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Impact of Artificial Intelligence on English Language Teaching at University Level: A Study of EFL Teachers' Perspectives in Pakistan

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ABSTRACT
Artificial intelligence (AI) has become a significant technological advancement in various fields. One area where AI shows particular promise is in English Language Teaching (ELT). Due to rapid technological development, online resources, classrooms, and language learning platforms now incorporate AI to teach and learn English, transforming the approach to language education. AI has great potential to improve learning outcomes and the teaching process. This research explores the impact of AI on English Language Teaching (ELT) at the university level in Pakistan, focusing on EFL teachers. Data were collected through a quantitative descriptive analysis from 50 teachers using a questionnaire based on validated sources, which assessed AI's effectiveness, challenges, and ethical issues. The results indicate strong agreement on AI benefits such as personalized learning (mean value of 4.24) and increased efficiency in lesson preparation (mean value of 4.28), with 86% of teachers confirming its effectiveness (mean value of 4.16). Concerns mentioned include data privacy (mean 3.64), reduced critical thinking (mean 4.02), and a digital divide (mean 3.48). Teachers emphasized the need for training (mean 3.80), and AI is viewed as a complement to traditional methods (mean 4.26). The study underscores the importance of addressing ethical issues, ensuring equitable access, and enhancing training to fully harness AI's potential for ELT. Recommendations include implementing comprehensive training programs and ethical guidelines to support human instruction rather than replace it, ultimately improving English language skills in higher education in Pakistan.

Keywords: *Artificial Intelligence, English Language Teaching (ELT), Perception, University Teachers*

Introduction

A major component in communication is language. It is how we share our thoughts and ideas with people. The most widespread and the best language to express oneself is English. It is a professional and educational necessity in the world (Tsang, 2021). Researchers have been

grappling with identifying factors that influence success of students learning English in EFL/ESL settings (Li et al., 2024). However, it has overpowered other languages since the twentieth century and is prestigious. The teaching of the English language (ELT) has developed due to the emergence of English as an international communication language, a language of business and education all over the world. The English language has emerged as an essential professional, economic, and social communication in the entire world (Rao, 2019).

The dominance of English as a lingua franca globally has further solidified its role as a key medium for professional, academic, and social communication worldwide (Marlina & Xu, 2018). In English as a Foreign Language (EFL) settings, especially in non-native English-speaking countries like Pakistan, the need for effective English Language Teaching (ELT) has grown rapidly due to its academic and economic importance (Rao, 2019). As ELT evolves to meet these demands, integrating Artificial Intelligence (AI) into educational practices represents a revolutionary change, transforming the way ELT is approached (Baskara, 2023). AI-based tools, including natural language processing (NLP) systems and intelligent tutoring systems (ITS), can offer personalized, interactive, and effective learning experiences tailored to diverse learners in EFL contexts (Ali, 2024).

This paper explores the impact of AI on university ELT in Pakistan from the perspective of EFL teachers, focusing on its effectiveness, challenges, and ethical considerations. The rise of English as a global language calls for innovative teaching methods to support language acquisition. Traditional ELT approaches, effective in conventional classroom settings, struggle to address individual differences in large university classes (Tsang, 2021). AI can bridge this gap by providing personalized guidance, automating repetitive tasks, and offering immersive learning experiences (Bekteshi, 2025). For example, tools such as Grammarly and AI chatbots support writing and speaking practice, aiding language skill development (Su , 2023). Research indicates that AI significantly enhances learner engagement and achievement in EFL environments through real-time corrections and customized exercises (Yuan & Liu, 2025). However, integrating AI into ELT presents challenges. Teachers often face obstacles like limited training, inadequate technology, and concerns that AI might diminish critical thinking or human interaction necessary for language development (Pedro et al., 2019). In Pakistan, where English is an essential language for academic and professional purposes, AI integration offers many opportunities, but issues like the digital divide and lack of infrastructure pose significant limits (Hussain et al., 2023; Awan et al., 2025; Rashid et al., 2025). Ethical considerations surrounding data privacy and equitable access complicate AI adoption and raise questions about the long-term sustainability of this technology in education (Ikwuanusi et al., 2023). This study investigates these dynamics from the perspective of EFL teachers to assess AI's effectiveness, challenges, and perceptions of its role in ELT. The existing researches have primarily focused on examining AI's impact on specific educational outcomes including academic achievement, learning attitudes, motivation, and self-efficacy across various educational contexts. These studies have investigated AI applications in multiple English language learning sub-domains, analyzed the effectiveness of different technological tools, and explored implementation across various educational settings from primary through

university levels. The research is intended to highlight how AI systems can provide personalized learning experiences, create immersive environments, offer writing and speaking support, and enhance overall language proficiency.

Problem Statement

Artificial intelligence has great importance in English language teaching. So, there are serious concerns about its challenges and limitations. Teachers have experienced difficulty with AI tools in their teaching techniques, such as a lack of proper training and support. Furthermore, focusing on AI may result in less human interaction, which is required for language development. Ethical issues, such as data privacy, also raise concerns about the integrity and effectiveness of Artificial Intelligence in English language Teaching. This study explores these drawbacks and limitations from the perspective of English language teachers. It provides insights into their practical and ethical challenges and recommendations for better use of Artificial Intelligence in educational contexts.

Objectives

- To assess the effectiveness of Artificial Intelligence in English language teaching.
- To gather and analyze teachers' perceptions, beliefs, challenges and experiences with Artificial Intelligence in the English language teaching approach.

Research Questions

1. How do teachers determine the effects of Artificial Intelligence on their English language teaching approach?
2. What are the difficulties and limitations of utilizing Artificial Intelligence for English language teaching?
3. To what extent do teachers believe AI enhances or hinders student learning and engagement in English language classes?
4. What are teachers' limitations with current AI technologies in teaching English and what improvements do they suggest?

Significance of the Study

The study is important because it explores EFL instructors' views on the role of AI in university-level English language teaching in Pakistan, addressing a key gap in local research. By showcasing successes, challenges, and ethical issues related to AI in education, it offers insights to improve teaching practices and guide policy. The findings highlight AI's potential to personalize and improve learning, as well as barriers like the need for training and data privacy concerns. This adds to the global knowledge of English language teaching and helps stakeholders effectively adopt AI to ensure ongoing access, human interaction, and better English skills in Pakistan's academic and professional settings.

Literature Review

Significance of Artificial Intelligence and Challenges in Adoption for ELT

The implementation of Artificial Intelligence (AI) in English Language Teaching (ELT) at the university level has revolutionized the teaching–learning activity (Fitria, 2021). It not only provides new resources to complement learning but also introduces unprecedented challenges.

AI is a transformative technology that enables personalized learning, automates administrative tasks, and supports data-informed decisions. AI-based language learning platforms (e.g., Duolingo, Grammarly) can adapt to each student's specific needs and offer personalized exercises for teaching grammar, vocabulary, and writing (Assidiq, 2025). AI can analyze student progress in real-time, helping teachers identify where comprehension gaps exist and adjust lesson plans accordingly. This student-centered classroom strategy now generates immediate data that enhances engagement and student outcomes by addressing both emotional and pedagogical aspects of online content (Shah, 2023). Additionally, AI tools like chatbots and virtual tutors are available around the clock, assisting students in practicing speaking and writing skills both during and outside of class, especially helpful for non-native speakers (Graefen & Fazal, 2024). AI also automates grading and feedback, freeing teachers to focus on instructional design and student interaction. However, challenges remain. Teachers are often ill-prepared to effectively integrate AI tools, resulting in underuse or misuse (Gambo et al., 2025). The digital divide, inequitable access to technology, can exacerbate inequalities in technology-rich schools, particularly those with limited resources (Parks, 2022).

Ethical concerns, including data privacy and AI biases, are also significant. For instance, biased AI systems trained on incomplete datasets may generate culturally insensitive or incorrect language suggestions (Liu, 2025). Moreover, overreliance on AI may diminish the human touch in teaching, such as developing critical-thinking skills through real-time discussions, an important aspect of ELT.

Teachers might also face resistance from students who prefer traditional methods or feel overwhelmed by technology. Several AI tools and technologies are transforming ELT in higher education. Both Grammarly and ProWritingAid offer students immediate feedback on grammar, style, and coherence (Amina, 2024). Their natural language processing (NLP) suggests corrections, fostering learner autonomy. AI chatbots like Google Dialogflow or Microsoft XiaoIce can respond to text input, enabling spoken practice and providing instant feedback on pronunciation and fluency (Julio, 2024).

Intelligent Tutoring Systems (ITS), such as the MATHia platform by Carnegie Learning adapted for language, provide personalized exercises to enhance vocabulary and reading skills (Marouf et al., 2024). Grammar and spelling checkers like Microsoft Word give immediate feedback but do not assess the overall quality of student work as well as Automated Essay Scoring (AES) systems like ETS's e-rater, which evaluate written work to produce consistent, unbiased scores, though human oversight may be necessary to ensure fairness (Bai et al., 2022). These tools range from blended learning, where AI supplements but does not replace in-person instruction, to hybrid classrooms where traditional teaching and AI are increasingly integrated. For example, teachers use AI analytics to monitor progress and inform in-class interventions. Flipped classrooms utilize AI platforms for pre-class learning, reserving class time for discussion and interactive activities. AI task-based learning involves assigning projects where students use tools like chatbots to apply language skills in real-world contexts. Ultimately, successful

implementation requires teacher training, clear guidelines, and efforts to bridge access gaps for inclusive use (Memon & Memon, 2025).

Theoretical Perspectives on the Use of AI in ELT

Lots of theories do actually exist which underline the advent and application of Artificial Intelligence (AI) in English Language Teaching (ELT) within the university level. These are all frames through which AI can be interpreted, and the impact that Lovac-Mercier discusses, of AI on language learning, can be explained with these frames, as can the support that is derived for the alignment of AI practices with educational principles. According to constructivism, as learners construct knowledge and understanding through experience and reflection (Piaget, 1970). In the field of ELT, AI enhances this approach by providing students with personalized learning paths (in the form of intelligent tutoring systems, such as Carnegie Learning's adapted platforms). These systems model student texts to provide adapted exercises, and offer students the possibility to work iteratively to build up competency in the language (Chergui et al., 2024). For example, AI-generated solutions such as Grammarly promote self-regulated learning by prompting students to think about their feedback. However, constructivism emphasises human interaction, and an overemphasis on AI stands to decrease the possibilities for collaboratively constructing knowledge, an important component of SLA (Vygotsky, 1978).

