Blended Courses in the English-as-a-Foreign-Language context of Iraq: examining university students' attitudes and gender effect

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Abstract

The increasing advancement of technology in the field of teaching English as a foreign language (EFL) has turned blended learning—a combination of online and in-person learning—into an innovative educational approach. Given the significance of investigating students' attitudes toward learning environments in different EFL contexts, this mixed-methods study was set to examine Iraqi university EFL students' attitudes toward blended EFL courses and investigate gender differences in this regard. Thus, 250 EFL students were selected from five public Iraqi universities via convenience sampling method and completed the questionnaire of the study. Of these participants, a random sample of 25 students was also selected for interview sessions. The questionnaire results suggested that due to serious technological and instructional drawbacks, such as a lack of appropriate infrastructure and insufficient technology knowledge, Iraqi EFL students had generally negative attitudes toward EFL blended courses. Gender also played no significant role in students' attitudes. In interviews, they emphasized the importance of technology training programs to pave the way for effective blended EFL courses, mentioning some important benefits for this hybrid approach. The pedagogical implications of the findings are also discussed.

Introduction

Computer-Assisted Language Learning (CALL) encompasses a broad spectrum of technologies supporting language acquisition from online quizzes and practice exercises to immersive virtual environments, intelligent tutoring systems, digital game-based learning, language corpus tools, and blended learning (Hanson-Smith, 2018). According to Weng et al. (2023), CALL refers to learning a second or foreign language, including learning English as a foreign language (EFL), mediated by computers, mobile devices, and other digital tools. After the COVID-19 pandemic in 2020, significant measures have been taken to replace the traditional teaching environment with CALL and make use of online or hybrid (blended) learning environments (Bosch, 2021; Rayeji & Tabandeh, 2023). As Bosch (2021) maintains, the transition from traditional to blended learning, which is a combination of e-learning and traditional face-to-face classes, is both complex and difficult, especially for societies without an advanced technological infrastructure.

Research indicates that when online and face-to-face learning are integrated into a blended-learning environment, students prioritize the in-person experience (e.g., Yajie & Jumat, 2023). However, communication between teachers and students extends beyond the classroom setting. As mentioned by Johnson and Marsh (2014), all instances of blended learning or teaching implicitly recognize that students' self-direction, active involvement, and motivation are critical, and students' role in learning is underscored. Such an emphasis on the role of students has made blended learning attractive in EFL contexts in which learner-centered instruction is essential (Yoon, 2016). New technologies in blended EFL learning present both benefits and obstacles to language acquisition.

Notwithstanding, using CALL effectively in blended EFL learning requires access to well-equipped Internet-based infrastructure and advanced technology. As Wang and Zhang (2022) maintain, scientific advances, the information technology revolution, and the exchange of information are all parts of the current era's characteristics, particularly in higher education, yet not equally accessible to educators and students in different corners of the world, particularly in developing countries. Similar to many developing countries, Iraq has had significant problems with the Internet and technology as they are mostly limited to certain areas (Serin, 2022). Fortunately, the Iraqi government and universities have recently recognized the value of blended learning in the educational system in general and the EFL programs in particular, yet not much is known about how university students as the main EFL stakeholders of such programs regard blended EFL courses and whether students' gender plays a meaningful role in this respect. Thus, to achieve success with this educational approach, it is vital to investigate Iraqi EFL university students' attitudes toward the current status quo of blended EFL courses and examine the tentative role of gender in the formation of such attitudes.

1. Review of Literature

Blended learning is an approach to education that combines online educational materials and opportunities with traditional place-based classroom methods comprising learning management systems (LMS), instructional videos, discussion forums, and various digital tools

for language practice (Müller & Mildenberger, 2021). This approach is designed to provide students with a more flexible and personalized learning experience, allowing for a balance between structured in-class activities and independent learning outside the classroom (Garrison & Kanuka, 2004). In the realm of second or foreign language learning, blended learning has been gaining widespread adoption particularly in the EFL context (Tabassum & Mohd Saad, 2024). This approach leverages the flexibility of digital resources alongside the interaction and support offered by face-to-face instruction. Given the shift toward more technology-driven educational environments, it is critical to understand how EFL students perceive and respond to blended learning environments. Students' attitudes toward blended learning significantly impact its success and efficacy in enhancing target language acquisition (Martunis et al., 2024).

1.1 EFL Students' Attitudes toward Blended Learning

The attitudes of EFL students toward blended learning are often shaped by various factors, including their previous experiences with technology, their learning preferences, and the technological infrastructure available (Taylor, 2024). Research in general has shown that many EFL students have positive attitudes toward blended learning, particularly when it aligns with their educational needs and goals (e.g., Al-Qudimi & Hameed, 2024; Istifci, 2017; Tabassum & Mohd Saad, 2024; Taylor, 2024).

