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Revolutionizing EFL Classrooms in Iran: Harnessing AI Tools for Personalized Language Learning

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A B S T R A C T

ChatGPT and other AI technologies employed in Iranian EFL classrooms can enhance individualized learning but are constrained by technical, cultural, and organizational limitations. The current study examines their effects on students' engagement and individualized feedback in terms of a mixed-methods design comprising interviews, classroom observations, and Technology Acceptance Model-based questionnaires administered among 100 instructors and 100 students. Evidence indicates that ChatGPT increases student engagement through instant feedback and student-focused spaces. Teachers were rated lower in their usefulness by students since they highlighted their individualized learning potential. However, limited internet penetration, inadequate teacher training, and organizational reluctance are among the most significant issues hindering adoption. Successful adoption will require specialized training of teachers, infrastructural planning, and regional AI solutions. Overcoming the challenges will derive maximum benefits from the advantages of AI in EFL learning. This study contributes to debates on AI in education in the Iranian context of EFL with both opportunities and limitations.

1. Introduction

The adoption of Artificial Intelligence (AI) technologies like ChatGPT in schools has revolutionized the way teaching and learning are done around the world. Such technologies open up the chance for unparalleled personalization in learning, whereby teachers can deliver lessons specific to individual students' requirements (Atchley et al., 2024; Jiang, 2022; Nwoko et al., 2023; Wei, 2023). For English

Foreign Language (EFL) learning, when learners are faced with issues like lack of exposure to naturalistic use, varying levels of proficiency, and the lack of immediate feedback, AI technologies can provide adaptive learning pathways, interactive language practice, and immediate feedback (Arfaie et al., 2024; Fan & Zhang, 2024; Shaikh et al., 2023; Song & Song, 2023; Wei et al., 2023). Nevertheless, if it is adopted without direction, these tools will serve to increase existing educational inequalities rather than to eliminate them.

Although AI applications in EFL teaching within advanced technological environments like China, the United States, and Europe have been thoroughly researched (Jamshed et al., 2024; Lee, 2024; Yu, 2024; Zhai et al., 2024), their implementation in Iranian EFL classrooms has not been as thoroughly explored. The Iranian education system is founded mainly on the traditional, teacher-centered approaches characterized by rote memorization, grammatical learning, and minimal communication between teachers and students (Bumbach, 2024; Castonguay et al., 2023; Sadeghi et al., 2022; Shamshiri et al., 2023). Traditional approaches typically do not support individualized learning that is built around learner autonomy, adaptive instruction, and individualized feedback. Personalized EFL learning involves the variation of instruction content and activities to suit the unique needs, levels of proficiency, and learning styles of learners, which fosters greater engagement and improved outcomes in language learning (Derakhshan et al., 2021).

This study aims to bridge this gap by investigating the potential use of AI tools, specifically ChatGPT, to provide personalized learning in Iranian EFL classrooms. ChatGPT was selected for this study as it has high availability, low price, and the ability to generate real-time, context-sensitive linguistic interaction, rendering it an appropriate AI tool for learning environments with limited resources (Arantes, 2023; Veras et al., 2023; Worthing et al., 2024).

The current research contributes methodologically by implementing a mixed-methods framework that combines semi-structured interviews, classroom observations, and a large-scale TAM-based survey. The combination of qualitative findings with statistical validation provides depth in addition to generalizability, enabling a clearer understanding of the ways AI-based tools are perceived and utilized in EFL learning environments.

Theoretically, the study extends the TAM model to the specific context of integrating AI into the teaching and learning of English as a Foreign Language (EFL). By situating the model in a resource-poor, non-Western context, it extends existing theoretical discussions on technology uptake, highlighting the influence of contextual variables such as cultural norms and infrastructural limitations on learners' and teachers' adoption of new technologies.

The research also provides a publication-oriented contribution by translating its results into policy-applicable suggestions for Iranian policymakers and pedagogues. These suggestions are not only confined to the technological requirements but also go on to cover the cultural and institutional subtleties of implementing AI-based instruction in Iran. In doing so, the research bridges the research-practice gap so that its implications are conveyed to inform intellectual discourse as well as practical decision-making.

Despite the promise of AI-driven personalized learning, there are numerous challenges to its implementation in Iranian EFL teaching. Constraints identified in the literature range from a shortage of suitable technological infrastructure, inexperienced instructors, and institutional opposition to pedagogical innovation (Kusuma, 2023; Naderi, 2010). Additionally, AI uptake can be culturally resisted owing to the tendency of traditional education systems to prioritize teacher control and standardized curricula over technology-facilitated, student-centered approaches to pedagogy.

This research also recognizes its scope boundaries. The results pertain to Iranian EFL classes, only allowing generalizability to wider educational environments. In addition, the research only used ChatGPT. By investigating the opportunities and challenges of AI-based personalized education in Iranian EFL classrooms, this study will provide direct recommendations to teachers, policymakers, and AI developers. As AI continues to reshape the world of education, its use cases and limitations will be crucial in developing impactful, inclusive, and sustainable AI-based models of learning.

2. Literature Review

The use of AI tools for educational purposes, especially in learning English as a Foreign Language (EFL), has gained increasing scholarly attention. AI technologies such as ChatGPT provide personalized interactive experiences in learning that have much potential to revolutionize traditional EFL teaching (Shaikh et al., 2023; Qu et al., 2023). Nevertheless, integration within Iranian classrooms has thus far been scant due to technical, pedagogical, and cultural constraints. This section presents literature on AI-based language learning with an examination of its merits alongside challenges within an Iranian context, whilst informing the discussion of theoretical frameworks such as the Technology Acceptance Model (TAM) and Self-Regulated Learning (SRL) Theory.