Connectivism, a network learning theory for the digital age (Siemens, 2005), considers learning as connecting to the nodes within one's personal learning network. It connects with connectivism because AI in ELT can provide access to a wide range of online resources and communities. Such devices as AI chatbots (e.g., Google's Dialogflow) keep the learner connected with live language practice distributed through networks and people." (Boonstra, 2021). AI analytics also provide teachers with the ability to connect student data with instructional methods, and to build dynamic learning environments. However, connectivism presupposes digital access which might not be available to those in under-resourced areas posing equitable access challenges (Correia, et al., 2024). Sociocultural theory is also based on Vygotsky's (1978) theory, and it focuses on the role of social interaction and cultural context in learning. AI aids this by means of tools such as virtual language labs or chatbots as well that mimic sociocultural settings mediating context-matched language use rehearsals (AbuSahyon et al., 2023)). For instance, AI-based platforms: can create culturally relevant dialogues to develop pragmatic competence. Yet, AI systems could implant biases in their language models that deviate from cultural subtleties, hindering genuine sociocultural acquisition (Lewis, 2025).

Teachers should play a mediating role in the use of AI to safeguard culturally responsive pedagogy. The stamp of behaviorism, Its hallmark of stimulus-response and reinforcement, underlies the part played by AI in drill after drill of language exercises accompanied by instant feedback. Apps such as Duolingo employ gamified, behaviorist methods to reward appropriately that develop vocabulary and grammatical structures (Shortt et al., 2023). AES (e.g., ETS's e-rater) is a timely, efficient, and systematically reinforced form of feedback consistent with behaviorist principles of reinforcement (Lim et al., 2021). But behaviorists' mechanical nature can hinder critical thought and creativity, which are critical in higher level language use. By combining these

views, AI in ELT can provide a multiple layer approach: constructivism encourages autonomy, connectivism broadens the network, sociocultural theory enriches contextual learning and behaviourism reinforces the basics. Among the challenges are making sure that access is equitable, bias is mitigated and that the over-all efficiency of A.I. is balanced with human interaction. Teachers need to evaluate them fruitfully in the face of AI as well as it's constraints, so that a healthy ELT ecosystem is secured that meets both theoretical and practical requirements.

Related Studies

According to Baskara (2023), what is interesting to note, however, is that the use of transformative AI for ELT purposes has now become a consideration. They highlight AI's ability to analyse vast amounts of data, offer personalised learning, and handle tasks like grading. The report emphasises improved student outcomes but also raises concerns about ethical issues, including data privacy and a reduced human role. Teacher training and infrastructure are crucial for effective AI implementation. This review supports the need to explore teachers' understanding of AI's benefits and challenges, including ethical considerations and training needs, within Pakistan's university context, as is the case with the present study.

Ziki et al. (2023) examined AI-mediated feedback in EFL writing instruction and note that tools such as Grammarly enhance accuracy and boost learner confidence. Their research, conducted with students at a Chinese university, shows AI's ability to provide personalized comments, including alternative phrasing, which helps second language learners understand a new language better. However, they also acknowledge challenges like over-reliance and lack of adequate teacher training. These findings are relevant to the current study because they highlight AI's role in developing language-specific skills and reveal areas where training is needed, which could address some difficulties Pakistani EFL teachers face when using AI tools.

Kaswan et al. (2024) examined technology-based language teaching, Fathi and Rahimi (2022) focus on AI in the design and implementation of interactive and individualized learning environments. Their systematic review highlights AI tools like chatbots and adaptive platforms that aim to boost EFL learners' engagement and language skills. Artificial intelligence enables content to be personalized, which can improve writing and speaking abilities, according to the report. However, it also presents challenges, such as teachers' technological skills and ethical concerns like data privacy. The authors stress the importance of teacher training to unlock AI's potential. This research is well-grounded in existing literature and addresses a gap in recent studies by emphasizing teachers' perceptions of AI's effectiveness and barriers in ELT, especially in places like Pakistan.

Da'jafar and Hamidah (2024) examined the effect of AI-supported tools on the speaking skills of EFL learners and reports that the EFL students who used AI products significantly improved their fluency and pronunciation compared to traditional methods. The study was conducted at an Indonesian university, and the experiment demonstrates AI's potential as a source of real-time feedback and conversational practice tools. However, the study acknowledges limitations, including access disparities and the potential for overreliance. These results are also relevant to

my current study because they show AI's potential in enhancing language skills; however, they also highlight challenges related to unequal access, which could be applicable and reflected in Pakistan's EFL context, thereby influencing teacher attitudes toward AI integration.

Ramnani (2024) identified ethical issues in AI for learning, data privacy, algorithmic bias, and lack of human interaction in education. Their research highlights how students' privacy is at risk and how they may lose their sense of personality in learning, while still benefiting from efficient education. Appropriate class links can save time by removing the need to distribute code and invite students individually. The authors recommend establishing ethical guidelines and providing teacher training to address these concerns. The present study relates to ongoing work by highlighting some of the CS issues that can affect how Pakistani EFL teachers perceive these technologies, particularly regarding data privacy and the integration of AI and human elements in ELT classrooms.

Research Methodology

A quantitative is employed to explore EFL teachers' perceptions regarding the influence of Artificial Intelligence (AI) in the EFL context at the university level in Pakistan. In contrast, the quantitative design concentrates on collecting and analysing numerical data, patterns, trends, and relationships related to teachers' experiences, attitudes, and challenges in integrating AI. This aligns with the study's aim of evaluating the effectiveness and ineffectiveness of AI integration. A structured questionnaire is the primary instrument used for data collection, allowing for systematic measurement of these perceptions among a large sample and enabling robust statistical analysis. A quantitative study is employed to understand the facts and figures in a numerical manner (Creswell, 2014).

Questionnaire

The primary tool was developed using validated instruments from existing literature and was employed to gather relevant information from respondents in similar studies (Moorhouse & Kohnke, 2024; Ghimire, et al., 2024; Zainuddin, 2024). The purpose of the questionnaire is to gather detailed information about EFL teachers' backgrounds and contexts, their exposure to AI tools (e.g., ChatGPT, Grammarly), perceived benefits (e.g., personalized learning, improved lesson planning), challenges (e.g., data privacy, training needs), and attitudes toward AI in ELT. It includes 23 close-ended questions rated on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to assess opinions, along with demographic questions for context.

Sampling Process

The population of interest comprises EFL teachers at universities in Pakistan who are directly engaging with AI tools for higher education. A purposive sampling method was used to ensure that participants have relevant ELT experience and exposure to AI facilities. The sample includes 50 teachers from public and private universities in urban and semi-urban areas, aiming to diversify the institutional landscape. The sampling method used was convenience sampling. Participants were selected based on having at least two years of experience teaching English as a foreign language and familiarity with AT tools to ensure informed feedback. The learners were recruited from university language departments. The sample size is appropriate for conducting

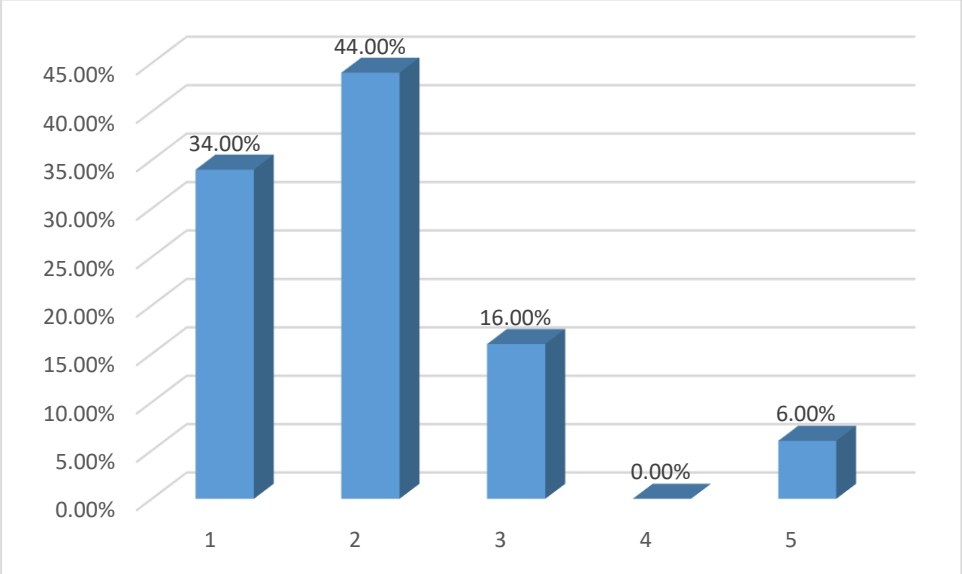
statistically reliable descriptive analyses, though it may limit generalizability to non-university settings.

Data Analysis

Q. No.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total	Mean Value
1	17	22	8	0	3	50	4.00
	34.00%	44.00%	16.00%	0.00%	6.00%	100.00%	
2	15	26	7	0	2	50	4.04
	30.00%	52.00%	14.00%	0.00%	4.00%	100.00%	
3	5	27	18	0	0	50	3.74
	10.00%	54.00%	36.00%	0.00%	0.00%	100.00%	
4	12	38	0	0	0	50	4.24
	24.00%	76.00%	0.00%	0.00%	0.00%	100.00%	
5	25	14	11	0	0	50	4.28
	50.00%	28.00%	22.00%	0.00%	0.00%	100.00%	
6	12	38	0	0	0	50	4.24
	24.00%	76.00%	0.00%	0.00%	0.00%	100.00%	
7	21	21	8	0	0	50	4.26
	42.00%	42.00%	16.00%	0.00%	0.00%	100.00%	
8	5	31	13	1	0	50	3.80
	10.00%	62.00%	26.00%	2.00%	0.00%	100.00%	
9	3	34	5	8	0	50	3.64
	6.00%	68.00%	10.00%	16.00%	0.00%	100.00%	
10	16	19	15	0	0	50	4.02
	32.00%	38.00%	30.00%	0.00%	0.00%	100.00%	
11	4	20	22	4	0	50	3.48
	8.00%	40.00%	44.00%	8.00%	0.00%	100.00%	
12	8	29	8	5	0	50	3.80
	16.00%	58.00%	16.00%	10.00%	0.00%	100.00%	
13	14	21	13	2	0	50	3.94
	28.00%	42.00%	26.00%	4.00%	0.00%	100.00%	
14	10	32	6	2	0	50	4.00
	20.00%	64.00%	12.00%	4.00%	0.00%	100.00%	
15	7	16	15	6	6	50	3.24
	14.00%	32.00%	30.00%	12.00%	12.00%	100.00%	
16	8	33	9	0	0	50	3.98
	16.00%	66.00%	18.00%	0.00%	0.00%	100.00%	
17	12	32	6	0	0	50	4.12
	24.00%	64.00%	12.00%	0.00%	0.00%	100.00%	
18	7	24	13	6	0	50	3.64
	14.00%	48.00%	26.00%	12.00%	0.00%	100.00%	
19	4	26	20	0	0	50	3.68
	8.00%	52.00%	40.00%	0.00%	0.00%	100.00%	
20	6	15	27	0	2	50	3.46

	12.00%	30.00%	54.00%	0.00%	4.00%	100.00%	
21	8	34	6	2	0	50	3.96
	16.00%	68.00%	12.00%	4.00%	0.00%	100.00%	
22	6	38	2	4	0	50	3.92
	12.00%	76.00%	4.00%	8.00%	0.00%	100.00%	
23	15	28	7	0	0	50	4.16
	30.00%	56.00%	14.00%	0.00%	0.00%	100.00%	

Question No. 1: I frequently use AI tools in my English language teaching.

