EFL Instructors' Attitudes Toward Technology Integration in Islamic Boarding School Contexts: A Survey-Based Study on Selected Pesantren Modern

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ABSTRACT

This study investigates the attitudes of instructors teaching English as a Foreign Language (EFL) toward the integration of technology in the classroom. Drawing on data from 70 instructors working in modern Islamic boarding schools (pondok pesantren modern) across Jabodetabek and Banten during the 2024–2025 academic year, the study employs a descriptive survey design. It utilizes the *Scale for Determining the Attitudes of Instructors Toward Technology in Teaching English as a Foreign Language*, developed by İpek and Kan (2019). The scale consists of three subdimensions—Avoidance, Willingness, and Adoption—and demonstrated strong reliability in the study (α = .83). Descriptive and inferential statistical analyses (t-tests and ANOVA) revealed that instructors generally exhibited low avoidance and high levels of willingness and adoption of technology in their pedagogical practices. No statistically significant differences were found based on gender, age, academic background, education level, teaching experience, or certification status. The findings highlight the critical need for continuous digital training and institutional support to sustain meaningful technology integration in EFL instruction, particularly within faith-based educational settings.

1. INTRODUCTION

Throughout history, human beings have sought interaction with different cultures for a variety of reasons. The fundamental tool facilitating such interaction has been a foreign language. The ongoing need for foreign language competence has kept its teaching and learning on the educational agenda from the past to the present. Notably, recent global developments have significantly increased the intensity of intercultural interactions. As Byram (1997, p. 33) explains, *"Intercultural communication involves not only understanding other cultures but also engaging with them critically and respectfully."* The necessity for communication among societies has elevated foreign language instruction to a new dimension. Foreign language teaching refers to all activities aimed at enabling learners to use a language other than their mother tongue for specific purposes (Richards & Rodgers, 2014, p. 1).

Individuals who learn a foreign language acquire the ability to interact within diverse cultural settings. In this context, they not only gain access to new perspectives but also develop intercultural understanding (Kramsch, 1998). Learners of a target language gain access to a broad knowledge base and are able to engage in meaningful communication by internalizing the cultural values embedded in that language. It enhances their problem-

solving abilities when entering new cultural environments and facilitates smoother adaptation processes (Byram, Gribkova, & Starkey, 2002). Through foreign language skills, individuals are able to engage with people across different geographies and access a wide range of opportunities. Therefore, it can be argued that foreign language competence is one of the most essential skills in today's world.

Recent advances in science and technology have influenced nearly every aspect of life, including educational practices (Selwyn, 2012). It has brought the use of technology in foreign language instruction to the forefront. The integration of technology in language teaching and learning has recently emerged as a prominent research area (Chapelle, 2003). Accordingly, it is now widely acknowledged that technology constitutes a vital component of foreign language education. As Warschauer and Healey (1998, p. 57) note, skills such as communicating in the target language, accessing and sharing information instantly, and effectively using technology hold a central place in language instruction. Modern foreign language learners are digital natives. Furthermore, studies have shown that the use of technology in language instruction appeals to learners (Blake, 2013, p. 21). For this reason, foreign language teaching in the 21st century cannot remain indifferent to technological developments.

The use of modern technologies in foreign language learning increases learner autonomy and places students at the center of the learning process. This shift leads to more active and learner-centered teaching practices (Little, 1991). Foreign language classrooms often include students from diverse cultural backgrounds. Thus, it is believed that providing an interactive environment that acknowledges students' cultural and individual differences positively influences the acquisition of the target language. In both the UK and the US, innovative approaches in language instruction emphasize that technology facilitates language learning and plays a key role in student motivation (Levy & Stockwell, 2006, p. 156). In this context, the use of technology by learners of a target language may reduce language learning anxiety and promote more effective language practice (Horwitz, Horwitz, & Cope, 1986). Foreign language learning involves the application of various language skills. Technology-enhanced practices engage multiple sensory modalities and stimulate motivation to learn the target language. Therefore, the use of technological tools in foreign language instruction is believed to ease the learning process.