Blended learning environments are often associated with higher levels of motivation. A study by Cennamo et al. (2009) highlighted that students in blended EFL courses tend to be more motivated than those in purely traditional classrooms, as the integration of technology makes learning more engaging and interactive. Students frequently report that using multimedia, such as videos, interactive quizzes, and language learning apps, makes the learning process more dynamic and enjoyable. Likewise, the study by Peng and Fu (2021) demonstrates that immersing EFL students within a blended-learning educational environment can directly improve students' intrinsic and extrinsic motivations because it boosts their autonomy and provides them with a more flexible language learning experience. According to Lai and Hwang (2014), students' positive perceptions of blended learning are also linked to the sense of autonomy it provides and their motivations. The use of online resources allows students to take ownership of their learning, which is an important factor in increasing motivation and promoting long-term retention.

Blended learning models also bring up more interactive opportunities for EFL students. Blended EFL courses often include online discussion forums, group projects, and collaborative tasks that encourage interaction among peers (Jianjuan & Zin, 2025). These activities allow students to practice their language skills in real-world contexts and engage in meaningful communication with other students. Several studies emphasize that EFL students appreciate the opportunities for social interaction in blended environments, which can help them develop both their linguistic and interpersonal skills (e.g., Alharthi, 2020; Istifci, 2017). Interaction with peers through online platforms is particularly beneficial for shy or introverted students who might feel uncomfortable speaking up in traditional classroom settings (e.g., Altay & Altay, 2019; Mehdipour & Zerehkafi, 2013).

1.2 Challenges of Blended Learning

Despite the many benefits of blended learning, EFL students' attitudes toward this approach are not universally positive (Albiladi & Alshareef, 2019). Some students report difficulties and frustrations that impact their perceptions of blended learning. One of the most frequently cited challenges is the issue of technology. Students in regions with limited access to reliable internet or technology may struggle to participate in blended learning environments. In one of the early studies, Warschauer and Healey (1998) found that students' attitudes toward CALL and blended learning are significantly influenced by their access to technology. For some students, technological problems such as slow internet connections, malfunctioning software, or lack of familiarity with digital tools can hinder their learning experience and lead to negative perceptions of the blended learning model. Furthermore, students with limited technological literacy may find the transition to blended learning environments difficult. Amiruddin et al. (2022) also observed that for ESL students, lack of sufficient CALL knowledge and familiarity ensues generally negative attitudes toward online and blended English learning programs.

While blended learning offers flexibility, some students express concerns about the reduced face-to-face interaction with instructors and peers. A common concern is that the absence of in-person communication may lead to a sense of isolation or detachment. This is particularly true for students who value the direct support and feedback that traditional classroom settings provide. Shraim and Khlaif (2010) reported that some students feel disconnected from their teachers and classmates when online learning predominates, which can affect their overall satisfaction with the course. According to Sun and Chen (2016), this lack of interpersonal interaction may also impede the development of language skills that require direct communication, such as speaking and listening. Similarly, Bonk and Graham (2012), also identified six other significant challenges when implementing a blended learning environment including "the function of real communication, the students' choices and self-regulation, models for support and training, dealing with the digital divide, adaptation of a culture, and finding a balance between production and innovation" (Bonk and Graham, 2012, 10). This assertion is confirmed by Alvarez Jr. (2020), who noted that there is an unstable electrical supply, particularly in distant places, which will ultimately damage a person's capacity for teaching and learning.

Overall, the literature suggests that EFL students' attitudes toward blended learning are generally positive, with many appreciating the flexibility, autonomy, and engagement that this approach offers. However, challenges such as technological issues, lack of face-to-face interaction, and potential overload may negatively affect students ' experiences (Altay & Altay, 2019). To ensure the success of blended learning in EFL contexts, it is essential to first inquire about EFL stakeholders' attitudes toward such programs and then address the challenges and concerns by providing adequate technological support, fostering interaction, and designing courses that balance online and face-to-face components effectively. By doing so, educators can enhance students' attitudes toward blended learning in EFL contexts and improve the overall quality of language education (Nusong & Watanapokakul, 2025).

1.3 The Study

Recent years have witnessed considerable progress in implementing blended courses in different EFL contexts (Wang et al., 2021). This unquestionably has affected the context of Iraqi EFL learning at various levels including the higher education system (Betti & Saeed, 2024). However, there are important research gaps related to students' attitudes and knowledge about blended courses (e.g., Al-Ibadi & Mohammed, 2020). As blended courses of EFL become increasingly prevalent, it is crucial to investigate the specific challenges and concerns experienced by students and take effective measures to enhance the effectiveness of blended instruction in developing countries such as Iraq (Betti & Saeed, 2024). Moreover, investigating the tentative role of gender in students' attitudes toward technology-based education is of prominent significance in different educational contexts. Therefore, this mixed-methods study investigated the Iraqi EFL university students' attitudes toward blended EFL courses and examined the degree to which these attitudes are influenced by their gender. Accordingly, the following research questions were posited:

What are Iraqi EFL university students' attitudes toward blended EFL courses?

