



## Challenges of Using AI in Teaching EFL at the University of Duhok

Mousa Hussein Mousa<sup>1</sup> - Lureen Ibrahim Naser<sup>2</sup>

[mosahussein3@gmail.com](mailto:mosahussein3@gmail.com) - [lureen.naser@uod.ac](mailto:lureen.naser@uod.ac)

<sup>1+2</sup> Department of English Language, College of Basic Education, University of Duhok, Duhok, Kurdistan Region, Iraq.

### Abstract:

The potential of integrating Artificial Intelligence (AI) into English as a Foreign Language (EFL) learning is invested in to a significant extent, which yields tangible progress in language teaching, testing, and learning. The use of AI in EFL education, however, is faced with certain challenges and specific barriers. This study aims to investigate the opinions of EFL instructors on these challenges and barriers. This research employs both qualitative and quantitative research strategies, which include interview sessions and a survey questionnaire, with 42 EFL teachers from the departments of English in colleges of Basic Education and Languages at the University of Duhok. The results showed that EFL teachers identify key challenges to AI adoption, including a lack of training, limited institutional support, and unreliable internet connections. Additionally, many teachers express concerns about the costs, the lack of sufficient computers, and the absence of clear guidelines for implementation. These barriers have notably hindered the practical integration of AI in the EFL classroom, limiting teachers' ability to apply new technologies and preventing a full understanding of AI's potential to support personalized instruction and interactive learning environments. These findings offer valuable insights into methods that help EFL teachers increase their awareness of AI, enabling them to understand how AI can be effectively introduced into EFL practice without fear of failure.

### Keywords:

Artificial Intelligence (AI), EFL Teachers, Language Education, Educational Technology, University of Duhok.

## ئاستهنگين بكارئینانا AI د فیربونا EFL دا ل زانکۆیا دهۆک

موسا حسین موسا<sup>۱</sup> - لورین أبراهیم ناصر<sup>۲</sup>

<sup>۱،۲</sup> پشکا زمانی ئینگلیزی، کۆلیژا پهروهردا بنیات، زانکۆیا دهۆک، دهۆک، ههریما کوردستان – عیراق

### پۆخته:

شیانا بکارئینانا ژیرییا دهستکرد (AI) د فیربونا زمانی ئینگلیزی وهک زمانی بیانی (EFL) دا تا رادهیهکی بهرچاف یا بهرهمههاتییه، کو پیشکهفتهکا بهرجسته د وانهگۆتن، ههئسهنگاندن و د فیربونا زمانی دا بدهستفهدئینیت. بهلی بکارئینانا AI د پهروهردهیا EFL دا روپرووی هندهک ئالنگاری و ئاستهنگان دبیت. ئارمانجا ئهفقی کهکۆلینی فیهکۆلینه ل دۆر بۆچوونین مامۆستایین EFL سهبارهت ئهوان ئاستهنگ و بهربهستهیان. ههروهسا ئامانج ژهفقی کهکۆلینی فیهکۆلینه ژ بۆچوونین مامۆستایین EFL سهبارهت ئهفان ئالنگاری و ئاستهنگان. ئهف فیهکۆلینه ههردوو ستراتیجییین فیهکۆلینین چاواپی و چهندایهتییه پهیرهودکته، کو پیکدهیت ژ چافپیکهفتن و پرسیارنامهیین راپرسیی، کو ۴۲ مامۆستایین EFL ل پشکین زمانی ئینگلیزی ل کۆلیژین پهروهردا بنهرهت و زمانان ل زانکۆیا دهۆک بهژدارن. ئههناج هۆسا دهردهفان کو ئاستهنگین سهرهکیین مامۆستایین EFL ژ بۆ بکارئینان AI ب ئهفی شیوهینه، ژ وان ژی، نهبوونا راهینانان، پشتگیریا سنووردارا سازی و لاوازییا هیلای ئینترنیتی. ههروهسا گهلهک ژ مامۆستایان نیگههرا نیین خو لسهر تیچو، نهبوونا کۆمپیوتهرین باش و نهبوونا رینمایین رۆن ژبوی جیهجیکرکی دهردرین. ههروهسا ئهفان ئاستهنگان ب شیوهیهکی بهرچاف کاریگهری ل دۆر گریدانا AI ب شیوهیهکی کرداری د پۆلا EFL دا کرییه، وهک سنۆردارکرنا شیاین مامۆستایان بۆ بکارئینانا تهکنهلوژیا نوی کوریگریهکا تمام ژ هۆشیاریا وان دکته لسهر شیاین AI بۆ پالپشتیکرنا فیرکاریا تاکه کهسی و ژینگههین فیربونی یین کاریگهر. ئهف دهرئههناجه دیتنهکا ب مفا درخسینیت دهربارهی ئهوان شیوازیین کو هاریکاریا مامۆستایین EFL دکته، دا کو بزنان چهوا هۆشداریا خو دهربارهی چهوانیا بکارئینانا AI د EFL دا زندهبکهن یی ههبوونا ترسهکی ژ شکهستی.