2.1 Theoretical Framework: TAM and SRL Theory

Although the Technology Acceptance Model (TAM) is primarily applied in studies to determine how users accept technology in education, less emphasis is given to AI-based learning in the EFL context. TAM posits that two fundamental constructs determine users' adoption intentions of a new technology (Davis, 1989). First is perceived usefulness (PU), which is the extent to which individuals believe that a particular technology will enhance their performance. In EFL contexts, ChatGPT demonstrates its usefulness in providing instant feedback, custom exercises aligned with students' requirements, and practice conversations in virtual interactions. These factors directly increase teaching and learning efficiency, as observed in recent studies (Holmes et al., 2022; Chen, 2024).

The second factor is perceived ease of use (PEOU), which entails the degree to which a technology is perceived as easy and straightforward to use. Recent studies affirm that while students consider ChatGPT relatively easy to use, teachers find it more challenging. This is mainly explained by the limited exposure and training of teachers to AI-based tools, which serves as a disincentive towards effortless integration into teaching-learning contexts (Baharloo & Miyan Baghi, 2024).

Along with such local attitudes, there are also international factors that are decisive for the adoption of AI in education. Institutional and cultural barriers, such as centralized curricula, lack of

digital infrastructure, and pedagogical conservatism, significantly influence the extent to which teaching can be achieved using AI. Such barriers are particularly seen in the Iranian example, where structural and policy limitations continually hinder the adoption of new education technologies (Kusuma, 2023; Naderi, 2010).

2.2 Self-Regulated Learning (SRL) Theory and AI in EFL

The SRL theory presumes that students regulate their learning process utilizing goal-setting, self-monitoring, and self-reflection (Zimmerman, 2002). Artificial intelligence tools such as ChatGPT are highly compatible with the principles of self-regulated learning (SRL) since they give students the capability to control and keep track of their performance. One system that is at the forefront of this is the provision of instant feedback, allowing students to monitor their performance in the here and now and change their learning strategies accordingly. The immediate response cycle supports self-monitoring and allows learners to refine their language task strategies without ongoing teacher assistance.

The other important feature is the way ChatGPT facilitates autonomous learning. It enables students to practice language skills on their own, at their rate, choosing the level of intensity, extent, and specificity of their exercises. By removing fixed temporal and spatial constraints of classroom education, AI systems can facilitate learners to take more control over their learning activities.

Finally, ChatGPT facilitates SRL through learner-informed learning pathways. Adaptive testing and tailored interaction construct learner-informed practice pathways that enhance self-motivation and self-direction. Personalization has been shown not just to enhance engagement but also to solidify learners' agency confidence over the learning process (Qiao & Zhao, 2023; Pedro et al., 2019).

South Korean and Chinese experiments, where AI-adaptive learning environments are extensively practiced, reveal that students who utilize AI-aided EFL tools are more independent and retain more of the language than those in conventional classrooms (Ateş & Gündüzalp, 2025; Ng et al., 2023). These implementations require comprehensive teacher training and institutional support, which remain in short supply in Iran.

2.3 Benefits of AI in EFL Education

ChatGPT and other AI models have been shown to enhance language learning in a variety of ways. Perhaps most significant is the potential to offer personalized feedback. AI-powered software can offer real-time corrections, grammar recommendations, and pronunciation tips, enabling students to advance their language abilities without waiting for a teacher's feedback. This immediacy not only increases the pace of learning but also supports continuous self-regulation and adaptation, as is confirmed by recent research (Holmes et al., 2022; Chen, 2024).

The second prominent characteristic is adaptive learning routes. Through students' skill levels analysis, AI systems can tailor exercises and materials based on the individual's requirements. This flexibility eliminates wastage due to one-size-fits-all learning. Empirical studies have established that such personalization enhances learner interest, persistence, and performance (Pedro et al., 2019).

AI also enables experiential language learning by simulating real-life conversational contexts. Chatbots like ChatGPT can mimic real conversation, which exposes students to context and pragmatic aspects of language use, something that is difficult to replicate in a controlled classroom setting. Virtual immersion by simulation develops communicative competence and prepares students for real-life interaction, bridging the gap between controlled practice and genuine use (Leng, 2024).

Comparative Studies: China, South Korea, and European studies highlight that AI-driven language learning systems increase student motivation and retention rates (Ng et al., 2023; Shaikh et al., 2023). AI-driven adaptive tutoring systems such as Squirrel AI have been integrated into China's public school system, which has seen measurable improvement in reading comprehension and writing skills (Huang, 2023). However, in Iran, where internet restrictions and AI literacy are less, the same findings remain theoretical rather than practical.

2.4 Challenges of AI Integration in Iranian EFL Classrooms

Despite being full of promise, the implementation of AI in Iranian schools is being hindered by a succession of persistent issues. Perhaps the most significant of these issues is the technological and infrastructural impediments. Many schools across the country lack reliable and good connectivity to the internet, which takes away from the reliability of AI-based learning systems (Hemmati & Aziz Malayeri, 2022). Further, the lack of contemporary digital infrastructure, including hardware and software facilities, particularly in underprivileged schools, deprives the masses from gaining access to AI-powered pedagogical instruments (Kusuma, 2023).

There is yet another impediment in teacher education and pedagogic readiness. Most Iranian EFL instructors have not been given chances for professional growth that would enable them to acquire the skills necessary for effective integration of AI instruments into their courses. This is accompanied by resistance to change: learning traditions of memorization remain deeply ingrained in a lot of the learning environment, and teachers sometimes question the pedagogic value of AI. In some cases, anxieties surrounding potential job replacement further contribute to resistance to implementing such technology (Naderi, 2010).

