



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology
Vol. 15, Issue, 01, pp. 12838-12852, January, 2024

RESEARCH ARTICLE

EFL TEACHERS' ATTITUDES TOWARD IMPLEMENTING BLENDED LEARNING AT UNIVERSITY OF JEDDAH

*Wejdan Abdulrahman Alghamdi

Ghamd Aznad, Albaha, Saudi Arabia

ARTICLE INFO

Article History:

Received 11th October, 2023

Received in revised form

27th November, 2023

Accepted 06th December, 2023

Published online 30th January, 2024

Keywords:

Blended learning, EFL teachers,
Attitudes, Challenges, Benefits.

ABSTRACT

The demand for blended learning is increasing in Saudi educational institutions, notably universities. Blended learning incorporates online and traditional face-to-face components to maximize teaching and learning best practices in synchronous and asynchronous learning contexts. Furthermore, there is a lack of studies on the attitudes, benefits, and challenges of implementing blended learning, even though it's been an emerging paradigm for decades. This study provides a picture of EFL teachers' attitudes towards Blended Learning (BL) at University of Jeddah, Khulais branch. The study also sought to determine if teachers' attitudes toward blended learning were related to gender and teaching experiences. It explored if instructors encounter supports and challenges as they implement blended approaches. The research instrument used by the researcher to collect quantitative data from a sample of 19 EFL teachers was a questionnaire to measure EFL teachers' attitudes towards it. Analyses for the research data used Statistical Package for Social Scientists (SPSS 26). The findings of the attitude questionnaire indicated teachers' satisfaction and positive attitudes towards BL, and they had never faced challenges. Also, the findings showed no significant differences among the teachers' gender and teaching experiences on their attitudes toward blended learning (BL). In the light of the results, some recommendations were suggested.

Citation: Wejdan Abdulrahman Alghamdi. 2024. "Efl teachers' Attitudes Toward Implementing Blended Learning at University of Jeddah", *Asian Journal of Science and Technology*, 15, (01), 12838-12852.

Copyright©2024, Wejdan Abdulrahman Alghamdi. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

This chapter presents the explanation and background for this research which is about teachers' attitudes towards implementing blended learning at University of Jeddah. It talks about the background of the study, research questions, significance of the research, objective of the study, research design, data collection technique and instrument, data analysis, and organization of the study.

Background of the study: Education in general and modalities of learning, in particular, is undergoing rapid change and development, resulting in significant effects on the educational system. Applying technology is one of the new methodologies in teaching and learning English for EFL/ESL teachers and students. Rapid advancements in information and technology have resulted in significant modifications to conventional educational systems. It employs modern technology and pedagogical methods in the teaching-learning process and produces unique learning environments that stimulate students to study more effectively. This form of education relies heavily on Internet services that encourage active learning. Blended learning (BL) has evolved as an efficient means of meeting the many learning styles of students. The rise of blended learning environments in education has highlighted the need for improved methods of characterizing and assessing effective instruction that enhances student learning in these settings. Blended learning is a formal

learning program that combines face-to-face and online learning. In this program, the student receives knowledge partly online and in class with the teacher. This way, the student controls the time, place, course, and learning speed more than in traditional learning programs. Blended learning has a long history, especially when Covid-19 pandemic emerges. A blended learning method that incorporates traditional classroom learning and web-based learning can aid students in learning integration application. Blended learning is becoming increasingly common to accommodate progressively more diverse students and faculty while adding value to the learning environment through online teaching materials. Blended learning, also known as the blending of traditional face-to-face and online learning (Graham, 2006), has been developed extensively due to the notion that with blended learning, education institutions can improve teaching methods, notably in teaching foreign languages (Garrison and Vaughan, 2008). In addition, blended learning enables a flexible community where faculty and students can interact at any time and place. Consequently, blended learning is intended to improve the quantity and quality of the learning environment.

Teachers are responsible for assessing their classroom settings and determining the most effective methods for fostering students' learning. Generally, they do it competently, carefully, and with the proper degree of caution, taking their values and those of their students into account. Teachers reflect on their practice to grow and improve. Since educational institutions worldwide are adopting blended learning, there is an urgent need to examine the teachers'

readiness and willingness to integrate this technology-assisted learning. According to Johnson and Howell (2005), teachers' attitudes toward the use of technology in education, and on blended learning, in particular, are among the most significant factors influencing the success of its implementation. This is due to the significance of teachers' roles in efficiently implementing blended learning within the educational system. However, there has been a lack of studies examining the teachers' roles in this development, particularly their attitudes toward incorporating blended learning into regular instruction. Therefore, this research is implemented to investigate the teachers' attitudes towards implementing blended learning in teaching English at University of Jeddah.

Research Problem: To effectively integrate blended learning in the classroom, instructors and students must collaborate to realize its potential benefits. Graham (2006) indicates that the overall blended learning approach refers to converging components and interactions in classrooms and the constituents of e-learning to enhance learning by exploiting learning technologies and enriching the pedagogical methods adopted by educators to meet the educational requirements of the learners. To what extent instructors' perceptions of blended learning influence their instruction is a crucial factor in the success of blended learning's implementation. According to Richards (2008), the teaching process is influenced by several factors, including the classroom environment, students' attitudes and behaviors, the instructors' objectives, and the students' understanding of the material. So, it is believed that few studies examine teachers' attitudes toward various learning aspects that can affect teachers' readiness for blended learning in Saudi Arabia. While the introduction of blended learning may result in constructivist views of teaching and learning, there is often little consideration of teachers' readiness for such changes. Therefore, the researcher attempts to bridge this gap by revealing the teachers' attitudes toward implementing blended learning and finding out the challenges they encounter by implementing this learning at University of Jeddah.

Research questions

In light of the research aims, this research project attempt to answer the following questions:

1. Are there any statistical differences among EFL teachers in University of Jeddah due to gender and teaching experience?
2. What are EFL teachers' attitudes toward blended learning at University of Jeddah?
3. Do teachers face support and challenges when implementing blended learning at University of Jeddah?

Significance of the research: Blended learning combines face-to-face and online learning, which enhances teachers' flexibility. Blended learning can provide the required balance between a program's flexibility and cost-effectiveness. The present study is considered to be significant for several reasons. The study's findings will provide EFL Saudi educators with deep insights into the attitudes toward blended learning. In detail, this research is essential for EFL teaching and learning in general, and in the Saudi context in particular, in terms of identifying the teachers' perceptions of BL as a teaching method and highlighting its advantages and challenges to encourage teachers to use BL. Besides, this study will enhance the awareness of blended learning. To the researchers in general, findings from this research will contribute to more knowledge on the significance of implementing blended learning and could give rise to several possible future studies in other aspects.

Objectives of the study: This study aims to investigate EFL teachers' attitudes towards implementing blended learning at University of Jeddah. It also aims to explore the supports and challenges these teachers encounter when implementing blended learning. In addition, to find out the effect of gender and teaching experience on their attitudes.

Research design: To investigate the teachers' attitudes towards implementing blended learning at University of Jeddah, the design used in this research project is quantitative that employs a survey research methodology. Survey research is a quantitative method in which a researcher offers a prepared set of questions to an entire population or sample of individuals. When a researcher seeks to characterize or explain the characteristics of a relatively large group or groups, survey research is a beneficial method. (Blackstone,2012). According to McCombes (2022) Surveys are a good choice when you want to find out about the characteristics, preferences, opinions, or beliefs of a group of people. This study depicts faculty members' attitudes toward blended learning at University of Jeddah, including the challenges and the supports encountered when implementing blended learning.

Data collection technique and instrument: This research project investigates teachers' attitudes toward a blended learning strategy in teaching at University of Jeddah. It mainly depends on the questionnaire method to collect information. The researcher adopted a questionnaire that was used by (Aldosemani, Shepherd and Bolliger, 2018) and modified it to correspond to the research objectives. The questionnaire involved the following sections: demographic questions, teachers' attitudes toward blended learning, and supports and challenges of blended learning items. Twenty questions included five-point Likert scale responses ranging from 1= strongly disagree, to 5= strongly agree.

Data analysis: The research uses Statistical Package for the Social Sciences (SPSS) version 26 to analyze the data collected. Descriptive statistics such as mean, percentages, frequency tables, and parametric test are used in the analysis.

Definitions of Terms

The following terms are referenced to throughout this research project:

EFL: The abbreviation for English as a Foreign Language (EFL) is the term used to describe the study of English by non-native speakers in countries where English is not the dominant language (Nordquist, 2020). In the current research, the EFL refers to the EFL teachers who teach English at University of Jeddah, Khulais branch.

Attitude: Pickens (2005) defines attitude as "a mindset or a tendency to act in a particular way due to both an individual's experience and temperament" (p. 43). For Emhamed and Krishnan (2011), attitude is "an informed predisposition to respond and is comprised of beliefs, feelings and intent for action" (p. 186). In the current research, attitude refers to the EFL teachers' desire, feelings, thoughts and actions exhibited when dealing with blended learning at University of Jeddah, Khulais branch.

Blended Learning: Graham (2006) classifies the many definitions of blended learning into three main categories: (1) the combination of online and face-to-face instruction, (2) the combination of different instructional modalities (or delivery medium), and (3) the combination of different teaching strategies. In this research, blended learning refers to the combination of the traditional method face-to face and online platforms in the English department at University of Jeddah, Khulais branch.

Organization of the study: This research project is divided into five chapters. The first chapter is the introduction and provides the background of the research, research questions, the aim and objectives of the research, significance of the research, research design, Data collection technique and instrument, and data analysis. In the second chapter, the literature review is presented. It provides the concept of blended, its benefits and challenges, teachers' attitudes toward blended learning, factor affecting blended learning, and studies on blended learning in Saudi Arabia. The third chapter presents the research methodology and procedures. It also provides

information on the data collection and analysis methods, participants, instruments, and reliability. Chapter four provides the findings and results of the research from the collected data. The last chapter discusses the results provided in light of existing literature, the study's conclusion, consideration of the limitations of the study and suggestions for future research.