**کلله پهیف:** زیرهکیا دهستکرد (AI)، مامۆستایین (EFL)، پهروهردهیا زمانی، تهکنولوژیا پهروهردهیی، زانکۆیا دهۆک.

### 1. Introduction

The application of AI in education is one of the changes that education systems have experienced in their teaching and learning activities. Hence, the implementation of AI technologies has brought forth avenues for giving instructions to students, observing their performance, and offering them better techniques of learning that are efficient and productive. These are mainly evident in EFL practices, where the use of AI is approaching an assistant role for both educators and learners (Holmes, et al., 2019; Luckin et al., 2016).

In EFL classrooms, AI has numerous applications and is well-suited to incorporate automated assessment options, adaptive learning capabilities, intelligent tutoring, and language learning applications that provide rapid responses. Such tools can adapt content

to the learner, track progress in real-time, and offer practice through interaction with artificial conversation partners to enhance the effectiveness and convenience of the language learning process (Rolfe, 2021; Zawacki-Richter et al., 2019).

However, several important factors that determine the successful application and efficacy of AI in EFL education are worth noting here, most of which revolve around the recognition and adoption of the technologies in question by the teachers who will incorporate them into their teaching. Teachers implement AI tools in their classrooms, and therefore, they need to understand how these tools operate. Consequently, they also need to understand the best practices regarding these tools. In addition, teachers' have of AI, whether they perceive it as a useful tool in their profession or as a threat to their authority, determine how such tools are embraced and incorporated in the classroom. Based on this, this paper seeks to provide answers to the following questions:

1. What are the challenges and barriers preventing EFL teachers from adopting AI tools in their teaching practices?
2. Are there differences among teachers in terms of gender, age, specialisation qualification, academic rank and experience as regards the challenges they face when teaching EFL?

## **2. Theoretical Background**

This present study was modelled after the works of Sutcu and Sutcu (2023), and Benaicha and Semmoud (2024), who both looked into EFL teachers' attitudes towards AI in language education. The research methodology of these studies also formed a foundation for designing the research methodology in particular, questionnaire development, data collection methods, and thematic categorization of perspectives with AI in EFL teaching. The research questions of their study were closely related to the objectives of this study, i.e., to understand what teachers know and think about AI tools in the language classroom. Yet, to further understand how they work, we further developed their frameworks by incorporating other questions necessary to uncover ethical implications, challenges and barriers facing AI adoption as well as teachers' recommendations for future AI integration in EFL education.

## 2.1 AI Tools and Applications in EFL Learning and Teaching

Generative AI in education has fundamentally transformed it through new methods of teaching and learning. With AI being employed for administrative functions such as marking and taking attendance, there is the opportunity for teachers to concentrate on providing quality instruction and engaging students in active learning (Zawacki-Richter et al., 2019). Moreover, artificial intelligence programs provide individualised instruction that caters to each student's specific needs. For instance, adaptive educational systems allow students to learn at their own pace by completing tasks of varying levels of difficulty. In contrast, they complete tasks (Holmes et al., 2019). Overall, it has been demonstrated so far that such systems are effective in achieving improved learning because they provide personalised feedback and learning resources that would otherwise be unavailable in a conventional classroom context (Luckin et al., 2016).

With the help of AI, assessment in a conventional educational context is beneficial, as it provides educators with timely information on learners' progress, accomplishments, and challenges. It assesses learning patterns through the use of data, combining large amounts of data, which offers much more insight than traditional examination tools. This approach not only informs the examiner of the student's answer but also reveals patterns, combining large amounts of data, which provides a deeper understanding than traditional examination tools. This approach not only informs the examiner of the student's answer but also reveals patterns, combining large amounts of data, which provides a deeper understanding than traditional examination tools. Since it not only informs the examiner of the student's answer but also reveals how the student arrived at the answer (Sánchez-Prieto et al., 2020). As seen earlier, AI is one of the key contemporary hopes that has tremendous potential for redefining education; however, its potential for nurturing effective learning remains ambiguous.

## 2.2 Challenges of AI-Integrated Tools in EFL Education

One of the most significant concerns in the process of incorporating AI tools into EFL instruction is the teacher's preparedness to integrate them into their teaching practices. One would argue that professionals' unsatisfactory preparation and knowledge regarding the use of AI in respective classrooms, as well as their limited experience with integrating AI tools into effective strategies in language learning, are contributing factors. This lack of

preparedness might be attributed to several factors, including the possibility that professionals receive inadequate professional development related to AI, a scarcity of resources, and a lack of motivation or impetus from the institution to embrace new technologies (Hazaymeh, et al., 2024). Preservice teachers often lack a comprehensive understanding of how AI can support conventional pedagogical teaching strategies, or they may doubt their own capacity to implement existing tools, which contributes to educational AI hesitancy or resistance (Arefian, et al., 2024).