Finally, ethical and cultural concerns provide an added element of complexity. AI use also raises sensitive concerns regarding data privacy since models dig through and store user interactions, subjecting students to surveillance risks in nations where the internet is highly censored (Arango-Ibanez et al., 2024). Algorithmic bias also remains a significant concern. Because the majority of AI systems are primarily trained on Western data, the ensuing cultural allusions and language usage may be incongruous to Iranian learners' language needs or socio-cultural contexts (Xu et al., 2022).

2.5 Addressing the Research Gap: Why This Study Matters

While AI-based EFL learning software has been widely studied in technologically developed countries, its use in Iran is a critical research gap. Most of the studies focus on the pedagogical potential of AI but seldom investigate practical concerns such as infrastructural limitations, teacher readiness, and socio-cultural challenges in the Iranian educational context (Ateş & Gündüzalp, 2025; Ng et al., 2023). This study tries to bridge this gap by:

1. Applying the TAM model to Iranian EFL classrooms to quantify the attitude of teachers and students towards AI adoption.

2. Investigating the potential of AI in enhancing Self-Regulated Learning among Iranian learners.

3. Providing comparative data from other countries to highlight potential policy and infrastructure improvements needed for AI implementation.

Artificial Intelligence-based language learning software like ChatGPT can potentially transform personalized learning in EFL teaching. Whether they will do so will be a function of whether the completion is technologically ready, the amount of training teachers receives, and cultural acceptability. While research in China, South Korea, and Europe demonstrates measurable improvement in EFL learning achievement, Iran has particular infrastructural and pedagogical challenges for localized AI applications, policy support, and professional training schemes.

By synthesizing TAM and SRL theories, the current study provides a better insight into AI adoption in EFL learning. It offers practical recommendations to Iranian teachers and policymakers on how to deal with AI-assisted learning challenges. This research aimed to evaluate the impact of AI-driven personalized learning in Iranian EFL classrooms through the following questions:

RQ1. How can Iranian EFL classrooms be optimally integrated with AI tools like ChatGPT for maximizing personalized learning?

RQ2. What are the perceived benefits and limitations of using AI technologies for personalized learning from the perspectives of Iranian EFL teachers and learners?

3. Methodology

The synergy of artificial intelligence tools like ChatGPT in Iranian EFL classrooms for custom learning is explored in this research through a mixed-methods research design. The research aims to provide a comprehensive understanding of the potential benefits, challenges, and practical applications of utilizing AI tools in this context by integrating quantitative and qualitative methods. The approach is made to take into account the particular features of Iranian EFL classrooms as well as to tackle the research questions. The research uses an exploration sequential mixed methods design that comprises two stages. First, interviews and classroom observations are used to obtain thorough insights into teachers' and students' encounters with artificial intelligence tools via qualitative data. In quantifying a perception of ChatGPT's supposed efficiency in improving custom learning results, the second step is a Questionnaire. Utilizing this two-phase approach, the research covers both the subtle viewpoints of subjects and more general patterns across a larger sample.

3.1 Participants and Setting

This study investigated two primary participant groups: EFL teachers and students in Iran, with a specific qualitative focus on Bandar Abbas city, Hormozgan province. A mixed-methods approach was

employed, utilizing purposive sampling for qualitative data collection and simple random sampling for the quantitative phase.

For qualitative research, five students and five EFL instructors were selected through purposive sampling. The inclusion criteria ensured that the participants had prior exposure to using AI tools in learning settings or showed a high willingness to use technologies such as ChatGPT for teaching or learning tasks.

The selection was targeted so that the participants were knowledgeable about AI-assisted language learning, thus providing depth of insight into the challenges and benefits it posed. The sample size was based on data saturation, saturation-the point at which no new themes were able to be presented during interviews and observations (Creswell & Creswell, 2023). The overriding importance of this method is improving the trustworthiness of qualitative findings by ensuring thematic completeness without excessive repetition. Additionally, participants were selected from various schools across Bandar Abbas to ensure diverse institutional perspectives, accounting for variations in AI access, school policies, and teaching styles.

For the quantitative stage, 200 participants were recruited, with 100 Iranian teachers of English as a foreign language and 100 EFL students. Simple random sampling was used in an attempt to improve the ability of the findings to be generalizable within the Iranian context. The sample represented the demographic profile of Iranian EFL learners and instructors in general, with instructors having an average of 33 years and students having an average of 16 years, which are the secondary and post-secondary levels where learning English is predominantly most common.

The screening began with an open call for volunteers made through LinkedIn. Potential volunteers were invited to contact the research assistant, and random sampling was then used to get an evenly balanced representation of both groups, unbiased. The procedure helped reduce sampling bias and obtain an evenly balanced set of analysis respondents from the survey. To validate the sample size, Cochran's formula (Cochran, 1977) was applied, ensuring that the selected 200 participants provided sufficient statistical power to detect meaningful differences in AI adoption between teachers and students.

While random selection was employed to minimize bias, the use of LinkedIn as a recruitment platform may introduce sampling bias. LinkedIn users typically have higher digital literacy and technology exposure than the broader Iranian EFL teaching population. This limitation suggests that the participants in this sample may be more open to accepting AI than teachers in rural or underprivileged schools with limited digital access. Thus, the outcomes may lean towards overestimating AI readiness and acceptance against the Iranian EFL teaching population.

In order to address this potential bias, future research would need to widen recruitment by incorporating an assortment of non-LINKEDIN platforms, such as school visits, national education networks, and offline groups of teachers. Additionally, with stratified sampling, researchers would be able to meet both urban and rural perspectives, therefore having a representative and more balanced view of AI implementation across the Iranian EFL environment.