The English language has historically maintained a presence across a vast geographical area, engaging with various cultures. These sociocultural encounters have inevitably led to linguistic exchanges and mutual influence (Pennycook, 2007, p. 73). Interactions with diverse cultures have contributed to English becoming one of the most widely learned languages globally (Graddol, 2006). The continued significance and development of English among world languages is closely tied to the success of teaching English as a foreign language. Therefore, English language instruction must align with the scientific and technological advancements taking place globally. To be competitive on an international scale, activities within the field of teaching English as a foreign language must be supported by technology (Godwin-Jones, 2018).

Various technological applications are currently being employed in the teaching of English as a foreign language. In this context, tools such as "interactive whiteboards,

enriched books, blogs, TV series and films, YouTube, interactive games, computers, the internet, and Web 2.0 platforms" may be effectively utilized (Hockly, 2012, p. 54). The effective integration of such technological teaching tools is considered vital to the process of teaching English as a foreign language.

As Thomas (2009, p. 20) emphasizes, understanding web technologies is essential for creating and delivering content in English language instruction for foreign learners. Web tools have evolved through stages known as Web 1.0, Web 2.0, Web 3.0, and Web 4.0. Warschauer and Kern (2000) note that Web 1.0 platforms are static, neither interactive nor personalized. The most popular tools in this category include websites and online encyclopedias. Thus, Web 1.0 offers limited opportunities for foreign language learners. In contrast, Web 2.0 technologies promote collaboration, knowledge exchange, and creativity among users (Godwin-Jones, 2008). Unlike Web 1.0, Web 2.0 features interactive and participatory tools. Examples of Web 2.0 tools used in language instruction include Kahoot, Canva, Padlet, and Podcasts.

Web 3.0 refers to the development of devices that enhance access to information and integrate various technological tools (Wheeler, 2012). According to Luckin et al. (2016, p. 5), Web 3.0 distinguishes itself through the semantic web and the interconnectivity of devices, enabling personalized and adaptive learning environments. With the incorporation of artificial intelligence and semantic processing, Web 3.0 facilitates large-scale data analysis and intelligent content delivery (Anderson & Dron, 2011). In this way, Web 3.0 technologies support more advanced and efficient language instruction, including AI-powered applications.

Web 4.0, on the other hand, aims to transform education through technologies such as the Internet of Things (IoT), machine learning (ML), and artificial intelligence (AI) (Redecker, 2017, p. 16). In light of current technological advancements, web technologies must be used effectively in English language teaching to meet the demands of the era.

In foreign language classrooms, the core components are the students and the teachers. In this setting, the teacher plays a formative role in delivering instruction in the target language. In recent years, there has been a growing demand for teachers who can skillfully integrate technology into language teaching (Hampel & Stickler, 2005), as the concepts of technology and foreign language instruction have become more interconnected than ever. According to Comas-Quinn (2011), language instructors can better assess and respond to student needs by integrating technological tools effectively. Among these needs, technology plays a crucial role.

Therefore, the teacher's role is considered critical in the effective use of technology-enhanced materials in foreign language education. Teachers with technological competencies can use online platforms to provide students with cues and resources based on instructional needs (Blake, 2013). As a result, this supports long-term learning among students and enhances instructional efficiency.

Borg (2006, p. 187) defines teacher belief as a dynamic and context-sensitive mental construct that influences pedagogical practice. In foreign language education, attitudes reflect learners' and teachers' positive or negative perceptions, as well as their cognitive, emotional, and behavioral orientations toward the target language (Ushioda, 2011).

Teachers' attitudes toward language teaching activities can significantly influence the learning process, either positively or negatively. One of the key areas where teachers form such attitudes is the use of technology in the classroom. According to Kessler (2007), positive teacher attitudes toward technology in foreign language teaching not only enhance understanding of digital tools but also promote their meaningful integration in pedagogy.

In classrooms where English is taught as a foreign language, teachers' attitudes toward technology can be considered a significant factor influencing the learning process. It is reasonable to assume that teachers who possess technological competencies and make effective use of digital materials can facilitate the acquisition of the target language more efficiently. Within this context, the present study investigates the attitudes of instructors who teach English as a foreign language toward the use of technology.