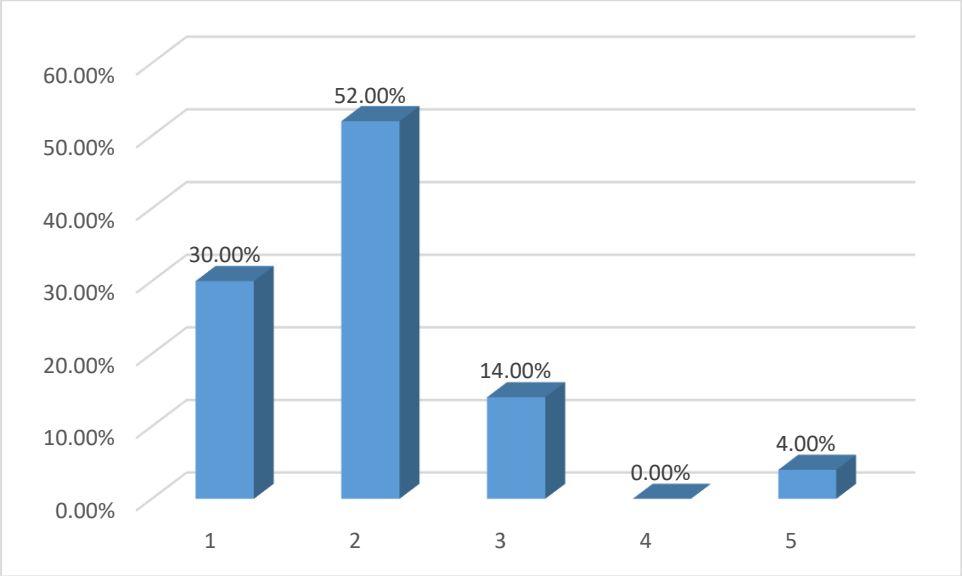


Graph No. 1

Analysis

The high mean of 4.00 indicates a strong trend of frequently using AI tools in ELT among teachers. It shows that a significant percentage (78%, with 34% strongly agreeing and 44% agreeing) have been using AI as a result of its growing popularity in university-based ELT in Pakistan. The 0% neutral responses suggest that no one objects to using AI tools, but a small proportion (6%) strongly disagree, possibly due to lack of familiarity or loyalty to traditional methods. The 16% neutral responses may belong to teachers who occasionally practice AI or have not yet realized its usefulness. This aligns with international trends in educational technology across various countries, as mentioned in the introduction. Nonetheless, the few highly negative responses indicate a need for more detailed investigation of obstacles (e.g., training or access), which could lead to targeted professional development to support AI adoption.

Question No. 2: I am familiar with AI tools (e.g., ChatGPT, Grammarly, Google Assistant) for English language teaching.

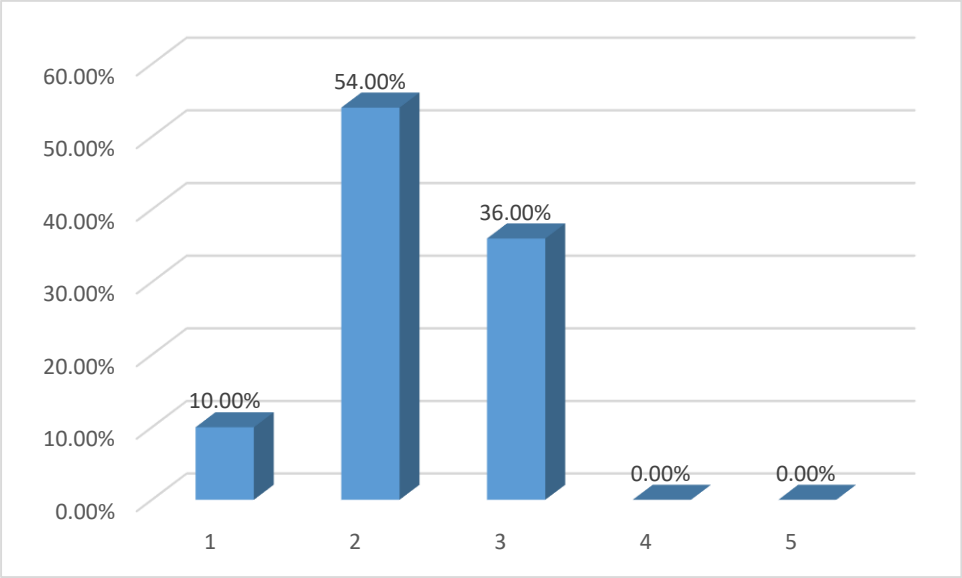


Graph No. 2

Analysis

The high mean value of 4.04 shows a high level of awareness among teachers about AI tools: 82% either strongly agreed (30%) or agreed (52%). This suggests that tools like ChatGPT and Grammarly are familiar to Pakistani ELT professionals, supporting the idea that AI can enhance and personalize learning (Su et al., 2023). The 14% who are neutral may include teachers with limited exposure to these tools, while the 4% who strongly disagree might be those unfamiliar due to lack of training or access. The absence of disagreement (0%) indicates that outright opposition to AI familiarity is uncommon. The high awareness level is promising for integration of AI in teaching, but the 18% (neutral + strongly disagree) may need additional training to fully benefit from these tools. These findings align with the study's goal to explore teachers' attitudes, perceptions, and beliefs, suggesting that a foundation of familiarity is essential for effective AI use in ELT.

Question No. 3: I encounter AI tools while teaching at the university.

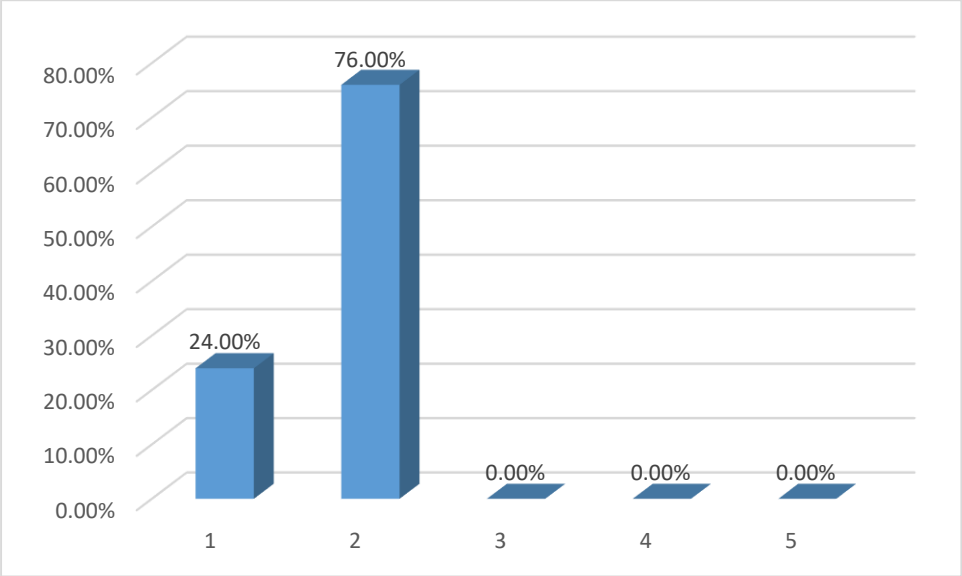


Graph No. 3

Analysis

A mean value of 3.74 indicates that teachers often encounter AI tools in the university context. However, this score is lower than those for Q1 and Q2, implying less frequent exposure. Specifically, 54% agreed and 10% strongly agreed (total 64%) that AI is already widespread, likely due to institutional adoption or student use. The large proportion of neutral responses (36%) suggests variability in exposure, probably because of differences in institutional resources or teaching environments. The absence of disagreement (0%) suggests that students do not reject AI, aligning with Fathi & Rahimi (2022), who state that AI contributes to developing interactive learning environments. This variability indicates a potential digital divide (akin to the problem statement in the study) and unequal access to AI tools. Universities could improve AI integration by providing ongoing access and training, which would address the neutral group's uncertainty and encourage more active use of AI in teaching.

Question No. 4: AI tools can enhance personalized learning for my students.