This study acknowledges these sampling limitations but maintains that the qualitative insights from Bandar Abbas and the quantitative findings from a broader Iranian sample provide meaningful and transferable conclusions regarding AI adoption in Iranian EFL classrooms.

By employing a dual-phase sampling strategy, this study balances specific contextual insights (Bandar Abbas) with broader statistical generalizability (national-level Questionnaire data). While LinkedIn-based recruitment poses some biases, these have been acknowledged and will guide future refinements in sampling methodologies.

This study, in order to offer comprehensive views on AI integration in Iranian EFL classrooms, uses a mixed-methods approach involving both qualitative (semi-structured interviews and classroom observations) and quantitative (Questionnaire-based) data collection methods. This triangulation yields both depth and generalizability, allowing for a more nuanced understanding of attitudes, challenges, and the effectiveness of AI tools in personalized learning.

3.2 Instrumentation

The qualitative phase of the research consisted of semi-structured interviews that focused on the Eastern views of EFL teachers and students toward the application of AI. Through these interviews, perceived benefits and challenges, pedagogical and institutional barriers, and recommendations for integrating AI will be examined. The interviewees were five EFL teachers and five students. They were purposively sampled based on previous experience with AI in education or an interest in AI-assisted learning. Such purposive sampling ensured that the participants had enough familiarity with AI tools to allow for deep insights regarding practical challenges and benefits.

Interviews lasted for 30 to 45 minutes and had a semi-structured nature in that they balanced flexibility with a set series of fixed questions. Interview sessions may be conducted in person or online, depending on the availability of the interviewee. The interviews were audio-recorded with the consent of the participant and then transcribed verbatim. Thematic analysis was conducted using MAXQDA software, which involves quantifying each category of response into "technical barriers," "instructional benefits," and student engagement. This approach was anticipated to gain a rich qualitative understanding of AI integration in Iranian EFL classrooms. Complementing interviews, classroom observations investigate live interactions among learners, instructors, and AI tools such as ChatGPT. The key areas of focus included learner motivation, AI integration issues, and the degree to which AI tools achieve personalized learning.

The observations were made in Bandar Abbas EFL classrooms where ChatGPT or any other AI tool was being used. The observer did not take on the role of a researcher and therefore allowed no interference in the formation of classroom dynamics. The data gathering comprised lengthy field notes on student-teacher interaction, a systematic checklist to determine the level of engagement, and a diary of technical and pedagogical obstructions. Observational data were then thematically coded, identifying general trends and common issues in AI-enhanced learning. With first-hand observation of AI integration, classroom observations provided real-world data that corroborated self-reported questionnaire and interview data, supporting the general research findings.

To quantify the trends of AI adoption, a Questionnaire approach was employed, designed within the Technology Acceptance Model (TAM) framework. The questionnaire quantified two significant constructs: Perceived Usefulness (PU) (the extent to which ChatGPT enhances EFL learning) and Perceived Ease of Use (PEOU) (the extent to which participants consider the tool easy to use and user-friendly). The questionnaire surveyed 100 EFL teachers and 100 students, who were selected by random sampling to gain a broad representation from across Iran. The questionnaire included Likert-scale questions (1 = Strongly Disagree, 5 = Strongly Agree) and open-ended questions in which the respondents could explain their experiences in detail.

The reliability of the questionnaire was ensured by high Cronbach's alpha coefficients, with PU ($\alpha = 0.85$) and PEOU ($\alpha = 0.82$), indicating strong internal consistency. Data analysis was conducted using SPSS software, employing descriptive statistics (means, standard deviations), independent-sample t-tests (to compare teachers' and students' perceptions), and Pearson correlation analysis (to examine relationships between PU and PEOU).

This quantitative approach ensured empirical validation of AI adoption trends in Iranian EFL classrooms, enabling statistical generalizability of the findings. A blend of qualitative (interviews, classroom observations) and quantitative (Questionnaire) methods was suitable to allow us to look at a holistic evaluation of the role of AI in EFL education. Interviews provided insightful understandings of students' and teachers' perceptions. Classroom observation captured real interaction in real time, and Questionnaire data quantified larger trends in AI adoption.

This triangulated approach is the most suitable for best practices in educational research, rendering findings data-driven as well as contextually relevant. Qualitative data provides depth to the findings, while quantitative analysis validates trends from a larger sample size, thereby ensuring that the study is methodologically robust. By integrating semi-structured interviews, classroom observations, and Questionnaire surveys, the research ensures rigorous data triangulation to provide insights into AI-facilitated personalized learning in Iranian EFL classrooms. The methodological design enhances validity, reliability, and usefulness, thus establishing the study as a valuable contribution to AI-based EFL pedagogy.

For the current study, the researchers utilized a mixed-method design with qualitative (semi-structured interviews and classroom observations) and quantitative (Questionnaire-based) data collection. This methodological design could ensure an all-round and in-depth examination of AI integration in Iranian EFL classrooms through the provision of in-depth qualitative insights and generalizable for statistical purposes.

3.3 Research Procedure

This section covered the qualitative and quantitative aspects of the study concerning the use of AI in Iranian EFL classrooms. For qualitative data, semi-structured interviews were conducted with five EFL teachers and five students conveniently selected from purposive sampling due to their expertise and willingness to utilize AI-supported language learning. The interviews lasted between 30 and 45 minutes. They were conducted in person or via video and audio-recorded, coded, and thematically analyzed. It allowed for flexible interaction in discussing AI-related benefits, issues, and related means of implementation.