In addition, the incorporation of AI presupposes a certain degree of digital literacy and technical skills that some teachers may lack if they have never worked with digital technologies or have preferred traditional approaches to learning and teaching. Such a digital divide means that the disparity in readiness increases the odds of other barriers that may reflect on instructors' capacities to manage AI in their classes. However, there are issues of how the use of AI tools may interfere with the teacher-student relationship or how the tools can take some instructional roles or require much time in preparing and monitoring, which could pose more challenges about the AI tools, and this might also lead to low rates of adoption (Ghanizadeh & Jahedizadeh, 2020).

As a result, EFL teachers may face difficulties in integrating AI and contributing to the improvement of learners' results in line with the intended educational purposes if they do not receive specific training and ongoing encouragement. This gap in readiness highlights the importance of providing organised and easily accessible professional development activities that help teachers learn how to effectively utilise these tools, without overwhelming them with the numerous AI tools being developed in the market. Therefore, the preparation of teachers is crucial if AI is to gain broader acceptance and be applied to yield positive effects in the sphere of EFL learning (Hazaymeh, et al., 2024; Liu & Chang, 2024).

Another major barrier is access, or the lack thereof. The approach adopted depicts this challenge purely in qualitative terms rather than quantitative. There are restrictions to the implementation of AI systems in educational institutions, such as inadequate technological foundations for the application of these tools. A lack of internet connection and the performance of ageing computing infrastructure hampers use in many parts, particularly in developing regions (Sun & Gao, 2022).

Moreover, stricter measures and restricting data usage create problems, not to mention data privacy issues. AI applications often collect the user's data, prompting questions about the management and protection of this data. Still, educational institutions must know these privacy challenges to meet regulatory requirements and build trust (Ghanizadeh & Jahedizadeh, 2020). Ultimately, the teacher's perception of technology can significantly influence its implementation. Some teachers may have concerns regarding the utilisation of AI in the teaching and learning processes, or may feel that the use of AI in these processes is intended to replace their role as educators. To eliminate these barriers, one needs training and development, improved infrastructure, and a more positive perception of AI as an effective and supportive teaching tool.

### **2.3 Accessibility Barriers in AI-Integrated EFL Education**

There are still some barriers to accessibility if AI is to improve EFL education. This is especially considering the geographic and infrastructure differences that hinder students' ability to access the technological learning resources necessary for AI learning support. The problem of insufficient or, at best, limited access to the Internet and modern technological resources works as a limitation to the uptake of AI applications in less developed geographical zones, particularly in non-Western nations. Aljabr and Al-Ahdal (2024) mentioned that increased use of AI systems in underprivileged educational contexts, such as low-funding classrooms, may hamper students from catching the uplifts of learning from AI AI-integrated environment due to inadequate availability of appropriate devices, software and sometimes even electricity. Such discrepancies can lead to a digital divide, something that sees students from affluent areas enjoying enhanced individualised learning, while others lack basic learning opportunities.

Many of the AI technologies used are developed based on educational models common in Western countries. For instance, what is produced by the AI tools to be used in the curriculum may relate to culture, learning methodology, or even expectations that may not be relevant in some cases. Dakakni and Safa (2023) opine that AI-based tools need to be functional within a range of cultural and educational settings for them to be effective, especially for learners with disabilities. This entails creating Artificial Intelligence platforms for education that incorporate various teaching and learning methods and accommodate language and cultural differences to enhance the student experience.

### 3. Methodology

#### 3.1 Research Design

The research design employed in this study is a mixed-methods approach, focusing entirely on the experiences and practices of EFL teachers within both selected colleges. Quantitative data were gathered through a structured questionnaire shared online via Google Forms, which was carefully designed and validated by expert jury members for reliability purposes. Qualitative data were elicited using semi-structured face-to-face interviews to provide complementary information to that found in the questionnaire, which was also validated by jury members. Such interviews provided a chance for a deep exploration of teachers' experiences, perceptions, and other contextual aspects that the questionnaire could not adequately convey.

#### 3.2 Setting and Participants

The study is carried out with EFL teachers at the Colleges of Languages and Basic Education, University of Duhok, Duhok, Kurdistan Region, Iraq. The sample of the study includes EFL teachers of both genders, comprising 10 males and 30 females, and two participants who preferred not to disclose their gender. The lower number of male participants reflects the department's gender distribution. All participants responded to the questionnaire, and only eight were interviewed, with four from each department, and an equal number of participants from both genders. The questionnaire was then distributed online using [Google Forms](#).

Participants were told in detail the aim of the study and that they were volunteering to participate in the research, and that they could withdraw at any time. Prior to data collection, they involved informed consent and open descriptions of how the data would be utilized. Strict confidentiality and anonymity were preserved, and data were stored securely and anonymously.

#### 3.3 Data Analysis

Quantitative data is analysed using [R version 4.4.3](#) (R Core Team, 2025) and [RStudio version 2024.12.1](#) (Posit Team, 2024).