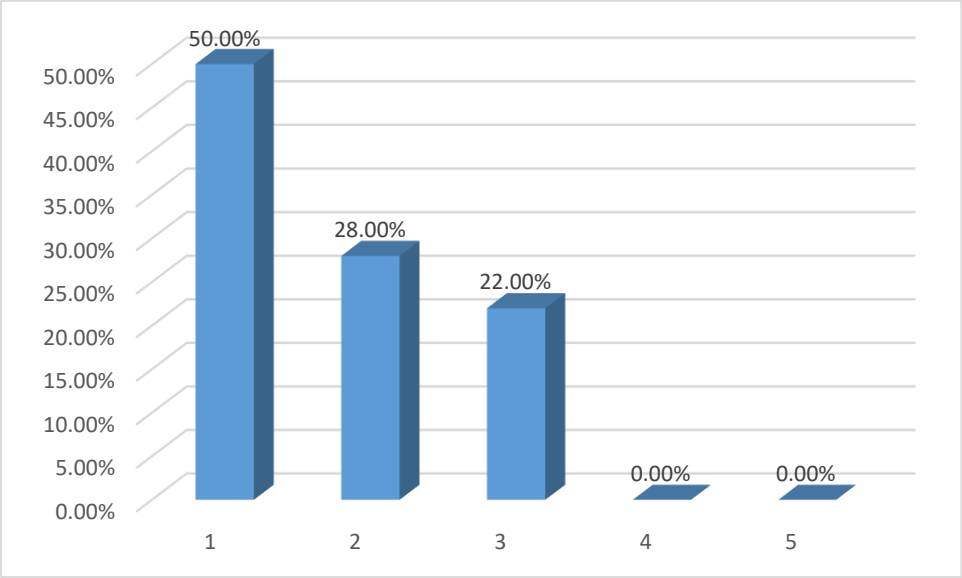


Graph No. 4

Analysis

As shown in the table, responses (mean = 4. 24; 100% of respondents expressing either strong agreement (24%) or agreement (76%)) strongly support the idea that AI tools facilitate personalized learning. This consensus on the Usefulness of AI Aligns with existing literature, which highlights that AI can provide feedback tailored to the individual (Roll & Wylie, 2016). The absence of neutral or negative responses suggests that teachers agree that AI effectively tailors learning experiences to students' needs, possibly through tools like Grammarly or AI- based platforms offering personalized exercises. This finding supports the research goal of assessing AI' s effectiveness in ELT, with teachers proposing AI as a means to address differences among students. However, the lack of disagreement might be influenced by optimism bias, as practical issues like technical difficulties are not considered. To uphold this positive perception, institutions need to invest heavily in AI infrastructure and training, addressing concerns about support and access- issues highlighted by teachers- so that the full potential of AI in personalizing ELT can be realized.

Question No. 5: AI tools make lesson preparation and grading more efficient.

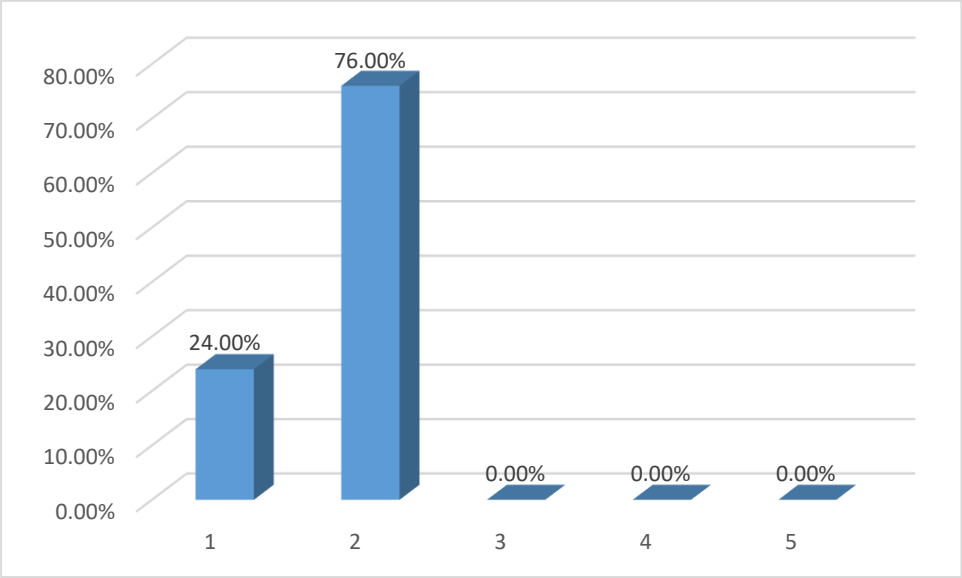


Graph No. 5

Analysis

The mean value of 4. 28 indicates strong agreement that AI tools improve efficiency in lesson planning and grading, with 50% strongly agreeing and 28% agreeing (totaling 78%). This supports the idea described in the document about AI taking over repetitive tasks. The 22% neutral responses suggest that some teachers may not widely use or be familiar with advanced AI tools, possibly due to limited access to these tools. Importantly, since there are no disagreements (0%), it appears that AI does contribute to reducing teachers' workload. This efficiency benefit is especially valuable in the busy academic environment, which favors interactive teaching over interpretation. The neutral group points to a need for more training to ensure all teachers can benefit from AI in administrative tasks and to address potential issues with technical support, as noted in the problem description.

Question No. 6: I am confident in my ability to integrate AI tools into my teaching.

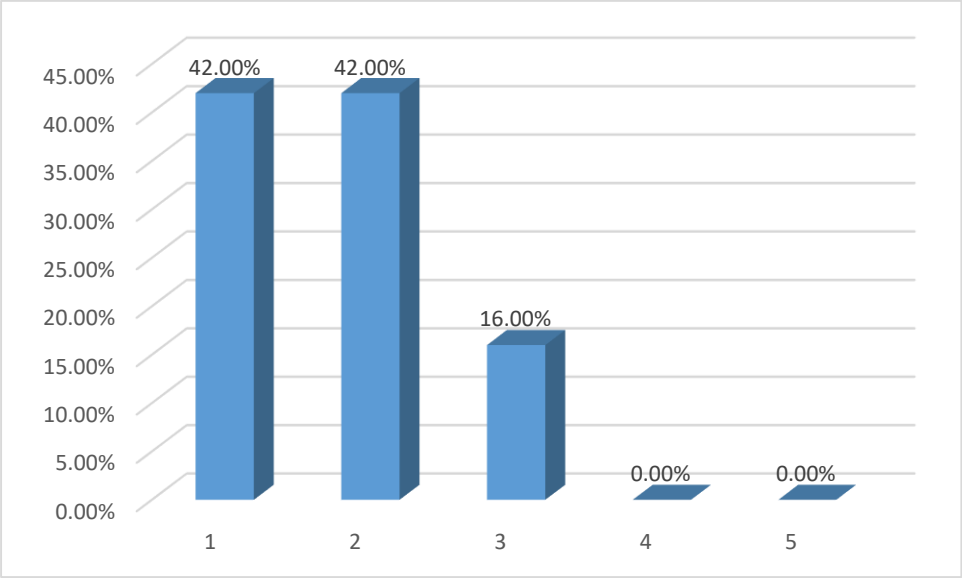


Graph No. 6

Analysis

The high mean (of 4.24) and the percentage of respondents, all of whom either strongly agreed (24%) or agreed (76%), indicate high confidence levels in integrating AI tools into ELT. This aligns with the note in the document regarding teachers' concerns about AI-based technologies (Lu, 2018). With an overwhelming majority of positive responses, teachers likely feel more confident with AI due to familiarity with tools like ChatGPT (Question 2). There is no middle ground, and lacking confidence is not an option. However, this confidence could be challenged by issues such as insufficient training, as mentioned in the problem statement. Ongoing professional development is essential to maintain and build this confidence, enabling teachers to effectively respond to and utilize new AI tools. This finding aligns with the study's goal of exploring teachers' attitudes and underscores the importance of self-confidence in adopting AI in ELT.

Question No. 7: AI tools should supplement, not replace, traditional teaching methods.

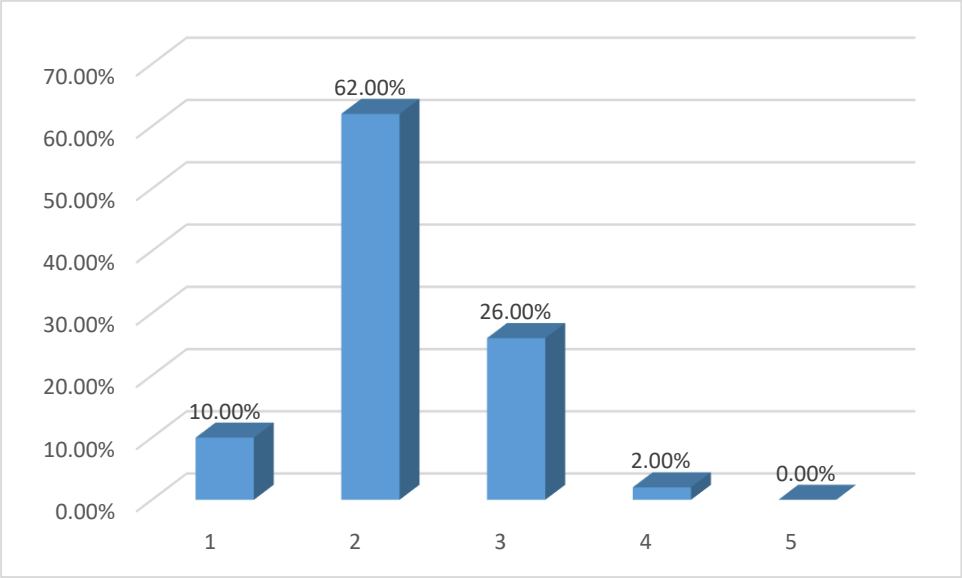


Graph No. 7

Analysis

A high mean of 4.26, with 84% strongly agree (42%) or agree (42%), indicates that the majority of respondents believe AI should be used to supplement, not replace, traditional teaching methods. This aligns with the paper's focus on ethical considerations and the importance of human presence in language learning. The 16% neutral responses may reflect teachers who are open to AI's role but are still unsure about how it compares to traditional methods. The absence of disagreement (zero support for replacing human teachers with machines) supports the study's conclusion that "Teachers use AI as a supportive assistant." This perspective emphasizes the value teachers place on personal contact in ELT and relates to concerns about depersonalization (see Question 20). Therefore, it is recommended that AI be used as a supplementary support tool that enhances, rather than replaces, teacher-student interactions to align with teachers' preferences and ensure the effective integration of AI in ELT.

Question No. 8: I have adequate technical support to use AI tools in my teaching.