LITERATURE REVIEW

The purpose of this chapter is to provide a background for the current study by reviewing the relevant literature on blended learning and paying particular attention to instructors' attitudes, followed by reviewing several studies and contributions related to blended learning implementation in Saudi Arabia. Also, this chapter points out some of the supports and challenges teachers face when implementing blended learning and the factors affecting blended learning.

INTRODUCTION

COVID-19 has spread globally since March 2020, causing a public health emergency and closing schools and universities in about 100 nations, including Saudi Arabia. As a result, teachers had been obliged to switch from face-to-face to online instruction. This method has proved so successful in Saudi Arabia that most universities still incorporate it even though the pandemic is over. With educational institutions increasingly integrating technology into the classroom, language classes using the internet have begun to attract more attention. Researchers have been interested in blended learning for years. Even before the pandemic, English as a Second Language (ESL) students and English as a Foreign Language (EFL) students around the world significantly benefited from blended learning. Researchers have been interested in blended learning for years. Even before the pandemic, students of English as a Second Language (ESL) and English as a Foreign Language (EFL) around the world significantly benefited from blended learning. Despite encountering numerous challenges during the online teaching process, many teachers have displayed a positive attitude toward using technology in their instruction. Assessing teachers' attitudes toward blended learning and giving them adequate training are essential steps in creating a thriving learning environment in which students will benefit from this modern method. In a study by Nissen and Tea (2012), most teachers had difficulty understanding the design of blended learning courses; they viewed the face-to-face modality as the most important design. They suggested that to better comprehend blended learning, teachers should be trained and encouraged to meet regularly to exchange their reflections, allowing them to form a learning community. This training is required to be available in both blended and face-to-face formats, and tutors should be encouraged to use their expertise in face-to-face sessions to enhance their knowledge of blended learning courses.

Defining Blended Learning: Although the notion of blended learning has existed for a long time, researchers did not fully define its language until the early twenty-first century, and many variations exist. Graham (2013) characterized blended learning as comprising educational methods that incorporate both face-to-face and computer-mediated instruction. Driscoll (2002) defined it as the use of many approaches to teaching and learning simultaneously. According to Bliuc *et al.* (2007), blended learning describes "learning activities that involve a systematic combination of co-present (face-to-face) interactions and technologically mediated interactions between students, teachers and learning resources" (p. 234). For Oliver and Trigwell (2005), blended learning is "the integrated combination of traditional learning with web-based online approaches" (p. 17). Singh (2003) considered blended learning to be a combination of multiple delivery media intended to complement one another and encourage effective learning. Vasileiou (2009) viewed blended learning as a specialized strategy that employs a combination of teaching and learning delivery methods to teach, support, and maintain the abilities required for top learning performance. Blended learning combines

traditional learning approaches with new technologies to create a synergistic, dynamic structure for learning that can drive it to new heights. Blended learning's basic idea is that it facilitates a continuous learning process through several delivery artifacts instead of one (Singh, 2003).

There are three major components of blended learning: the learning environment, instruction, and media. The learning environment is the area in which the learning process occurs to facilitate effective teaching and learning processes. Media are the tools, methods, and techniques teachers use to increase the effectiveness and interactivity of communication between teachers and students, which is integral to the achievement of educational goals in general and learning objectives in particular. In mixed learning, the instructional component is a portion of the methodology or technique that aids in achieving the learning objective (Listiana and Jaharadak, 2019). Researchers have categorized blended learning into numerous subtypes based on the varied methods of implementation. Graham (2006) developed and labeled the most acceptable taxonomy of mixed learning, which includes three subtypes. The first is the enabling blend, which provides the same opportunity or learning experience through multiple modes: face-to-face and online. The second is the enhancing blend, which provides online supplementary resources for courses mainly conducted face to face and vice versa. The last one is the transforming blend, which uses online learning approaches as the main instruction method combined with traditional learning.

From the perspective of Khan (2016), there are three distinguishing characteristics of a blended learning environment: flexibility in providing learning resources, support of learning diversity, and enhancement of campus-based e-learning experiences. Maarop and Embi (2016) concluded that some studies identified essential factors for successful blended learning deployment. (1) Before establishing a blended course, conduct a thorough needs analysis on the institution's deliverables and support system. (2) Choose institution-appropriate blended learning. (3) Provide ongoing training for faculty members, including instructors and administrative personnel, on the abilities required to execute the program and the means to continuously improve the program's delivery. (4) Encourage instructors to collaborate by establishing a framework for them to share ideas and best practices through networking. Finally, (5) establish a support structure for teachers and students and the resolution of technical issues to facilitate the program's delivery.

Benefits of Blended Learning: From the above definitions, we can observe that blended learning is essential in educations today. In effect, blended learning helps students as technology becomes more pervasive in society. With mobile access, teachers can easily set up assignments, grade student work, and keep track of students' progress through an online hub for teacher management. In addition, Blended learning helps teachers be more efficient and get to know their students better. Blended learning is also flexible, and its methods can be used in almost any classroom. Many studies demonstrate the benefits of blended learning. It is an approach that combines the best aspects of both online and face-to-face instruction to meet the needs of a wide range of students. Blended learning (BL) allows teachers to use instructional strategies that are not possible in traditional settings, which increases student engagement and learning outcomes. Blended learning also increases flexibility and access to learning experiences by taking them outside of the classroom, which reduces costs for both teachers and students. However, because BL is a strategic blend of online and face-to-face instruction, these advantages cannot be realized by merely adding virtual space to already existent face-to-face instruction. Educators should make sure that online activities complement and extend those that take place in a traditional classroom setting (Graham *et al.*, 2009). Vaughan (2007) summarized the following advantages of blended learning approaches teachers have cited: lectures can be delivered both synchronously and asynchronously. It enables the sharing of content with a variety of audiences, including colleagues and students. It is an effective method for tutoring a huge number of individuals, and it offers excellent

student evaluation and feedback. Students in a blended learning setting are actively involved in their own education, and they have access to continuous opportunities for peer and instructor collaboration (Bonk and Graham, 2006). Marsh (2012) asserted that blended learning encourages individualism, collaboration, independence, and involvement among students because students may learn at their own pace, take responsibility for their education, and keep track of their accomplishments. It also serves as a place for them to practice their abilities in a way that is flexible and less stressful (Adam and Nel, 2009). In his study at the University of Botswana, Masalela (2009) stated that all of the people who used blended learning thought blended classes could be suitable for both students and teachers. Blended courses encourage students to look into related topics independently and learn how to think critically. Students can easily find information online and use it to help them learn. They become self-directed and develop skills that will help them learn for the rest of their lives.

Tayebinik and Puteh (2012) studied the advantages of BL over face-to-face or asynchronous online instruction and discovered that “blended learning is more advantageous than pure e-learning and offers various benefits for learners, such as fostering a sense of community or belonging” (p. 103). They conclude that “blended learning can be considered an effective strategy for distant learning in terms of the learning experience of students, student-student interaction, and student–instructor interaction” (p. 103). Some of the benefits for teachers are that blended courses can fulfill their desire to teach, provide them with scholarship opportunities, and give students new ways of learning and intellectual challenges. Some of the benefits for teachers are that blended courses can fulfill their desire to teach, provide them with scholarship opportunities, and give students new ways of learning and intellectual challenges. Almkali (2011), in her study conducted at Umm Al Qura University, employed a mixed-methods approach and interviewed instructors who used websites on the university portal and surveyed their students through questionnaires. She found that blended learning would improve student performance at universities. She noted that blended learning is helpful because it fosters connections between students and teachers, which positively affects learning. In addition, she concluded that instructors and students valued the accessibility and flexibility of blended learning design. Blended learning may allow teachers to effectively utilize class time. This may occur as a result of combining face-to-face instruction with online-based methods. Teachers may use BL to expand their students’ understanding of a certain subject and give supplemental materials. Teachers may, for instance, use the online platform to provide the curriculum and the physical class time to construct a variety of engaging activities (Nuruzzaman, 2016).

Blended Learning Challenges: Blended learning poses many challenges, however, because teachers must plan both face-to-face and online activities. Masalela (2009) interviewed 15 faculty members and one administrator with direct experience with this form of delivery at the University of Botswana and suggested two significant themes that dominated faculty members’ accounts: the potential benefits and challenges of blended learning. He found that participants faced four main difficulties when teaching blended classes: the lack of a formal development program, insufficient time for faculty members to adapt their existing courses for use, problems facilitating student success, and a lack of infrastructure. Mozelius and Rydell (2017) examined challenges to BL in higher education. They used a qualitative cross-sectional study with semi-structured interviews. They interviewed six teachers who are subject matter experts and instructional designers for courses on computer science and then analyzed the data thematically. They found that problems with implementing BL fall into four categories: documentation and support (teachers find the lack of documentation in their virtual environment a problem for applying extension modules), introduction and training (teachers rarely get training on the use of tools and modules), time (the lack of time to implement blended learning), and didactics (teachers do not feel they have the required knowledge or skills to apply blended learning).

Aldosemani *et al.* (2018) explored instructors’ perceptions and challenges with blended learning implementation. They revealed several challenges of blended learning. Teachers can lack training, experience, and skill. They also experience technical difficulties while implementing the blended approach. Huong and Hanh (2019) aimed to investigate EFL teachers’ attitudes toward blended learning and the factors affecting their applications of blended learning in teaching English at a university in Hanoi. This study also identified EFL teachers’ challenges and concerns. The teachers’ language competence, their knowledge of information and communication technology, students’ learning autonomy, and time constraints influenced their success. Their study of EFL teachers’ perceptions of blended learning practices used a quantitative approach with a survey of 247 EFL teachers across education levels. Ismayana *et al.* (2020) showed that the teachers’ gender did not affect their perceptions of their skill, experience, or motivation for blended learning. Gender also did not affect their perceptions of interactions with students, their success in communicating through blended learning, or their perceptions of the effectiveness and flexibility that blended learning offers.