Descriptive statistics, including Means, Standard Deviations, Frequencies, and Percentages, are extracted, and an Analysis of Variance (ANOVA) of group differences on

study variables is carried out to analyse the demographic information of the participants and their effect on responses.

A thematic analysis approach is adopted for the qualitative data gathered through semi-structured interviews. Interview recordings are transcribed, and the transcripts are then systematically coded to generate recurrent patterns and themes. This is done using [ATLAS.ti 24.1.1](#) software for facilitating this process and increasing the rigour of the qualitative analysis.

## **4. Results and Discussion**

### **4.1 Participant Responses to the Questionnaire Items**

The descriptive statistics of all 34 questionnaire items, included in Table 1, provide an accurate measure of the overall participant responses based on their Frequency (F), Percentage (%), Mean (M), and Standard Deviation (SD). The Frequency column measures the rate at which each answer is chosen by teachers, indicating how often each answer is selected. The Percentage (%) measures the proportion of their total votes. The Mean (M) is the typical level of agreement and is measured from 1 “Strongly disagree” to 5 “Strongly agree”. Means over 2.5 indicate that the group mostly agrees with the statement, while the Means below 2.5 indicate that the group disagrees with the statement. The Standard Deviation (SD) reveals whether teachers tended to respond to the statements similarly (low SD) or in different ways (high SD). The data in Table 1 are supported by a visual chart in Figure 1.

Participants’ views show that AI in English as a Foreign Language (EFL) raises concerns. Most teachers agree that AI introduces various difficulties, as indicated by the high number of respondents who agree with the statement, “Employing AI in English classrooms raises challenges for both teachers and students” (54.8% agree, 14.3% strongly agree). When polled on “I face technical challenges when using AI tools,” 28.6% of teachers said they agree, and 40.5% chose neutral, indicating that although facing technical hurdles is common, many educators often do so and are not completely sure about how significant an issue it is. Interestingly, despite recognition of technical problems, self-efficacy remains strong. In the statement “I am confident in my ability to use AI tools effectively and appropriately,” there is a 54.7% agreement or strong agreement, suggesting that most teachers do feel competent to deal with AI tools, despite the problems.



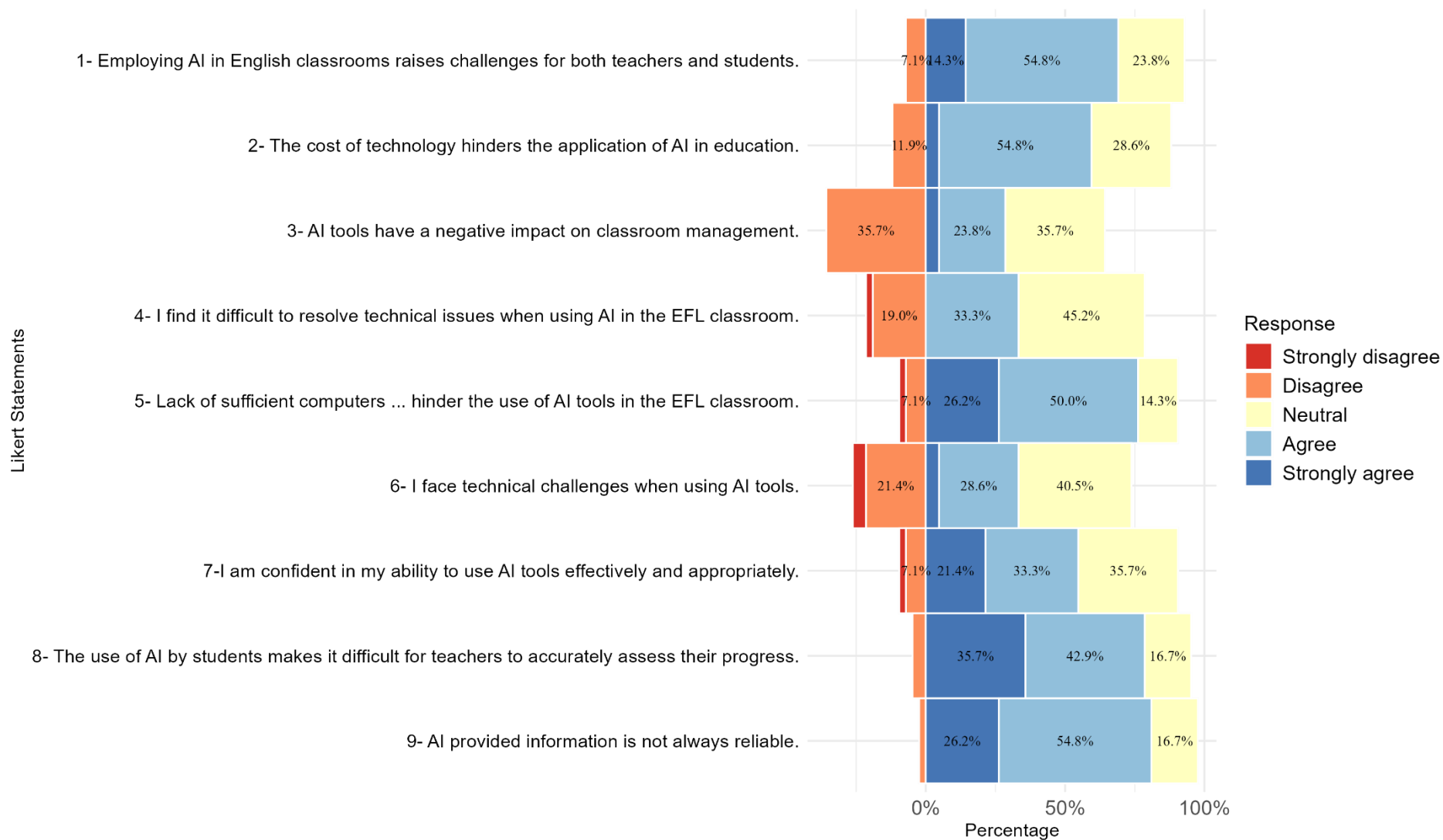
**Table 1***Participant responses to the questionnaire items*

