Ed Process Int J

www.edupij.com

ISSN 2147-0901 (Print), 2564-8020 (Online)

EDUCATIONAL PROCESS
INTERNATIONAL JOURNAL

The Importance of Using Blended Learning in Iraqi Universities

Suaad Hadi Hassan Al-Taai, Waleed Abood Mohammed Al-Dulaimi

Research Article

Cite this article: Al-Taai, S. H. H., & Al-Dulaimi, W. A. M. (2025). The Importance of Using Blended Learning in Iraqi Universities. *Educational Process: International Journal, 18*, e2025526. https://doi.org/10.22521/edupij.2025.18.526

Received July 26, 2025
Accepted October 5, 2025

Keywords: Blended learning, COVID-19, Thinking, Questions, Discussions, Activities

Author for correspondence:
Suaad Hadi Hassan Al-Taai
suaad.hadi@ircoedu.uobaghdad.edu.iq
University of Baghdad/ College of Education Ibn Rushd for Humanities / department of History, Iraq

Abstract

Background/purpose. Blended learning can be an effective solution for improving the quality of education. The research problem lies in the lack of interest among a number of Iraqi university professors in improving blended learning in universities, as well as the lack of interest among students in developing and implementing blended learning in Iraqi universities.

Materials/methods. The researcher employed a descriptive analytical approach, which involves collecting data, information, and facts, then analyzing and interpreting them to draw conclusions. The researcher defined the research community and study sample as 50 professors and students in Iraqi universities, using a questionnaire prepared specifically for this purpose, within a maximum period of 4 weeks.

Results. The research concluded that a major reason behind some Iraqi university professors' reluctance to adopt blended learning in their courses is the lack of adequate support, limited material resources, and insufficient knowledge on how to use computers and blended learning software.

Conclusion. The importance of exploring blended learning has grown significantly, especially in light of its essential role during and after the COVID-19 pandemic. This approach provided a flexible and effective solution for maintaining educational continuity, enhancing interaction between teachers and learners, and resulting in more impactful and widely accepted learning experiences. These outcomes were made possible by combining a range of instructional strategies that bridge virtual learning environments with traditional face-to-face teaching. This study shows several key aspects, including the definition of blended learning, its terminology, benefits, and overall advantages.

OPEN ACCESS

© The Author(s), 2025. This is an Open Access article, distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction, provided the original article is properly cited.

1. Introduction

E-learning and the use of non-traditional methods are not new. They have been used since the introduction of computers and the limited distribution of educational programs and teaching modules on television in many industrialized countries.

Blended learning is an integral part of educational technology and has become an urgent necessity today, in light of crises and the spread of epidemics that require social distancing.

This suggests that digital education was expected and natural as part of the development of scientific and humanitarian services. However, it became an urgent necessity with the spread of the COVID-19 pandemic, which contributed to accelerating its emergence and propelling it to the forefront. With the passage of time and the maturation of experience, the foundations of a new educational system were established, regardless of the presence of crises, by leveraging scientific and technological developments and the information revolution.

The importance of blended learning became clear after and during the COVID-19 pandemic, as it became clear to everyone that universities, schools, and other educational institutions must continue their role in education. Although the experience was initially challenging due to a lack of skills, a culture of comprehensive support for e-learning and blended learning, and a lack of experience in the field, it was inevitable and necessary to keep pace with external developments. This prompted everyone to enter the world of technology, depending on the capabilities and resources available, to continue the educational process.

In recent years, education has undergone significant changes due to the rise of technology and the increasing availability of online learning. Blended learning, which merges in-person teaching with online instruction, has become a widely accepted approach aimed at enhancing educational quality. This research focuses on a specific issue: the noticeable lack of engagement among some Iraqi university professors in advancing blended learning within their institutions, along with a general lack of motivation among students to adopt and promote this learning method in Iraqi higher education settings. The study aims to achieve several key goals, including examining the concept of blended learning, shedding light on its importance, types, and identifying the essential qualities and responsibilities of instructors who work within this educational setting. The significance of this research lies in its focus on the critical role that university professors play in advancing and improving blended learning within Iraqi universities.

The adoption of online learning and alternative instructional methods is not a recent development. These approaches have been in use since the emergence of computers and the early broadcasting of educational content through television screens in various industrialized countries (Al-Hamdi & Al-Husseini, 2020). Blended learning has since evolved into a core component of educational technology and has proven to be critically important, particularly during emergencies and pandemics that require social distancing measures. While the shift toward digital education may have been an inevitable step in the advancement of both scientific and human services, the COVID-19 pandemic significantly accelerated its implementation, bringing it to the center of modern teaching practices (Dawood, 2020).

The value of blended learning became especially evident in the context of the COVID-19 crisis, highlighting the urgent need for schools, universities, and educational institutions to continue fulfilling their missions. Although the transition posed challenges, such as a lack of technical skills, limited institutional support, and minimal prior experience, it became clear that adaptation was no longer optional. The drive to align with global progress encouraged the widespread adoption of available digital tools, ensuring that learning could continue uninterrupted (Saleh & Zuboon, 2023).

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

2. Literature Review

Study (Saleh & Zboon, 2023). The research aims to identify the requirements for implementing blended learning in Arabic language departments in primary schools from the teachers' perspective. This is achieved by: identifying the technological requirements for implementing blended learning in Arabic language departments in primary schools. And identifying the human resources necessary for implementing blended learning. The research sample consisted of (200) male and female teachers from Arabic language departments in primary schools in Iraqi universities, with a total of (247) male and female teachers. The researcher prepared a questionnaire on the requirements for implementing blended learning in Arabic language departments in primary schools, consisting of (51) paragraphs, of which (30) paragraphs were for technological requirements, and (21) paragraphs for human requirements. Five alternatives were placed in front of each paragraph: always agree, often agree, sometimes agree, disagree, never agree. The scores (1, 2, 3, 4, 5) were distributed on a five-point Likert scale, and the theoretical scores of the questionnaire ranged between 51 and 255. The questionnaire was distributed using Google Forms to simplify the distribution and receipt process. The data collection and distribution process was completed in March 2021. The researcher statistically processed the data to analyze the results using the following methods: chi-square, Pearson's coefficient, weighted average, and percentile weight. The results showed that 21 out of 30 technological requirements were met from the faculty members' perspective. From the trainers' perspective, 19 out of 21 human requirements were met. Based on the research results, the researchers reached a number of conclusions, recommendations, and proposals, including: The existence of (51) requirements for blended learning, distributed across two areas, and these are essential for the success of blended learning in Arabic language departments in primary schools. The possibility of utilizing the research results in planning Arabic language teacher preparation programs in joint higher education institutions, based on technological and objective foundations, and in line with the experiences and skills required for teaching in joint environments. Conducting a comparative study to evaluate the performance of Arabic language students in mixed primary schools and students in traditional education (Saleh & Zboon,2023).

Study (Jassim & Aziz, 2024) The research aims to identify the effect of blended learning on the achievement of physics among fourth-year secondary school students and to test the hypothesis that there are no statistically significant differences at the significance level (0.05) between the average scores of students in the experimental group that learned using blended learning and the control group that learned using the traditional method in the physics achievement test. The researcher chose the experimental method because it is appropriate for the research objectives. The research sample consisted of fourth-year science students for the 2023-2024 academic year. The research sample consisted of (60) male and female students, (30) male and female students forming the experimental group, and (30) male and female students forming the control group. Students in both groups were rewarded based on their chronological age in months, their previous performance, and their intelligence while studying the same physics subject. To achieve the research objectives, the researcher prepared a research tool, specifically an achievement test consisting of 40 multiple-choice items, to measure performance in physics. After the experiment was completed, the data were processed using the statistical package SPSS. The study's results favored the experimental group, indicating its superiority over the control group in terms of academic performance in physics (Jassim & Aziz, 2024).

The study (Jamil & Amin, 2024) The research aims to identify the effect of blended learning on the achievement of physics among fourth-year secondary school students and to test the hypothesis that there are no statistically significant differences at the significance level (0.05) between the average scores of students in the experimental group that learned using blended learning and the control group that learned using the traditional method in the physics achievement test. The

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

researcher chose the experimental method because it is appropriate for the research objectives. The research sample consisted of fourth-year science students for the 2023-2024 academic year. The research sample consisted of (60) male and female students, (30) male and female students forming the experimental group, and (30) male and female students forming the control group. Students in both groups were rewarded based on their chronological age in months, their previous performance, and their intelligence while studying the same physics subject. To achieve the research objectives, the researcher prepared a research tool, specifically an achievement test consisting of 40 multiple-choice items, to measure performance in physics. After the experiment was completed, the data were processed using the statistical package SPSS. The results of the study favored the experimental group, indicating its superiority over the control group in terms of academic performance in physics (Jamil & Amin, 2024).

