Al-Tamimi, A., Al-Shamiri, N., & AL- Dulimi, K. (2022). Integrated Accounting Education In Iraq Between Reality and Expectations: An Empirical Study. Akkad Journal of Contemporary Accounting Studies, 2(1), 1-19.

### INTEGRATED ACCOUNTING EDUCATION IN IRAQ BETWEEN REALITY AND EXPECTATIONS: AN EMPIRICAL STUDY

### Amal Mohammed Al-Tamimi

University of Karbala, Karbala, Iraq E-mail: amal.altamimy@uokerbala.edu.iq

#### Nahla Obeis Al-Shamiri

Al-Furat Al-Awsat Technical University, Karbala Technical Institute, Karbala, Iraq E-mail: nahla.talal@atu.edu.iq

#### Khitam Raheem AL- Dulimi

University of Karbala, Karbala, Iraq E-mail: khitam.r@s.uokerbala.edu.iq

Received: December 2021 1st Revision: January 2022 Accepted: March 2022 ABSTRACT. The research aims to provide an integrated conceptual framework on the most critical challenges and problems facing integrated electronic accounting education in Iraq and to identify the extent of its importance and effectiveness and the most significant proposed solutions to the issues facing both students and faculty. Two questionnaires were created and distributed electronically: one for accounting students in universities and institutes affiliated with the Ministry of Higher Education, with 161 responses, and the other for accounting professors in colleges and institutes, with 100 responses, and they were analyzed. According to the correlation coefficient, blended education has a considerable impact on education quality. Before the COVID-19 epidemic, universities and institutions in the Ministry of Higher Education and Scientific Research did not use e-learning. Modern electronic means include all advanced technical means that can be used and benefited from in the blended learning process, including computers as one of the main pillars, all devices, equipment, and all means of communication, such as computer networks of all kinds, and it is necessary to continue e-learning for some subjects, such as electronic and practical theoretical lectures. Therefore, electronic elements supplement my presence. Accounting education is an integrated system with several connected aspects to fulfill its aims, and elearning is becoming more popular in education. Blended Learning is one way to apply this notion to elearning.

*JEL Classification:* example D02, O17, P31

**Keywords**: Integrated Accounting Education, electronic accounting education, electronic education

#### Introduction

The multiplier effects of COVID-19 are increasingly beginning to appear, and this pandemic has affected businesses worldwide. As a result, fears are beginning to increase about what will happen next. Countries are going through exceptional circumstances and

emergencies, especially in curfews or natural crises such as rain And snow. In these cases, communication can take place between the educational institution represented by the teaching staff and the students or between the students themselves through the use of electronic means in the educational process and in light of the technical developments that occurred in the international business environment and the significant expansion that included all economic activities, it became important (A. H. Almagtome, Al-Yasiri, Ali, Kadhim, & Heider, 2020). The accounting teaching staff inside Iraq is a challenging and complex task that requires rapid response to these changes on an ongoing basis. Given the continuation of the virus (COVID-19) pandemic, scientific methods have been adopted, including (an e-learning system). The Ministry of Higher Education and Scientific Research has adopted policies and priorities for the performance of remote teaching and exams and for Using (multiple electronic platforms) for e-learning (E-Learning Platform Screens). However, the accounting teaching staff, despite being familiar with most of the electronic applications, practices, and international accounting standards, continued to suffer from many problems because accounting education inside the country needs a lot of fundamental modifications that it should undergo, so the apparent shortcomings in electronic accounting education on The local level emerged as a result of the presence of several challenges facing blended accounting education, which impede its continuous development. Therefore, this study seeks to provide an integrated picture of the most critical challenges to provide a set of proposed solutions to develop blended accounting education consistent with the accounting model in developed countries. Undoubtedly, higher education is crucial in any region of the world (Hameedi, Al-Fatlawi, Ali, & Almagtome, 2021).