No.	Items	Strongly disagree		Disagree		Neutral		Agree		Strongly agree		M	SD
		Fr.	%	Fr.	%	Fr.	%	Fr.	%	Fr.	%		
1	Employing AI in English classrooms raises challenges for both teachers and students.	0	0	3	7.1	10	23.8	23	54.8	6	14.3	3.90	0.64
2	The cost of technology hinders the application of AI in education.	0	0	5	11.9	12	28.6	23	54.8	2	4.8	3.73	0.56
3	AI tools have a negative impact on classroom management.	0	0	15	35.7	15	35.7	10	23.8	2	4.8	3.52	0.64
4	I find it difficult to resolve technical issues when using AI in the EFL classroom.	1	2.4	8	19	19	45.2	14	33.3	0	0	3.35	0.65
5	Lack of sufficient computers ... hinder the use of AI tools in the EFL classroom.	1	2.4	3	7.1	6	14.3	21	50	11	26.2	4.05	0.83
6	I face technical challenges when using AI.	2	4.8	9	21.4	17	40.5	12	28.6	2	4.8	3.36	0.86
7	I am confident in my ability to use AI tools effectively and appropriately.	1	2.4	3	7.1	15	35.7	14	33.3	9	21.4	3.77	0.90

Journal of University of Raparin		Vol(12).No()					گۆفاری زانکۆی راپه‌رین						
8	The use of AI by students makes it difficult to accurately assess their progress.	0	0	2	4.8	7	16.7	18	42.9	15	35.7	4.20	0.72
9	AI information is not always reliable.	0	0	1	2.4	7	16.7	23	54.8	11	26.2	4.10	0.66

Figure 1

*Responses of EFL teachers to statement about challenges and barriers of AI use in education*



Another significant issue is that of infrastructure. The observation "Lack of sufficient computers ... hinders the use of AI tools in the EFL classroom," which is rated positively (50.0% agree, 26.2% strongly agree), suggests that efforts need to be made towards improving technology accessibility across all stakeholders within education systems and institutions. This contrasts with the more polarised opinions on "The cost of technology hinders the application of AI in education," with 54.8% agreeing, but a quarter remaining neutral at 28.65%.

Besides, with a notable proportion (11.9%) disagreeing, despite the assumed cost being one of the key barriers to AI integration, the answers indicate that it might not be the most universal limiting factor. When discussing access to the necessary hardware and internet connection, the issues associated with it appear to be of more immediate concern, with a larger number of respondents supporting the claim that it poses significant barriers.

Regarding the statement "AI tools have a negative impact on classroom management," responses are split: 35.7% disagree, 35.7% are neutral, and 23.8% agree. This suggests that educators' use of AI in classroom management may lead to varied experiences; perhaps they can only draw that from a relevant context or implementation. One particularly striking finding concerns assessment and reliability. The majority of respondents agree that "The use of AI by students makes it difficult for teachers to assess their progress accurately" (42.9% agree and 35.7% strongly agree) and, in a similar vein, almost half (54.8%) agree and 26.2% strongly agree that "AI-provided information is not always reliable." Rather than replacing human instruction, these concerns suggest that AI-supported instruction may bring ambiguity into evaluating student learning and content accuracy.

Finally, participants' responses to the statement "I find it difficult to resolve technical issues when using AI in the EFL classroom" demonstrate a more guarded attitude towards the use of AI in teaching. When asked how they experienced troubleshooting problems with AI, a plurality (45.2%) of respondents chose the option 'neutral': meaning significant uncertainty or variability in their experiences across the examined variables. However, 33.3% of educators agree with the statement that a fair number of teachers experience problems when technical challenges are encountered. By contrast, 19.0% disagree, indicating a smaller group that believes they are well-equipped to meet such scenarios.