The current research is distinguished from previous studies by its theoretical content, as it attempts to define blended learning in Iraqi universities and to demonstrate its applications, effects, and characteristics in education, as well as its advantages, benefits, controls, and levels. Its practical and applied content distinguished it, as it included a descriptive survey study that analyzed data on the opinions of lecturers at Iraqi universities regarding the role of blended learning in improving and developing education at universities, the roles of lecturers and students in it, and its most significant obstacles.

The importance of this research lies in its distinction from previous studies, as it sheds light on the effectiveness of blended learning in Iraqi universities.

The weak use of blended learning in some Iraqi universities and colleges is an important reason for preparing this research due to its educational importance as a complement to face-to-face learning in the classroom, and its impact on understanding and reviewing the course material without specifying a specific time or place, which has a significant impact in reducing the pressure on both the professor and the student.

2.1. The Concept and Objectives of Blended Learning

Blended learning is known by several names, including hybrid learning and mixed learning, as noted by various scholars (Dawood, 2020; Al-Jubouri, 2020; Daskan & Yildiz, 2020). This educational approach places strong emphasis on active student involvement and is structured through carefully designed programs delivered via electronic platforms. These programs are supported by information and communication technologies (ICT), making it easier for students to access learning materials and engage in academic activities (Hussein, 2024).

Blended learning offers students the best of both worlds: the flexibility of learning from home and the benefits of direct classroom interaction. Although there are varying interpretations regarding the form and nature of blended learning, it is widely agreed that this model combines elements of traditional instruction with digital learning. Depending on the needs of the educational setting, this integration brings together conventional content and techniques with modern digital tools and methods.

The researchers define blended learning as the combination of real-life classroom learning and virtual online learning on educational platforms available to students and university professors, such as Classroom and others. Through blended learning, students can answer professors' questions at any time that suits them or within a specific time frame set by the professor, giving them the opportunity to freely express their opinions without being bound by a specific time or place.

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

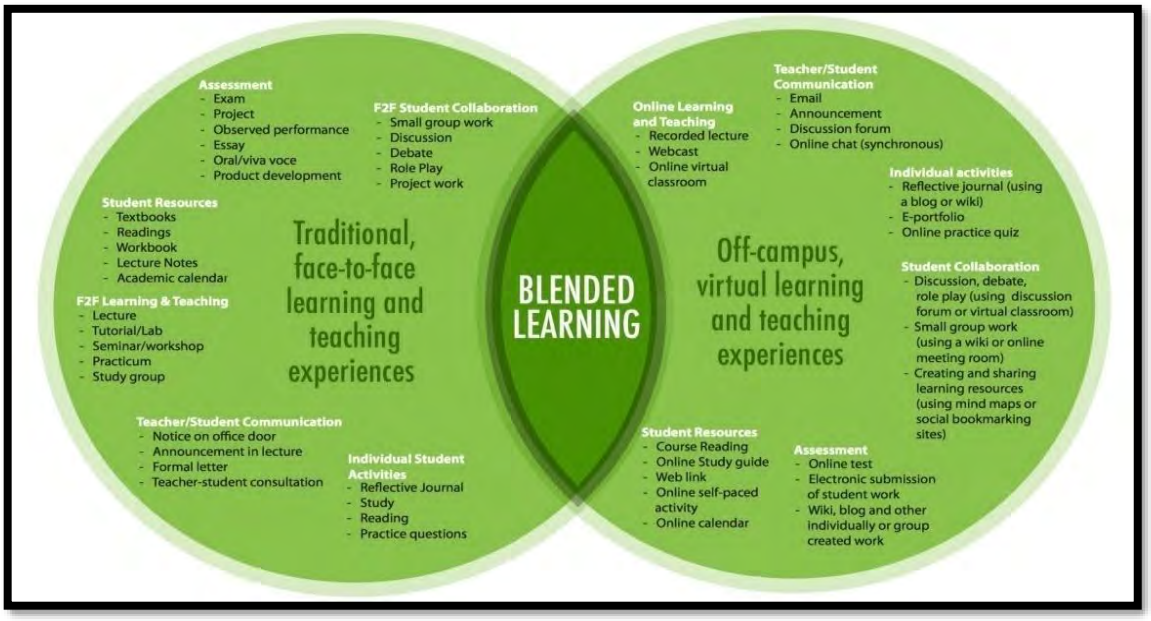

Figure 1. A Diagram Illustrating the Blended Learning Environment (Bath & Bourke, 2010, p. 4).

One of the primary aims of blended learning is to achieve a comprehensive educational goal that involves enhancing curricula and motivating students to engage actively in classes. It also seeks to improve student performance through the integration of modern technologies, foster both direct and indirect interaction among teachers, learners, and educational content, and reduce overall educational costs.

2.2. Advantages of Blended Learning

One of the most significant benefits of blended learning is the development of problem-solving skills, fostering community interaction, promoting a sense of belonging, and encouraging critical thinking. This also contributes to increased educational effectiveness and improved educational outcomes by strengthening the relationship between learners' needs and the educational program and facilitating access to educational materials. The diversity and multiplicity of educational materials enable students to access multiple sources of knowledge by choosing electronic programs that are appropriate to their abilities and skills. This also allows them to obtain a comprehensive education and acquire more knowledge. The focus is on the active role of the learner and their interaction in achieving quality education by integrating individual activities. It also achieves interaction during classes, as learners enjoy face-to-face interaction with their teachers and peers through electronic and traditional means of interaction, which contributes to strengthening relationships and human and social attitudes among learners during classes (Agosto et.al, 2013; Al-Subaie, Al-Qubati, 2020; Al-Tamimi, 2019; Hussein, 2024; Suleiman, 2024).

It provides diverse sources of information that enable comparison, discussion, analysis, and evaluation. It also redesigns the educational process by defining the roles of teachers, learners, and educational institutions. Furthermore, the use of blended learning technologies fosters connections and enhances interaction within the educational system, encompassing teachers, learners, educational institutions, parents, and the broader community. It contributes to the spread of technological culture in creating a digital society capable of keeping pace with modern developments.

2.3. Benefits of Using Blended Learning

Blended learning offers several notable advantages, including the development of problem-solving skills, the enhancement of social interaction, and a stronger sense of belonging among learners. It also plays a significant role in cultivating critical thinking abilities. By aligning educational content more closely with students' individual needs and providing easier access to a wide range of

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

learning resources, blended learning boosts educational effectiveness and improves learning outcomes. This approach places the learner at the center of the educational process, promoting active participation and meaningful interaction during lessons.

Moreover, blended learning exposes students to a variety of informational resources, encouraging critical practices such as comparison, discussion, analysis, and evaluation. Additionally, this educational model enhances communication within the broader educational ecosystem, fostering stronger connections among teachers, students, institutions, families, and the broader community. It also promotes the adoption of digital tools and the spread of technological literacy, helping to build a society that can keep pace with the demands of the modern world.

2.4. Types of Blended Learning

The first type of blended learning involves integrating online education with traditional classroom instruction, combining features from both approaches to create a well-rounded and adaptable learning experience(Hamidi & Kadhim, 2024).

The second type merges self-directed learning with collaborative learning. Self-directed learning emphasizes personalized instruction that caters to the individual needs of each student, while collaborative learning fosters active engagement among learners. Through this interaction, students exchange knowledge, review academic content and literature, and explore contemporary applications together (Hamidi & Kadhim, 2024).

The third type involves blending customized content with pre-designed educational materials. Although pre-made content may not reflect the specific learning environment or individual student preferences, it is recognized for its affordability and efficiency. The fourth type integrates tools that support learning, practice, and performance. Effective blended learning is achieved when these tools are synchronized within their appropriate timelines(Hamidi & Kadhim, 2024).