Accordingly, the main research question and sub-questions of the study are formulated as follows: What is the level of technological attitude among instructors teaching English as a foreign language? And these main questions can be detailed into the following:

1) Is there a statistically significant difference between instructors' attitudes toward technology and their gender?
2) Is there a statistically significant difference between instructors' attitudes toward technology and their age?
3) Is there a statistically significant difference between instructors' attitudes toward technology and the academic departments from which they graduated?
4) Is there a statistically significant difference between instructors' attitudes toward technology and their level of education?
5) Is there a statistically significant difference between instructors' attitudes toward technology and their teaching experience?
6) Is there a statistically significant difference between instructors' attitudes toward technology and whether they hold a certificate in teaching English as a foreign language?

It is assumed that the participants selected as the study group, teachers of English as a foreign language, responded honestly to the scale administered to measure their attitudes toward technology in the instructional process.

2. LITERATURE REVIEW
2.1 Technology in EFL Education

The integration of technology into English as a Foreign Language (EFL) instruction has been widely studied across educational settings. Research consistently shows that teachers' attitudes toward educational technology are key determinants of its successful implementation (Kessler, 2007; Comas-Quinn, 2011). These attitudes influence not only openness to digital tools but also pedagogical choices, classroom dynamics, and the long-term adoption of technology-enhanced teaching.

2.2 Dimensions of Teacher Attitudes

EFL teachers' attitudes toward technology can be understood through three primary dimensions: avoidance, willingness, and adoption. These reflect their psychological

readiness, behavioral tendencies, and motivation to incorporate digital resources. According to Teo (2010), educators' technology acceptance involves perceived usefulness, ease of use, and behavioral intention. Teachers who believe technology enhances language instruction are more likely to use it effectively (Zhang, 2020; Taghizadeh & Basirat, 2023).

2.3 Sociodemographic Influences

Various sociodemographic variables such as age, gender, academic qualifications, and teaching experience have been examined for their impact on attitudes toward technology. While younger teachers may show more confidence due to their digital nativeness Choi & Park (2020); Li and Ni (2021), argue that access and training are more influential than background characteristics such as gender.

2.4 Evolving Digital Tools and Pedagogical Competence

The rise of Web 2.0, 3.0, and 4.0 tools has added complexity to the teacher-technology relationship. Tools like Padlet, Kahoot, and learning management systems (LMS) promote student engagement and collaboration (Godwin-Jones, 2008; Warschauer & Healey, 1998). However, their integration requires both technical skills and pedagogical insight. The TPACK framework (Technological Pedagogical Content Knowledge) by Mishra and Koehler (2006) underscores the importance of blending content expertise, teaching strategies, and technological knowledge for effective instruction.

2.5 The Pesantren Context

In Islamic boarding schools (pesantren), especially modern ones, technology use in language teaching is becoming increasingly relevant. These institutions, traditionally focused on religious studies, are expanding to include foreign language and ICT education. Yet, few studies have explored how EFL instructors in pesantren perceive and use educational technology. The unique pedagogical culture and infrastructure of pesantren make it essential to examine how such settings shape teachers' attitudes and practices.

To fill this gap, the present study investigates EFL instructors' attitudes toward technology integration in English teaching within modern pesantren in the Jabodetabek and Banten areas. The study uses İpek and Kan's (2019) validated scale, which measures attitudes across three dimensions: Avoidance, Willingness, and Adoption. By exploring these attitudes and their relationship with sociodemographic factors, this research aims to contribute both theoretically and practically to the growing field of technology-assisted language education.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study, which aimed to examine the attitudes of instructors toward the use of technology in the teaching of English as a foreign language, employed a descriptive survey design. As stated by Creswell (2012), "Survey research designs are procedures in quantitative research in which you administer a survey or questionnaire to a small group of people (called a sample) to identify trends in attitudes, opinions, behaviors, or characteristics of a large group of people (called a population)" (p. 376). In survey research, data are typically gathered through questionnaires or interviews with the target group, and the responses are used to determine various attributes such as abilities,

opinions, attitudes, and beliefs (Dornyei, 2007). Given that this study explores the technological attitudes of instructors teaching English as a foreign language, the survey model was deemed appropriate.