To what degree does gender influence Iraqi EFL university students' attitudes toward blended EFL courses?

2. Method

2.1 Design

The present study used a mixed-method approach with a convergent design following triangulation of sources and data collection techniques. In particular, the convergent design was used to collect quantitative and qualitative together to consolidate the findings of the study (Creswell & Creswell, 2018). First, questionnaire data were gathered as quantitative data, and then, interview data were collected as qualitative data. The qualitative and quantitative findings were then analyzed and compared to provide rich and valid findings.

2.2 Participants

The participants comprised 250 Iraqi EFL university undergraduate students selected via convenience sampling from English departments of five public universities in Iraq. Fifty students were selected from each of these universities: 125 male students and 125 female students. Table 1 summarizes the demographic information of the participants.

Table 1. *Demographic Information of the Participants*

Phase	N	Male/Female	M_{age}/SD_{age}
Quantitative (Questionnaire data)	250	125/125	22.59/1.13
Qualitative (Interview data)	25	15/10	22.43/.87

These participants completed the study's questionnaire. As for the interview, 25 students were selected randomly from these participants. These universities implement CALL-based programs, including blended EFL teaching courses, have the same syllabus, and have almost the same experience with CALL-based programs since the breakout of the COVID-19 pandemic. The participants were selected from senior bachelor's students due to their long period of blended learning that extends to four years of study.

2.3 Instruments

2.3.1 Attitudes Questionnaire

To measure the students' attitudes toward EFL blended courses, the questionnaire by Vandewaetere and Desmet (2009) on L2 students' attitudes towards CALL was adapted, revised, and administered. The items were revised by the authors, and minor changes were implemented to make it fit for examining EFL university students' attitudes toward blended learning. The questionnaire has four sections with 46 items. All items are on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*) (see Appendix 2).

Regarding the construct validity of the questionnaire, Exploratory Factor Analysis (EFA) was conducted. Before running EFL, the prerequisites of the sample and the data for conducting EFL were checked. The level of Kaiser-Meyer-Oklin (KMO) measure of sampling adequacy for the questionnaire was estimated and found suitable (KMO = .843, > .6); the significant results of Bartlett's test of sphericity ($\chi2$ (903) = 8393.642, p = .000, < .05) indicated that the correlation matrix was factorable meaning that there was neither too high nor too low correlations among all factors. These values proved that the sample of the study and collected data were appropriate for running EFA (Watkins, 2021). Next, EFA was conducted, factors with eigenvalues higher than 1 were extracted, and items with a loading value of .3 and above were retained for each factor. The results revealed four factors aligning with the validation results of the original questionnaire by Vandewaetere and Desmet (2009): four factors (sections) with 46 items: blended learning benefits (17 items), blended learning challenges (12 items), blended learning improvement suggestions (9 items), and blended learning training (8 items). As for the reliability of the questionnaire, internal consistency Cronbach's alpha (α) analysis was run, and the questionnaire was found to have an acceptable level of internal consistency (α = .78) (Raykov & Marcoulides, 2019).

2.3.2 Interview Protocol Development

As for investigating the students' attitudes toward blended EFL courses qualitatively, seven open-ended questions were posed in a semi-structured format based on the recent relevant literature on CALL-based and blended-learning attitudes. The questions were checked and revised by the researchers and were piloted on five EFL students to be checked for clarity and ease of understanding. The interview was conducted in English. The questions revolved around the following themes: attitudes toward blended EFL courses, benefits and challenges of blended EFL courses, suggestions for improvement of blended EFL courses, relevant training on blended EFL courses, readiness to attend blended EFL courses, and adequate facilities for blended EFL courses.

2.4 Data Collection

The data were collected by administering the questionnaires to 250 Iraqi EFL university students (quantitative data) and conducting semi-structured interviews (qualitative data) with 25 of them. In the first step, 250 students from the five Iraqi universities were selected via convenience sampling method to complete the hard-copy version of the questionnaire. The questionnaire was distributed manually to the students in their classrooms under the supervision of the first author (teacher). The reason for this supervision was to ensure that they

did not copy each other's answers. Afterward, semi-structured interviews were conducted with 25 students who were randomly selected from the participants of the study, including five students from each university. The interviews were conducted consecutively in a convenient classroom, and students' answers to the questions were recorded and transcribed verbatim. Finally, the data were collected, organized, and coded for the analysis procedures.