Alnemri (2019) explored teachers’ perceptions of implementing blended learning in EFL classes at Saudi universities. She used a constructivist approach, which suggests that an individual could be affected by several factors such as culture, social aspects, cognitive development, and prior experiences to construct their views, to understand how teachers perceive BL. She used a mixed-method design with questionnaires and interviews to collect data from 100 EFL teachers working in Saudi higher education. The findings showed that some teachers indicated they might face several challenges when implementing blended learning, including class management and student disengagement, the need for technical support, a lack of electronic devices and internet access, and a lack of student readiness and preparation for blended learning. However, some teachers were able to provide methods to overcome these challenges, such as monitoring the students’ learning process to guarantee interest, utilizing portable Wi-Fi, and designing additional paper-based activities when internet disconnection issues arose. Wang (2020) aimed to investigate EFL teachers’ perceptions of blended learning, what teachers had done with this model, and what challenges they had faced in implementing it. More than 75% of participants reported that the most significant challenges were in striving to respect diverse talents and ways of learning, encourage contact between students and faculty, encourage collaborative and active learning, provide prompt feedback, and apply technology. The least challenging aspects were to set and communicate high expectations and emphasize time on task. Blended learning is not without difficulties for both students and universities. Students might have unrealistic expectations and feelings of isolation, whereas universities might lack resources and time. Challenges in the form of technological concerns affect both students and educational institutions (Poon, 2013).

Yang (2014) examined the problems encountered and solutions proposed by six language teachers who altogether instructed 214 college students on summary writing. The findings of the study are based on content analyses of the teachers’ interview transcripts, the teachers’ observation of college students’ progress in on-site and online instruction, and the interactions among the students recorded in the log files of the online system. The results showed that the language teachers’ problems in blended teaching of summary writing fell into three categories: instructional processes, community concerns, and technical issues. The four main themes that emerged from the three categories include the following: (1) the changing roles of the teachers and students, (2) a limited sense of community building, (3) the lack of training in blended teaching of summary writing, and (4) unfamiliarity with the new systems or technologies. Similarly, Nissen and Tea (2012) interviewed seven tutors of three different blended learning courses. They found that most teachers struggled to comprehend the blended learning course design. As in

traditional language learning courses, they viewed the face-to-face classes as central.

Factors Affecting Blended Learning Implementation: This study looks at demographic factors that affect the implementation of blended learning by combining online learning with traditional learning to enhance the quality of learning outcomes and improve communications between academics and their students. The coming section will illustrate some of the factors that may affect the implementation of blended learning.

Gender: The first factor that may affect the implementation of blended learning is gender. Previous research has shown no differences between male and female learners. For example, Alshankity and Alshawi (2008) examined gender differences of internet adoption and usage in Saudi Arabian higher education institutions as reported by faculty members. They gathered information from 504 faculty members in four Saudi Arabian higher education institutions regarding internet usage for academic purposes. The results showed that there were no statistically significant differences between male and female Saudi academics regarding internet usage in their teaching techniques or familiarity with internet technologies. They conducted their research at four Saudi universities in Riyadh, and they hypothesized that their findings might be applied to similar gender-segregated academic environments for both faculty and students. Similarly, Villalon (2017) used a quantitative study to determine the relationships between instructors' attitudes toward implementing blended learning and their self-reported hours of technology training in blended learning and differences in attitudes toward blended learning by gender. A sample of 33 participants who taught blended learning completed the survey. The study found no statistically significant difference in attitudes toward implementing blended learning by male and female instructors. Moreover, the study found no statistically significant difference in instructors' self-reported degree of technology training for blended learning held by male and female instructors.

Another study conducted by Al-Samadi (2022) which aimed to reveal primary teachers' attitudes towards blended learning in the Hashemite Kingdom of Jordan and determine the attitudes of primary teachers towards blended learning in variables such as gender and qualification). The sample of the study consisted of 356 primary teachers, including 143 men and 213 women. The results of the study revealed that the attitudes of primary teachers toward blended learning were average, and there were no statistically significant differences between the average scores of male and female teachers for their attitudes toward blended learning. He also found that there were statistically significant differences between the average scores of primary teachers and their attitudes towards blended learning, and it was high for the academic qualification. In contrast, Moukali (2012) investigated factors and barriers that influence faculty attitudes toward adopting technology-rich blended learning at Jazan University in Saudi Arabia. The influence of faculty incentives, technology experience, and demographic variables, including gender and academic rank, were important considerations. He employed a mixed-method approach using quantitative and qualitative data. Participants included 303 faculty members (234 male, 69 female) from 36 departments. The results showed that male instructors in a Saudi university were more advanced at blended learning implementation than female instructors. Male instructors were also more confident regarding educational technology skills. Along the same lines, Algamdi and Samarji (2016) investigated the challenges of adopting e-learning in higher education by focusing on one of the recently established Saudi universities as a case study. They collected quantitative data through 214 questionnaires. Findings from quantitative data analysis revealed several barriers that challenge the effective implementation of e-learning at the targeted Saudi university. They found that barriers to e-learning are gender-related. In detail, female academics saw fewer impediments to using technology in education than male academics.

Teaching Experiences: The second factor to consider that may affect the blended learning implementation is years of teaching by the language teacher. A number of research works have dealt with this issue (Aldosemani *et al.*, 2018; Al-Sarrani, 2010; Balusamy and Indrani, 2021; Huong and Hanh, 2019). Balusamy and Indrani (2021) applied the normative survey method to find the variation in the attitude toward blended learning of school teachers due to different personal and demographic variables. The sample consisted of 450 teachers working in higher secondary schools in Tamil Nadu. The results demonstrated that the samples based on the length of teaching experience did not differ significantly in their attitude toward blended learning. By contrast, Al-Sarrani (2010) aimed to obtain science faculty concerns and professional development needs to adopt blended learning in their teaching at Taibah University. He designed a survey instrument to collect quantitative and qualitative data using close-ended and open-ended questions. The findings stated that younger faculty members are more receptive to blended learning than their older counterparts. Also, the younger group is more likely to be less confident due to their lack of tenure. In contrast, younger instructors may be familiar with extra tools and, consequently, have less confidence in their combined application.

In addition, Aldosemani *et al.* (2018) showed significant difference in comfort with blended learning due to teaching experiences. They concluded that blended course materials were more likely to have been prepared in advance by instructors with less than 5 years of experience teaching. Teachers with 11–15 years of experience may have more faith in their time management skills or experience and feel less pressure. Huong and Hanh (2019) investigated EFL teachers' attitudes towards blended learning and the factors affecting their applications of blended learning in teaching English at a university in Hanoi. They showed that the applications of blended learning in teaching were affected by internal factors of (1) teachers' ages, (2) teachers' experiences in teaching English, and (3) teachers' experiences of applying blended learning in teaching as well as external factors of (1) institutions, (2) students' learning, and (3) society. They also suggested some recommendations for EFL teachers to improve their application of blended teaching.

Teachers' Attitudes Toward Blended Learning: A teacher's responsibility is to assess their classroom setting and determine the most effective methods for fostering student learning. Teachers' attitudes can play a significant role in sustaining the blended learning process. Several studies have examined teachers' attitudes toward blended learning in different schools and universities. According to Johnson and Howell (2005), teachers' attitudes on the use of technology in education, and on blended learning in particular, are among the most significant factors influencing the success of blended learning because teachers are so vital to the implementation process. In the same way, Larsen (2012) argued that the attitude of teachers towards the implementation of blended learning was a significant contributor toward the successful achievement of their educational goals. Debbache and Zidoun (2018) evaluated teachers' and students' perspectives on the impact of BL on motivation and interaction in EFL classrooms at an Algerian university. This study collected data from 60 master's students and 10 English department teachers using a questionnaire. The investigation findings revealed that integrating blended learning and technology tools in foreign language teaching classes was an effective learning method. Specifically, most respondents reported blended learning to be a powerful learning strategy that boosts learners' motivation, interaction, and performance.

Das (2021) aimed to assess the attitudes of elementary students and teachers toward the blended learning approach. He found that blended learning has more positive effects than other approaches and might benefit students and teachers when adopted at the primary level. Because of its facility, it is easy to state that the blended learning approach is more authentic than the traditional learning process. This learning process maintained the time management process, which is useful for learners. However, with the help of a blended learning

process, students can increase their interaction with the teacher. The study is conducted with a positivist research philosophy, descriptive research design, and deductive research approach. To sum up, in a blended learning environment, established learning processes are significantly more efficient and effective. Williams (2018) focused on teachers' experiences with blended learning, their present beliefs about how students learn most effectively, and whether the practice of blended learning altered their thoughts about education. He demonstrated that teachers who previously relied on a textbook-based approach changed their pedagogy because of their experience with blended learning, shifting their focus from their preferences to the needs of their students. They discovered that using a blended approach resulted in students becoming more engaged in their learning and in a more positive overall experience. Facilitating beneficial educational experiences for their students boosted teachers' sense of self-worth. Despite such benefits, some teachers remained resistant to using technology in the classroom because they did not possess the necessary skills. For instructors to successfully incorporate blended learning experiences, schools must help them develop their technical expertise. Khan (2016) investigated the attitudes toward blended learning technology of 200 prospective teachers from three different colleges of education in the Aligarh district. He found that female prospective teachers from science streams had a highly favorable attitude toward blended learning methods compared to male prospective teachers and those from the arts streams. Better training and hands-on experiences can help prospective teachers become more proficient in using blended learning techniques. Admiraal *et al.* (2017) surveyed 1,602 teachers regarding the incorporation of technology in secondary schools. Specifically, the researchers wanted to know how comfortable instructors were with learner-driven online education and how competent they were with technology. They identified five teacher archetypes through an online survey: teachers comfortable with technology, teachers with significant reservations about technology use in schools, teachers wholly uncomfortable with technology, teachers skeptical of student-directed technology, and teachers with no firm stance on technological adoption in schools (Admiraal *et al.*, 2017). Uncomfortable teachers were older (51+) and had greater teaching experience (over 11 years) than other groups. Middle-aged (36–45) teachers with 6–20 years of experience were more comfortable with technology, according to the study. Younger teachers tended to be more apprehensive about introducing technology into the classroom, not due to a lack of expertise with technology, but rather due to apprehension regarding the level of student autonomy that technology encouraged.