## 4.2 Effect of teacher variables on their perception of challenges and barriers in using AI in education

The results of the Cumulative Link Mixed Model (CLMM) analysis, presented in Table 2, provide the findings from an analysis that aims to explore the extent to which certain demographic and professional factors influence EFL teachers' perceptions of challenges and barriers in using AI in education. This table includes predictors such as gender, age, college affiliation, academic specialisation, number of years of teaching experience, and academic qualification. The conventional symbol is used to denote the significance level of each predictor based upon the estimate, standard error, z-value, and p-value of that predictor.

**Table 2**

*Fixed effects from CLMM for the challenges and barriers of using AI in education*

Predictor	Estimate	Std. Error	z value	p-value	Sig.
Gender: (Male)	0.32	0.27	1.17	= .241	
Age: (31–40)	0.65	0.50	1.30	= .195	
Age: (41–50)	0.50	0.54	0.93	= .354	
Age: (Over 50)	0.21	0.73	0.29	= .772	
College: (Languages)	0.13	0.26	0.49	= .623	
Specialisation: (Linguistics)	0.03	0.29	0.11	= .913	
Specialisation: (Literature)	-0.66	0.40	-1.65	= .100	.
Specialisation: (TESOL)	0.75	0.48	1.54	= .123	
Experience: (5–10 years)	-0.31	0.40	-0.77	= .443	
Experience: (11–15 years)	-0.81	0.41	-1.98	= .048	*

Experience: (> 15 years)	-0.58	0.45	-1.29	= .198	
Qualification: (PhD)	0.74	0.27	2.68	= .007	**

Sig. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Results show that academic qualification (PhD holders) and teaching experience (11–15 years) are statistically significant predictors of teachers' views on the challenges and barriers to AI integration. In particular, teachers who, aside from those with a PhD, stated that they are concerned about the challenges posed by AI in education have a positive estimate of 0.74 (Sig.  $p < .01$ ), with a  $p$ -value of 0.007. This therefore implies that those with higher academic credentials are more sensitive to the ethical, pedagogical and institutional dynamics of using AI technology in classrooms.

Additionally, their advanced academic training may also serve to provide them with a wider theoretical lens for looking at possible risks and limitations. However, the estimate of teachers with 11 to 15 years of professional experience is found to be a significant negative estimate of -0.81 ( $p = .048$ ), which suggests that this group of teachers is more likely to perceive more challenges in adapting to AI in their teaching practice. This could potentially lead to the peak of difficulty in technologies for mid-career educators, who have experienced but are currently in a transition stage, where they may need to acquire pedagogical flexibility along with technical upskilling to deal with rapidly adopting technologies.

The estimate for the third variable, specialisation in Literature, is marginally significant and negative (-0.66;  $p = .100$ ), which indicates that literature specialists as a group are also concerned or sceptical towards AI, with a slightly negative coefficient. However, the result does not meet the conventionally required standard for statistical significance. It could be the case that the way literature has primarily been taught, which is to say that in many ways, it has been taught to revolve around the interpretive and humanistic elements and not so much to sit down and figure out the logic of AI-driven tools, might bias towards showing the effects of using AI to teach literature.