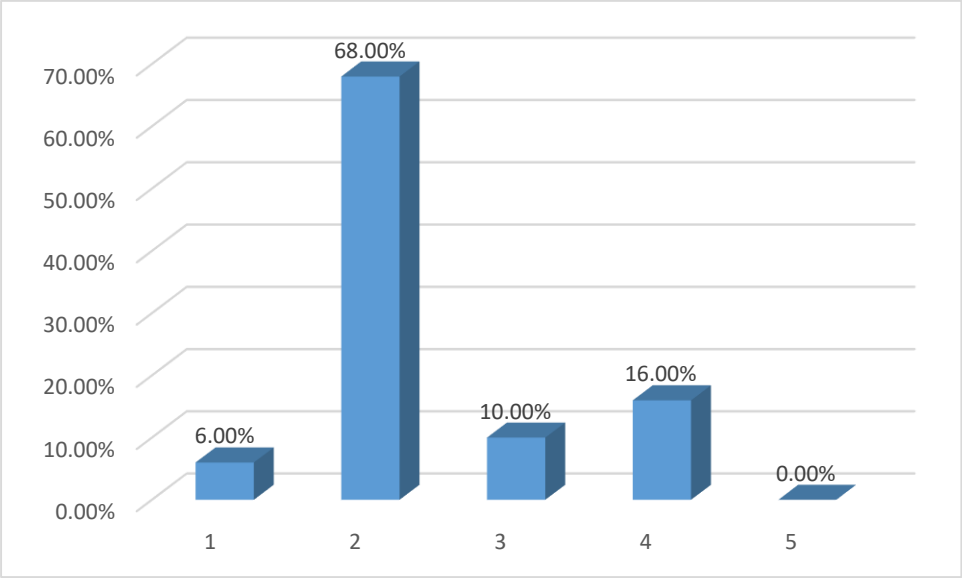


Graph No. 8

Analysis

The mean value for the technical support item was 3.80, indicating moderate agreement; 62% of respondents agreed and 10% strongly agreed (total agreement: 72%). Meanwhile, 26% were neutral, and 2% disagreed, making it unclear whether respondents have access to the necessary support, in line with PS 37 36, which states that there are not enough support and training. The lower mean compared to other questions suggests a significant obstacle to AI application. The 26% neutral likely represents Teachers in such institutions who feel pressured to make do with limited resources, and the few who disagreed (2%) are probably facing resource shortages overall. This highlights the importance of strong technical foundations and training opportunities to foster fair AI adoption, addressing the digital divide. Closing these gaps could improve teachers' knowledge and skills in using AI tools and support the study's goal of identifying challenges related to AI in the classroom.

Question No. 9: I am concerned about data privacy and ethical issues when using AI tools.

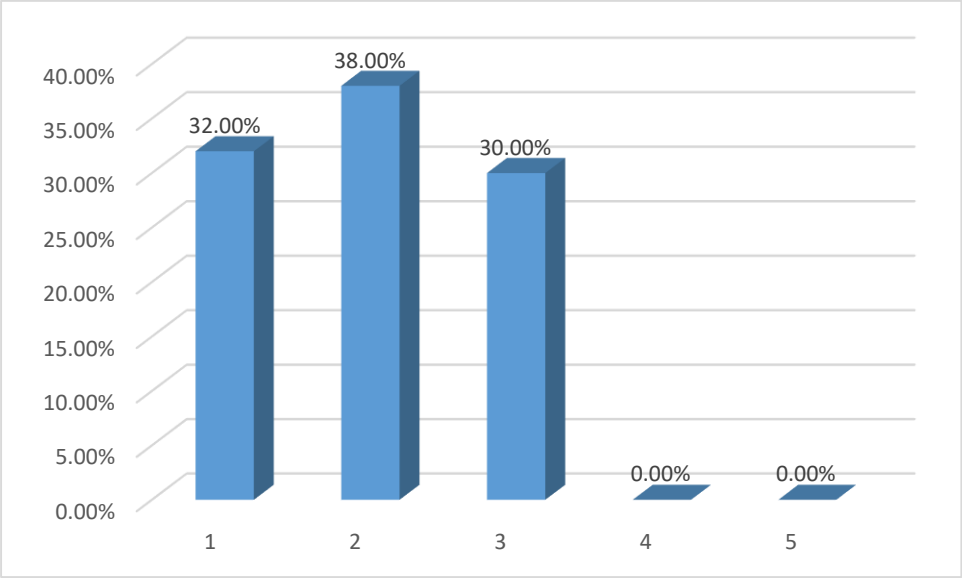


Graph No. 9

Analysis

With a mean of 3.64, there is notable concern about data privacy and ethical issues, with 68% agreeing and 6% strongly agreeing (total: 74%). This aligns with the focus of the problem statement on ethical issues surrounding AI use. The 10% neutral responses suggest some teachers are still undecided, possibly due to limited awareness of privacy concerns, while the 16% who disagree are a minority who may see the benefits of AI outweighing its risks. The absence of respondents at the low end (0%) indicates no outright denial of these issues. This concern represents a significant barrier to AI adoption and aligns with reported DQ-teacher worries about data integrity, similar to what literature reports. It is advisable for institutions to develop clear data privacy guidelines for collecting and processing anonymous and informed consent data for research or academic purposes, to prevent misuse of this information. Doing so can help teachers become role models for effective AI use in ELT, coexisting responsibly with technology.

Question No. 10: Over-reliance on AI may reduce students' critical thinking skills.

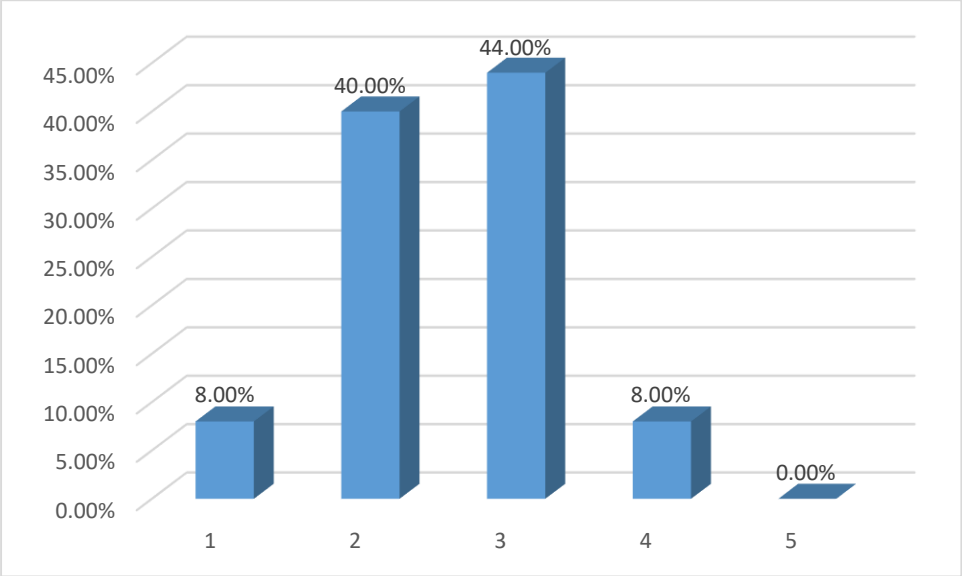


Graph No. 10

Analysis

The mean value of 4.02 indicates significant worry about AI reducing students' critical thinking abilities, with 38% agreeing and 32% strongly agreeing (total: 70%). The 30% neutral responses may reflect some teachers' uncertainty or a cautious approach to balancing AI's benefits against potential risks. The lack of disagreement suggests that this concern is widely shared. This aligns with the document's remarks on AI's limitations, such as decreasing human interaction. This finding highlights a pedagogical issue: as AI boosts efficiency, teachers worry it might hinder students' analytical skills, which are vital for language learning. It stresses the need for balanced AI integration, ensuring it supports rather than replaces critical thinking. Teacher training should focus on combining AI with communicative and task-based activities, including critical thinking exercises, to address this challenge and better manage AI's role in ELT, as the study indicates.

Question No. 11: There is a digital divide that affects equitable access to AI technologies in my context.

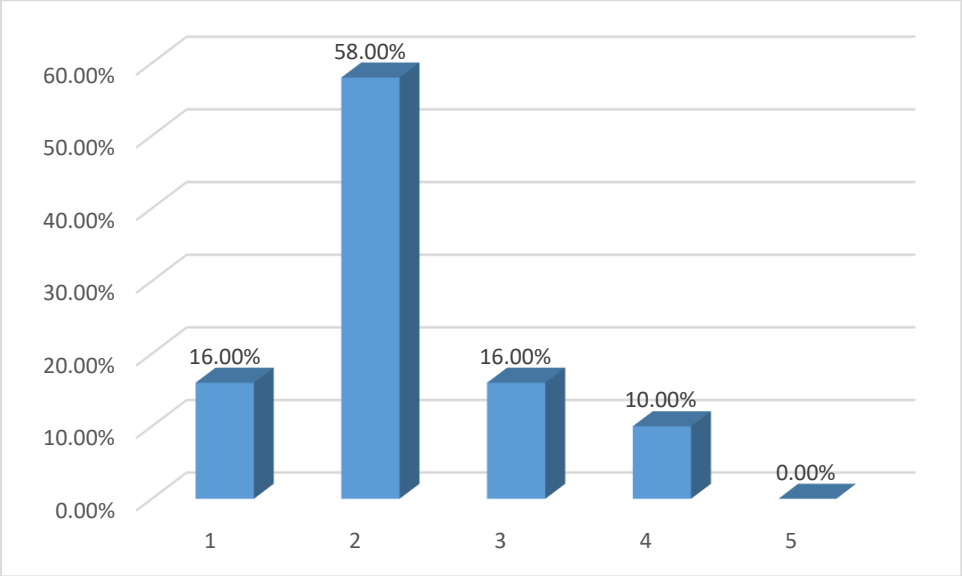


Graph No. 11

Analysis

The moderate concern about a digital divide is reflected in a mean value of 3.48, with 48% of respondents either strongly agreeing (8%) or agreeing (40%). The high 44% neutral responses suggest uncertainty, which could relate to resource disparities between institutions, and the 8% disagree suggests some teachers believe access is equitable. The 0% disagreement indicates no outright dismissal of the issue. This aligns with the problem statement regarding access difficulties and the document noting the impact of the digital divide. Since the majority are neutral, more research is needed to understand specific obstacles, whether infrastructure or funding, to ensure fair AI access. Addressing this digital divide through institutional investment in technology and training can promote equitable AI use in ELT, supporting the study's goal of democratizing technology in the ELT community.

Question No. 12: I need more training to effectively use AI tools in English language teaching.