Wang (2020) examined Chinese EFL teachers' perceptions of blended learning, using the Changzhou Institute of Engineering as a sample. The study participants included 20 teachers who teach English as a foreign language at the Changzhou Institute of Engineering. The findings revealed that teachers believed blended learning could facilitate language learners' autonomy, extend communications between teachers and students, promote respect for individuality, accommodate diverse learning styles, and integrate modern technology. Huong and Hanh (2019) aimed to investigate EFL teachers' attitudes toward blended learning and the factors affecting their applications of blended learning in teaching English at a university in Hanoi. Based on the results of questionnaires and interviews, the researchers discovered that ESL teachers generally have positive attitudes toward blended learning applications and are willing to employ them in their classrooms. However, the teachers' ages, the length of their teaching experience, and the number of years they had engaged in blended learning were internal characteristics that influenced their blended teaching adaptability. Meanwhile, institutions, students, and society urged them to embrace blended learning. School teachers in Tamil Nadu had a favorable attitude toward blended learning in a study by Balusamy and Indrani (2021). The subsamples based on the length of experience did not differ significantly in their attitude toward blended learning, but the subsamples based on gender, locality, marital status, and type of

management varied significantly in their attitudes toward blended learning.

Studies on Blended Learning in Saudi Arabia: Over the past decade, Saudi Arabia has utilized the blended learning model. It has been facilitated by technological innovations and the global development of ICT (Alnahdi, 2019). According to Barry and Alhazmi (2018), recognizing the significance of education's role in a knowledge-based society, Saudi Arabia has made education one of the cornerstones of its Vision 2030 plan. The Saudi Ministry of Education has mandated that all educational institutions design new programs that bridge the gap between job requirements and education output and adhere to international standards (Alnahdi, 2019). Blended learning can be substituted for e-learning in Saudi Arabia. Blended learning and e-learning are frequently used interchangeably in the literature on e-learning in the Arab world. In Saudi Arabia, e-learning is frequently substituted for blended learning (Alharbi and Drew, 2014). Numerous studies on blended learning in Saudi Arabian universities have focused mainly on preparing students and teachers for blended learning. For instance, Yushau (2006) investigated the impact of blended learning on the computer and mathematics attitudes of Saudi Arabian university students. During the experiment, face-to-face learning occurred three times per week, and online learning consisted of a weekly computer laboratory session where students had access to online learning resources on the intranet and internet. According to the data, the students have positive attitudes toward mathematics and computers.

Ja'ashan (2015) evaluated the perspectives and attitudes of students at the University of Bisha toward studying English through blended learning. His findings indicated that students are pleased and optimistic about learning English through blended learning. This pleasure with blended learning for English classes results from improving students' English language skills and making learning more enjoyable, collaborative, and interactive. Alebaikan (2010) researched the attitudes of Saudi female lecturers and undergraduate students toward BL and found that most of them held positive views. Al-Otaibi (2010) conducted a second study in Saudi Arabia to determine the understanding and attitudes of secondary school teachers on BL in Tatweer schools in the Makkah district. The findings revealed that teachers have a high awareness and favorable views toward BL (as cited in Al-Saleh, 2018). According to Alebaikan (2014), implementing blended learning in the Saudi EFL context would facilitate effective learning and teaching experience. Additionally, it would help teachers enhance their students' engagement in a more critical and reflective learning experience by utilizing online interactive activities and materials. EFL Saudi teachers would also have more time to deliver sufficient instruction in both face-to-face and online learning environments as well as more time to make efficient use of the time they have in the classroom to improve their student's ability to engage with one another (Alaidarous and Madini, 2016). Al-Saleh (2018) investigated secondary EFL teachers' attitudes towards blended learning in Tabuk City. The results revealed that the attitudes of EFL teachers about BL vary; however, most teachers demonstrated positive attitudes. Teachers of English as a foreign language discovered numerous benefits of using BL in their classrooms. However, training was needed to provide them with a thorough opportunity for learning. Common challenges included lack of training, internet access, technical support, time, teachers' technological skills and experience, access to technology in classrooms, increased workload, lack of technological skills on the part of students, lack of administrative support, and absence of modeling by other teachers.

Aldosemani *et al.* (2018) asked 124 academics from the public Saudi Arabia University about their perceptions of and challenges with blended learning implementation. The findings demonstrated that Saudi Arabian instructors viewed blended learning positively, particularly in situations where they had greater flexibility and their students could access the information at any time. Alnemri (2019) explored teachers' perceptions of implementing blended learning, in

EFL classes at Saudi universities. He used a mixed-method study approach with questionnaires and interviews to collect the data from 100 EFL teachers working in Saudi higher education. The findings of the study revealed that overall, teachers have a positive attitude toward implementing blended learning in their classes due to its various advantages, such as providing teachers with the ability to personalize their teaching, incorporating numerous teaching materials, and facilitating the improvement of learners' study skills and English language acquisition. Alsharif (2022) explored the perceptions of undergraduate students and teachers at King Saud University regarding the use of websites and online portals as part of blended learning practices. Also, she investigated the views of teachers and students and the challenges they have faced while using blended courses. The findings revealed that blended learning had the potential to be effective in the Saudi higher education sector. It could enhance teaching quality and the university's ability to cater to many students. With blended learning, there can be enhanced communication and interaction among teachers and students, increasing student satisfaction. Blended learning can be more beneficial for female students, who need to be taught by male teachers via a virtual environment due to cultural issues. Even though the above studies have presented a glimpse into the use of BL in Saudi Arabia, there seems to be some gaps in the literature concerning ESL Saudi teachers' perceptions of learning in the blended learning environment. This study, therefore, aims to shed light on the EFL teachers' attitudes toward teaching English in a blended environment and the challenges encountered by them in such an environment. In addition, the current study is also explicitly devoted to studying University of Jeddah, Khulais branch, a location that Saudi researchers have not yet considered. The next chapter describes the research methodology. It talks about participants and the instrument utilized in this research. In addition, it explains the procedure and the statistical analysis of this research.

METHODOLOGY

This chapter describes the research design and participants, the instrument utilized in this study in addition to the validity of this instrument. Moreover, it explains the procedure and the statistical analysis employed in this research.

Research design: To investigate the teachers' attitudes towards implementing blended learning at University of Jeddah, the design used in this research project is quantitative that employs a survey research methodology. Survey research is a quantitative method in which a researcher offers a prepared set of questions to an entire population or sample of individuals. When a researcher seeks to characterize or explain the characteristics of a relatively large group or groups, survey research is a beneficial method (Blackstone, 2012). According to McCombes (2022) Surveys are a good choice when you want to find out about the characteristics, preferences, opinions, or beliefs of a group of people. This study depicts Saudi faculty members' attitudes toward blended learning at University of Jeddah, including the challenges and the supports encountered when implementing blended learning. Therefore, this research project used a questionnaire procedure because this research aims to determine teachers' attitudes toward implementing blended learning to determine which supports and challenges teachers face as a result of implementing this method for English teaching.

Participants: This research project aims to better comprehend EFL teachers' attitudes toward implementing blended learning. The choice of this population was to make sure that they had implemented blended learning in this department. The participants are, therefore, all English language faculty members from the Department of English Language and Translation at the Khulais branch of University of Jeddah. The participants of this research project are male and female faculty members in this branch of English department. The sample of the study consisted of (19) male (12) and female (7) EFL teachers. The Saudi participants were 7 whereas the other participants were from other nationalities like, Yemeni (1), Sudanese (4), Tunisian (2),

and Indian (5). Most of them were very high (16 years or more) teaching experiences and have PhD degree. The convenience sampling approach was used in this research project. As Etikan, Musa, and Alkassim (2016) stated, convenience sampling is affordable and straightforward, and subjects are readily available. The primary purpose of convenience sampling is to acquire data from participants who are readily accessible to the researcher. Convenience sampling in this research project involved selecting faculty members from the Department of English Language and Translation at the Khulais branch of University of Jeddah because it was convenient and they were easily accessible.

Instruments: This research project investigates teachers' attitudes toward a blended learning strategy in teaching at University of Jeddah. This research project mainly depends on the close-ended questionnaire method to collect information. The researcher adopted a questionnaire that was used by Aldosemani *et al.* (2018) after seeking permission from the authors, and the researcher modified it to correspond to the research objectives. The online questionnaire was designed to take 5 minutes to complete using Microsoft Office 365 Forms technology. The questionnaire consists of three parts (see the appendix 1). The first part contains six questions is concerned with the participants' demographic variables of nationality, native language, teaching experiences, and level of education. The second part included fifteen questions about teachers' attitudes towards implementing blended learning, for example "*The flexibility provided by the blended environment is important to me*". The third part consists of five questions about supports and challenges with blended learning, for instance, "*It is more difficult for me to motivate my students in the online environment than in the traditional setting*". The questions included Likert-scale responses ranging from 1= strongly disagree, to 5= strongly agree. According to Nemoto and Beglar (2013), A Likert scale is "a psychometric scale that has multiple categories from which respondents choose to indicate their opinions, attitudes, or feelings about a particular issue". Both of them proved that there are some advantages of Likert-scale questionnaires are that (a) data can be collected relatively quickly from large numbers of respondents, (b) they can provide highly reliable estimates of a person's ability, and (c) the validity of interpretations made from the data they provide can be established in several ways. The researcher also added five items that were served as distractors for participants in each section to get accurate and precise responses. Finally, the validity of the instruments was checked before administering the questionnaire as piloting, and only marginal changes were made.

Validity of Items (Internal consistency): The internal consistency is the extent to which the items from a measure represent the variable they are intended to. Pearson correlation was performed to assess the internal consistency of the items between each item of the variable and the total score of that variable.

Reliability of Scales: Cronbach's alpha is used to evaluate the reliability of scales. Cronbach's alpha is the most common measure of the reliability of scales when the study uses multiple Likert questions in the questionnaire. (Hair *et al.* 2014) suggests that if Cronbach's alpha is 0.7 or higher, it is considered good reliability.

Data collection Procedures: This research project was conducted during the first semester of the academic year 2022-2023. The proposed questionnaire is prepared and kept online for 20 days to gather as much data as possible to estimate teachers' attitudes toward blended learning. The questionnaire was available online from the 1st October until the 20th October, 2022. After the questionnaire was designed and the final version is to be approved. The medium of distribution for the questionnaire was through the internet WhatsApp and Email. The online questionnaire link was sent and distributed to the faculty members of the department of English at University of Jeddah, Khulais branch.