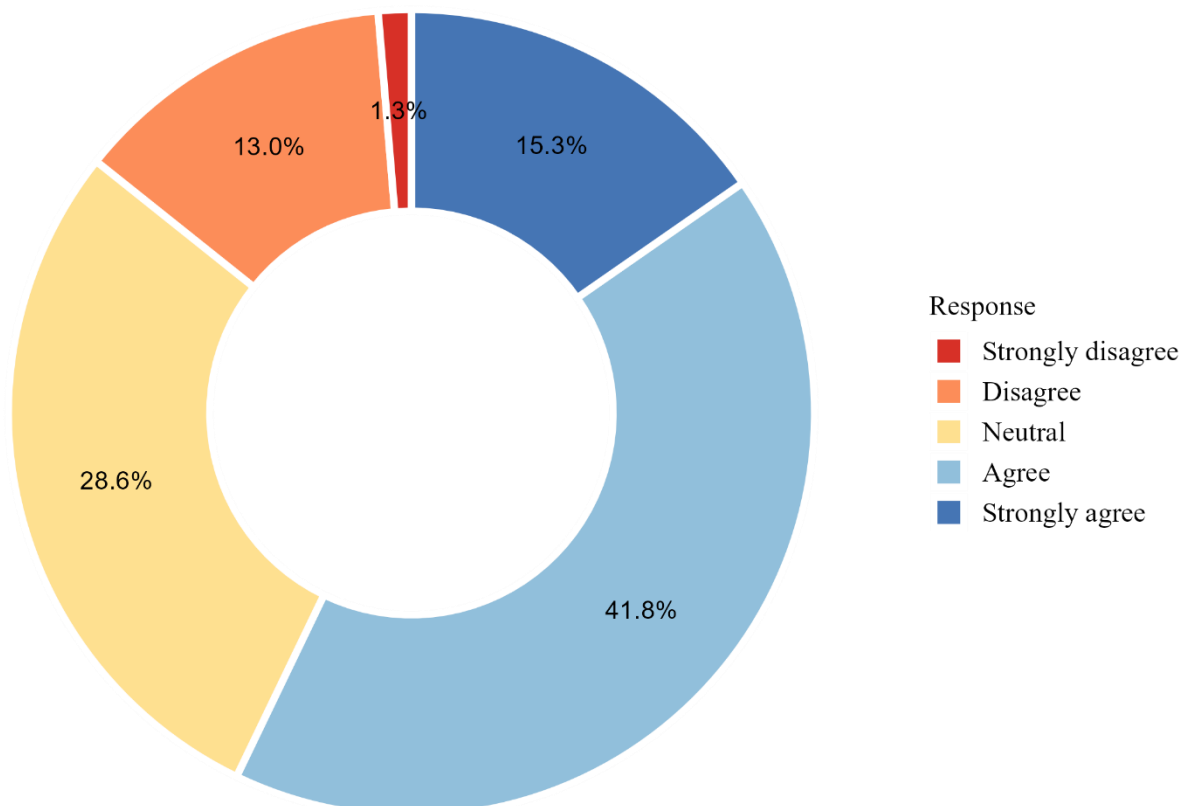
Other independent variables, such as gender, age, college affiliation, or specialisations in Linguistics and TESOL, also do not show statistically significant outcomes, as the  $p$ -values are greater than the standard 'significance thresholds.' Other experience categories (i.e.,

5–10 years and more than 15 years of experience) are also characterised by a non-significant estimate, thus indicating that the AI-related challenges are not perceived in a uniform way across different career durations. Notably, age does not decisively influence the result, since none of the age groups (31 – 40, 41 – 50, or over 50) show a significant effect.

Figure 2 also shows that the majority of respondents face such challenges concerning all statements, as manifested by 15.3% of respondents strongly agreeing with the statement and 41.3% agreeing that AI entails considerable obstacles for EFL in the educational field. The combination of these two agreement categories constitutes 57.1% of the total responses, which implies that more than half of the sampled teachers express some level of concern about the challenges posed by the integration of AI technologies in their teaching practices.

**Figure 2**

*Donut plot of participant responses on challenges and barriers of using AI in education*



All in all, the results of this analysis reveal that the two main groups of educators who are more likely to mention challenges and barriers regarding AI in education are educators with professional qualifications at the doctoral level and educators in the mid-career stage (11 to 15 years of experience). Such findings provide useful suggestions for how institutional support and targeted training and professional development efforts could be better aligned with the concerns of these subgroups to facilitate smoother and more equitable integration of such AI technologies into educational settings. At the same time, 28.6% of respondents are neutral, thus expressing uncertainty or ambivalence regarding their position. In particular, this neutral segment is remarkable, considering it could stand for a low degree of exposure to AI tools in class or for a low degree of understanding of the long-term repercussions of the incorporation of AI in the professional routine of teachers who have not yet been able to make use of this technology in their daily routine. However, 13.0% of teachers disagree, and only 1.3% strongly disagree, totalling 14.3% of participants who do not believe that AI could pose serious challenges to the EFL classroom. Evidently, this is a minority group, but their presence in the data implies that there might be a group of educators who are confident enough to overcome such hurdles or have not encountered them to the extent that they have a meaningful impact on their instruction.

The qualitative data results support the results of the questionnaire. One of the common points raised in the interviews is the presence of institutional and technical barriers. The teachers discuss the absence of training, unstable internet connections, and a lack of administrative support as significant barriers to implementing AI in the classroom. "Most of the time we have problems with the connection, and for AI we need a connection," remarked Interviewee 7. Interviewee 3 continued, "Well, I think mostly the lack of training. I think everybody, especially the teachers, need training, because we do not know how to use it. I mean, I have to be honest." This substantiates the quantitative results, which showed that most people are concerned with these issues. The recommendations that teachers can provide to improve, such as workshops or training programs specialised in AI, would suggest that there is an apparent necessity for institutional intervention.

### **4.3. Discussion of the Key Findings**

Answering the first research question, the results showed that some of the main challenges to the integration of AI that could be identified are a lack of training, a lack of technical assistance, uncertainty regarding ethical applications, and the absence of institutional



policies. These barriers share many similarities with the study by Dakakni and Safa (2023), who discussed the ethical and equity issues in the introduction of AI in higher educational institutions, and Zawacki-Richter et al. (2019), who outlined technological readiness and support by institutions as the key determinants impacting the attainment of AI adoption. In this study, teachers also expressed their fear of AI reducing the human component of language teaching, similar to Rolfe (2021) and Holmes et al. (2019), who warned against over-dependence on automation in education.