2.5 Data Analysis

In the quantitative phase, two sets of analyses were conducted. First, to assess the validity and internal consistency reliability of the questionnaire, EFA and Cronbach's alpha (α) internal consistency reliability were run, respectively. Next, descriptive statistical analysis was used to analyze the data of the questionnaires to summarize the overall responses of the students to the questionnaire items. The means and standard deviations of each item of the questionnaires were calculated and presented for reporting students' attitudes toward blended EFL courses. To measure significant differences between male and female students regarding their attitudes toward blended EFL courses, after making sure that the data met the assumptions of conducting parametric tests, a series of independent-sample *t*-tests were used. All statistical tests were carried out using SPSS version 26.

As for the interview data, an inductive reflexive thematic analysis was employed as the method of data analysis and interpretation to analyze the content and extract themes and relevant sub-themes (Braun & Clarke, 2022). As a robust method of qualitative data analysis, inductive reflexive thematic analysis is a type of content analysis defined as a critical reflection of the researcher on their practice and process while coding and extracting themes where the analysis is located within the context. This model of thematic analysis has six consecutive phases: 1) familiarizing yourself with the dataset, 2) coding, 3) generating initial themes, 4) developing and reviewing themes, 5) refining, defining, and renaming themes, and 6) writing up. Regarding the reliability of the extracted themes, 50% of the qualitative data was coded by a second coder (a colleague of the researcher), and the results of intercoder reliability analyses (Cohen's Kappa *k*) revealed substantial collaborative agreements between the two coders (*k*s > .7).

3. Results

3.1 EFL Students' Attitudes Toward Blended EFL Courses

3.1.1 Questionnaire Results

The first research question investigated the Iraqi university EFL students' attitudes toward blended EFL courses. To answer this question quantitatively, the students' responses to the questionnaire items in the four sections of the blended-learning questionnaire are presented here and analyzed via descriptive statistics of the items (i.e., *Means* and *Standard Deviations*). The first section of the questionnaire targeted the benefits of blended EFL learning.

Table 2 shows the results of EFL students' perceptions about the benefits of EFL blended courses. Based on the 5-point Likert scale range of responses, the mean range of 1-2.5 demonstrates a highly negative attitude, the mean range of 2.6-3.5 shows a moderate attitude, and the mean range of 3.6-5 shows a highly positive attitude towards blended EFL courses. As can be seen in Table 1, EFL students believed that the main benefits of blended EFL courses

were their cost-effectiveness and time-saving. On the other hand, they regarded creativity enhancement, more class engagement, more collaboration, better content memorization, and independence as moderate benefits of blended learning.

Yet, they mostly believed that concentration, relaxation, user-friendliness, memorization, variety, and assessment are not the benefits of blended courses. So, they only had a highly positive attitude towards EFL blended courses regarding their cost-effectiveness and time-saving features.

Table 2. *Blended-learning Attitudes Questionnaire: Section 1*

	Items	M*	SD.
Q1	I have the confidence to attend blended classes.	2.53	0.93
Q2	I am interested in learning by participating in blended classes.	2.11	0.87
Q3	I am motivated to participate in blended classes	2.77	0.91
Q4	It is easy to concentrate well in blended classes.	2.15	0.89
Q5	Blended courses help me enhance my creativity in learning English.	2.91	0.99
Q6	Participating in blended classes make me feel relaxed.	2.40	1.01
Q7	The blended learning platform (software) is user-friendly.	2.42	0.99
Q8	Blended courses provide an interactive environment to learn English.	2.34	0.83
Q9	Learning in blended courses is cost-effective.	3.68	1.22
Q10	Learning in blended courses is time saving.	3.80	1.04
Q11	I am very much engaged in blended courses.	3.02	0.83
Q12	I can have lots of collaboration with my classmates in blended courses.	2.67	0.99
Q13	Blended learning helps me memorize content more permanently.	2.40	1.01
Q14	Learning in the blended course make me more autonomous.	2.88	0.97
Q15	There is more access to learning materials in blended courses	2.37	0.91
Q16	I am interested in the way I am assessed in blended courses	2.28	0.95
Q17	There is lots of variety in learning materials of blende courses.	2.36	0.85

The second section of the questionnaire inquired about the purpose of using digital devices by the students. Table 3 reveals the results. As can be seen, the students had highly negative attitudes towards EFL blended courses regarding the challenges they face in this type of learning (all the means of responses were below 2.5). They believed that they felt isolated in blended courses, they were not trained enough to attend blended courses, they had many technological problems in their blended courses, it was costly to attend blended courses, and EFL instructors were not educated sufficiently to run efficient EFL courses.