#### 1. Literature review

### 1- The concept and importance of electronic accounting education

Electronic accounting education represents that education that uses Internet technology for communications and information. The education is obtained by technical means and is provided by the teaching staff on computers directly and immediately through local networks or the Internet (Al-Fatlawi, Al Farttoosi, & Almagtome, 2021). Electronic accounting education is important because it allows students and teachers to use the internet and its various applications, computer networks, and other electronic technologies to manage education. Distance education using computer technology and the application of technology in educational programs is one of the biggest challenges of our time. Technology has advanced greatly since the days when PowerPoint slides were an example of Innovative classroom technology. Studies indicate that accounting students are adept at using technology and expect to use it in the curriculum. It is worth noting that educational technology has remained essentially unchanged over the past two decades. Here, a question arises about integrating technology into accounting to improve the educational experience. For faculty and students? While online or co-education is part of technology integration, the effective use of technology to improve education is more complex. Research studies are needed to identify technologies that have the potential to improve accounting education and examine how these technologies are used or how they can be used in accounting education (Al-Wattar, Almagtome, & Al-Shafeay, 2019). It should be noted that since the 1980s, accounting education has gone through some particularly "turbulent times," and there have been increasing calls for improvement in terms of focusing on standards and overall quality (Campbell, Choo, Lindsay, & Tan, 2013), technical developments have changed the methods of carrying out tasks within the scope of accounting activities, and accountingrelated transactions have begun to take place through electronic means. Day after day, the rapidly growing growth and development in information technology have led to a digital revolution in the economic, social, and cultural fields. Delaney, Fletcher, Cameron, and Bodle

(2013) stress the need to recognize the importance of general skills in accounting education and implement a quality assurance framework that clarifies teaching and learning activities and assesses teamwork skills, especially in the context of large class sizes. These pedagogical approaches are developed over time for educators and relevant learners, and accounting educators find detailed guidance on the contributions and research tools for analyzing peerreviewed data that can be integrated into financial and management accounting, auditing, accounting information systems, and tax cycles. Liu, Chiu, Muehlmann, and Baldwin (2021), and the results of the research (Lucianelli & Citro, 2018) indicate broad support for the expectation and performance gap in education where Italian university programs and training course outcomes still conflict with the development of behavioral and practical skills required of professional accountants, and the importance of finding academics Available and to finish their research and courses about the real needs, the increase in the number of professional accountants in recent years, and cooperation not only for the growth of the innovation process in professional education, but also indicates the need to develop the accounting education methodology, as some researchers Al-Yasiri (2021) emphasize the phenomenon of the gap Between the skills they possess (the level of education or training) and the demand (in order to do their work), there is a need for universities to commit to include the graduates' professional characteristics or attributes in their accounting programs (A. Almagtome & Abdlazez, 2021). Yap, Ryan, and Yong (2014) indicate that there is no doubt that our present age is the information age, and since accounting is an information system, the method and operations of business transactions for economic units have changed using information technology, and this has affected accounting, and led to the need to keep pace with the changing circumstances of accounting To teachers and practitioners taking on new tasks, and to the inclusion of the information age and technical factors in education by making use of digital resources as well as theoretical information in accounting education provided in universities and creating an interactive environment to keep the student vigil and favoring the educational model that uses information technologies, in order to achieve this should be provided Students with goaloriented accounting courses, and an educational system must be created in which students can evaluate and interpret information beyond registration and make a difference through information and communication technologies, and so that all activities can be managed more efficiently, at an affordable cost, and more flexibly than before through online facilities (Güney, 2014). since all the parties to the activity (employee-manager-customer-general body-business partner-supplier) are real-time users of the system and share updated information immediately if there is a need for accounting staff through accounting education, and it is prepared The quality of accounting education is a factor that affects the success of the employees of economic units and thus those units themselves directly. In addition, the restructuring of accounting education and the development of contents by taking into account the current conditions are necessary with regard to training graduates of sufficient quality to respond and meet the needs of the times. All the institutions of society have been severely affected by the COVID-19 pandemic in the world, some of the consequences of this crisis have been positive and some have been negative, and among these impacts that will have the greatest impact in the future is education (Coban & Vardar, 2021). Hussein Hakeem Barzani (2021) determined levels of higher education students' satisfaction with distance education, while (Atasoy et al., 2020) determined levels of higher education students' satisfaction with electronic courses. In addition, a study examining higher education students' perceptions of stress during Distance education has been conducted before (Turan & Gurol, 2020).