Some classroom observations were conducted to observe AI integration in real-time. Over one month, there were three different observation sessions conducted in each of the five classrooms in Bandar Abbas. Observations included student engagement, teacher facilitation, AI effectiveness, and existing technical or institutional barriers. Data were gathered via field notes, a structured checklist, and logs of technical issues. The data were then thematically coded to identify patterns in AI-enhanced learning experiences.

The quantitative element of this research involved a questionnaire study based on the Technology Acceptance Model (TAM), centered on the Arguably Usefulness (PU) and Perceived Ease of Use (PEOU) of ChatGPT. 100 EFL teachers and 100 students randomly sampled from widespread Iranian regions were traced through Google Forms to maintain diversity. Likert-scale and open-ended questions captured participants' opinions on AI adoption, barriers, and expectations.

For reliability and validity, we computed Cronbach's alpha, which showed a high internal consistency (PU = .85, PEOU = .82), hence indicating that the questionnaire could measure AI perceptions appropriately in EFL learning. This mixed method helped to narrow down specific patterns so that AI plays a role in Iranian EFL education, with qualitative insights anchoring the exercise in strong statistical attributes.

4. Data Analysis

A report on the study's results is presented in detail in this section. Both qualitative and quantitative findings were considered and integrated through the process of thematic analysis, classroom observations, descriptive and inferential statistics, and correlation analysis.

4.1 Qualitative Data Analysis

MAXQDA was utilized in conducting the thematic analysis, and three basic themes were disclosed: engagement and motivation, individualized feedback, and problems of implementation. The themes were derived from systematic coding, and their characteristics are reflected in Figure 1, a thematic map of qualitative findings.

Participants indicated that ChatGPT increased student engagement and participation in EFL classes. The majority of students found the tool dynamic, interactive, and engaging, describing it as "like having a personal tutor always at your fingertips." Particularly in environments where traditional teaching methods dominate, ChatGPT introduced some freshness, breaking classroom monotony and inspiring learning enthusiasm.

By offering instant, personalized feedback, ChatGPT became the most prized website, as students were able to correct their mistakes within a few seconds and were not made to wait for a teacher's evaluation. Teachers also benefited from the program's application, which reduced their marking workload, allowing them to focus on more participative teaching techniques. One student pointed out, "ChatGPT corrects my grammar in real time and offers enhancements, saving me considerable time." This corroborates earlier international research that identifies the use of AI in advancing self-directed learning.

Despite the numerous benefits, several AI adoption challenges stood out from the study. Among the most commonly mentioned challenges was poor internet connectivity, which is prone to interfering with class work and undermining the effectiveness of AI-based tools. Another issue is the lack of teacher training, as most teachers lack the necessary qualifications to utilize ChatGPT's potential effectively. Institutional resistance is also a key factor, where pedagogical issues regarding curriculum integration and the possibility of excessive overdependence on technology have resulted in educational authorities' hesitation. All these factors are the pedagogical and structural hindrances that have to be addressed before AI can be successfully applied to EFL teaching in Iran.

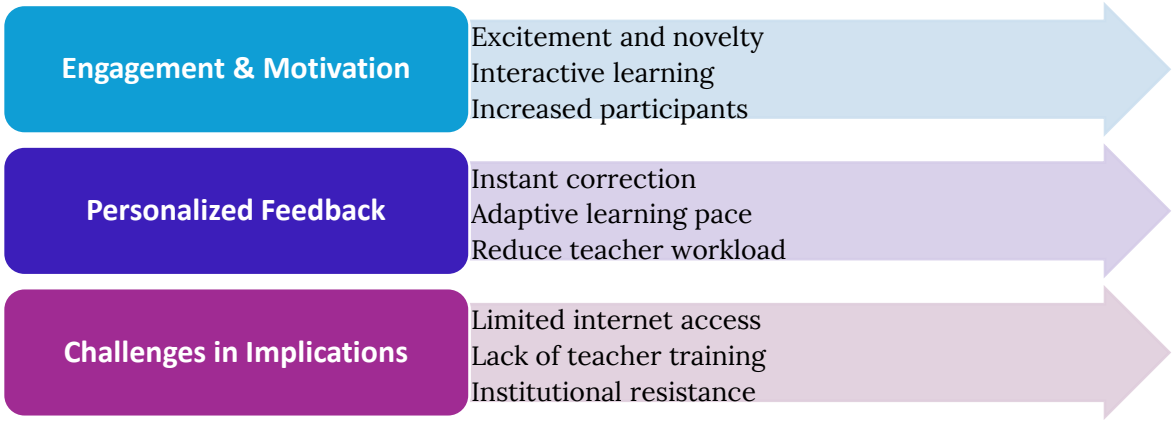
One teacher stated affirmatively, "Whilst ChatGPT is seemingly very promising, most schools are woefully lacking in the technical support to be taught how to implement it successfully." These barriers will have to be addressed before AI can achieve its potential in education.

Classroom observations provided us with first-hand data about how ChatGPT was being implemented inside EFL classrooms. Several positive outcomes were noted. Students were more engaged, cooperating constructively with ChatGPT-supported activities that stimulated interaction, rather than the customary teacher-led routine. Teachers also reported benefits in planning, with the inclusion of AI supporting more diverse and interactive lesson styles. Apart from that, ChatGPT use enabled flexibility in the sense that it allowed customized learning experiences for learners with varying levels of competence, therefore enabling enhanced inclusivity in class.

At the same time, there were some drawbacks. Recurring technical glitches, most of which resulted from unstable internet, hampered the free integration of AI tools in teaching. A second drawback stemmed from compatibility issues between AI-generated responses and already established learning objectives, rendering the use of AI as part of compulsory learning forms impossible. Finally, instructors' lack of experience with AI tools created the pressing need for special training courses to build necessary digital and pedagogical competencies. Presented below is a thematic map of key qualitative findings categorizing responses according to engagement, feedback, and limitation.