Data analysis producers: Data analysis was done to achieve the research objectives. The Statistical Package for Social Sciences

(SPSS) version 26 was used for analyzing the data. Before conducting data analysis, the data preparation was done on the completed questionnaires by editing, coding, entering and cleaning the data. Moreover, Pearson correlation was applied to assess the internal consistency of the scales and Cronbach's alpha were preformed to assess the reliability of the scales. Furthermore, descriptive statistics like (frequency, percentage, mean, and standard deviation were used to the summarization of demographic characteristics of respondents and personal degree of agreement toward the scale's statements. Subsequently, Shapiro-Wilk was used to test the normality of the data. Lastly, Independent t-test was applied to examine the relationship between the gender and teachers' attitudes, while One-way ANOVA was performed to test the association between the teaching experience and teachers' attitudes. The coming section presents the findings from the questionnaire in detail. In the end, the researcher presents a summary of key findings.

RESULTS

This chapter presents the findings from the questionnaire with EFL teachers. The questionnaire provided attitudes toward blended learning at University of Jeddah, challenges and supports they faced, and whether the gender and teaching experiences affected their attitudes.

Results: This section is intended to present the main findings of the present study. The presentation is divided into five main sections. The first section presents the findings about the general information about the main participants of the study. The second section outlines in detail teachers' attitudes toward implementing blended learning. The third one addresses supports and challenges of blended learning faced by EFL teachers. The fourth section offers the results of the effect of gender on teachers' attitudes towards implementing blended learning and supports and challenges of blended learning. The last section presents the findings of the effect of teaching experience on teachers' attitudes towards implementing blended learning and supports and challenges of blended learning. The conclusion offers a summary of the key research findings.

Demographic Information: This section presents the findings about the general information about the main participants of the study. This is obtained from the questionnaire items. Table 1. illustrates the de-mographic data of the (19) participants.

Table 1. The demographic information

Characteristics	Categories	Frequency	Percentage (%)
Gender	Male	12	63.2
	Female	7	36.8
Nationality	Saudi	7	36.8
	Sudanese	4	21.1
	Tunisian	2	10.5
	Indian	5	26.3
	Other	1	5.3
Native Language	Arabic	13	68.4
	English	1	5.3
	Other	5	26.3
Level of Education	Master degree	5	26.3
	PhD degree	14	73.7
Teaching Experiences	6-10 years (medium)	3	15.8
	11-15 years (high)	5	26.3
	16 years or more (very high)	11	57.9

The results showed that most of the respondents (63.2%) were males, and (36.8%) were females. The percentage of Saudi participants was (36.8%), and (26.3%) of them were Indian, (21.1%) of them were Sudanese, (10.5%) of them were Tunisian, and lastly (5.3%) of the participants were other nationalities. More than half of the respondents (68.4%) were native Arabic language, (5.3%) of them

were native English language, and (26.3%) of them were other native languages. Most of the respondents (73.7%) had a Ph.D. degree, and (26.3%) of them had a master's degree. Lastly, most of the respondents (57.9%) had teaching experience of 16 years and over, (26.3%) of them had 11-15 years, and (15.8%) of them had 6-10 years.

Validity of Items of Blended Learning Attitudes: The correlation coefficients for all items of the blended learning attitudes are presented in Appendix 2. The results indicated that all the correlation coefficients of items are statistically significant with the total score of the variable at the level of significance (0.05), thus, these items were valid. Except the statement (3,4,5,8, and 12) were not statistically significant, that means these statements were not consistent with the factor that belong to. Therefore, they have been deleted.

Validity of Items of Supports and Challenges of Blended Learning: The correlation coefficients for all items of supports and challenges of blended learning are presented in Appendix 3. The results presented indicated that all the correlation coefficients of items were statistically significant with the total score of the variable at the level of significance (0.05), thus, these items were valid.

Reliability of Scales: The results presented showed that Cronbach's alpha of the scales of blended learning attitudes is (0.75) which is higher than the accepted value (0.70). Therefore, the reliability of the scales of blended learning attitudes is acceptable (See Appendix 4). Cronbach's alpha of the scales of supports and challenges of blended learning is (0.70). Therefore, the reliability of the scales was acceptable. Lastly, the results showed that the Cronbach's alpha of overall reliability of the scales was (0.71) it indicated that the reliability of overall scales was good.

Test of Normality: Shapiro-Wilk was used to test the normality of the data. The results indicated that the data of the current study was normally distributed where the significant value of teachers' attitudes towards implementing blended learning is (0.252) and the significant value of the teachers' supports and challenges of blended learning is (0.804). Therefore, the normality assumption was met, and all the constructs of this study considered reasonable and acceptable. Because of the normal distribution of the data, parametric tests were used to examine the significant difference between groups. Moreover, independent t-test was used to investigate the significant difference between two groups, and one-way ANOVA was utilized to examine the significant difference between more than two groups.

Descriptive Statistics: This study used descriptive statistics such as means, standard deviation, and percentages to address the research questions and examine the hypothesis. This study applies the five-point Likert scale (5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1=strongly disagree). The questionnaire respondents were asked to indicate the personal degree of agreement toward the scale's statements. The interpretation of the scale levels is showed in Table 5.

Table 2. Interpretation of Scales Values

Mean Value	Meaning
From 1 to 1.49	Strongly disagree
From 1.50 to 2.49	Disagree
From 2.50 to 3.49	Neutral standpoint
From 3.50 to 4.49	Agree
From 4.50 to 5	Strongly agree

Teachers' Attitudes towards Implementing Blended Learning: This section presents the findings about the attitudes of the main participants of the study in detail. To assess the teachers' attitudes towards implementing blended learning descriptive statistics were used. The results revealed that that the overall teachers' attitudes towards implementing blended learning are positive where the total mean is (3.97) and total standard deviation is (0.75) (see appendix 5). In detail, the results indicate that respondents take a positive standpoint " I understand my role in blended teaching", where the

mean is (4.47), and standard deviation is (0.513). The respondents agree on that *"I am able to align online course materials with their face-to face counterparts"* where the mean is (4.21), and standard deviation is (0.535). The respondents strongly agree on *"I appreciate that I can access online course materials anytime, anywhere"*, where the mean is (4.58), and standard deviation is (0.507). The respondents showed a positive attitude on *"I appreciate that my students can access my online course materials anytime, anywhere"*, where the mean is (4.47), and standard deviation is (0.612). The respondents indicated an agreeing standpoint on *"I am able to provide better feedback to my online students on their performance in the blended course"*, where the mean is (4.21), and standard deviation is (0.535). The respondents reported a neutral standpoint on *"the rate of my interactions with students in the blended course is higher than in a traditional face-to-face class"*, where the mean is (2.84), and standard deviation is (1.068). The respondents showed a positive standpoint on *"I incorporate more resources when teaching a blended course as compared to traditional teaching"*, where the mean is (3.68), and standard deviation is (1.057). The respondents indicated an agreeing standpoint on that *"adopting a blended teaching approach will result in positive evaluations of my teaching abilities/skills"*, where the mean is (4.00), and standard deviation is (0.745). The respondents reported a neutral standpoint on *"I am more satisfied with teaching in blended environments compared to other delivery methods"*, where the mean is (3.37), and standard deviation is (1.065). Lastly, the respondents indicated a positive attitude on *"I am looking forward to teaching my next blended course"*, where the mean is (3.84), and standard deviation is (0.834).

Supports and Challenges of Blended Learning: This section intends to present the findings of the study participants if they face any challenges and support. To explore the teachers' supports and challenges of blended learning descriptive statistics were applied. The results showed that the overall teachers' perception towards supports and challenges of blended learning is positive where the total mean is (3.55) and total standard deviation is (1.01) (see appendix 6). Moreover, the results showed that respondents agree to *"technical difficulties make the online component of blended teaching frustrating"*, where the mean is (3.74), and standard deviation is (0.806). The respondents showed an agreement standpoint on that *"not meeting my students face-to-face in a blended setting for every class prevents me from knowing them as well as my on-site students"*, where the mean is (3.58), and standard deviation is (1.121). The teachers revealed a neutral standpoint on that *"it is more difficult for me to motivate my students in the online environment than in the traditional setting"*, where the mean is (3.42), and standard deviation is (1.121). The respondents showed a positive attitude on that *"I received sufficient training to design a blended course"*, where the mean is (3.58), and standard deviation is (0.902). Lastly, the respondents indicated a neutral standpoint on that *"I received sufficient training to manage a blended course"*, where the mean is (3.42), and standard deviation is (1.121).

The Effect of Gender on Teachers' Attitudes towards Implementing Blended Learning and Supports and Challenges of Blended Learning: This section presents the finding of the effect of gender on the main participants of the study. To examine the effect of gender on teachers' attitudes towards implementing blended learning and supports and challenges of blended learning independent t-test was used. The results indicated that there was not a significant relationship between teachers' attitudes towards implementing blended learning and gender ($t=-0.691, df=17, p=0.499$). Also, the results showed that gender had no significant association with supports and challenges of blended learning ($t=-0.398, df=17, p=0.695$) (See appendix 7).

The Effect of Teaching Experience on Teachers' Attitudes Towards Implementing Blended Learning and Supports and Challenges of Blended Learning: This section presents the finding of the effect of teaching experience on the main participants of the study. To investigate the effect of teaching experience on teachers' attitudes towards implementing blended learning and supports and challenges

of blended learning one-way ANOVA test was applied. The results reported that teaching experience wasn't found to be significantly correlated with teachers' attitudes towards implementing blended learning ($F=0.659, df=2, p=0.531$). Similarly, the results revealed that there wasn't a significant relationship between teaching experience and supports and challenges of blended learning ($F=0.037, df=2, p=0.964$) (See appendix 8).

SUMMARY OF FINDINGS

To sum up, the findings of this study revealed that

The overall EFL teachers' attitudes towards implementing blended learning are positive

2- There are no significant differences among the respondents' gender and teaching experiences on their attitudes toward blended learning

3- The EFL teachers demonstrated that they never faced challenges. Also, they received sufficient training and support. The next chapter discusses the findings of the research. Also it provides a conclusion and limitations of the study. Finally, further research is suggested at the end of the research.

DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

The purpose of this chapter is to provide a discussion of and conclusions to the research in the light of the given research questions. Also, it offers limitations of this research and recommendations for further investigation.

Discussions: This section provides a discussion on the attitudes concerning blended learning at University of Jeddah. To be specific, the research has understood the attitudes of EFL teachers towards blended learning. It identifies the supports of blended learning and the challenges facing teachers in the implementation of blended learning. Also, justifies the reasons gender and teaching experiences may affect the teachers' attitudes toward implementing blended learning.

Factors Affecting Blended Learning Implementation: The first research question was: Are there any statistical differences among EFL teachers in University of Jeddah due to gender and teaching experience?

In this study, none of the faculty members mentioned gender as a factor affecting blended learning implementation in the university. The results indicated no significant relationship between teachers' attitudes toward implementing blended learning and gender. Also, the results showed that gender had no significant association with the supports and challenges of blended learning. So, this is compatible with other studies in the literature that have found no significant gender differences regarding implementing blended learning in Saudi Arabia (Alshankity & Alshawi, 2008). Similarly, Villalon (2017) demonstrated no differences between male and female skill sets in blended learning courses. In the same way, Ismayana *et al.* (2020) showed that the teachers' gender did not affect their perceptions of their skill and experience or their motivation for blended learning. Gender also did not affect their perceptions of interactions with students, their success in communicating through blended learning, or their perceptions of the effectiveness and flexibility that blended learning offers. Another study conducted by Al-Samadi (2022), the results of this study revealed that there were no statistically significant differences between the average scores of male and female teachers and their attitudes toward blended learning. So, these studies consider gender as a factor in implementing blended learning with no significant differences. This study is in line with the results of this research as a result of no significant differences between different genders among EFL teachers at University of Jeddah, Khulais branch. This may be because there is no direct interaction between male and female members, which makes it impossible to compare the different

genders in implementing blended learning in their teaching practices due to the segregated gender environment in all University buildings. The results contradict some studies in literature that have explored gender differences concerning implementing blended learning. These studies have shown differences between gender in the study of Moukali (2012) that showed male instructors in a Saudi university were more advanced at blended learning implementation than female instructors. Moreover, the results of this research reported that teaching experience wasn't found to be significantly correlated with teachers' attitudes toward implementing blended learning. Similarly, the results revealed that there wasn't a significant relationship between teaching experience and support and the challenges of blended learning. There are no significant differences because maybe the teachers effectively divide their lecture time and have a broader range of options to accommodate different learning experiences, for enhancing their experiences and teaching skills. Teachers have valued the flexibility and accessibility provided by blended learning. These results build on existing evidence from Balusamy and Indrani (2021) in their study that demonstrated the samples based on the length of teaching experience did not differ significantly in their attitude toward blended learning.

However, the results of this study were inconsistent with some previous studies. For instance, Al-Sarrani (2010) stated that younger faculty members are more receptive to blended learning than their older counterparts. In addition, Aldosemani *et al.* (2018) study showed a significant difference due to teaching experiences. They concluded that blended course materials were more likely to have been prepared in advance by instructors with less than five years of experience teaching (1-5 years). In contrast to this study, all participants demonstrated that teaching experiences were ineffective in implementing blended learning. In the same way, Huong and Hanh (2019) argued that the teachers' length of their teaching experience and the number of years they have engaged in blended learning were internal characteristics that influenced their blended teaching adaptability. These studies contrast with the results of current research. In conclusion, not all factors were considered barriers to implementing blended learning in education, as some academics implement it without facing problems with the university infrastructure or students' difficulties. Now, all academics have good skills, so no barriers prevent them from using a new method that benefits them and their students.

EFL Teachers' Attitudes Toward Implementing Blended Learning:

The second research question was: What are EFL teachers' attitudes toward blended learning at University of Jeddah?

This research project aimed at exploring EFL teachers' attitudes towards blended learning at University of Jeddah. Larsen (2012) holds the view that the attitude of teachers towards the implementation of blended learning is considered to be significant contributor towards the successful achievement of educational goals. The results of this research demonstrate that EFL teachers at University of Jeddah, Khulais branch have a positive attitude towards the implementation of blended learning in their teaching process. Similarly, These findings are linked to other literature which finds that teachers have a positive attitude toward implementing blended learning in their classes (Khan, 2016; Aldosemani *et al.*, 2018; Alnemri, 2019; Huong and Hanh, 2019; Wang, 2020; Balusamy and Indrani, 2021; Das, 2021). A likely explanation is that the findings of this study revealed that all EFL teachers have a positive attitude toward implementing blended learning in their classes due to its various advantages. Firstly, blended learning is flexible; teachers and students can easily access online course materials anytime, anywhere. The outcome is consistent with the research findings of Aldosemani *et al.* (2018), who found that instructors viewed blended learning positively, particularly in situations where they had greater flexibility and their students could access the information anytime. Second, in blended learning, the teachers provide better feedback to online students on their performance. This result is similar to Vaughan

(2007)'s perspective; blended learning is an effective method for tutoring a huge number of individuals and offers excellent student evaluation and feedback. Thirdly, the teachers can incorporate more resources when teaching a blended course as compared to traditional teaching. This is in agreement with Nuruzzaman (2016)'s study; teachers may use BL to expand their students' understanding of a particular subject and give supplemental materials. Teachers may, for instance, use the online platform to provide the curriculum and the physical class time to construct a variety of engaging activities. Fourth, adopting a blended teaching approach results in positive evaluations of teachers' teaching abilities/skills, enhancing the university's quality. Similar to ALSarif (2022)'s study, the findings revealed that blended learning has the potential to be very effective in the Saudi higher education sector. It can enhance the quality and the university's ability to cater to many students. Finally, the results showed that the teachers were looking forward to teaching their blended course, and they are ready to implement blended learning in all courses they teach, that it is for the valuable advantages of blended learning in the teaching process. These results build on existing evidence from Huong and Hanh (2019)'s study; they discovered that ESL teachers generally have positive attitudes toward blended learning applications and are willing to employ them in their classrooms.

Supports and Challenges of Blended Learning

The third research question was: Do teachers face support and challenges when implementing blended learning at University of Jeddah?

The results of this research demonstrated that, overall, EFL teachers never faced any challenges of blended learning. Furthermore, the results showed that the teachers received sufficient training to manage and design a blended course. The results contradict the claims of Alnemri (2019) that showed some teachers indicated that they might face several challenges when implementing blended learning, including class management and student disengagement, the need for technical support, a lack of electronic devices and internet access, and a lack of student readiness and preparation for blended learning. It is also contrary to the findings of Yang (2014) that identified challenges as the changing roles of teachers and students, a lack of training in blended learning courses, and a lack of familiarity with new systems or technologies. The results of this research, contrary to the previous study, may be because the world was exposed to the Corona pandemic during the past two years. Therefore, the Ministry of Education in the Kingdom of Saudi Arabia was forced to completely make distance education learning. At the beginning of its application, there were some difficulties faced by teachers and students, but over time they overcame these difficulties and gained experience. After the success of the implementation of distance learning ultimately, many universities have adopted the implementation of blended learning, including the University of Jeddah, and all teachers have received training on this method of education.

CONCLUSION

This research project explored teachers' attitudes toward blended learning as an emerging trend in Saudi education. As stated by Johnson and Howell (2005), teachers' perspectives on the use of technology in education, and blended learning, in particular, are among the most significant factors influencing the success of blended learning because teachers are so vital to the implementation process. So, this research aims to investigate teachers' attitudes. The primary objective of this research was to examine teachers' attitudes toward implementing blended learning at University of Jeddah. The secondary aim was to examine the supports and challenges these teachers encounter when implementing blended learning. Finally, to determine the effect of gender and teaching experience on their attitudes. The research project was carried out at University of Jeddah, Khulais branch, in the English department. A questionnaire was used in order to collect data. The data generated were analyzed

using The Statistical Package for Social Sciences (SPSS). The extracted data led to conclusions that answered the research questions and achieved the research aims. From the findings of this research, the researcher can conclude that EFL teachers have highly positive attitudes toward learning English in the newly adopted blended learning environment due to its advantages. In the same way in Alnemri (2019)'s study, that overall, teachers have a positive attitude toward implementing blended learning in their classes. The results also observed that teachers showed readiness for blended learning, never faced challenges, and received sufficient training. Moreover, gender and teaching experiences did not affect their attitudes. In conclusion, it can be said that blended learning has the potential to be very effective in the Saudi education sector. Das (2021)'s study showed that blended learning has more positive effects and might benefit both students and teachers. Established learning processes are significantly more efficient and effective in a blended learning environment. According to Almalki (2011), blended learning is helpful because it fosters connections between students and teachers, which positively affects learning. It can enhance the university's quality and ability to cater to large numbers of teachers and students. With blended learning, there can be enhanced communication and interaction among teachers and students.

Limitations: This research explores EFL teachers' attitudes of implementing blended learning at University of Jeddah. The first limitation of this study is based on its context as it was conducted on EFL teachers, therefore, generalizing the finding of it to broader educational systems such as primary and secondary schools is limited. In addition, this study is geographically limited to one Saudi university. Furthermore, there is a limitation with the research instrument design. This research uses questionnaire as a main source of collecting data about teachers' attitudes of blended learning. Thus, the reliability of the data is based on the truthfulness of the participants. Also, the present research is limited to a small number of participants, and it was not, therefore, possible to generalize its finding to all populations. Finally, another limitation is that this research did not explore the age differences in their attitudes towards blended learning.

RECOMMENDATION

Based on this research, it is obvious that blended learning can be a very efficient and successful way to provide quality education in the Saudi education environment. So, future research can be taken into account with regards to conducting a research to investigate how teachers might organize a blended learning environment to support the learning process effectively. Conducting further research on this topic in the EFL context or other subject areas. Moreover, a similar research can be applied to other universities colleges in Saudi Arabia in the future to extend the research and application of this model. Further research incorporating a similar design, and a larger sample size, will be valued. Finally, further study is required to investigate if there are any differences due to age and compare the results with Al-Sarrani (2010).