2.5. Main Tools in Blended Learning

There are multiple main means of blended learning, most of which are important and give significant positive results in delivering educational material to students. They are as follows(Ali, 2024) :

The first method: Direct dialogue on the Internet Relay: This method allows for direct communication through group discussions, brainstorming exercises, and problem-solving activities.

The second method: Real-time Audio with Visuals: This enables communication with trainees via the Internet, allowing audio to be combined with visuals.

The third method: Application Sharing, i.e., enabling trainees to participate with others in working on one of the application programs, such as open spreadsheets, or one of the presentations designed with the PowerPoint program, or using the electronic whiteboard on the network.

Fourth method: Dashboard: This is the primary method in the shared applications that enables trainees to write, select topics, take notes, draw, and paste content.

The fifth method includes: short tests and surveys. This method enables the group leader or teacher to assess the session's success. This way, at the end of the session, they can see the extent to which their goals have been achieved and access the results directly and easily.

The sixth method includes browsing the Internet. This method provides the ability to browse the World Wide Web through the virtual classroom by entering the required URL in the designated field.

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

2.6. Instructor's Qualities and Roles in Blended Learning

In blended learning, instructors must possess a range of qualities and skills to effectively utilize modern technologies and tools in delivering educational content. They are as follows(Al-Tamimi, 2019 ; Dawood, 2020 ; Al-Rababa, 2019 ; Al-Laheebi, 2017 ; Hussein, 2024) :

- Combining traditional and online teaching, designing tests and dealing with multimedia, creating a spirit of participation and interaction within the classroom, understanding the purpose of teaching and learning, the ability to search for new information on the Internet, and the desire to continue developing skills and updating information. The ability to deal with ready-made programs or those that require special skills to deal with them.

- The ability to interact with the Internet via email and exchange emails with students. The ability and desire to move from the traditional education stage to e-learning.

- And the possibility of transforming everything from a stereotypical, rigid image into a living reality that attracts the attention of students through various online media. And to establish in his mind that the entry of e-learning and the complete transformation to virtual classrooms, e-courses, and e-management is inevitable, in order to motivate him to work and train well during blended education, and benefit from it.

- His roles revolve around the professor being the lecturer, responsible for preparing and delivering lectures and lessons traditionally. He serves as the supervisor and guide for the students, encouraging them to attend classes, receive the educational materials sent to them, and complete the tasks assigned. The professor or teacher is responsible for the evaluation process, i.e., they evaluate the educational process, and they are also responsible for identifying both the positive and negative points (Al-Tamimi, 2019).

2.7. Students' Qualities and Roles in Blended Learning

Students should have specific characteristics and qualities to enable them to use blended learning correctly, including the following (Al-Tamimi, 2019; Dawood, 2020):

- The student should be a seeker of knowledge, not just a passive recipient of the material they receive from the teacher.

He should be trained in several skills, including using a computer, activating and using email, and speaking via the Internet.

- The student is the learner with the teacher present, who serves as the supervisor, guide, and encourager of their attendance at classes. The student is assigned to carry out tasks with his classmates in cooperative groups.

- The student is interested in reading the textbook and building social relationships with his classmates.

The student's role revolves around feeling like he is a participant in the lessons and that his role is not limited to being just a recipient. It is necessary to practice conversing and explaining lessons online. He must be familiar with and able to use email in order to receive all related study materials (Al-Tamimi, 2019; Dawood, 2020; Khalil, 2019; Ayada, 2017).

2.8. Reasons for the Success of Blended Learning and Barriers to Its Implementation

The success of blended learning depends on two primary components of the educational process: the teacher and the student. Teachers must be capable of traditional teaching methods while also integrating technology into their lessons (Saleh & Ziyoun, 2023). They should be proficient in using course design software, whether pre-designed or requiring specific technical skills, and be

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

able to convert traditional assessments into digital formats. Furthermore, teachers should be open to transitioning from traditional teaching to e-learning (Jassim & Aziz, 2024). The student's active role is crucial for effective interaction with the instructor and achieving educational goals.

A key technical requirement is the presence of virtual classrooms that complement traditional ones. These classrooms must be equipped with computers, projectors, and reliable internet connections. Despite its advantages, blended learning faces several challenges. One of the most significant difficulties is the shift for teachers from traditional, lecture-based teaching methods to more modern approaches. Another challenge is the lack of self-directed learning skills among some students, as well as insufficient computer and internet skills. Teachers may also need to invest more time and resources to prepare digital materials. The scarcity of computers in educational institutions, poor digital infrastructure, and the high cost of internet services also make it difficult to maintain continuous training. Moreover, the lack of essential equipment for both teachers and students, such as workstations, impedes the implementation of new teaching methods.

Blended learning is often not regarded as a serious strategy for improving education, mainly due to a lack of enthusiasm from some teachers. These instructors often cite concerns about the effectiveness of blended learning and prefer traditional face-to-face teaching methods. Additionally, many teachers face difficulties with software in English, and most educational materials are still in printed form, requiring conversion into digital formats.

3. Methodology

The researcher employed the descriptive-analytical method for this study. This approach involves collecting data, information, and facts about the phenomenon or topic under examination, followed by analysis, interpretation, and drawing conclusions based on the findings. The term validity refers to the instrument's ability to measure the research variables it was designed to measure. Consideration was given to the instrument's completeness in its absorption of the research variables and the absence of duplication. Therefore, to verify the instrument's face validity, a copy of the questionnaire was presented to several members of the specialized panel (Appendix 1). The questionnaire received a 100% agreement rate from the majority of the panelists. The panelists' comments were taken into account to correct some phrases and reformulate them more appropriately.

3.1. Research Community

The research community for this study comprised faculty members from a diverse range of academic institutions across Iraq. Specifically, the study targeted professors from 17 public and private universities, ensuring a broad representation of disciplines, academic ranks, and institutional types. By including a diverse range of universities, the study aimed to gain a comprehensive understanding of the academic environment in Iraq. This diversity also enhanced the generalizability of the findings, as it allowed for insights drawn from varying institutional settings, research cultures, and teaching experiences. The selection of professors as the primary participants was intentional, given their direct involvement in academic research, knowledge dissemination, and their potential influence on educational policy and innovation within the higher education system.

3.2. Research Sample

The research sample consisted of 50 university professors from various Iraqi universities, carefully selected to reflect the diversity of academic disciplines and institutional affiliations within the country. Data were collected through a structured questionnaire specifically designed to align with the study's objectives. This instrument aimed to capture the participants' perspectives and experiences relevant to the research questions. The data collection process was conducted within a one-week timeframe, ensuring the timely and efficient gathering of responses while maintaining the

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

reliability and validity of the collected information. The selected sample size, though limited, was deemed sufficient for exploratory analysis and offered valuable insights into the academic landscape across Iraq.

3.3. Data Collection Tools

To gather the necessary information, the researcher relied on a range of tools suited to the study's nature and methodology, including books and scientific references related to blended learning. Previous studies and research on blended learning. Websites containing information on blended learning and A questionnaire.

3.4. Data Analysis and Results

The study population consists of lecturers from Iraqi universities. A random sample of 50 lecturers was selected from 17 public universities in Iraq. Table 1 provides details about the lecturers, including their titles and academic specializations. The table reveals that the majority (68%) of the professors are female, while 32% are male, which may indicate a higher representation of women in higher education. The distribution also shows a variety of academic titles, with professors (26%) and assistant professors (18%) being the most common. Additionally, a significant majority (78%) of the professors specialize in the humanities and education, indicating that the survey primarily focuses on these fields. The University of Baghdad is notably well-represented, with 38% of the sample from this institution, highlighting its prominence in Iraq's higher education system.

4. Results

Table 1. Demographic Profile

Variables	Frequencies	Percentages
Gender		
Male	16	32%
Female	34	68%
Academic Title		
Professor Doctor	4	8%
Professor	13	26%
Assistant Professor	6	12%
Doctor		
Assistant Professor	9	18%
Lecturer Doctor	5	10%
Lecturer	4	8%
Assistant Lecturer	9	18%
Scientific Specialization		
Humanities and Educational Sciences	39	78%

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

Applied and Engineering Sciences	7	14%
Medical and Health Sciences	2	4%
Administrative and Economic Sciences	0	0%
Others	2	4%
Workplace		
University of Baghdad	19	38%
Al-Mustansiriya University	10	20%
University of Mosul	1	2%
University of Tikrit	1	2%
University of Basra	2	4%
University of Maysan	1	2%
Al-Mansour University	1	2%
Ministry of Education	2	4%
University of Dhi Qar	2	4%
University of Anbar	1	2%
University of Diyala	2	4%
University of Kirkuk	1	2%
University of Jarmo	1	2%
University of Babel	1	2%
University of Wasit	2	4%
Technical University	1	2%
Iraqi University	2	4%

Figure 2 illustrates the percentage of professors who are familiar with blended learning. An overwhelming 98% of the professors are knowledgeable about it, indicating that their understanding of blended learning could significantly impact its implementation in their classrooms. Professors with a firm grasp of the concept are likely to be more equipped to integrate the tools and strategies associated with this approach.