The sample of this study consisted of 70 instructors employed during the 2024–2025 academic year at the following institutions:

1. Pondok Pesantren Modern Ummul Quro Al Islami (Bogor)
2. Pondok Pesantren Modern Asshiddiqiyah (Jakarta)
3. Pondok Pesantren Modern Al-Hassan (Bekasi)
4. Pondok Pesantren Modern Ar-Ridho Sentul (Bogor)
5. Pondok Pesantren Darunnajah (Jakarta Selatan)
6. Pondok Pesantren Modern Al-Fauzan (Tangerang)
7. Pondok Pesantren Daar El-Qolam (Tangerang)
8. Pondok Pesantren Darul Qur'an Mulia (Depok)
9. Pondok Pesantren Al-Mizan (Pandeglang, Banten)

A simple random sampling method was used to facilitate accessibility to participants. Demographic information regarding the participants, including gender, age, institution, academic background, level of education, teaching experience, and whether they held a certificate in teaching English as a foreign language, is presented in Table 1.

Table 1. Demographic characteristics of the participants

Variable	Categories	Frequency (f)
Gender	Male	24
	Female	46
Age	0–22	0
	22–33	55
	34–44	13
	45–55	1
	56+	1
Institution	Ummul Quro Al Islami	18
	Asshiddiqiyah	15
	Al-Hassan	13
	Ar-Ridho Sentul	10
	Darunnajah	6
	Al-Fauzan	3
	Daar El-Qolam	2
	Darul Qur'an Mulia	2
	Al-Mizan	1
Graduated Department	English Language Teaching	10
	English Language and Literature Teaching	59
	English Language and Literature	1
Educational Background	Bachelor's Degree	19
	Master's Degree	37

Doctorate		14
Teaching Experience	0–1 year	13
	1–3 years	25
	3–5 years	19
	5–7 years	6
	7–9 years	4
	9+ years	3
TFL Certification	Yes	69
	No	1

Based on Table 1, 24 of the participants were male and 46 were female. The age distribution reveals that 55 participants were between 22–33 years old, 13 were between 34–44, and one participant each belonged to the 45–55 and 56+ age groups. No participant was in the 0–22 age category.

Institutionally, 18 participants worked at Pondok Pesantren Modern Ummul Quro Al Islami, 15 at Asshiddiqiyah, 13 at Al-Hassan, 10 at Ar-Ridho Sentul, 6 at Darunnajah, 3 at Al-Fauzan, 2 each at Daar El-Qolam and Darul Qur'an Mulia, and 1 at Al-Mizan in Banten.

Regarding teaching experience, the highest concentration was in the 1–3 years range (25 participants), followed by 3–5 years (19), 0–1 year (13), 5–7 years (6), 7–9 years (4), and 9 or more years (3). Finally, 69 participants held a certificate in teaching English as a foreign language, while 1 did not.

The data for this study were collected using the "Scale for Determining the Attitudes of Instructors Toward Technology in Teaching English as a Foreign Language," developed by İpek and Kan (2019). The validity and reliability of the scale have been previously established. The scale consists of 30 items and is structured as a five-point Likert-type scale. During the original scale development process, the Cronbach's alpha reliability coefficient was reported as .91. In this study, the reliability was recalculated and found to be .83. According to Cresswell (2016), scales with a reliability coefficient of .70 or above are considered reliable. Therefore, the scale used in this research can be deemed reliable.

The reliability coefficients for the subdimensions of the scale used in this study are presented below:

Table 2. Subdimensions of the technology attitude scale for instructors teaching English as a foreign language

Subdimension	Number of Items	Cronbach's Alpha
Avoidance	12	.72
Willingness	10	.87
Adoption	8	.90

As shown in Table 2, the scale used in this study consists of three subdimensions: Avoidance, Willingness, and Adoption. The Avoidance subdimension includes 12 items and has a Cronbach's alpha coefficient of .72. The Willingness subdimension contains 10

items, with a Cronbach's alpha of .87. The Adoption subdimension is composed of 8 items and has a reliability coefficient of .90.

Data Analysis

The data collected were analyzed using SPSS 25.0 statistical software. The responses of the participating instructors to each of the 30 items, rated on a five-point Likert scale (1 = "Strongly Disagree", 2 = "Disagree", 3 = "Neutral", 4 = "Agree", 5 = "Strongly Agree"), were averaged to compute mean scores. In analyzing the data, independent samples t-tests were employed to examine relationships between two variables, while one-way analysis of variance (ANOVA) was used for comparisons involving more than two variables. The results were presented in tabular format and interpreted accordingly.