REFERENCES

Adam, S., & Nel, D. 2009. Blended and online learning: Student perception and performance. *Interactive Technology and Smart Education*, 6, 140–155.

Admiraal, W., Louws, M., Lockhorst, D., Paas, T., Buynsters, M., Cviko, A., Janssen, C., de Jonge, M., Nouwens, S., Post, L., Van der Ven, F., & Kester, L. 2017. Teachers in school-based technology innovations: A typology of their beliefs on teaching and technology. *Computers & Education*, 114, 57-68. <https://doi.org/10.1016/j.compedu.2017.06.013>

Al Gamdi, M. A., & Samarji, A. 2016. Perceived barriers towards e-Learning by faculty members at a recently established university in Saudi Arabia. *International Journal of Information and Education Technology*, 6(1), 23.

Alaidarous, K., & Madini, A. A. 2016. Exploring EFL students' perception in blended learning environment in Saudi technical education context. *International Journal of Educational Investigations*, 3(6), 69-81.

Aldosemani, T., Shepherd, C., & Bolliger, D. 2018. Perceptions of instructors teaching in Saudi blended learning environments. *Techtrends*, 63(3), 341-352. <https://doi.org/10.1007/s11528-018-0342-1>

Alebaikan, R. 2010. *Perceptions of Blended Learning in Saudi Universities* [Doctoral dissertation, Exeter University].

AlEbaikan, R. 2014. Blended learning in Saudi Arabia: Potential for its use in EFL. *Using Technology in Foreign Language Teaching*, 30.

Alharbi, S., & Drew, S. 2014. Using the technology acceptance model in understanding academics' behavioural intention to use learning management systems. *International Journal of Advanced Computer Science and Applications*, 5(1), 143–155.

Almalki, A. 2011. *Blended learning in higher education in Saudi Arabia: A study of Umm Al-Qura University* (Doctoral dissertation, RMIT University).

Alnahdi, A. 2019. Blended learning in Saudi Arabia-A review. *Global Journal of Education and Training*, 2(6), 1-7.

Alnemri, N. A. 2019. *An Exploration into Teachers' Perceptions of Implementing Blended Learning in EFL Classrooms at Saudi Universities*. (Master's thesis, SACM). <https://drepo-sdl-edu-sa.sdl.idm.oclc.org/handle/SDL/44162>

Al-Otaibi, H. 2010. *The degree of secondary schools teachers in Tatweer schools in Mecca* [Master's thesis, University of Jordan].

Al-Saleh, R. S. S. 2018. EFL teacher's attitudes towards blended learning in Tabuk, Saudi Arabia. *International Journal of Information Research and Review*, 5(1), 5065–5071.

Al-Samadi, A. 2022. The attitudes of primary stage teachers towards blended learning in the Hashemite Kingdom of Jordan. *Educational and psychological studies*, p. 117-215,254. <http://search.mandumah.com/Record/1287774>

Al-Sarrani, N. 2010. *Concerns and professional development needs of science faculty at Taibah University in adopting blended learning* [Doctoral dissertation, Kansas State University]. *ProQuest Dissertations and Theses*, 217.

Alshankity, Z., & Alshawi, A. 2008. Gender differences in internet usage among faculty members: The case of Saudi Arabia. *IEEEExplore*, pp. 830-833.

Alsharif, N. A. 2022. *To explore the perception of Saudi undergraduate students and teachers towards blended learning—a case study of King Saud University* [Master's thesis, SACM].

Balusamy, K., & Indrani, A. 2021. Attitude towards blended learning among school teachers in Tamil Nadu—A Study Blended Learning. *International Journal of Creative Research Thoughts*, 9(12), 2320–2882.

Barry, A., & Alhazmi, F. A. 2018. A blended learning model used to prepare Saudi Arabian doctoral students to be knowledge-based educational leaders. In *Proceedings of the RAIS Conference* (pp. 72–86). Princeton, New Jersey. <http://rais.education/proceedings-of-the-9th-international-rais-conference-on-socialsciences-2/>

Birbal, D., D., Ramdass, D., & Harripaul, M. 2018. Student teachers' attitudes towards blended learning. *Journal of Education and Human Development*, 7 (2). <https://doi.org/10.15640/jehd.v7n2a2>

Blackstone, A. 2012. *Principles of sociological inquiry*.

Bliuc, A., Goodyear, P., & Ellis, R. 2007. Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education*, 10(4), 231–244. <https://doi.org/10.1016/j.iheduc.2007.08.001>

Bonk, C. J., & Graham, C.R. 2006. *The handbook of blended learning environments: Global perspectives, local designs*. Jossey-Bass/Pfeiffer.

Das, R. 2021. The attitude of students and teachers towards blended learning at the elementary level. *Elementary Education Online*, 20(5), 245–257. <https://doi.org/10.17051/ilkonline.2021.05.23>

Debbache, A., & Zidoun, R. 2018. Teachers' and students' attitudes towards the use of blended learning in EFL classrooms

- Driscoll, M. 2002. Blended learning: Let's get beyond the hype. *E-learning*, 1(4), 1–4.
- Emhamed, E., & Krishnan, S. 2011. Investigating Libyan teachers' attitude towards integrating technology in teaching English in Sebha Secondary Schools. *Academic Research International*, 1(3), 182–192. Retrieved: November 9, 2022, from the World Wide Web: <http://www.savap.org.pk/journals/ARInt/Vol.1%283%29/2011%281.3-19%29.pdf>.
- Etikan, I., Musa, S., & Alkassim, R. 2016. Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Garrison, D. R., & Vaughan, N. D. 2008. *Blended learning in higher education: Framework, principles, and guidelines*. The Jossey-Bass higher and adult education series. Jossey-Bass.
- Graham, C. 2006. *Blended learning systems. Definitions, current trends and future directions*. In C. Bonk & C. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs*. John Wiley and Sons.
- Graham, C. R. 2013. *Emerging practice and research in blended learning*. In M. G. Moore (Ed.), *Handbook of distance education* (pp. 333–350). Routledge.
- Graham, C. R.; Borup, J.; Pulham, E. P., and Larsen, R. 2009. Blended Teaching Readiness K-1Y: Model and Tool Development. *Journal of Research in Technology in Education*, 51 (3), 239-258
- Hair, J., Hult, T., Ringle, C., & Sarstedt, M. 2014. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications, Inc.
- Huong, N., & Hanh, L. 2019. An investigation into teachers' attitudes towards blended learning application at a university in Hanoi. *Journal of Language and Literature*, 5(285).
- Ismayana, D., Mulyono, H., Suryoputro, G., & Komara, C. 2020, December 11–14. An evaluation of EFL teachers' perceptions of blended learning. *Proceedings of the Proceedings of the Third Workshop on Multidisciplinary and Its Applications*. Medan, Indonesia. <https://doi.org/10.4108/eai.11-12-2019.2290808>
- Ja'ashan, M. 2015. Perceptions and attitudes towards blended learning for English courses: A case study of students at university of Bisha. *English Language Teaching*, 8(9), 40–50.
- Johnson, G., & Howell, A. 2005. Attitude toward instructional technology following required versus optional WebCT usage. *Journal of Technology and Teacher Education*, 13(4), 643–654.
- Khan, S. 2016. Attitude of prospective teachers towards blended learning technology: A normative approach. *International Journal of English Language, Literature and Humanities*, 4(6), 2321–7065.
- Larsen, L. J. E. 2012. *Teacher and student perspectives on a blended learning intensive English program writing course*. Iowa State University.
- Listiana, N., & Jaharadak, A. A. 2019. Blended learning as instructional media: Literature review. *Journal of Physics: Conference Series*, 1167, 012066. <https://doi.org/10.1088/1742-6596/1167/1/012066>
- Maarop, A. H., & Embi, M. A. 2016. Implementation of blended learning in higher learning institutions: A review of literature. *International Education Studies*, 9(3), 41. <https://doi.org/10.5539/ies.v9n3p41>
- Marsh, D. 2012. *Blended learning: Creating learning opportunities for language learners*. Cambridge University Press.
- Masalela, R. K. 2009. Potential benefits and complexities of blended learning in higher education: The case of the University of Botswana. *Turkish Online Journal of Distance Education*, 10(1), 66–82
- McCombes, S. 2022. Survey Research | Definition, Examples & Methods. Retrieved 17 September 2022, from <https://www.scribbr.com/methodology/survey-research/>
- Moukali, K. H. 2012. *Factors that affect faculty attitudes toward adoption of technology-rich blended learning* [Doctoral dissertation, University of Kansas]. ProQuest Dissertations & Theses Full Text.
- Mozelius, P., & Rydell, C. 2017. Problems affecting successful implementation of blended learning in higher education—the teacher perspective. *International Journal of Information and Communication Technologies in Education*, 6(2), 4–13.
- Nemoto, T. & Beglar, D. 2014. Likert-scale questionnaires. In *JALT 2013 conference proceedings* (pp. 1-8).
- Nissen, E., & Tea, E. 2012. Going blended: New challenges for second generation L2 tutors. *Computer Assisted Language Learning*, 25(2), 145–163. <https://doi.org/10.1080/09588221.2011.636052>
- Nordquist, R. (2020, March 26). English as a foreign language (EFL). Thought Co. Retrieved November 9, 2022, from <https://www.thoughtco.com/english-as-a-foreign-language-efl-1690597>
- Nuruzzaman, A. 2016. The pedagogy of blended learning: A brief review. *IRA International Journal of Education and Multidisciplinary Studies*, 4(1), 125–134.
- Oliver, M., & Trigwell, K. 2005. Can 'blended learning' be redeemed? *E-Learning and digital media*, 2(1), 17–26. <https://doi.org/10.2304/elea.2005.2.1.17>
- Pickens, J. 2005. Attitudes and Perceptions. In N. Borkowski (Ed.), *Organizational behavior in health care* (pp. 43-76). Sudbury, Massachusetts: Jones and Bartlett Publishers.
- Poon, J. 2013. Blended learning: An institutional approach for enhancing students' learning experiences. *Journal of Online Learning and Teaching*, 9(2), 271–288.
- Richards, J. C. 2008. Second Language Teacher Education Today. *RELC Journal*, 39(2), 158-177. doi:10.1177/0033688208092182
- Singh, H. (2003). Building effective blended learning programs. *Educational Technology*, 43(6), 51–54.
- Tayebnik, M., & Puteh, M. 2012. Blended learning or e-learning? *International Magazine on Advances in Computer Science and Telecommunications*, 3(1), 103–110.
- Vasileiou, I. 2009. Blended learning: The transformation of higher education curriculum. *The Journal for Open and Distance Education and Educational Technology*, 5(1), 77. <https://doi.org/10.12681/jode.9698>
- Villalon, C. 2017. *Influence of instructors' attitudes, gender, and technology training when implementing blended learning* (Order No. 10603062). ProQuest Dissertations & Theses Full Text. (1944007534).
- Wang, M. 2020. Chinese EFL teachers' perceptions towards blended learning. *International Journal of Languages, Literature and Linguistics*, 6(2), 117–121. <https://doi.org/10.18178/ijll.2020.6.2.262>
- Williams, M. 2018. Exploring teachers' attitudes to implementing blended learning: A case study.
- Yang, Y. 2014. Preparing language teachers for blended teaching of summary writing. *Computer Assisted Language Learning*, 27(3), 185–206. <https://doi.org/10.1080/09588221.2012.701633>
- Yushau, B. 2006. The effects of blended e-learning on mathematics and computer attitudes in pre-calculus algebra. *The Mathematics Enthusiast*, 3(2), 176–183.