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

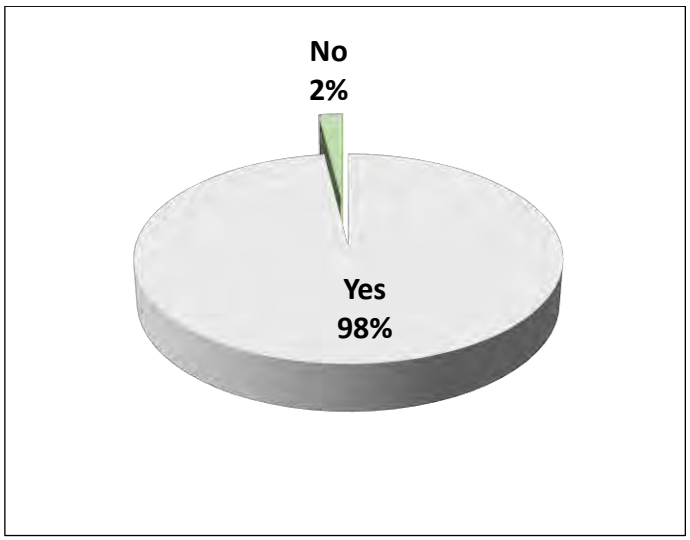

Figure 2. The Percentage of Professors' Knowledge about Blended Learning

Figure 3 presents a bar chart showing the percentage of professors using blended learning in Iraqi universities, divided into four key categories: Less than 25%: This category accounts for the largest percentage, with 54% of professors using blended learning at a rate of less than 25%. This suggests that most professors make minimal use of this educational model. 25% to 50%: Here, 34% of professors use blended learning between 25% and 50%, indicating a moderate level of adoption and a higher degree of interest compared to the previous group. 50% to 75%: Only 2% of professors fall into this category, using blended learning between 50% and 75%. This reflects a small group of professors who rely more heavily on this approach. More than 75%: This category includes 10% of professors who use blended learning extensively, with a reliance exceeding 75%.

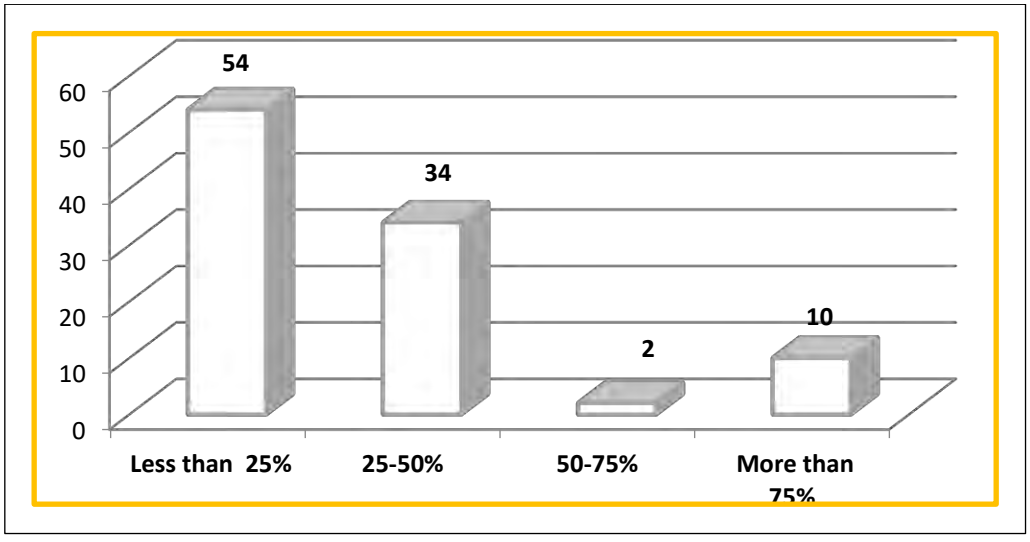

Figure 3. The Percentage of Blended Learning Usage by Professors in Iraqi Universities

Figure 4 presents a bar chart displaying the percentage of tools used by professors in blended learning, categorized into four main groups: Google Classroom and Moodle Platforms. The largest percentage (72%) of professors use educational platforms such as Google Classroom and Moodle. This indicates that these platforms are the most commonly adopted, highlighting their effectiveness in supporting the learning process. Virtual Classrooms: Approximately 18% of professors utilize virtual classroom platforms, such as Microsoft Teams. Although this percentage is lower, it demonstrates growing interest in utilizing these tools for educational purposes. Assistive Applications (e.g., Audio or Video Recording): A small percentage (5%) of professors utilize assistive tools, including audio or

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

video recording applications. These tools support learning but are less frequently utilized. Other Types: Only 2% of professors use alternative tools not mentioned in the previous categories.

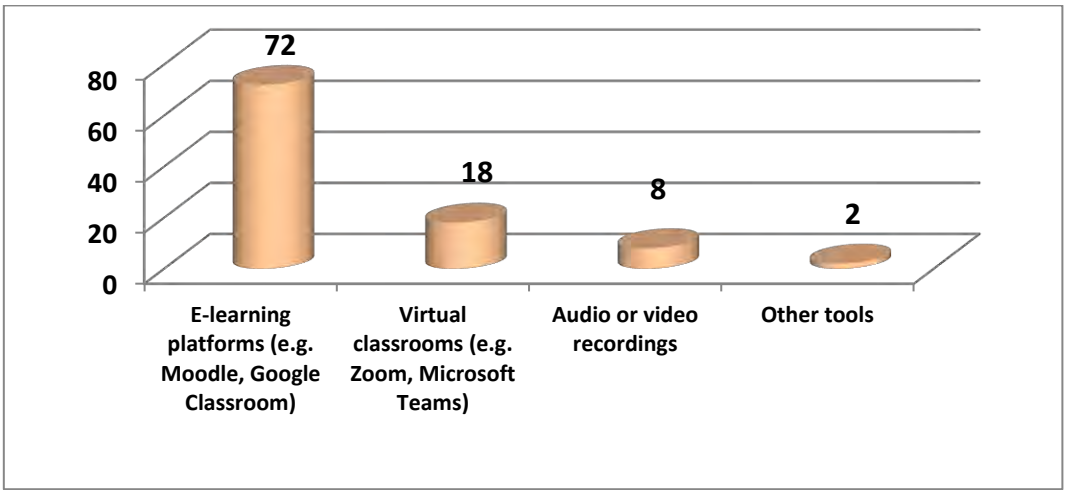

Figure 4. Shows the Percentage of Tools Used by Professors in Blended Learning in Iraqi Universities

Figure 5 presents a bar chart showing how professors evaluate the quality of education when using the blended learning system. The chart is divided into five main categories: Weak: A very small percentage (2%) of professors believe the quality of education in blended learning is weak. This suggests that most professors do not see this as a common issue. Good: 22% of professors rate the quality of education as good. While this reflects a positive experience, it may not be enough to be considered fully reassuring. Acceptable: The largest percentage (62%) of professors feel that the quality of education is acceptable. Although there is room for improvement, this suggests that many professors perceive a decent level of engagement. Excellent: 14% of professors consider the quality of education to be excellent, reflecting some successful experiences that could serve as models for others.