Figure 1

Thematic Map of Qualitative Findings



4.2 Quantitative Data Analysis

The quantitative questionnaire examined participant perceptions of ChatGPT using two primary constructs: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). The findings are summarized in Table 1, which includes effect sizes to indicate the practical significance of differences.

Table 1

Descriptive Statistics of Participants' Perceptions of ChatGPT

Construct	*M*	*SD*	Cronbach's Alpha	Effect Size (Cohen's d)
Perceived Usefulness (PU)	4.21	0.68	0.85	0.72 (large)
Perceived Ease of Use (PEOU)	4.05	0.72	0.82	0.65 (moderate)

The results indicate high levels of perceived usefulness (M = 4.21, SD = 0.68), with students and teachers recognizing ChatGPT's role in supporting learning activities. The Perceived Ease of Use score (M = 4.05, SD = 0.72) suggests that users found the tool user-friendly. Effect sizes confirm that both factors had a substantial impact on participants' experiences. To assess variations between students and teachers, an independent samples t-test was conducted. The results, including confidence intervals (95%), are provided in Table 2.

Table 2

T-Test Results for Perceived Usefulness and Ease of Use

Construct	Group	*M*	t-value	p-value	95% Confidence Interval
Perceived Usefulness (PU)	Students	4.30	2.47	0.015*	[4.18, 4.42]
	Teachers	4.12			[4.02, 4.22]
Perceived Ease of Use (PEOU)	Students	4.10	1.38	0.170	[3.98, 4.22]
	Teachers	3.99			[3.87, 4.11]

The results show that students perceived ChatGPT as significantly more helpful than teachers (p = 0.015). However, both groups found the tool equally easy to use (p = 0.170), suggesting familiarity with AI technology was not a significant barrier. A Pearson correlation analysis was conducted to examine the relationship between Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). The results are summarized in Table 3 and Figure 2, which presents the correlation matrix, including p-values.

Table 3

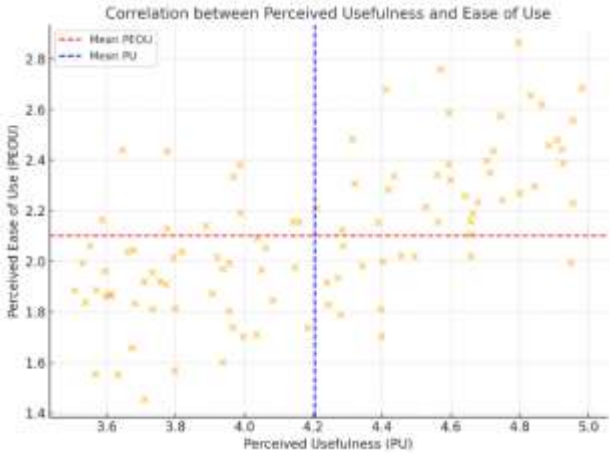
Correlation Analysis Results

Variables	PU	PEOU
Perceived Usefulness (PU)	1.00	0.52**
Perceived Ease of Use (PEOU)	0.52**	1.00

Note: $p < 0.01$, indicating a statistically significant correlation.

Figure 2

Correlation Between Perceived Usefulness and Ease of Use



A scatterplot with a regression line visually represents the relationship between PU and PEOU. The moderate positive correlation ($r = 0.52$, $p < 0.01$) suggests that users who found ChatGPT more useful also perceived it as easier to use, reinforcing the Technology Acceptance Model (TAM) hypothesis. The findings from both qualitative and quantitative analyses are synthesized in Table 4, summarizing significant insights.

Table 4

Summary of Key Findings

Aspect	Key Findings
Engagement & Motivation	ChatGPT increased student participation and enthusiasm, creating a more interactive learning environment.
Personalized Feedback	The tool provided instant, tailored feedback, reducing teachers' grading workload.
Technical Challenges	Limited internet access and lack of teacher training emerged as significant barriers.
Resistance to Change	Cultural and institutional resistance hindered AI adoption.

The findings of this research indicate that although ChatGPT has the potential to change Iranian EFL students' personalized learning in the classroom, technical constraints, a lack of teacher training, and institutional opposition are serious barriers. Future initiatives must focus on enhancing the infrastructure, implementing targeted professional development, and fostering a culture of transparency around AI pedagogical innovations.

5. Discussion and Conclusion

The findings of this research offer a comprehensive examination of the application of AI tools, specifically ChatGPT, in Iranian EFL classrooms. They unveil the immense potential for such tools to facilitate individualized learning and point out severe challenges to their application. This section compares the findings with existing research to show comparisons, contrasts, and implications for teaching EFL.

The results indicate that the incorporation of ChatGPT significantly enhances student engagement and motivation, as indicated by comparative studies worldwide. For example, Mohamed (2024) demonstrated that ChatGPT evokes creativity and offers personalized learning opportunities, leading to increased participation and interest in EFL environments. Similarly, Tajik (2025) mentioned that ChatGPT provides interactive feedback, enhancing students' writing and acting as a reliable digital assistant. These findings align with participant descriptions in this study, where ChatGPT was equated with an "available anytime personal tutor," emphasizing its capability to make learning an interactive and dynamic process.

More evidence from overseas studies confirms these findings. Ateş and Gündüzalp (2025) revealed that AI-based platforms like Duolingo heighten the engagement of students considerably by offering adaptive and interactive learning environments. These tools can be particularly advantageous in traditional schooling contexts, such as in Iran, where they help disrupt the dullness of age-old pedagogy. The above advantages do, however, carry some restrictions. Kamali et al. (2024) emphasized the importance of deploying AI tools effectively in Iranian classrooms, which hinges on addressing infrastructure issues and incorporating teacher education programs, which are often lacking in this environment.