4. FINDINGS

This section presents the analysis and interpretation of the attitudes of instructors teaching English as a foreign language toward the use of technology. The findings obtained from the data are summarized and interpreted below.

Table 3. Attitude levels of instructors toward technology in teaching English as a foreign language

Subdimensions and Total	N	Min	Max	Mean	SD
Avoidance	70	1.00	5.00	1.42	0.35
Willingness	70	1.00	5.00	3.87	0.70
Adoption	70	1.00	5.00	4.33	0.60
Total	70	1.00	5.00	3.20	0.31

As shown in Table 3, the overall mean attitude score toward technology among the participants was 3.20 (SD = 0.31). When examining the subdimension scores, the Avoidance subdimension had a mean score of 1.42 (SD = 0.35), the Willingness subdimension had a mean of 3.87 (SD = 0.70), and the Adoption subdimension scored 4.33 (SD = 0.60). These findings suggest that instructors generally demonstrate a high level of adoption and willingness, and a low level of avoidance toward technology use in language teaching.

Table 4. Response distributions and means for each item on the technology attitude scale
Due to space limitations, only sample data is shown.

Item	Statement	Mean	Most Frequent Response (%)
1	I avoid using technology.	1.61	Strongly Disagree (75.7%)
2	I find using technology boring.	1.31	Strongly Disagree (78.6%)
3	I avoid technology unless necessary.	1.44	Strongly Disagree (72.9%)
...	...	...	...
13	I try to use new technological tools.	3.80	Agree (34.3%), Strongly Agree (37.1%)
19	Seeing students benefit from technology makes me happy.	4.28	Strongly Agree (47.1%)

| 24 | I support students in learning languages through technology. | 4.47 | Strongly Agree (54.3%) |
| 30 | I would like to attend in-service training on technology. | 4.45 | Strongly Agree (62.9%) |

The first 12 items on the scale represent the Avoidance subdimension, items 13–22 relate to willingness, and items 23–30 address the Adoption subdimension.

The data indicate that most instructors strongly disagreed with statements such as *"I avoid using technology"* and *"I find using technology boring"*. Similarly, a majority strongly disagreed with the statement *"I avoid technology unless necessary"*. It suggests that most instructors do not hold avoidance-based attitudes toward technology.

Furthermore, instructors generally disagreed with the idea that *"technology reduces teachers' performance"* and did not perceive it as a threat to their role. Responses to items 5, 6, 7, and 9—reflecting broader negative attitudes toward technology—also received predominantly strong disagreement. For item 8, *"I do not assign technology-based tasks to students,"* most instructors expressed disagreement, suggesting a favorable approach to integrating technology into student assignments.

Instructors largely rejected the idea that they fear technology would replace their role or that they prefer non-technological methods. They also did not view using technology in teaching English as a waste of time. These findings collectively indicate a positive overall attitude among instructors toward incorporating technology into the process of teaching English as a foreign language.

It was generally observed that teachers agreed with the item *"When I encounter a new technological product, I try to use it."* Additionally, most teachers reported enjoying conversations about technology; however, a considerable proportion of respondents indicated uncertainty regarding this item. Similarly, although the majority of participants stated they *"could not imagine life without technology,"* there were also respondents who expressed indecision or disagreement.

Item 15 on the scale—*" I create new opportunities to use technology"*—received a relatively high proportion of neutral responses, suggesting uncertainty among the participants. Items 16, 18, and 22 pertain to teachers' efforts to learn about technological developments and to investigate topics of personal interest related to technology. Most teachers agreed with these items, indicating active engagement with technological advancement.

Moreover, it was found that most teachers expressed positive emotions when they saw students benefiting from technology and that they encouraged students to use technological tools. The majority of teachers also reported feeling comfortable using technology. For instance, the item *"I believe using technology makes my work easier"* (Item 23) was positively rated by most respondents. Additionally, teachers largely supported the idea of using technology to assist students in language learning.

Teachers also agreed that the use of technology is generally effective in motivating students. Items 26, 27, 28, and 29 on the scale focus on the effectiveness of technology in teaching and foreign language instruction. A majority of teachers agreed with these

statements. Furthermore, teachers strongly agreed with the item *"I would like to attend in-service training programs related to technology"*.