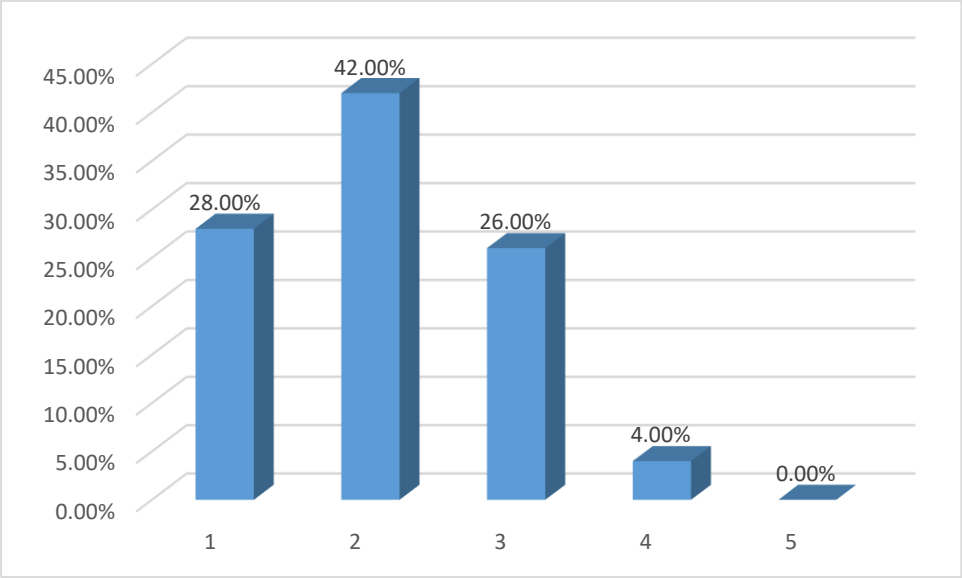


Graph No. 12

Analysis

With a mean value of 3.80, there is a clear need for additional training, as 74% of respondents either strongly agree (16%) or agree (58%). The 16% neutral responses indicate some teachers believe their current training is sufficient, while the 10% who disagree suggest a minority feel confident in their skills. The absence of strong disagreement (0%) shows no opposition to further training. This finding aligns with the problem statement that highlights insufficient training and support as key barriers to successful AI implementation. It's widely agreed that professional development is necessary to unlock AI's potential , which is also reflected in the document through training gaps. Institutions should prioritize comprehensive AI training to meet this need. Doing so will help achieve the study's goal of improving AI use in ELT and enable teachers to utilize AI more effectively.

Question No. 13: AI implementation will reduce teachers´ workload.

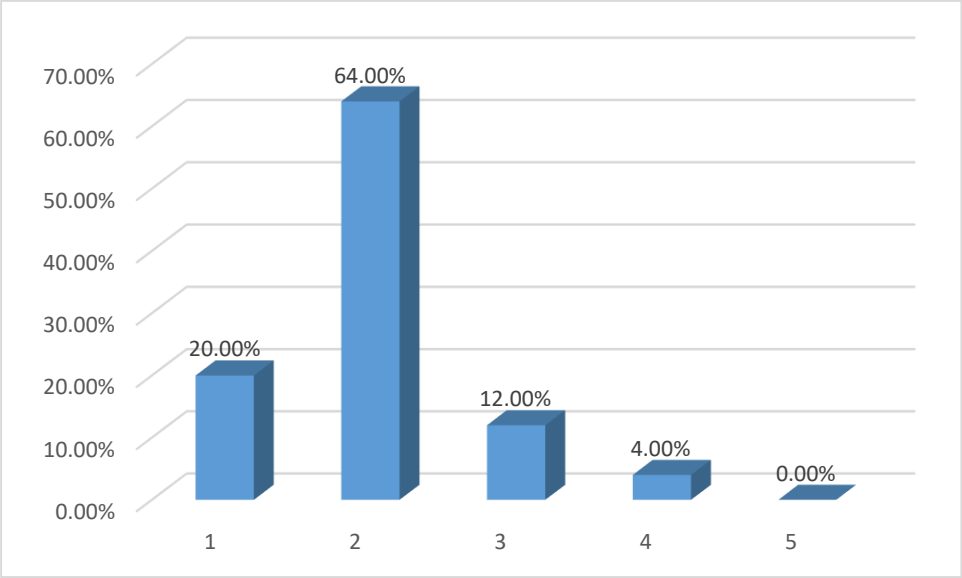


Graph No. 13

Analysis

The mean value of 3.94 indicates a high level of agreement that AI helps reduce teachers' heavy workload: 70% of participants either strongly agreed (28%) or agreed (42%). The 26% who are unsure may be uncertain because the efficiency benefits of AI are not yet widely known, and the 4% who disagree exhibit some skepticism. (With 0%, strong disagreement cannot be definitively dismissed as a benefit of FLL.) This aligns with Question 5 and the reference to AI automating tasks such as grading in the document. Workload reduction is particularly valuable in busy educational settings, allowing Teachers to focus more on classroom interaction. However, the neutral and disagreement responses suggest that broader AI adoption and training are necessary for all teachers to fully benefit. Addressing these gaps aligns with the study's goal of evaluating AI's effectiveness and exploring ways to improve its implementation in ELT.

Question No. 14: AI will improve education in general.

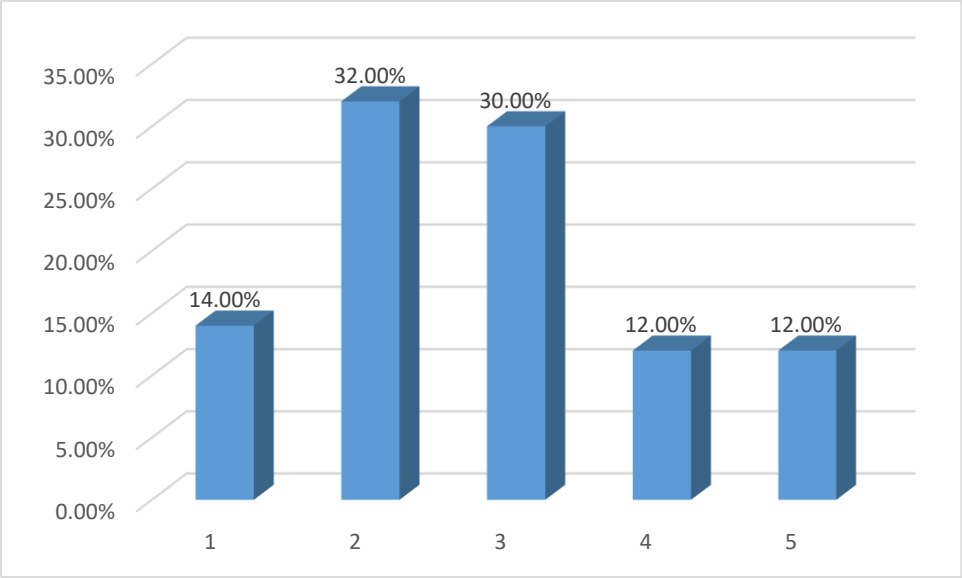


Graph No. 14

Analysis

The mean value of 4.00 reflects a very optimistic view of AI's potential to enhance education, with 84% of respondents either strongly agreeing (20%) or agreeing (64%). Minor doubts showed up in the 12% neutral and 4% disagree responses, likely due to concerns about the practicality of delivery. The absence of any strong disagreement (0%) suggests a general acceptance of AI's role in pedagogical activities. This matches the statement in the document that AI is transforming education processes. Teachers who view AI positively seem hopeful about its potential to improve learning outcomes, but barriers such as training and access still need to be addressed. This finding supports the study's aim of assessing AI's effectiveness and indicates that while teachers are optimistic, substantial support is necessary for AI to be fully exploited in education, especially in ELT.

Question No. 15: AI will replace human teachers in the future.

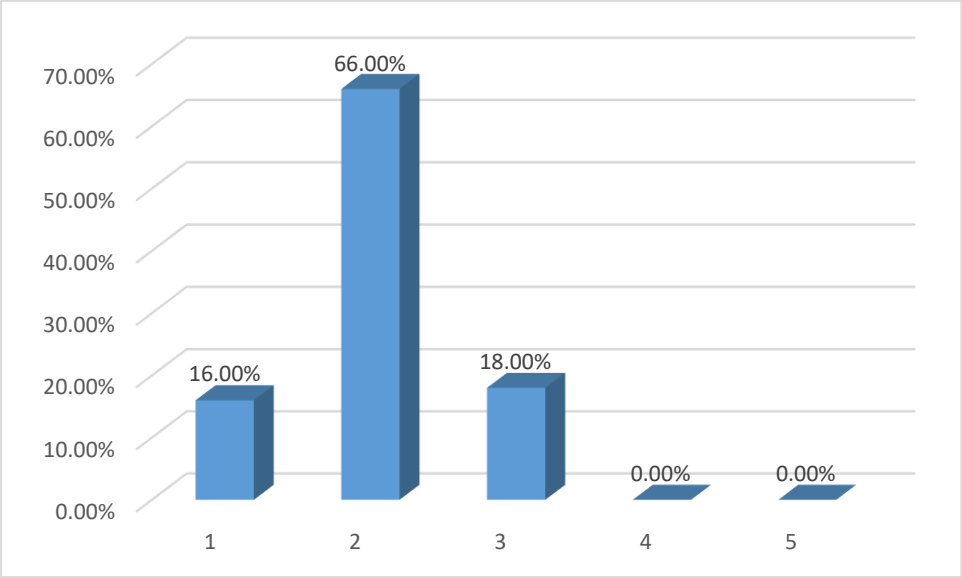


Graph No. 15

Analysis

The mean value of 3.24, the lowest in the survey, reflects divided opinions about whether AI can replace teachers, with 46% of respondents either strongly agreeing (14%) or agreeing (32%). Those who responded neutrally (30%) have a good deal of uncertainty, and 24% say it's not possible (12% disagree, 12% strongly disagree), showing notable resistance to the idea. This ties into the emphasis on AI as a supplement in question 7 and the understanding that it doesn't replace human interaction in ELT, as outlined in the ELT document. Teachers' concerns stem from the belief that AI cannot replicate the "human aspect," which is central to language learning. The mixed responses highlight the need for clear policies that ensure AI supports rather than replaces teachers. This aligns with the study's focus on teachers' perceptions of AI and underscores the importance of balancing AI's role with human-led education to maintain the effectiveness of ELT.

Question No. 16: AI will improve English Language Teaching.