While the motivational benefits of AI tools are well-documented, the unique infrastructural and cultural context in Iran presents distinct challenges. Thus, the dependence on traditional instructors and low awareness about AI-powered teaching negates the actual benefits of the tool. Hence, while results conform to international research in greater engagement and motivation, context-specific issues underscore the need for contextual implementation strategies. By surmounting these challenges, AI instruments could be more effectively deployed in Iranian EFL classrooms. ChatGPT's ability to provide immediate, tailored feedback is the research's most significant selling point. This point is supported by past studies suggesting the potential of AI to transform instructional practices.

Holmes et al. (2022) pointed out the way that AI instruments reduce teachers' workloads by performing feedback work while improving learners' outcomes through tailored support. Similarly,

Namaziandost and Rezai (2024) noted that AI tools like ChatGPT cater to the different needs of EFL learners by offering personalized assistance, which is significantly missing in regular instruction. The subjects also confirmed these outcomes. The instructors appreciated the ability of ChatGPT to provide detailed learner-specific feedback, thereby allowing them to embrace more interactive pedagogical strategies. The students commended the assistant's capability to fill individual learning gaps and provide real-time correction, substantiating it as an ideal learning tool. These findings buttress the case that AI instruments can aid learner-centric environments that are more adaptive and personalized.

The study also points out some challenges in integrating AI into underground environments. While respondents appreciated ChatGPT's capability to give comments, technical issues like uneven internet coverage and the likelihood of freezing software became the main hindrances. These challenges are consistent with Kamali et al.'s (2024) observations that infrastructure disparity is among the major deterrents discouraging the utilization of AI in the Iranian environment. In contrast, studies on improved infrastructural facilities, such as Ateş and Gündüzalp (2025), report fewer technical complications and smooth implementation of AI.

This contrast shows the importance of considering environmental factors in the uptake of learning technologies. For it truly to utilize its maximum potential in the provision of individualized feedback, the development of infrastructure and resource sufficiency becomes key to ChatGPT. Future initiatives must be directed towards filling these gaps so that the benefits of AI instruments can be delivered in poor-resource settings like Iran. The study identifies some concerns regarding the use of ChatGPT in Iranian schools.

These encompass limited Internet availability, poor training of teachers, and cultural reluctance to adopt change. These findings corroborate the work of Kusuma (2023), who identified infrastructures and a lack of professional development as two profound obstacles to technology adoption in Iranian schools. Similarly, Naderi (2010) has reported institutional resistance to practical and creative methods of teaching, often due to cultural and systemic constraints. Whereas the earlier studies on such issues have been inclined to describe them in broad terms, the current study provides some examples of their incidence in practice.

The respondents explained how their classes would often be disrupted by extremely slow internet, discouraging the students and teachers from utilizing the web-based tool of ChatGPT effectively. The teachers further stated that they lacked faith in incorporating AI into their curricula due to inadequate training. This highlights the need for sufficient time and resources to be allocated to teachers' professional development courses, which can adequately prepare them to use AI tools in classrooms. However, there was a second principal barrier to change: cultural resistance. Some educators are cynical about the reliability and suitability of AI technologies for the traditional lesson. The skepticism is generally based on a lack of knowledge of what AI can offer or a struggle to meet existing curriculum and pedagogic objectives. Cultural and institutional hindrances in these cases need to be bridged to establish a climate of devotion to innovation and technology infusion.

Therefore, a multidimensional approach has to be constructed to deconstruct the barriers. This framework would challenge the path of technology, train teachers in it, and embrace an open attitude toward innovations. By removing these barriers, the whole potential of AI tools like ChatGPT

would be unleashed to promote learning performance and revolutionize teaching methods in Iranian EFL courses.

The perceptual gap in the usefulness of ChatGPT between teachers and students is significant, with students giving a much higher rating. This is in line with Davis's Technology Acceptance Model of 1989, where perceived usefulness and ease of use are two constructs that most determine the acceptance of technology. Students reacted very sensitively to the immediate academic benefits of ChatGPT: it was interactive, and hence, personalized learning was possible.

The significant positive correlation ($r = 0.52$) that was developed between perceived usefulness and ease of use provides further support for TAM, which indicates the significance of user-friendly tools as significant determinants of technology acceptance. The findings also support Venkatesh and Bala's Unified Theory of Acceptance and Use of Technology (2008), where friendly technologies serve as strong enablers for technology acceptance by allowing for integration into the practice of the individual and the institutional regime.

However, extrinsic factors, infrastructures, and societal pressures also play a role; they are just as relevant in shaping mindsets towards AI tools. These include diminished training, school-imposed arrangements, and distrust of institutions, which are reflected in teachers' abysmal scores on the usefulness of ChatGPT. Such types of trends have also been addressed by Zheng et al.(2023), who established the existence of high resource availability and social pressure on the use of educational technology in low-resource environments. External factors like these are crucial to be fulfilled to create an enabling environment to ensure that teachers have a more positive view of AI tools. On the other hand, such inherent variables as usability, perceived value, availability of supporting infrastructure, and acceptance by peer educators must be considered to realize the maximum potential of integrating AI tools in education. Schools must foster a favorable climate that encourages educators to address the disparity between students' perceptions of ChatGPT and educators' perceptions.