In addition, other teachers specifically asked to include functions of the AI tools that detect the production of work by students and whether they are human- or AI-generated, which is also the case in Benaicha and Semmoud (2024) under the topic of accountability and academic integrity.

In answer to the second research question, the analysis revealed that teaching experience and academic rank were both factors that significantly influenced the perception of challenges, as had been evidenced in the analysis. As an illustration, more experienced educators reported a higher degree of confidence when it comes to AI utilization, which can be confirmed with Liu and Chang (2024), who discovered that adaptive expertise depends on experience and emotional stability. Gender and qualification, however, had no significant effect, therefore confirming the result of Sun and Gao (2022) that the adoption of AI by EFL teachers varies more based on the perceived usefulness of the technology than on the demographical characteristics.

All in all, this study is both adding to the existing literature by providing a localised insight as seen through the prism of the University of Duhok and validating the general global tendencies of AI application to EFL education defined in studies by Hazaymeh et al. (2024), Arefian et al. (2024), and Ghanizadeh and Jahedizadeh (2020).

## 5. Conclusion

The results indicate that although EFL teachers at the University of Duhok have generally understood the potential of AI in language education, several long-term issues impede its successful application. These include mostly poor access to reliable internet and appropriate hardware, as well as the absence of institutional support and specialised training. These obstacles contribute to the unequal adoption of AI tools in classrooms. To achieve all the possible positive outcomes of AI in the EFL setting, it is crucial to manage

these challenges with the help of infrastructure advancement and professional development schemes. With these insights, it is emphasised that professional development, pedagogical support, and institutional strategies need to be designed and provided to teachers during their training to help address their concerns and build AI readiness in EFL contexts.

## 6. References

- Aljabr, F.S. & Al-Ahdal, A.A.M.H., 2024. Ethical and pedagogical implications of AI in language education: An empirical study at Ha'il University. *Acta Psychologica*, 251, 104605.
- Arefian, M.H., Çomoğlu, I. & Dikilitaş, K., 2024. Understanding EFL teachers' experiences of ChatGPT-driven collaborative reflective practice through a community of practice lens. *Innovation in Language Learning and Teaching*, pp.1–16. <https://doi.org/10.1080/17501229.2024.2412769>.
- ATLAS.ti Scientific Software Development GmbH, 2024. *ATLAS.ti Windows (version 24.1.1) [Qualitative data analysis software]*. <https://atlasti.com>.
- Benaicha, B. and Semmoud, A., 2024. Investigating Algerian EFL teachers' attitudes towards AI utilization in language education. *ATRAS Journal*, 5(3). <https://doi.org/10.70091/atras/AI.8>
- Dakakni, D. & Safa, N., 2023. Artificial intelligence in the L2 classroom: Implications and challenges on ethics and equity in higher education: A 21st century Pandora's box. *Computers and Education: Artificial Intelligence*, 5, 100179.
- Ghanizadeh, A. & Jahedizadeh, S., 2020. EFL teachers' perspectives on integrating technology in language instruction: The case of Iran. *Computer Assisted Language Learning*, 33(3), pp.1–17.
- Hazaymeh, W.A., Bouzenoun, A. & Remache, A., 2024. EFL instructors' perspective on using AI applications in English as a foreign language teaching and learning. *Emerging Science Journal*, 8, pp.73–87.
- Holmes, W., Bialik, M. & Fadel, C., 2019. *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
- Liu, Y. & Chang, P., 2024. Exploring EFL teachers' emotional experiences and adaptive expertise in the context of AI advancements: A positive psychology perspective. *System*, 126, 103463.
- Luckin, R., Holmes, W., Griffiths, M. & Forcier, L.B., 2016. *Intelligence unleashed: An argument for AI in education*. Pearson Education.
- Posit team, 2025. *RStudio: Integrated development environment for R*. Posit Software, PBC, Boston, MA. <http://www.posit.co/>.

- R Core Team, 2025. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>.
- Rolfe, V., 2021. *Artificial intelligence in language education*. Cambridge University Press.
- Sánchez-Prieto, J.C., Olmos-Migueláñez, S. & García-Peñalvo, F.J., 2020. Assessing the potential of AI to enhance learning experiences: A case study approach. *British Journal of Educational Technology*, 51(4), pp.1054–1070.
- Sun, Y. & Gao, F., 2022. AI in language education: EFL teachers' perceptions and intentions to use AI-based language learning applications. *Educational Technology Research and Development*, 70(3), pp.1–18.
- Sutcu, S. and Sutcu, E. (2023). English teachers' attitudes and opinions towards Artificial Intelligence. *International Journal of Research in Teacher Education*, 14(3), pp. 183-193. <https://ijrte.inased.org/makale/4071>
- Zawacki-Richter, O., Marín, V.I., Bond, M. & Gouverneur, F., 2019. Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(39). <https://doi.org/10.1186/s41239-019-0171-0>.