Table 3. *Blended-learning Attitudes Questionnaire: Section 2*

	Items	M*	SD.
Q1	I do not feel isolated when I attend blended courses.	2.20	0.99
Q2	I am trained enough to attend blended courses.	1.79	0.94
Q3	It is not costly to learn in blended courses.	3.82	1.15
Q4	There are not many technological problems in blended courses.	1.76	1.00
Q5	My English instructors are competent enough to work with blended learning technologies.	2.05	0.95
Q6	The university has enough facilities for running blended courses.	1.85	1.10
Q7	Software tools required for blended learning are available.	1.80	1.14
Q8	I have a low level of anxiety in blended courses of English.	1.96	1.26
Q9	It is not boring to learn English in blended courses.	2.06	0.96
Q10	Blended courses for learning English are interactive enough.	2.03	0.95
Q11	The internet speed is high in blended courses.	1.83	1.63
Q12	It is easy to collaborate with my classmates in blended courses.	2.16	1.25

Moreover, they mostly stated that universities provide inadequate facilities for blended courses and Internet speed is low, they feel anxious and bored in blended courses, such classes

are not as interactive as they should be, and it is not very easy to collaborate with classmates in blended courses. Therefore, in general, Iraqi EFL university students find EFL blended courses very challenging and have a negative attitude towards such courses in this regard.

The third section of the questionnaire tapped into EFL students' suggestions for further improvement in the quality of blended EFL courses. Table 4 shows the results. All in all, the students mostly agreed that universities should provide updated software tools and high Internet speed for having more efficient blended courses. Moreover, they maintained that both EFL instructors and students should be educated sufficiently on how to run blended courses effectively and how to make use of such classes efficiently, respectively. Instructors should also use more innovative techniques in line with the blended courses' context and use a wide range of assessment techniques to make more valid judgments and evaluations of the students. Furthermore, the students emphasized that blended courses should be more interactive and make use of quality English materials.

Table 4. *Blended-learning Attitude Questionnaire: Section 3*

	Items	M*	SD.
Q1	The university should provide high-quality software tools for blended learning.	4.22	1.15
Q2	My instructors should be constantly trained to be more competent in using blended learning technologies.	4.30	1.07
Q3	I need to be trained constantly to enhance my digital literacy for blended courses.	4.23	1.14
Q4	A high level of Internet speed should be provided for students by the university	4.24	1.14
Q5	More extensive access to quality English learning materials should be provided in blended courses.	4.21	1.13
Q6	Instructors should use more innovative techniques for teaching English in blended courses.	4.14	1.19
Q7	The blended courses of learning English should be based on the real needs of students.	4.16	1.06
Q8	Blended courses for learning English should become more interactive using more cooperation among students.	4.15	1.20
Q9	Instructors should use a wide range of assessment/testing techniques to make more effective judgments in blended courses.	4.22	1.14

Finally, the fourth section of the questionnaire focused on the necessary training the students received on different CALL tools and technologies before attending EFL blended courses. Table 5 depicts the resus.

Table 5. *Blended-learning Attitude Questionnaire: Section 4*

	Items	M*	SD.
1	Using software tools required for blended learning.	2.08	1.316
2	Interacting with the instructor in blended courses.	2.54	1.414
3	Accessing to learning materials in blended courses.	2.26	1.180
4	Using the online platform of blended courses.	2.96	1.461
5	Dealing with technological problems occurring in blended courses.	2.07	1.284
6	Finding relevant educational resources required for blended courses.	2.16	1.109
7	Cooperating with other classmates in blended courses.	2.31	1.154
8	Adapting learning habits with teaching methods/techniques in blended courses.	2.05	1.109

As can be observed in Table 4, almost all training targets received lower than average means, indicating that Iraqi EFL students received insufficient training on CALL-related tools and technologies used in blended courses. For instance, they received insufficient training on

relevant software tools and applications, how to deal with technological problems, how to cooperate effectively with teachers and classmates, and how to adapt required learning habits in blended courses. They only received mediocre training on how to use online platforms for blended courses. Thus, overall, inadequate and insufficient training is given to Iraqi EFL university students regarding how to make use of blended courses effectively.

3.1.2 Interview Results

Based on the interview questions and students' responses, the results of the thematic analysis revealed four major themes regarding blended EFL courses: benefits, challenges, and suggestions for improvement. Each theme included subthemes that emerged from the thematic analysis as discussed below.

The first theme was the 'benefits' of blended EFL courses. Here, the students named the following subthemes as the main components of benefits: flexibility and convenience and increased interaction and collaboration. Table 6 depicts the theme and its relevant subthemes. One of the main benefits of blended EFL courses mentioned by the students was the flexibility and convenience of such classes.