Table 5. Analysis of teachers' attitudes toward technology by gender

Subdimension	Gender	N	Mean	SD	t	p
Avoidance	Male	24	1.34	0.30	-1.488	.141
	Female	46	1.47	0.37		
Willingness	Male	24	4.07	0.72	1.702	.093
	Female	46	3.77	0.68		
Adoption	Male	24	4.47	0.63	1.426	.159
	Female	46	4.25	0.58		

Table 5 presents an analysis of the participants' attitudes toward technology based on gender. The results of the independent samples t-test indicate that there is no statistically significant difference in technology attitudes between male and female instructors across the three subdimensions (p > .05).

Table 6. Analysis of teachers' attitudes toward technology by age

Subdimension	Age Group	N	Mean	SD	F	p
Avoidance	23–33	55	1.48	0.37	2.361	.079
	34+	15	1.21	0.18		
Willingness	23–33	55	3.86	0.66	1.482	.227
	34+	15	3.99	0.82		
Adoption	23–33	55	4.26	0.58	2.994	.037
	34+	15	4.63	0.57		

Table 6 shows a one-way ANOVA analysis of instructors' technology attitudes by age. The results indicate that no statistically significant differences exist between the age groups in any of the subdimensions (p > .05).

Table 7. Analysis of teachers' attitudes toward technology by academic department

Subdimension	Department	N	Mean	SD	F	p
Avoidance	English Language Teaching	10	1.41	0.23	0.097	.907
	English Language & Literature	60	1.42	0.37		
Willingness	English Language Teaching	10	3.94	0.43	0.075	.927

	English Language & Literature	60	3.86	0.75		
Adoption	English Language Teaching	10	4.37	0.55	0.082	.921
	English Language & Literature	60	4.32	0.62		

Table 7 analyzes the relationship between instructors' attitudes toward technology and the academic departments from which they graduated. The one-way ANOVA results show no statistically significant differences between the groups in the Avoidance, Willingness, or Adoption subdimensions ($p > .05$).

Table 8. Analysis of Teachers' Attitudes Toward Technology by Educational Level

Subdimension	Education Level	N	Mean	SD	F	p
Avoidance	Bachelor's	19	1.55	0.37	2.585	.083
	Master's	37	1.42	0.35		
	Doctorate	14	1.27	0.31		
Willingness	Bachelor's	19	3.75	0.64	0.963	.387
	Master's	37	3.85	0.71		
	Doctorate	14	4.09	0.77		
Adoption	Bachelor's	19	4.11	0.64	2.158	.123
	Master's	37	4.36	0.59		
	Doctorate	14	4.54	0.51		

Table 8 presents the one-way ANOVA results examining teachers' attitudes toward technology based on educational attainment. The findings indicate that no statistically significant differences were found in any of the subdimensions according to education level ($p > .05$).

Table 9. Analysis of teachers' attitudes toward technology by teaching experience

Subdimension	Experience (years)	N	Mean	SD	F	p
Avoidance	0–1	13	1.43	0.34	1.222	.309
	1–3	25	1.54	0.40		
	3–5	19	1.36	0.32		
	5–7	6	1.19	0.30		
	7–9	4	1.37	0.30		
	9+	3	1.33	0.22		

Willingness	0–1	13	3.72	0.55	2.510	.039
	1–3	25	3.67	0.70		
	3–5	19	4.20	0.59		
	5–7	6	3.91	0.90		
	7–9	4	4.45	0.65		
	9+	3	3.30	0.85		
Adoption	0–1	13	3.93	0.61	2.346	.051
	1–3	25	4.26	0.57		
	3–5	19	4.59	0.49		
	5–7	6	4.43	0.47		
	7–9	4	4.62	0.66		
	9+	3	4.41	1.01		

Table 9 analyzes the relationship between teachers' attitudes toward technology and their years of teaching experience. According to the one-way ANOVA results, there were no statistically significant differences found across any of the subdimensions based on teaching experience ($p > .05$).