The findings of the current research have sparked considerable interest in the international community regarding the positive applications of AI in learning, specifically its potential to foster student interaction and implement effective feedback mechanisms. Pedro et al. (2019) and Holmes et al. (2022) also summarized such potential into creating interactive, adaptive learning environments to enhance students' motivation and learning outcomes.

The research indicated that such cultural and infrastructural barriers, as revealed here, do so more compellingly in Iran: this is a strong indication of the need for solutions with roots. Restricted internet use, low quality of teachers, and unwillingness to change are reported to represent important challenges for AI implementation, highlighting the more pronounced necessity of a facilitating environment for technology take-up. Another fascinating result of this study is that, while students found ChatGPT more useful than teachers, the opposite result has been reported in specific Western research in which teachers have historically led technology implementation.

Ateş and Gündüzalp (2025) consider this to be a result of more institutional support and teacher training in educationally rich environments. In the case of Iran, this difference can be understood in terms of intergenerational differences, i.e., how differently successive generations of teachers evolved in terms of using technology and the relative emphasis on teacher professional

development. These findings highlight the importance of context-specific measures to adopt AI. Addressing infrastructural deficits, providing teacher training on using AI tools individually, and sensitizing educators to students' technology use would go a long way in effectively integrating AI tools in Iranian EFL classrooms. Encouraging student-teacher collaboration will further bridge the gaps in perception and provide an integrated and effective learning environment.

With a focus on their capacity for personalized learning and the problems of their implementation, this research explored the incorporation of AI tools such as ChatGPT in Iranian EFL classrooms. The results offer practical information about how teachers and students view artificial intelligence tools and the realistic consequences of their implementation in a resource-limited environment. The research questions, theoretical and practical implications, and recommendations for future research are all thoroughly explained in the very detailed solution presented below.

Implications suggest that ChatGPT could be effectively implemented in Iranian EFL classes to facilitate personalized learning by providing immediate feedback, adapting to individual learning needs, and enhancing student participation. The tool's capability to provide tailored feedback and build interactive learning sessions was cherished by students as well as educators. Effective integration, however, necessitates surmounting daunting obstacles such as limited internet connectivity, poor teacher training, and opposition to change. Teachers can use ChatGPT to the best of their abilities to enhance individualized learning in Iranian EFL classrooms through teachers' training, building technological infrastructure, and creating localized AI solutions.

They identified research that shows students and teachers alike find ChatGPT very helpful for personal teaching, specifically in its capacity to offer immediate feedback, cater to several levels of learning, and stimulate motivation. They also suggested several difficulties, including technical problems, language differences, and dependency on AI. The need for customized programs to guarantee optimal and balanced uses of AI tools in the teaching of EFL is supported by these difficulties. Overcoming these problems will involve an interdisciplinary endeavor on the part of educators, policymakers, and technology developers.

Transposing the Technology Acceptance Model (TAM) to the Iranian EFL context, this research adds to existing research on artificial intelligence in education. The findings corroborate the model's contention that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are key determinants of technology acceptance. The research further highlights the imperatives of forces from outside in the form of social influence and facilitating conditions that play a considerable role in precipitating technology adoption in resource-limited environments. Such theories promote the consolidation of theoretical knowledge about AI assimilation in schooling and place more focus on context-dependent models for consideration of both infrastructural and cultural variables.

The research puts particular stress on the enormous possibilities AI tools such as ChatGPT hold for transforming EFL teaching in Iran and other similar contexts. On top of this, it provides instructors, policymakers, and researchers with realistic information, enabling them to effectively utilize AI while minimizing drawbacks and addressing limitations and ethical concerns.

AI adoption in Iranian EFL teaching requires specific professional development, infrastructure investment, and culturally tailored AI solutions. Professional development schemes should take into account technical as well as pedagogical training for teachers in order to integrate AI without

replacing conventional instruction. Infrastructure upgrades, including robust internet and digital resources, must be adopted to ensure equitable access to AI, particularly in rural areas. Along with that, localized AI tools with support for two languages and local content can make them more powerful. There has to be a balanced equation with AI complementing, not replacing, teacher instruction by enhancing critical thinking and social interaction.

Ethical issues should also be addressed, such as AI bias, data privacy, and AI over-reliance by students. Responses generated by AI should be tracked for cultural correctness, and privacy protection measures should be enforced to ensure the safeguarding of sensitive student information. Future studies should investigate the impact of AI in diverse learning environments while avoiding self-reported biases, differences in technological competency, and regional differences in digital connectivity. Extension of research to more than one province will provide a clearer picture of the place of AI in EFL teaching across Iran.

Subsequent research on Iranian EFL learning with AI can assess the long-term impact on students' proficiency, memorability, and grades after six months or more. Further research in rural locations would create the challenging level of Internet learning required to affect the desired interventions. New models for trainer training will need to be built if the introduction of AI is to be sped up, with a greater focus on pedagogy and technology instruction. Successful implementation requires the localization of AI tools to meet cultural and education-focused expectations, including bilingual demands, as a significant priority. The issue of ethical concerns over data privacy, discriminatory algorithms, and technological reliance also must be discussed to enable the ethical application of AI. Comparative studies among various locales and education systems can also identify the most effective utilization of AI in poor contexts.

The application of AI in Iranian EFL education must take precedence when it comes to pedagogical value and ethics. AI technology, such as ChatGPT, can be leveraged to engage students, personalize learning, and tackle longstanding challenges like inadequate infrastructure and insufficient teacher support. AI will not work, however, if it is not simple, culturally accommodated, and endorsed by the institution's policy. Improved resource coordination and collaboration among educators, researchers, and policymakers are of critical significance to enable ethical and equitable utilization of AI to augment the language ability sets of the students in order to achieve their educational and professional success as the preferred goal.

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