Table 6. *Benefits of Blended EFL Courses and Relevant subthemes*

Theme	Subthemes
Benefits of blended EFL courses	1. Flexibility and convenience
	2. Increased interaction and collaboration

Interviewed students believed that the combination of online and in-person classes can make teaching methodology and syllabus more flexible because different learning materials and various teaching schedules can be introduced by the teacher. In this regard, one student mentioned:

Students can access online materials anytime and anywhere which allows them to learn at their own pace. The teacher can also adjust the teaching schedule better in the online portion of the class which makes it more convenient for both teachers and students.

Moreover, students maintained that blended EFL courses could provide more interactional opportunities and increase collaboration beyond the physical classroom environment. One student stated that:

In online classes, there is more opportunity for students to be active and collaborate with each other. The combination of online and in-person teaching can increase the amount of exposure students have to the English language through more interaction and collaboration.

The second theme was the 'challenges' of blended EFL courses. Here, the students named the following subthemes as the main subthemes of challenges: increased workload, lack of sufficient CALL knowledge, and low-quality facilities. Table 7 shows the theme and its relevant subthemes. One of the main disadvantages of blended EFL courses according to the EFL students was the increased workload on instructors' shoulders. Preparing extra materials that are in line with online methodology requires more time and effort on teachers' part.

Table 7. *Challenges of Blended EFL Courses and Relevant Subthemes*

Theme	Subthemes
Challenges of blended EFL courses	1. Increased workload
	2. Lack of sufficient CALL knowledge
	3. Low-quality facilities

Furthermore, the lack of sufficient CALL-related knowledge by instructors may be a discouraging factor. Thus, extra workload together with insufficient CALL knowledge might act as a demotivating factor to hold such classes. A student highlighted this point:

Most teachers are used to using materials and methodologies that are suitable for traditional in-person classes. So, they do not welcome blended courses because they should redevelop their teaching methods and materials for the online environment. This adds extra workload which is discouraging for many instructors especially those who are older.

The students also highlighted some technical problems as one of the main challenges in the way of running smooth online classes. Low internet quality and lack of updated computerized facilities including computers, laptops, smartphones, and updated learning platforms and applications are among the most frequent issues raised by EFL students. One student maintained that:

Unfortunately, the Internet quality and speed are not very good which is problematic for online classes. The video quality cannot be so good because of low Internet speed which negatively affects the efficiency of blended courses

The third major theme was labeled 'suggestions for improvement'. Here, EFL students introduced their recommendations and suggestions for enhancing the quality of blended EFL courses in the Iraqi context. Here, students named the following issues as the main subthemes of challenges: needs analysis, encouraging more participation, updating CALL facilities, and more CALL training. Table 8 shows the theme and its relevant subthemes. The first point highlighted by the students was the significance of conducting a thorough needs analysis and taking into account teachers' and students' feedback.

Table 8. *Suggestions for Improvement and Relevant Subthemes*

Theme	Subthemes
Suggestions for improvement	1. Needs analysis
	2. Updating CALL facilities
	3. More CALL training

The constant feedback that syllabus designers and instructors receive from both teachers and students can help stakeholders spot weaknesses and try to resolve them which eventually leads to more efficient blended EFL courses. One student refers to this subject by stating that:

Teachers should listen to students' voices and feedback regarding the main methodological and technological problems in blended EFL courses.

One of the main problems that was almost unanimously mentioned by the students and they offered some suggestions for it to be solved was the lack of updated and technologically sufficient CALL hardware and software for running blended EFL courses. The students expressed that universities and related stakeholders should provide more advanced hardware

and software as well as quality Internet connection if they want the blended course to be effective. One student touched on this issue by saying that:

Unfortunately, the online platform of the university is not very advanced and students have problems joining the classes. The Internet speed is also poor most of the time which makes benefiting from online EFL courses difficult.

Finally, the EFL students almost unanimously expressed that both teachers and students need additional CALL training to make the most of blended EFL courses. They stated that CALL training and education should start from the early semesters so that teachers and students are familiar with the basics and nuances of online classes and thus can hold them as efficiently as possible. They also maintained that holding CALL workshops for both teachers and students while they are experiencing blended EFL courses can be also fruitful. In this respect, one student expressed that:

Not only students but also teachers are not completely familiar with the online classroom environment and how they can make the most of such an environment. I think pre-service and in-service CALL training programs and workshops should be held for teachers and they should be assessed in the end.

3.2 Gender-Based Differences in EFL Students' Attitudes

The second question asked whether there was a difference between male and female Iraqi university students' attitudes toward blended EFL courses. To answer this research question, EFL learners' attitude scores derived from the blended-learning questionnaire were measured and compared based on gender (i.e., male vs. female). An independent-sample *t*-test was used to compare the two groups after checking the assumptions of normality and homogeneity of variance. Table 9 demonstrates the results of descriptive statistics. As shown, the two groups had close means in terms of digital literacy scores

Table 9. *Descriptive Statistics for Two Groups' Attitude Scores*

Groups	*df*	*Mine*	*Max*	*Mean*	*SD.*
Male learners	125	75	176	118.296	15.894
Female learners	125	69	152	116.877	14.111

Next, to test the normality of the distribution of scores, Kolmogorov-Smirnov and Shapiro-Wilk tests were used. As can be seen in Table 10, none of the *P*-values for both genders were significant proving that the data were all distributed normally.