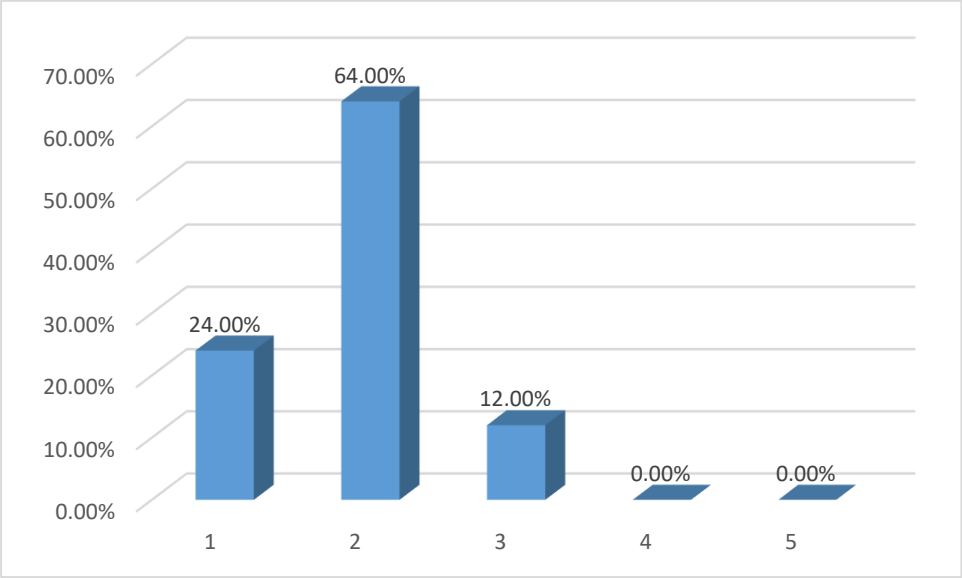


Graph No. 16

Analysis

The mean value of 3.98 indicates a very strong level of agreement that AI will enhance ELT, with 82% either strongly agreeing (16%) or agreeing (66%). The 18% of neutral responses show some ambivalence, perhaps reflecting that some users have little experience with this or have concerns about how to implement it. The absence of disagreement (0%) suggests that AI's potential to improve ELT is generally accepted, aligning with the findings of the source regarding AI's positive impact. Teachers recognize that AI can support language skills development through personalized feedback and interactive tools. However, the neutral group indicates that more teachers with firsthand experience of AI need exposure to it. These results support the study's goal of examining AI's impact; they show that while optimism is high, careful attention to implementation is necessary to fully realize AI's potential in ELT.

Question No. 17: Teachers should be careful when using AI tools in their classes.

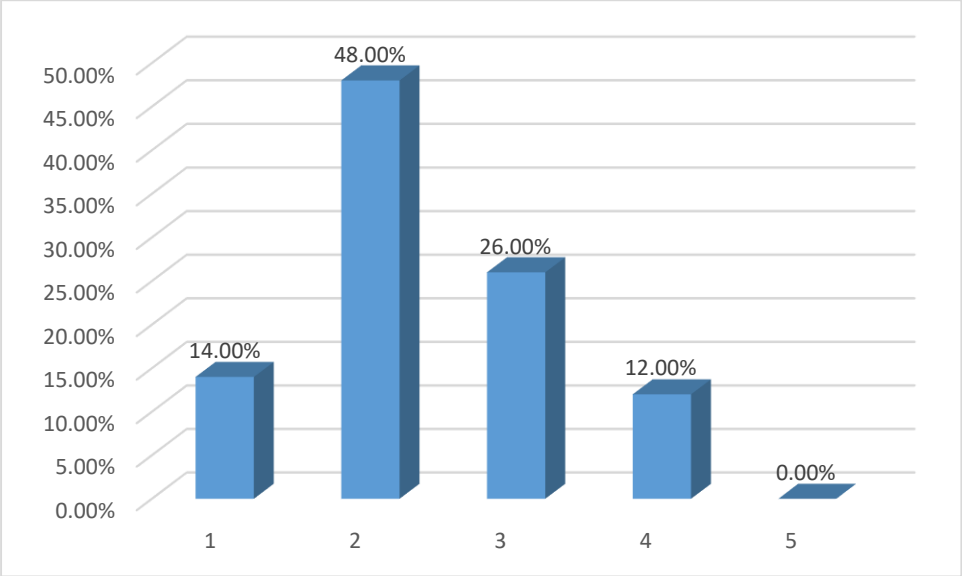


Graph No. 17

Analysis

The mean value of 4.12 reflects strong agreement that teachers should exercise caution with AI tools, with 88% either strongly agreeing (24%) or agreeing (64%). The 12% neutral responses suggest some concern, possibly because those less involved with AI may be less aware of potential risks. No disagreement (0%) indicates consensus on the need for caution, especially concerning ethical issues like data privacy . Teachers are aware of potential threats, such as overreliance on AI or privacy concerns, and support cautious implementation. This finding underscores the purpose of the study, to identify obstacles in AI use and to develop guidelines and training for responsible implementation. Institutions should develop policies to ensure that AI enhances ELT without compromising ethics or pedagogy.

Question No. 18: I have an adequate knowledge of AI-powered applications for English language teaching.

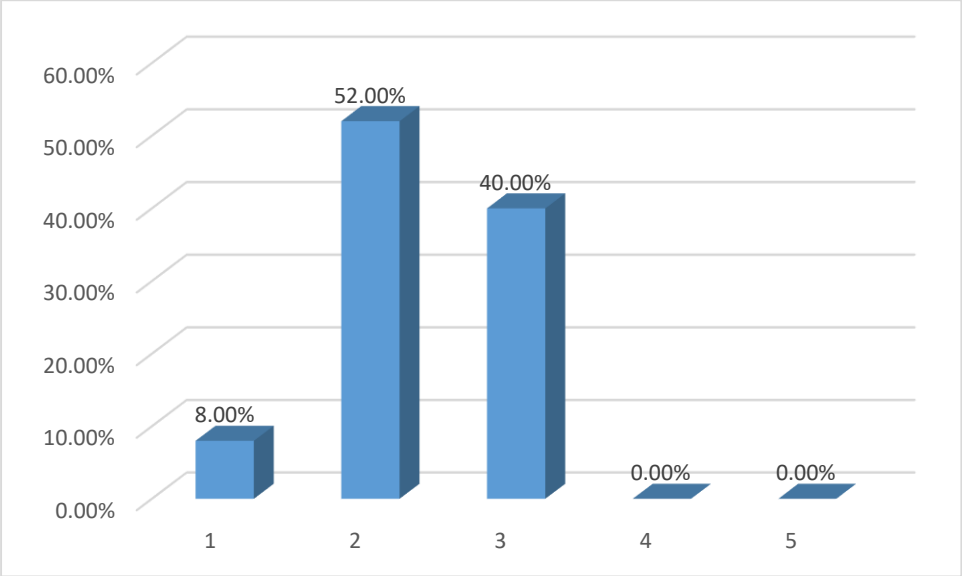


Graph No. 18

Analysis

The mean value of 3.64 indicates moderate confidence in understanding AI-based applications, with 62% either strongly agreeing (14%) or agreeing (48%). The 26% neutral and 12% disagreeing responses reflect varied levels of familiarity, aligning with training deficiencies mentioned in the problem statement. The lack of strong disagreement (0%) suggests no complete lack of knowledge; however, the neutral and disagreeing groups highlight the need for more comprehensive training. This supports the emphasis on professional development to ensure teachers are proficient with AI tools. Addressing this knowledge gap is essential for better AI integration, aiming to explore teachers' experiences and practice and to enhance AI use in ELT.

Question No. 19: AI helps EL teachers to make their assessment procedures more objective.

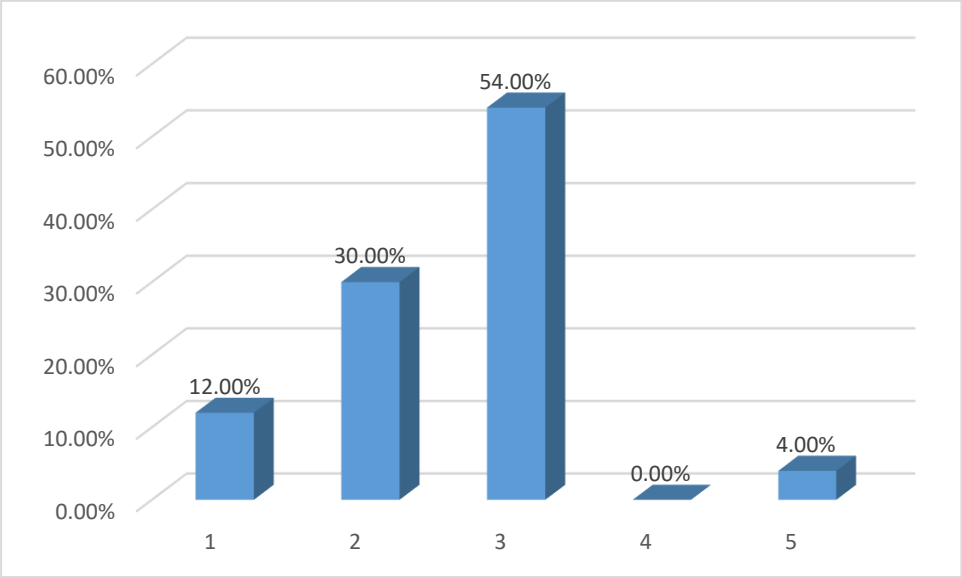


Graph No. 19

Analysis

The mean value of 3.68 suggests that participants believe AI promotes more objectivity in evaluations, with 60% either strongly agreeing (8%) or agreeing (52%). The high 40% of neutral responses indicates uncertainty, possibly due to limited experience with AI-based assessment tools. The lack of disagreement (0%) shows that AI's potential in this area is not rejected, as also noted in the survey regarding AI providing individualized feedback (Roll & Wylie, 2016). Among teachers, AI is viewed as a way to assign fairer grades, although teachers form a neutral group as well; broader adoption of AI-based assessment tools could make these tools more beneficial for everyone. Increased education and exposure to these tools may shift neutral respondents toward agreement, further supporting the study's goals to evaluate the effectiveness of AI in ELT and encourage its use in objective assessment practices.

Question No. 20: AI makes EL learning/teaching less personal.