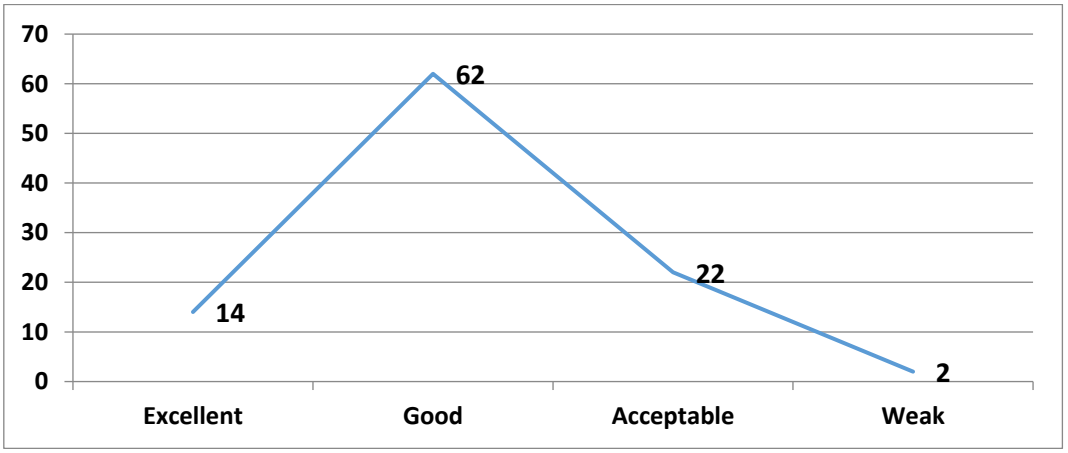

Figure 5. The Percentage of Professors' Evaluation of Their Experience during Blended Learning

The study also analyzes the key challenges faced by professors in blended learning. Figure 6 displays the challenges faced by professors when implementing blended learning in Iraqi universities. The chart highlights the percentages of various challenges, including a lack of training, where 16% of professors report this challenge. Technical issues: 50% of professors face technical problems. Weak student interaction: 28% of professors identify this as an issue. Lack of educational resources: 6% of professors encounter this difficulty. These challenges highlight key areas that require improvement. The frequent reporting of these obstacles could impact the effectiveness and quality of blended learning. Understanding these challenges can help universities create strategic plans to overcome them.

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

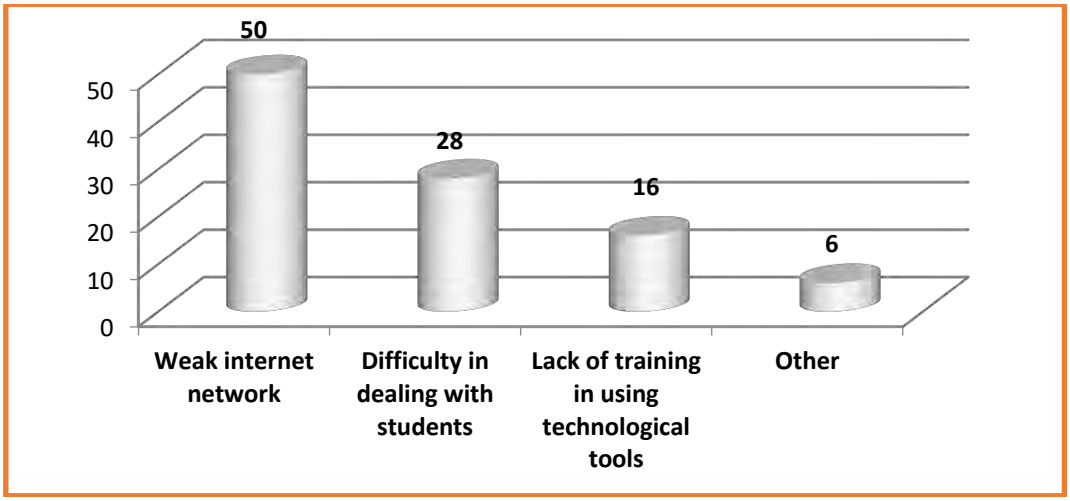

Figure 6. The Percentage of Challenges Faced by Professors during Blended Learning

The study also explored the satisfaction level of professors with blended learning compared to traditional education. Figure 7 illustrates professors' opinions on the quality of blended learning compared to traditional education. The chart is divided into three main categories: Yes: 46% of professors believe that blended learning offers better educational quality than traditional methods. This indicates strong support for the advantages of this approach. To Some Extent: 44% of professors feel that blended learning provides an acceptable quality of education, though they do not see it as clearly superior to traditional education. This group takes a more cautious view, requiring additional experience to assess the effectiveness of blended learning fully. No: 10% of professors disagree, believing that blended learning does not provide better educational quality.

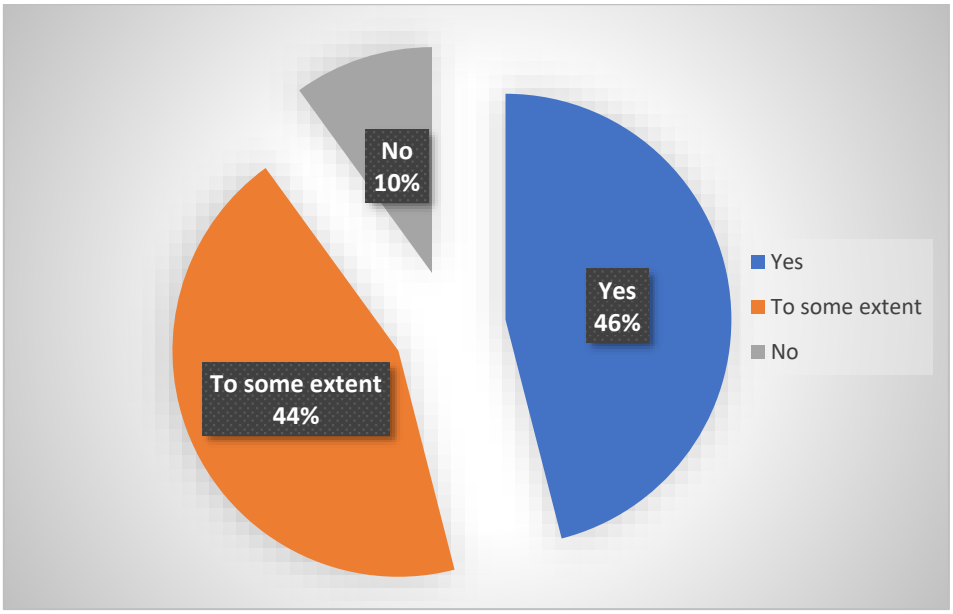

Figure 7. The Professors' Opinions on Continuing to Use Blended Learning After the Crisis Ends

Additionally, the study identified the key advantages of blended learning from the professors' perspective. Figure 8 highlights the main advantages of blended learning. Flexibility in time and location stands out as the most prominent benefit, with 68%, showing its significant importance and widespread support. Diversity of educational resources follows in second place with 22%, indicating that while it's important, it is considered less impactful than flexibility. Cost reduction ranks last, with just 10%, suggesting that it is seen as the least influential factor in the context of blended learning.

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

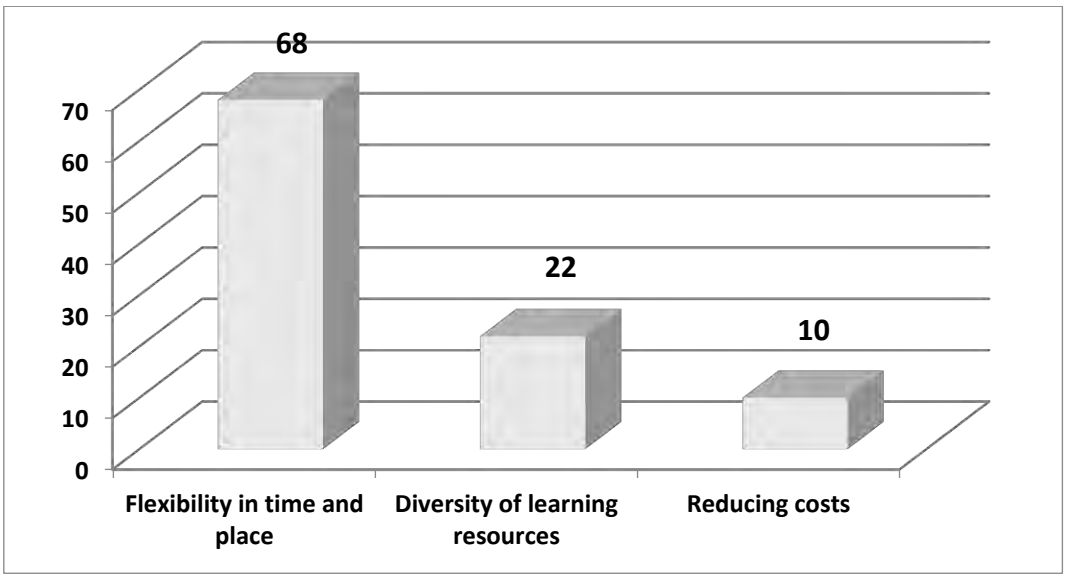

Figure 8. The Professors' Beliefs about the Quality of Blended Learning Compared to Traditional Education

On the other hand, the study illustrated the key disadvantages of blended learning from the professors' perspective. As shown in Figure 9, the lack of necessary technological tools represents 38% of the challenges encountered, highlighting the significant impact of missing essential technology on performance and interaction. Moreover, lack of direct interaction constitutes the largest portion, at 42%, indicating that this is the most significant challenge. It points to the potential negative effects of reduced face-to-face interaction between individuals or groups on the overall effectiveness of learning. Finally, difficulty in focusing within the learning environment represents the smallest percentage at 28%. Although it remains a challenge, the learning environment can still have a significant influence on individuals' ability to stay focused and productive.