Table 10. *Tests for Normality of the Distribution of Digital Literacy Scores*

	Kolmogorov-Smirnov			Shapiro-Wilk		
Groups	Statistic	Df	Sig.	Statistic	Df	Sig.
Male learners	.178	125	.126	.981	125	.055
Female learners	.137	125	.076	.961	124	.134

Next, to check the homogeneity of variance, Levene's statistical test was used. This test checks the assumption that the error variance of the dependent variable is equal across groups. As shown in Table 11, the results of Levene's test were not significant, hence the homogeneity of variance.

Table 11. *Levene's Test of Equality of Error Variances* for digital literacy scores

Groups	*df*	*F*	*Sig.*
Male learners	125	24.976	.165
Female learners	125	19.721	.134

Finally, an independent-sample *t*-test was run to check whether there was a significant difference between the two groups in terms of attitude. The results revealed no significant difference between the two genders ($F = 3.535$, $t (248) = 1.010$, $P = .314 \geq .05$; CI, lower = -1.824, upper = 5.664) in terms of their attitudes toward blended EFL courses.

4. Discussion

The first research question of the study investigated Iraqi EFL university students' attitudes toward blended EFL courses. The students completed a questionnaire to collect quantitative data and answered interview questions to collect qualitative data. Based on the questionnaire results, Iraqi EFL students only believed that blended EFL courses were cost-effective and time-saving and could provide easier access to materials and content. In terms of other aspects, such as concentration levels and creativity in blended courses as well as feeling comfortable, the students had generally negative attitudes. Besides, they believed that collaboration in blended courses is not sufficient, assessment is not interesting and effective, and these courses are not improving independence. Therefore, based on the questionnaire data, it can be claimed that Iraqi EFL university students have generally negative attitudes towards blended EFL courses or to put it another way, they are more positive about in-person classes. Mixed findings are reported regarding EFL students' attitudes toward blended learning in the literature. For example, as for generally negative attitudes, Albiladi & Alshareef (2019) stated in their review study that EFL students favor in-person classes generally more than online or blended courses as they are provided with more interaction and first-hand learning experiences in in-person classes. Likewise, as for Japanese EFL students' perceptions in this regard, they expressed more positive attitudes toward in-person EFL classes rather than online or blended ones (Alhamami, 2022). Nevertheless, in some other studies, more positive attitudes have been reported among EFL students (e.g., Erdem & Kibbar, 2014; Shahrokni & Talaeizadeh, 2013; Tabassum & Mohd Saad, 2024). For example, Erdem and Kibbar (2014) reported that Turkish EFL students have highly positive attitudes towards blended learning despite some challenges. Similarly, Shahrokni and Talaeizadeh (2013) and Tabassum and Mohd Saad (2024) also stated that blended learning can provide some benefits and challenges for Iranian EFL students but in general both EFL students are positive about blended EFL courses. The reason might be that more advanced countries in the region with more updated CALL facilities, such as Turkey and Iran, can foster more positive attitudes toward blended EFL programs among students.

In terms of the benefits of blended EFL courses, although Iraqi EFL students only picked up cost-effectiveness and time saving as the main benefits in questionnaires, in interviews they highlighted enhanced flexibility and convenience, enhanced self-discipline and independence, and increased interaction as well as cost-effectiveness. The students emphasized that provided that blended EFL courses are in line with standard procedures, students can gain from such benefits. These advantages are also reflected in previous research (e.g., Akbarov et al., 2018; Alhamami, 2022; Altay & Altay, 2021; Chen et al., 2021). Akbarov et al. (2018) stated that

blended EFL courses can foster students' motivation and interest and through using updated technology can engage students more in the English environment. Focusing on teachers' perspectives. Likewise, Emelyanova and Voronina (2017) reported that the integration of in-person and online EFL courses can bring up some advantages such as convenience, flexibility, and additional exposure to authentic materials. In the same vein, Alhamami (2022) also mentioned that Japanese EFL students believe that ease of accessibility and cost-effectiveness are the main advantages of blended courses. Yet, as also observed in this study, Japanese EFL students were reported to favor in-person classes more than blended or online ones. Therefore, based on these results, it can be claimed that if blended EFL courses are presented efficiently and in line with high educational standards, they can bring up many advantages for EFL students and motivate them to study English more persistently (Alebaikan & Troudi, 2010; McCarthy & Murphy, 2010).