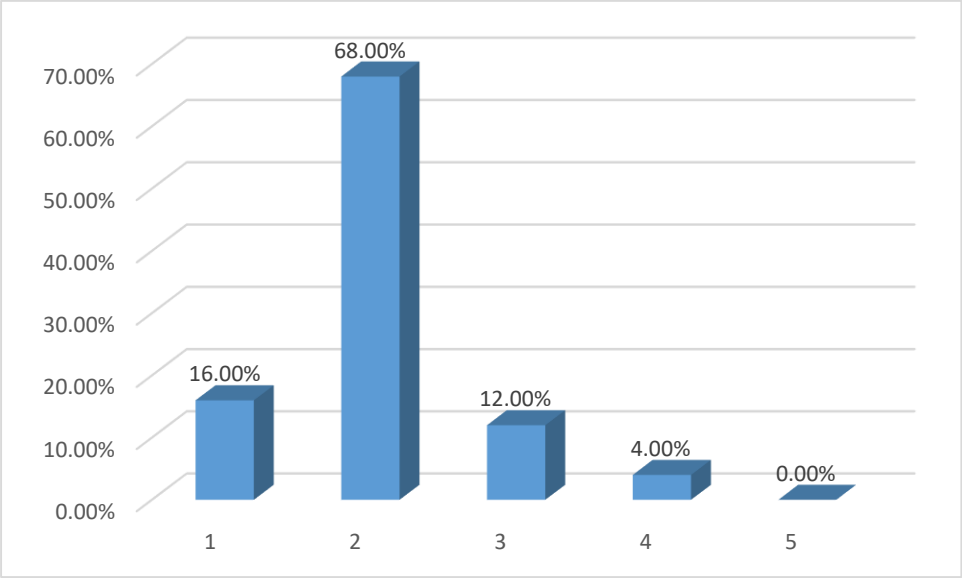


Graph No. 20

Analysis

The mean value of 3.46 indicates mixed feelings about AI reducing personalization, with 42% either strongly (12%) or moderately (30%) agreeing. The large 54% of neutral responses signals moderate uncertainty, and the 4% who strongly disagree suggest a small minority believe AI is improving personalization. The absence of outright disagreement indicates no strong rejection of this concern. This aligns with the statement of the problem that AI has limited human interaction. Teachers are divided, recognizing AI as economical but worried about its potential to weaken the teacher-student relationship that is vital to language learning. These results highlight the need to explore AI's limitations, balancing AI use with human interaction to preserve personalization in ELT and address concerns about AI's impersonal approach.

Question No. 21: AI implementation reduce teachers´ workload.

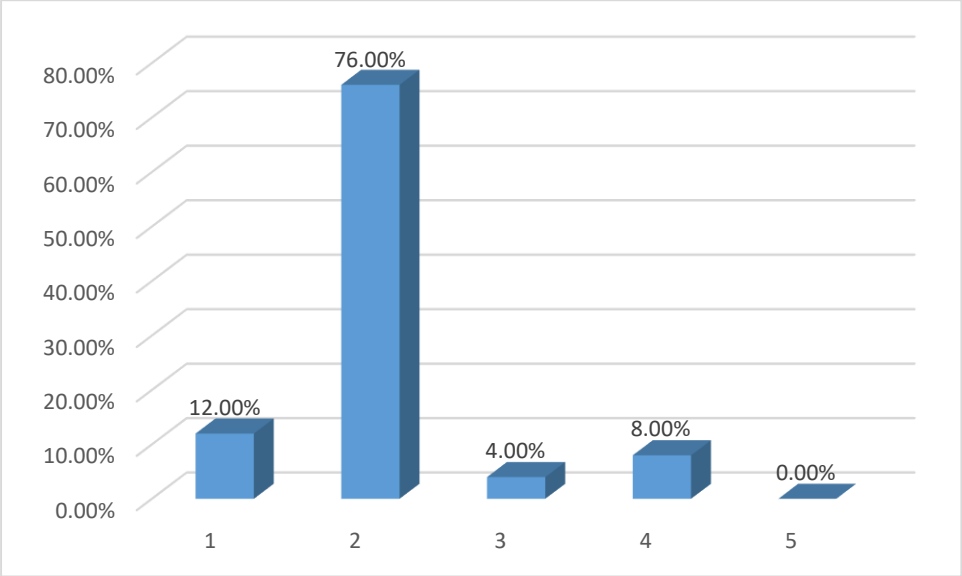


Graph No. 21

Analysis

The mean value of 3.96 indicates strong agreement that AI reduces workload, with 16% strongly agreeing and 68% agreeing (Table 3). The 12% neutral and 4% disagree responses may reflect some uncertainty or skepticism, possibly due to limited evidence of efficiency gains from AI. The absence of strong disagreement (0%) suggests there is no outright rejection of AI, aligning with Question 13 and the comment in the document that AI "makes work flow smoothly" . This supports the promise of AI in reducing administrative tasks, allowing teachers to focus more on teaching. However, the neutral and disagreeing groups' opinions point to the need for wider AI implementation in more schools and better training for teachers to ensure all benefit from workload reduction. This matches the study's aim to evaluate AI's performance and highlights the importance of overcoming barriers to implementation to fully realize this benefit in ELT.

Question No. 22: AI helps EL teachers with performing repetitive tasks (such as pronunciation drills).

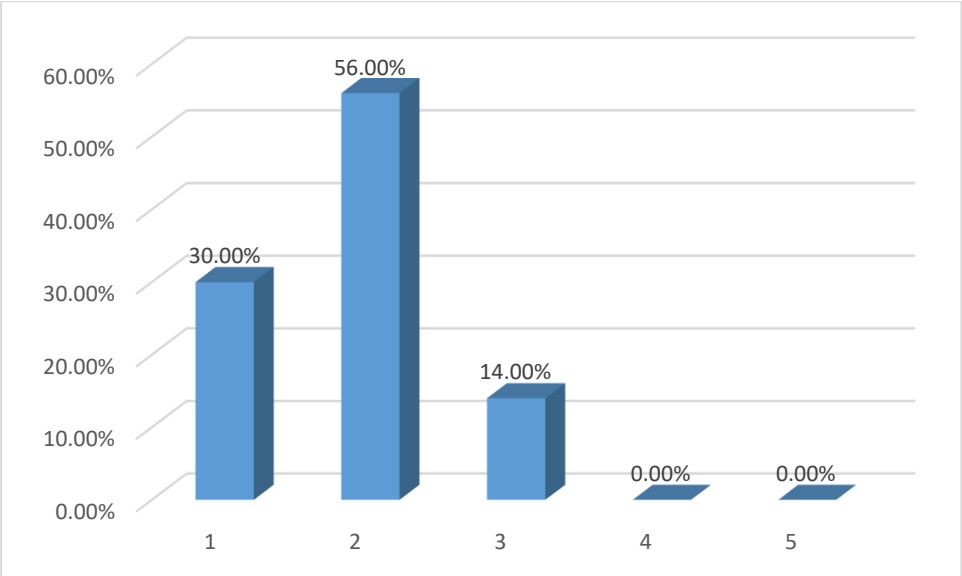


Graph No. 22

Analysis

The mean value of 3. 92 indicates a high level of agreement that AI is useful for reducing repetitive tasks, with 88% responding as either strongly agree (12%) or agree (76%). The low 4% neutral and 8% disagree percentages suggest little uncertainty or skepticism, likely because AI tools are not yet widely used, for example, for pronunciation drills. No one strongly disagrees (0%), which means nobody rejects the utility of AI in this area. This aligns with comments in this document stating that “AI can automate routine tasks” (Wei, 2018) and thus improve teaching efficiency. The strong agreement highlights AI' s value in automating administrative tasks, allowing teachers to focus more on student engagement. Addressing this could involve AI training and access to specialized AI tools, supporting the study' s goal of increasing AI implementation in ELT and taking advantage of AI' s efficiency in handling repetitive subtasks.

Question No. 23: AI-powered applications are effective tools for English Language (EL) learning and teaching."



Graph No. 23

Analysis

The mean value of 4.16. 16 indicates a consensus that AI- based applications are effective tools for ELT, with 86% of responses being either strongly agree (30%) or agree (56%). The 14% neutral responses suggest some uncertainty, possibly because respondents have not had enough experience or are cautious about implementation. Zero disagreement (0%) aligns with the document' s positive view of AI' s effect. Respondents recognize that AI can enhance learning through personalized feedback and interactive tools. This supports the research' s goal of assessing AI' s effectiveness and reinforces the perceived value of AI in ELT. To include more teachers in this positive outlook, teacher training and access to AI tools that enable all teachers to use them effectively are essential to unlocking AI' s potential in improving ELT learning outcomes.

Conclusion

Research indicates that Pakistani EFL teachers see AI as a significant change in ELT, with strong agreement that AI can enhance personalized learning (mean 4.24), improve the efficiency of lesson planning and grading (mean 4.28), and help perform repetitive tasks (mean 3.92). Most (86%) believe AI-driven tools can benefit ELT, aligning with global trends in educational technology. However, concerns about privacy (mean 3.64), reduced critical thinking (mean 4.02), and a digital divide (mean 3.48) remain. “Teachers are asking for more training (mean 3.80) and emphasize that AI should be an educational aid, not a replacement for traditional methods (mean 4.26)." Mixed feelings exist regarding AI’s role in reducing personalization (mean 3.46) and replacing teachers (mean 3.24), highlighting the importance of human involvement in ELT. These

findings support the study's goal to assess AI's effectiveness and explore teachers' perceptions, offering insight into potential practical and ethical challenges.

Findings

- Teachers frequently use AI-based tools (means 4.00, 4.04).
- AI supports personalized learning and efficiency (means 4.24, 4.28).
- Ethical considerations, including data privacy (mean 3.64), are significant.
- Teachers require more training to effectively incorporate AI into their teaching (mean 3.80).
- Access to AI reveals a digital divide (mean 3.48).
- AI should serve as a supplement, not a replacement, for traditional teaching (mean 4.26).

Recommendations

- There should be development of comprehensive, institute-level AI training programs for teachers.
- There should be clear data privacy policies for AI use in ELT.
- It is essential to ensure equitable access to AI by bridging the digital divide.
- AI should be used to complement human interaction, not replace it, in education.
- AI tools can enhance and automate repetitive tasks.
- Teachers and institutes should promote the balanced use of AI to maintain students' critical thinking skills.

Future Research Gap

As this study significantly advances understanding of EFL teachers' beliefs about AI in ELT, it also has limitations that warrant further exploration. The research focused on university-level teachers in Pakistan, so its findings may not be applicable to other educational levels or regions. Future research could investigate AI's impact in primary and secondary schools or compare perceptions across different cultures. The mixed-methods approach can be used to emphasise the need for longitudinal studies on AI's long-term effects on student achievement and teaching practices. Additionally, a more detailed exploration of how the digital divide influences fair access to AI, especially in rural or marginalised areas, would be advantageous. Ethical issues such as privacy require further analysis to establish clear guidelines for AI utilisation. Studies exploring students' perspectives on AI in ELT can provide a more balanced view and a thorough understanding of AI's role and effectiveness in language teaching.

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