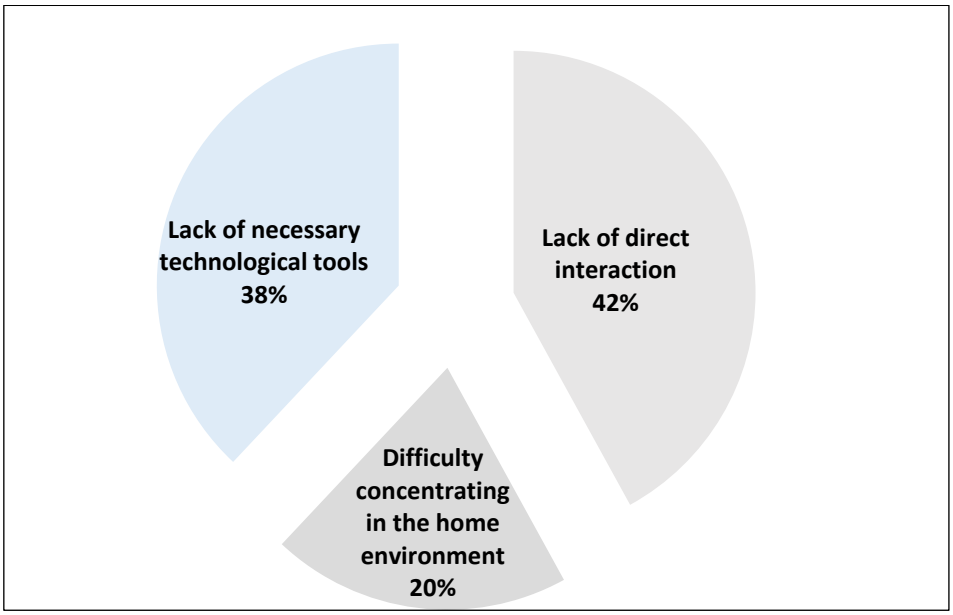

Figure 9. Disadvantages of Blended Learning from the Professors' Perspective

The study also analyzed their opinions on whether professors received sufficient training to use blended learning tools. Figure 10 showed that 42% of professors indicate that they feel adequately trained to use blended learning tools. This suggests that a reasonable level of support has been provided for some professors in this area. Moreover, 52% of professors, representing the largest proportion, indicate that more than half of them feel they received some training, but not enough.

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

These professors still require further skill development and additional time to master the tools fully. This highlights the need to improve the training programs by offering more diverse resources and extended training periods. Finally, only 6% of professors indicate that they feel they have not received adequate training and lack expertise in blended learning tools. Although the percentage is small, it still indicates a group that requires additional support, time, and skill development.

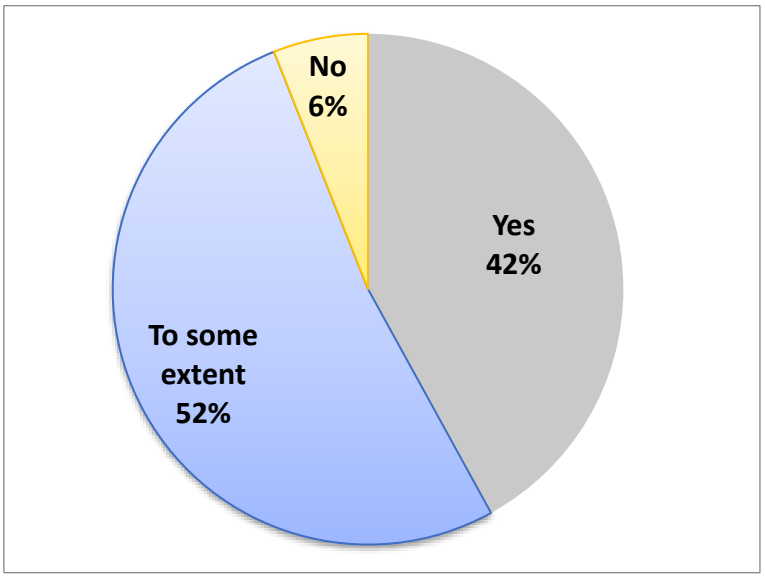

Figure 10. The Percentage of Professors Receiving Adequate Training on Using Blended Learning Tools

The study also evaluated the professors' interaction with students in the blended learning systems. Figure 11 illustrates that 52% falls under the "Acceptable" category, indicating that while interaction is satisfactory, there is still room for improvement to enhance the level of engagement. The "Weak" category, at 4% shows that a small number of professors are struggling with student interaction, highlighting the challenges some may face in effectively engaging with their students. The "Excellent" category, with 10%, reflects a positive outcome, although this percentage remains small. While some professors achieve good interaction, further efforts are needed to optimize engagement and communication. In general, the chart highlights the importance of developing new strategies and approaches to enhance interaction between professors and students in a blended learning environment.

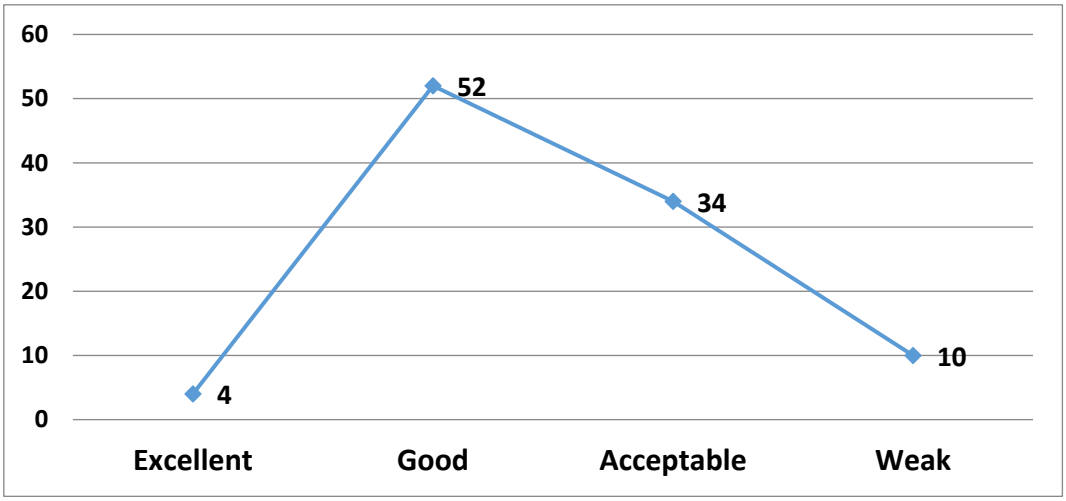

Figure 11. The Percentage of Professors' Interaction with Students through Blending Learning Systems

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

The study also analyzed IS literacy among professors by examining their ability to access educational materials through online platforms. Figure 12 presents the distribution of challenges encountered by professors when trying to access educational materials through online platforms. A significant portion, 74%, indicates that many professors experience occasional difficulties, highlighting the need for improvements to facilitate better access to educational resources. A smaller percentage, 2%, points to a group of professors who face constant issues, suggesting that more comprehensive solutions may be required to enhance the overall quality of resources. Finally, 28% of professors report smooth access, implying that while some platforms work efficiently, there is still room for improvement to ensure a seamless experience for all users.