The other finding of the study centered on the challenges that Iraqi EFL students faced in their blended courses. Here, the students almost unanimously mentioned in the questionnaire that both EFL instructors and students need more CALL-based training because they lack sufficient updated knowledge in this regard and that university technology facilities including those used for running blended EFL courses efficiently are not updated and advanced. The same pattern of problems and challenges was also reflected in students' answers to the interview questions. They pointed to instructors' and students' increased workload and insufficient CALL knowledge as the main challenges. Moreover, they stated that low-quality facilities and less socialization and collaboration are among other drawbacks of blended EFL courses. These raised issues and concerns have been also reiterated profusely in previous studies (e.g., Chen et al., 2021; Emelyanova & Voronina, 2017; Loch & Borland, 2014). For instance, Loch and Borland (2014) emphasized that students' preparedness and lack of advanced technology for running blended courses are two of the main challenges. In this respect, Emelyanova and Voronina (2017) also mentioned EFL students' lack of preparedness to act effectively in blended classes and asserted that students are mostly inclined to rely on the teachers. Therefore, based on such challenges, it seems imperative to run CALL-based training and relevant educational workshops and courses as stated by the students in interviews so that both EFL instructors and students can brush up their knowledge of blended courses and make use of these courses effectively.

The second research question of the study addressed whether there was a significant difference between male and female Iraqi EFL university students in terms of their attitudes toward blended EFL courses. Results of the independent-sample *t*-test revealed no significant difference between the two gender groups in this regard. Research findings in this regard are scarce and mixed. As for general education, for example, Cai et al. (2017) conducted a meta-analysis of 50 research articles and reported that male students hold more favorable attitudes towards technology and computer in education than female ones, but the effect size of such a difference is small. However, Alothman et al. (2017) found no gender differences in the attitudes toward computer use among Saudi undergraduate students. Likewise, In the field of EFL, Istifci (2017) also found no gender differences regarding attitudes toward blended EFL learning. One reason behind the insignificance of gender might be the fact that new generations of students, particularly after the turn of the third millennium, are all born and grown up in the

era of advanced technology and the Internet, and hence are equally exposed to and ready for engaging in technology-based education and find it more interesting and motivating. Hence, overall, as Alhamami (2022) argues, attitude is influenced by the city of study, parental encouragement, and English language proficiency, but not gender.

Conclusion

The results of the study showed that Iraqi university EFL students had slightly negative attitudes towards blended EFL courses as they expressed many concerns and named many challenges in the way of implementing efficient blended EFL courses. Moreover, it was found that gender plays no meaningful role in shaping the students' attitudes. The results of the questionnaire analysis revealed that Iraqi EFL students mostly believed that blended EFL courses are cost-effective, time-saving, and somehow engaging for the students, but they mostly believed that concentration, relaxation, user-friendliness, memorization, variety, and assessment are where blended EFL courses are not very efficient. This proves that Iraqi EFL students' attitudes are generally negative in this regard irrespective of their gender. In terms of negative points and challenges, the EFL students felt mostly isolated in blended courses, they were not trained enough to attend blended courses, they had a lot of technological problems in their blended courses, and EFL instructors were not educated sufficiently to run efficient EFL courses. These concerns show that lack of sufficient advanced technology on the one hand and inadequate digital literacy skills have made EFL students reluctant to participate in blended EFL courses.

This was also reflected in the EFL students' suggestions for improving the quality of blended EFL courses. In questionnaire data, students unanimously believed that they maintained that both EFL instructors and students should be educated sufficiently on how to run blended courses effectively. Instructors should also use more innovative techniques in line with the blended courses' context and use a wide range of assessment techniques to make more valid judgments and evaluations of the students. These suggestions were also reflected in students' responses to interview questions. They expressed that it is the university's educational board and curriculum developers to provide advanced technology for blended EFL classes and educate and prepare both teachers and students for such classes. Therefore, to change the EFL students' generally negative attitudes toward blended EFL courses to more positive ones and help students make use of such courses efficiently, EFL curriculum planners, syllabus designers, and instructors need to deal with technological obstacles and challenges in the way of effective blended courses on the one hand and provide relevant, effective CALL training programs to the instructors and students on the other.

The study dealt with some limitations. The first was the participants of the study who were selected from undergraduate university EFL students. Hence, generalization of the findings to graduate and postgraduate EFL students should be done with care. Future studies can include other academic grades to provide a more comprehensive picture of Iraqi EFL students' attitudes toward blended EFL programs. Furthermore, the participants' gender was not a variable under focus in this study despite its potential effect on EFL students' attitudes. This issue can be addressed in future studies by investigating gender-based differences in EFL students' attitudes toward blended EFL courses.

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