Appendices

Appendix1: Survey about blended learning implementation

I am carrying out research to elicit teachers' opinion about method of teaching. The following questionnaire is designed to help in the educational process and to obtain information that helps us analyze teachers' thinking.

Please complete the following questionnaire in light of your own experience and opinion. The information provided will be used solely for this research, and your opinion will be confidential.

Researcher/ Wejdan Abdulrahman Alghamdi, University of Jeddah, Department of English and Translation-Khulais

Demographic questions:**-Name:****-Gender:***

- Male
- Female

- Nationality:

- Saudi
- Sudanese
- Tunisian
- Indian
- Other

- Native Language:

- Arabic
- English
- Other.....

-Level of Education:*

- Bachelor's degree
- Master degree
- PHD

-Teaching Experiences:*

- 1-5 (low)
- 6-10 (medium)
- 11-15 (high)
- 16 or more (very high)

Blended learning attitudes items:**1. I understand my role in blended teaching.**

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

2. I am able to align online course materials with their face-to face counterparts.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

3. Blended teaching is frustrating because it requires extra planning time for the course.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

4. Having course materials and learning resources ready before the semester starts encourages me to apply blended teaching.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

5. The flexibility provided by the blended environment is important to me.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

6. Blackboard is easy to use for blended teaching purposes.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

7. I appreciate that I can access online course materials anytime, anywhere.

- Strongly disagree
- Disagree

- Not sure
- Agree
- Strongly agree

8. Using Blackboard enables me to accomplish tasks more quickly (e.g., teach the topic, assess assignments).

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

9. I appreciate that my students can access my online course materials anytime, anywhere.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

10. Posting resources online discourages my students from paying attention in class because they can get the information later.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

11. Blackboard is only useful to accomplish administrative tasks (e.g., sending emails, making announcements).

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

12. I am able to provide better feedback to my online students on their performance in the blended course.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

13. The rate of my interactions with students in the blended course is higher than in a traditional face-to-face class.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

14. I incorporate more resources when teaching a blended course as compared to traditional teaching.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

15. I have a higher workload when teaching a blended course as compared to a traditional course.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

16. Adopting a blended teaching approach will result in positive evaluations of my teaching abilities/skills.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

17. I am more satisfied with teaching in blended environments compared to other delivery methods.

- Strongly disagree
- Disagree
- Not sure

- Agree
 - Strongly agree
- 18. I am looking forward to teaching my next blended course.**
- Strongly disagree
 - Disagree
 - Not sure
 - Agree
 - Strongly agree

Supports and challenges of blended learning items

19. Technical difficulties make the online component of blended teaching frustrating.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

20. Blackboard has technical problems that hinder my blended teaching.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

21. Not meeting my students face-to-face in a blended setting for every class prevents me from knowing them as well as my on-site students.

- Strongly disagree
- Disagree
- Not sure

- Agree
 - Strongly agree
- 22. It is more difficult for me to motivate my students in the online environment than in the traditional setting.**

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

23. I received sufficient training to design a blended course.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

24. I received sufficient technical training about Blackboard before starting blended teaching with the tool.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

25. I received sufficient training to manage a blended course.

- Strongly disagree
- Disagree
- Not sure
- Agree
- Strongly agree

Appendix 2: The correlation coefficients for all items of the blended learning attitudes

S	Statements	correlation coefficient	Significant level
1	I understand my role in blended teaching.	0.459*	0.048
2	I am able to align online course materials with their face-to face counterparts	0.573*	0.010
3	Blended teaching is frustrating because it requires extra planning time for the course.	-0.175	0.474
4	Having course materials and learning resources ready before the semester starts encourages me to apply blended teaching.	0.357	0.133
5	The flexibility provided by the blended environment is important to me.	0.309	0.198
6	I appreciate that I can access online course materials anytime, anywhere.	0.675**	0.002
7	I appreciate that my students can access my online course materials anytime, anywhere.	0.516*	0.024
8	Posting resources online discourages my students from paying attention in class because they can get the information later.	0.125	0.612
9	I am able to provide better feedback to my online students on their performance in the blended course.	0.745**	0.000
10	The rate of my interactions with students in the blended course is higher than in a traditional face-to-face class.	0.631**	0.004
11	I incorporate more resources when teaching a blended course as compared to traditional teaching.	0.480*	0.037
12	I have a higher workload when teaching a blended course as compared to a traditional course.	0.261	0.281
13	Adopting a blended teaching approach will result in positive evaluations of my teaching abilities/skills.	0.649**	0.003
14	I am more satisfied with teaching in blended environments compared to other delivery methods.	0.488*	0.034
15	I am looking forward to teaching my next blended course	0.546*	0.016

Appendix 3: The correlation coefficients for all items of supports and challenges of blended learning

S	Statements	correlation coefficient	Significant level
1	Technical difficulties make the online component of blended teaching frustrating.	0.763**	0.000
2	Not meeting my students face-to-face in a blended setting for every class prevents me from knowing them as well as my on-site students.	0.611**	0.005
3	It is more difficult for me to motivate my students in the online environment than in the traditional setting.	0.674**	0.002
4	I received sufficient training to design a blended course.	0.667**	0.002
5	I received sufficient training to manage a blended course.	0.585**	0.009

Appendix 4. Reliability of the scales

	N	Number of Items	Cronbach's Alpha
Blended learning attitudes	19	10	0.754
Supports and challenges of blended learning	19	5	0.701
Overall reliability of the scales	19	15	0.712

Appendix 5. Descriptive statistics of Teachers' attitudes towards implementing blended learning

Statement	Percent %					Mean	Standard deviation
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
I understand my role in blended teaching.	47.4	52.6	0	0	0	4.47	0.513
I am able to align online course materials with their face-to-face counterparts	26	68	5	0	0	4.21	0.535
I appreciate that I can access online course materials anytime, anywhere.	57.9	42.1	0	0	0	4.58	0.507
I appreciate that my students can access my online course materials anytime, anywhere.	52.6	42.1	5.3	0	0	4.47	0.612
I am able to provide better feedback to my online students on their performance in the blended course.	26.3	68.4	5.3	0	0	4.21	0.535
The rate of my interactions with students in the blended course is higher than in a traditional face-to-face class.	5.3	26.3	21.1	42.1	5.3	2.84	1.068
I incorporate more resources when teaching a blended course as compared to traditional teaching.	21.1	47.4	10.5	21.1	0	3.68	1.057
Adopting a blended teaching approach will result in positive evaluations of my teaching abilities/skills.	26.3	47.4	26.3	0	0	4.00	0.745
I am more satisfied with teaching in blended environments compared to other delivery methods.	5.3	57.9	10.5	21.1	5.3	3.37	1.065
I am looking forward to teaching my next blended course	15.8	63.2	10.5	10.5	0	3.84	0.834
Overall mean						3.97	0.75

Appendix 6. Descriptive statistics of Teachers' supports and challenges of blended learning

Statement	Percent %					Mean	Standard deviation
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree		
Technical difficulties make the online component of blended teaching frustrating.	10.5	63.2	15.8	10.5	0	3.74	0.806
Not meeting my students face-to-face in a blended setting for every class prevents me from knowing them as well as my on-site students.	21.1	42.1	10.5	26.3	0	3.58	1.121
It is more difficult for me to motivate my students in the online environment than in the traditional setting.	10.5	52.6	10.5	21.1	5.3	3.42	1.121
I received sufficient training to design a blended course.	15.8	36.8	36.8	10.5	0	3.58	0.902
I received sufficient training to manage a blended course.	15.8	36.8	26.3	15.8	5.3	3.42	1.121
Overall mean						3.55	1.01

Appendix 7: The effect of gender on teachers' attitudes towards implementing blended learning and supports and challenges of blended learning

Variables	Gender	N	Mean	Std. Deviation	df	T value	P value
Teachers' attitudes towards implementing blended learning	Male	12	3.94	0.382	17	-0.691	0.499
	Female	7	4.06	0.364			
Supports and challenges of blended learning	Male	12	3.50	0.635	17	-0.398	0.695
	Female	7	3.62	0.752			

Appendix 8: The effect of teaching experience on teachers' attitudes towards implementing blended learning and supports and challenges of blended learning

Variables	Teaching experience	N	Mean	Std. Deviation	F value	P value
Teachers' attitudes towards implementing blended learning	6-10 years (medium)	3	4.20	0.463	0.659	0.531
	11-15 years (high)	5	4.00	0.467		
	16 years or more (very high)	11	3.92	0.313		
supports and challenges of blended learning	6-10 years (medium)	3	3.53	0.230	0.037	0.964
	11-15 years (high)	5	3.48	0.672		
	16 years or more (very high)	11	3.58	0.771		