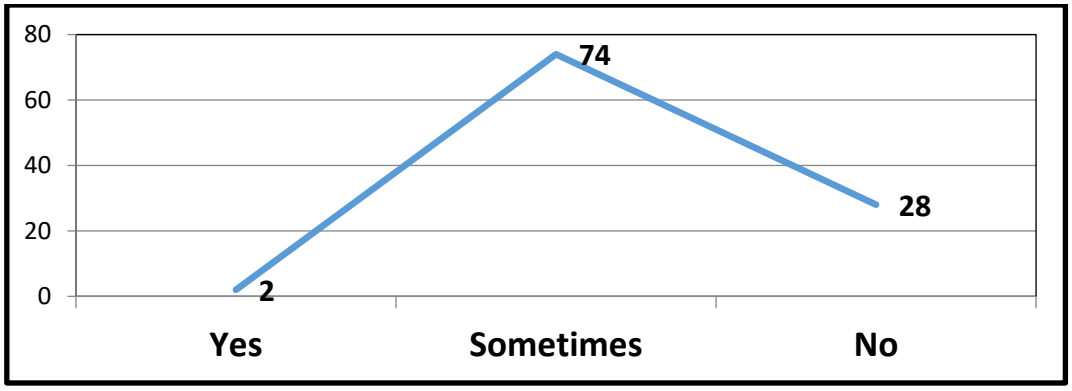

Figure 12. The Percentage of Professors' Interaction with Students in the Blended Learning System

Finally, the study investigated the professors' opinions on continuing blending learning after the crisis. Figure 13 shows professors' views on whether to continue using blended learning once the crisis has passed. The chart is divided into three categories: "Yes" category, which includes 54% of professors, indicating that the majority are in favor of continuing with blended learning. This suggests a strong belief in the benefits of this educational approach. "Sometimes" category, with 22% of professors, reflects some uncertainty about the future use of blended learning. These professors may require more experience or support to evaluate the effectiveness of the system in their teaching fully. "No" category, representing 24% of professors, shows that a significant portion prefers not to continue with blended learning after the crisis.

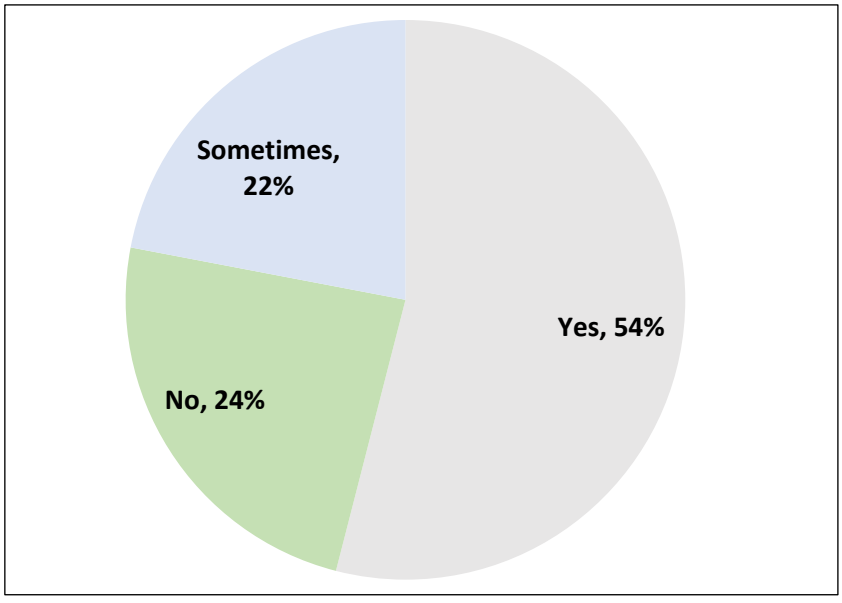

Figure 13. The Percentage of Difficulties Professors Face in Accessing Educational Materials through Electronic Platforms

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

5. Conclusion

The research concluded that a major reason behind some Iraqi university professors' reluctance to adopt blended learning in their courses is the Lack of financial, technical, academic, and administrative support, limited material resources, and insufficient knowledge on how to use computers and blended learning software.

The research found that students are not interested in using blended learning in their lectures due to a lack of support from the university, insufficient financial resources, and the professor's limited interest in implementing blended learning in their lessons, which negatively affects students.

Blended learning complements traditional teaching methods and is an important addition to traditional higher education. With its diverse methods, techniques, and tools, it represents a promising technology for coordinating teaching methods that utilize face-to-face instruction and e-learning, employing various techniques and tools.

Blended learning has helped teach a number of subjects that cannot be taught online due to their difficulty. At the same time, students can benefit from lectures during holidays and during difficult circumstances when they cannot access traditional classrooms.

Blended learning is characterized by the flexibility of using various electronic technologies with low financial expenditure. It also works to strengthen human and social relationships between teachers and learners.

It has contributed to increasing educational activities, enhancing their effectiveness, and diversifying their knowledge sources. Furthermore, it has facilitated access to educational content, reduced border barriers, saved time, alleviated the student overcrowding crisis, and eased the financial burden on families for education, including travel expenses, purchasing school supplies, and other necessities.

Blended learning makes the student a central axis in the educational process, while simultaneously emphasizing their interaction with the teacher and increasing the rate of information retention compared to traditional learning.

Blended learning has enhanced teachers' ability to manage traditional teaching methods. Blended learning faces several challenges, the most significant of which include a lack of awareness among teachers and students about the need to implement blended learning and a shortage of sufficient computers in educational institutions.

The lack of resources to support curriculum development for teachers and the difficulty of supporting English language proficiency in e-learning programs have made it necessary for teachers to master these skills and attend training courses on how to guide and manage curricula based on e-learning or blended learning.

6. Suggestion

1. Increase awareness among university faculty about the significance of blended learning by organizing courses, workshops, and conferences aimed at training them on the use of relevant educational software.

2. Provide all necessary resources for blended learning, including computers and internet access in classrooms.

3. Encourage students to adopt blended learning in their courses by involving them in workshops and training sessions on how to use various blended learning tools effectively

https://doi.org/10.22521/edupij.2025.18.526 Published online by Universitepark Press

4. Working to develop diverse educational cultures in Iraqi universities and improve economic and social conditions and technological infrastructure.

5. Forming specialized committees to monitor, follow up, evaluate, and measure the development of the effectiveness of the use of blended learning and all related activities in Iraqi universities, and providing all their requirements.

Declarations

Author Contributions. The authors contributed equally to the preparation of this manuscript. Their contributions include conceptualizing and writing both the theoretical and practical aspects of the research, as well as collecting, reviewing, and analyzing the relevant sources.
Conflicts of Interest. The authors declare that there are no conflicts of interest regarding the publication of this research
Funding. The authors declare that no financial support or funding was received for this research.
Ethical Approval. The authors affirm their adherence to the principles of research integrity and publication ethics. This manuscript complies with the ethical standards of academic publishing.
Data Availability Statement. All data and sources related to this research are openly accessible on the internet.
Acknowledgments. The authors would like to thank all the lecturers at Iraqi universities who responded to the research questionnaire sent to them.