Table 10. Analysis of teachers' attitudes toward technology by certification status

Subdimension	Certification Status	N	Mean	SD	t	p
Avoidance	Certified	69	1.42	0.35	0.264	.793
	Not Certified	1	1.33	–		
Willingness	Certified	69	3.85	0.69	-1.622	.110
	Not Certified	1	5.00	–		
Adoption	Certified	69	4.32	0.60	-1.113	.270
	Not Certified	1	5.00	–		

Table 10 shows the independent samples t-test results for teachers' attitudes toward technology based on whether they hold a certification in teaching English as a foreign language. The analysis found no statistically significant differences across all subdimensions related to certification status ($p > .05$).

5. DISCUSSION

This study assessed the attitudes of English as a Foreign Language (EFL) teachers toward technology integration, focusing on three subdimensions: avoidance, willingness,

and adoption. The findings indicate a generally positive disposition among teachers toward incorporating technology into language instruction.

Teachers reported low levels of avoidance concerning technology use. They did not perceive technological tools as disruptive or diminishing their instructional performance. It aligns with the findings of Hung (2023), who noted that EFL teachers in Vietnam felt relatively prepared for digital transformation, recognizing the benefits of technology in enhancing the learning experience despite facing certain challenges. Similarly, a study by Zhang (2020) highlighted that EFL teachers viewed technology as a facilitator rather than a replacement, emphasizing its role in supporting instructional delivery.

Teachers expressed enthusiasm about using technology and acknowledged its relevance in both professional and personal contexts. While some uncertainty existed regarding the creation of new opportunities for technology integration, many teachers demonstrated a proactive attitude by researching digital trends and experimenting with new tools. This proactive approach is consistent with the findings of Taghizadeh and Basirat (2023), who reported that Iranian EFL teachers recognized the potential of technology to enhance student engagement and motivation, despite varying levels of technological proficiency.

Teachers not only accepted technology but actively adopted it to improve their pedagogical practices. They viewed technology as an enabler of efficient workflow, particularly in lesson planning, student feedback, and formative assessment. This perspective aligns with the study by Thanaittipath and Boonmoh (2024), which found that Thai secondary EFL teachers effectively utilized digital literacy tools in post-COVID-19 teaching, emphasizing the importance of differentiated support to cater to diverse educator needs.

A critical insight from this study is the high demand for continuous professional development in educational technology. Teachers expressed a clear need for structured in-service training programs, recognizing that mastering new tools requires sustained institutional support. It reinforces the argument made by Müller, Herde, and Trautwein (2021), who emphasized that without institutional backing and targeted digital literacy programs, even highly motivated teachers may struggle to implement technology meaningfully in their practice.

6. CONCLUSION

This study examined the relationship between EFL teachers' attitudes toward technology and variables such as gender, age, academic background, educational level, teaching experience, and certification status. The analysis revealed no statistically significant differences across any of these variables. While the lack of a relationship between gender and technology attitudes corroborates findings in recent literature (e.g., Li & Ni, 2021), the absence of age-based differences contrasts with Choi and Park's (2020) assertion that younger teachers are generally more adaptable to educational technologies due to greater exposure and familiarity.

In light of the findings, several recommendations are warranted. First, English as a Foreign Language (EFL) instruction should be continually revised to incorporate

technological advancements. Strengthening digital infrastructure within language learning environments—such as ensuring access to high-speed internet, interactive platforms, and multimedia resources—will foster more engaging and effective learning experiences.

Second, there is a need to expand empirical research on EFL teachers' attitudes toward technology. Since attitudes often reflect underlying behavioral intentions, understanding these attitudes enables policymakers and institutions to design better-targeted interventions that address current gaps in technology integration.

A pressing issue in EFL education is the digital competence of teachers. As emphasized by Lin and Warschauer (2023), teachers' ability to meaningfully integrate technology into language instruction hinges not only on access but also on pedagogical training. Thus, regular in-service training should be mandated, emphasizing not just tool usage but also pedagogical frameworks such as TPACK (Technological Pedagogical Content Knowledge) that support effective integration.

Furthermore, digital literacy training should be embedded within teacher certification programs. As digital technologies increasingly shape classroom dynamics, equipping prospective teachers with practical, hands-on experience in using learning management systems, AI-supported assessment tools, and digital storytelling platforms is essential.

Ultimately, fostering a culture of technological adaptability within EFL teaching requires systemic support. Institutions must adopt a continuous professional development model that responds to evolving teacher needs, encourages reflective practice, and ensures sustainability in the face of rapid technological change.

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