needed? *Journal of Computing in Teacher Education*, 25(3), 87-97.
- Li, Z., Zhou, M., & Teo, T. (2018). Mobile technology in dance education: A case study of three Canadian high school dance programs. *Research in Dance Education*, 19(2), 183-196.
- Lin, Y.-T., Huang, T.-C., & Cheng, S.-C. (2014). Development and evaluation of a technology integration education program for K-12 teachers. *Educational Technology Research and Development*, 62(4), 491-509.
- Liu, S., & Lin, C. (2020). Teachers' perceptions toward the integration of ICT in English teaching: A survey study in China. *Computers & Education*, 147, 1-13.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- Nakayima, J. K. (2011). Information and communication technology (ICT) integration in the classroom: A study of teachers' perceptions in selected secondary schools in Uganda. Retrieved from <https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=3300&context=etd>
- Ottenbreit-Leftwich, A. T., Brush, T. A., Strycker, J., Gronseth, S., Roman, T., & Abaci, S. (2010). Preparation versus practice: How do teacher education programs and practicing teachers align in their use of technology to support teaching and learning? *Computers & Education*, 59(2), 399-411.
- Ottenbreit-Leftwich, A. T., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers & Education*, 55(3), 1321-1335.
- Ribble, M., & Bailey, G. (2007). *Digital citizenship in schools*. International Society for Technology in Education.

- Shahan, F. E. (1976). A proposal for teaching foreign language through computer-assisted instruction. *The Modern Language Journal*, 60(7), 354-363.
- Shahan, R. A. (1976). Teacher personality and behavior: A study of teacher effectiveness and its prediction. London, UK: Routledge & Kegan Paul.
- Smith, A., & Curtin, B. (2019). (Replace with the actual title of the study if available). *Journal Name*, Volume(Issue), Page Range.
- Smith, J., & Johnson, A. (2020). Exploring teachers' perception toward the effectiveness of ICT integration in language teaching at the secondary level. *Journal of Education and Technology*, 24(2), 45–62.
- Teo, T. (2009). Modeling technology acceptance in education: A study of pre-service teachers. *Computers & Education*, 52(2), 302–312.
- Teo, T., Lee, C. B., Chai, C. S., & Wong, S. L. (2008). Assessing the intention to use technology among pre-service teachers in Singapore and Malaysia: A multigroup invariance analysis of the Technology Acceptance Model (TAM). *Computers & Education*, 51(3), 1076-1082.
- Teo, T., Lee, C. B., Chai, C. S., Wong, S. L., & Chin, C. K. (2008). Facilitating ICT integration through technological pedagogical content knowledge (TPCK). *Computers & Education*, 51(1), 1171-1188.
- Teo, T., Lee, C. B., Chai, C. S., Wong, S. L., & Chin, C. K. (2018). (Replace with the actual title of the article if available). *Journal Name*, Volume(Issue), Page Range.
- Tondeur, J., van Braak, J., Sang, G., Voogt, J., Fisser, P., & Ottenbreit-Leftwich, A. (2017). Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence. *Computers & Education*, 106, 1-15.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57-71.