References

Agosto, D. E., Copeland, A. J., & Zach, L. (2013). Testing the benefits of blended education: Using social technology to foster collaboration and knowledge sharing in face-to-face LIS courses. *Journal of Education for Library and Information Science*, *54*(2), 94–107.https://files.eric.ed.gov/fulltext/EJ1074116.pdf

Ali, A. M., Ahmad, M. M., & Abdul Rahman, B. M. (2024). The reality of using blended learning in achieving Arabic language for secondary school students from the perspective of their teachers. *Nasaq Journal*, *42*(7), 89–101.https://drive.google.com/file/d/1DDkBj-5wfNKjn0Chf3A8I6fdEO97uxi1/view

Ali, M. H. (2024). Blended learning and its impact on student achievement in art criticism and analysis. *Nasaq Journal*, *41*(1), 77–88.https://drive.google.com/file/d/1Ui7OadvX39u9lNFRq9jLn-R67rOeNz3P/view

Avazmatova, M. M. (2020). Significance of blended learning in education system. *The American Journal of Social Science and Education Innovations*, *5*(525), 134–139. https://www.researchgate.net/profile/Marhabo-Avazmatova/publication/343970415_Significance_Of_Blended_Learning_In_Education_System/links/60cdc0b1458515dc17924ea8/Significance-Of-Blended-Learning-In-Education-System.pdf

Bath, D., & Bourke, J. (2010). *Getting started with blended learning*. Griffith University. https://www.yumpu.com/en/document/view/22085397/getting-started-with-blended-learning-pdf-27-griffith-university

Daskan, A., & Yildiz, Y. (2020). Blended learning: A potential approach to promote learning outcomes. *International Journal of Social Sciences & Educational Studies*, *7*(4), 103–109. https://ijsses.tiu.edu.iq/index.php/ijsses/article/view/296/285

Dawood, H. S. (2020). The impact of blended learning strategy on the scientific awareness of third-year intermediate students in biology. *Journal of Educational and Scientific Studies*, *2*(15), 88–97. https://iasj.rdd.edu.iq/journals/uploads/2024/12/17/e6405199fe5a947546f35a48a1da6d6f.pdf

Ghawadra, N. (2017). The effect of implementing blended learning on the achievement of students in research methodology courses at the Faculty of Education, Al-Khalil University. *Palestine Technical University Journal of Research*, *5*(1), 23–36. https://digitalcommons.aaru.edu.jo/cgi/viewcontent.cgi?article=1050&context=ptuk

Al-Hamdi, A., & Al-Husseini, K. (2020). Towards blended learning in engineering disciplines: Computer engineering programs as a model. *Al-Kut University College Journal of Humanities*, Special Issue for the 29th International Conference "Digital Education: Between Necessity and Need", November 11–19, 2020, 87–97. https://jh.uokut.edu.iq/article_10531_f9af010912f2c4401bbd8f668cafe841.pdf?lang=ar

Hamidi, I. M., & Kazem, S. A. (2024). The degree of awareness of blended learning requirements in Iraqi universities from the perspective of faculty members. *Nasaq Journal*, *14*, 58–69. https://drive.google.com/file/d/10DEZ9yqsBcyqZNTx3wbsm-mPu7mT8T_6/view?usp=sharing

Hussein, M. A. A. (2024). Blended learning and its problems for female intermediate students from the perspective of Arabic language teachers. *Iraqi Journal of Humanities, Social, and Scientific Researches*, (14A), 145–158. https://iasj.rdd.edu.iq/journals/uploads/2025/08/14/f22358c0c5d83307b5afa03f53548017.pdf

Jamil, S. S., & Amin, S. A. (2024). Measuring university professors' attitudes towards blended learning during the COVID-19 pandemic. *Al-Qadisiyah Journal of Arts and Educational Sciences*, *24*(2), 11–30. https://edujou.qu.edu.iq/index.php/QJAES/article/view/264/240

Jasem, S. H. I., & Aziz, M. S. (2024). The impact of employing blended learning on physics achievement for fourth-year scientific female students. *Journal of Educational and Psychological Researches*, *21*(83), 101–116. https://jperc.uobaghdad.edu.iq/index.php/jperc/article/view/1945/1342

Al-Jubouri, N. A. A. J. (2020). The role of digital education in improving performance and achievement in chemistry for secondary education. *Al-Kut University College Journal of Humanities*, Special Issue for the 29th International Conference "Digital Education: Between Necessity and Need", November 1–9, 2020, 225–236. https://jh.uokut.edu.iq/article_10534_5d3fc2c2820f013bf377c2101469958a.pdf?lang=ar

Al-Lahibi, A. R. A. M. (2017). The effect of blended learning on achievement of second-year intermediate students in physics, development of scientific skills, and their attitude towards physics. *Al-Fath Journal*, *71*, 321–335. https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/article/view/1374/1104 https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/article/view/1374

Lloyd-Smith, L. (2010). Exploring the advantages of blended instruction at community colleges and technical schools. *MERLOT Journal of Online Learning and Teaching*, *6*(2), 508–515. https://jolt.merlot.org/vol6no2/lloyd-smith_0610.pdf

Al-Mawla, M. M. A. (2024). A proposed strategy for blended learning in teaching methods curriculum and student attitudes towards it in the Life Sciences Department, College of Education for Pure Sciences. *Psychological Sciences Journal*, *35*(2), Part 4, 143–158. https://iasj.rdd.edu.iq/journals/uploads/2025/04/27/2a551b267f8d1b8b53b8363a570b7c64.pdf

Al-Rababa, N. K. A. (2019). The impact of implementing blended learning strategy on achievement in the Arabic language curriculum for seventh grade students in schools of Amman. *Journal of Educational and Psychological Researches*, *16*(61), 119–132. https://jperc.uobaghdad.edu.iq/index.php/jperc/article/view/1006/806

Rao, C. S. (2019). Blended learning: A new hybrid teaching methodology. *Journal for Research Scholars and Professionals of English Language Teaching*, *3*(13), 1–7. https://files.eric.ed.gov/fulltext/ED611486.pdf

Saleh, J. A., & Zuboon, R. S. (2023). Requirements for implementing blended learning in the Arabic language departments in colleges of basic education from the perspective of faculty members. *Maysan Research Journal*, *19*(37), 102–117. https://iasj.rdd.edu.iq/journals/uploads/2025/01/31/6e064e3eb014a7ff6c4cf2f552d46a3c.pdf

Suleiman, A. S. (2024). The role of blended learning in improving the quality of the educational process: A case study of some schools in Nineveh Governorate. *Iraqi University Journal*, *68*(1), 144–156. https://iasj.rdd.edu.iq/journals/uploads/2025/05/03/df2b095dc2961e000902269210f6d686.pdf

Al-Subaie, A. R., & Al-Qubati, A. A. A. (2020). The reality of using blended learning from the perspective of Arabic language teachers in teaching primary school students. *Arab Journal of Scientific Publishing*, *21*, 55–67. https://www.ajsp.net/research/واقع%20استخدام%20التعلم%20المدمج%20من%20وجهة%20نظر%20م علمي%20ومعلمات%20اللغة%20العربية.pdf

Al-Tamimi, A. L. (2019). The effectiveness of the blended learning strategy in chemistry achievement for third-year intermediate students. *Journal of Educational and Scientific Studies – College of Education – Iraqi University*, *1*(14), 125–138. https://journals.esj.edu.iq/index.php/JESS/article/view/106/92

About the Contributor(s)

Suaad Hadi Hassan Al-Taai, PhD, is Professor of History of the Mongols and the Islamic East at University of Baghdad Her main research interests include: History of India, China and Turkey, History of Islamic Civilization and Thought, Environmental Pollution, Human and Sustainable Development, Human Rights, E-Learning and Blended Learning Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=57224948956
Email: suaad.hadi@ircoedu.uobaghdad.edu.iq
ORCID: https://orcid.org/0000-0002-8981-4339

Waleed Abood Mohammed Al-Dulaimi, PhD is Professor in University of Baghdad/ College of Education Ibn Rushed for Humanities / department of History. Educational attainment: Doctorate in the modern and Contemporary history Accurate specialization: History of European - Arab Contemporary Relations. Research interests: Modern and Contemporary History of Japan; History of

International Relations; Human and Sustainable Development; Environmental Pollution; E-learning and blended learning. Scopus ID: https://www.scopus.com/authid/detail.uri?authorId=57224949507
Email: waleed.abood@ircoedu.uobaghdad.edu.iq
ORCID: https://orcid.org/0000-0003-3012-3880

Publisher's Note: *The opinions, statements, and data presented in all publications are solely those of the individual author(s) and contributors and do not reflect the views of Universitepark, EDUPIJ, and/or the editor(s). Universitepark, the Journal, and/or the editor(s) accept no responsibility for any harm or damage to persons or property arising from the use of ideas, methods, instructions, or products mentioned in the content.*

Appendix I.

Table A1. List of Experts to Demonstrate the Validity of the Questionnaire

N.	Name	Specialty	Place of Work
1	Professor Dr. Khalid Jamal Jassim	Measurement and Evaluation	Ibn Rushd College of Education for Humanities / University of Baghdad
2	Professor Dr. Manal Mohamed Ibrahim	Curricula and Teaching Methods	Ibn Rushd College of Education for Humanities / University of Baghdad
3	Assistant Professor Dr. Gian Yahya Bilal	Measurement and Evaluation	Ibn Rushd College of Education for Humanities / University of Baghdad