#### 2. The concept of blended learning

Blended education is an innovative concept that includes the advantages of both traditional classroom teaching, i.e., the presence of students in the classroom, as well as the use of

information and communication technology that supports education, including offline and online learning, and that blended learning is a method that should be adopted. Dangwal (2017) indicates that blended learning represents an approach to education that combines online educational materials and opportunities for online interaction with traditional, place-based classroom methods, as it requires the physical presence of both the instructor and the student with some student control over time or space. Blended learning is used in training and professional development settings. Blended learning allows students to learn at their own pace and level of their abilities by including a virtual environment, where education is not limited to a physical classroom, and education can occur in long periods in parts and parts, from home, from a café, or during lunch break, depending on what fits the schedule, blended learning allows more flexibility as teaching can be done anytime and anywhere, and eliminates the need to attend class allowing for more excellent geographic range, and is preferred by Students who cannot participate in class at set times each day or week, and this can include learners who have young children, full-time jobs, or physical disabilities, or who live in different cities (Oliver & Trigwell, 2005). Covid-19 has invaded most countries, forcing all educational institutions to switch from direct education to e-learning. About 1.5 billion children and young people in 188 countries were forced to stay home after their studies in schools and institutions of higher education where closing was (Affouneh, Salha, & Khlaif, 2020).

### 3- The importance of blended learning

Bonk & Graham sees that blended education is a combination of e-learning in all its forms and shapes, whether computer-based or on the internet, and regular education, so that it is not limited to one of them only, but rather both (Bonk & Graham, 2012). Blended education is as follows:

- 1. Better speed and flexibility for learning, i.e. (educational flexibility)
- 2. Increasing the effectiveness of education compared to traditional education
- 3. Not being bound by the limits of space and time, as is the case with conventional education
- 4. Develop the concepts of teamwork and cooperative one-team work
- 5. Save time for the student by not going to the university
- 6. Contributes to increasing learning experiences for students
- 7. This leads to an increase in the motivation of the learning process through the use of multimedia for teaching
- 8. Achieving educational goals through the use of the most important technical innovations and many things promote blended education, including the following:
  - a. Blended education contributes to enabling students to improve and develop themselves on their own. It also tries to reduce students' anxiety and tension and increases students' satisfaction with themselves.
  - b. Blended learning is one of the most enjoyable education systems for both the student and the teacher

- c. The blended education system is the most efficient as it improves the effectiveness of the entire educational process
- d. Increase communication and positive interaction between teacher and student
- e. The blended education system increases students' sense of responsibility and the importance of education
- f. The blended education system covers all types of education
- g. The blended learning system is trying to reduce education expenses compared to e-learning only significantly
- h. The blended education system enhances cultural communication between different cultures to benefit from all that is new and innovative in the various fields of science
- i. Find customer-oriented solutions.
- j. Reducing the consumption of available resources.
- k. Systematic improvement of the final added value and delivery to the end-user.
- 1. Enhance quality and delivery faster and more flexibly.
- m. Reduce costs.
- n. Reduce the periods for the flow of operations activity.
- o. Limit and delete unnecessary activities.
- p. Achieving high efficiency with the least effort possible.
- q. Get rid of marketing activities that do not add value to the customer.
- r. Identifying the expected markets for certain products and taking notes of sales and purchases, customer behavior, and other phenomena

### 4- The Blended learning features and benefits

Blended learning has many characteristics that can be summarized as follows:

- 1. Blended education provides students with what enables them to deal with computers and the internet and their applications in terms of the dependence of many jobs on computer technology and the internet.
- 2. Blended education allows the limits of time and space in the educational process and the possibility of obtaining knowledge at any time, meaning that the university campus and classrooms will not be the only place to receive education and training.
- 3. Blended learning provides a continuous interactive environment where direct communication provides the process of communication between students and professors.

- 4. Blended education provides an automatic and direct evaluation of the student, leading to an increase in the percentage of attendance during university hours.
- 5. Obtaining information from direct sources, allowing the teacher to manage discussion and guidance
- 6. Blended learning increases the retrieval of knowledge and facts and answering questions, as well as the application and use of applied knowledge and how to search for reliable information.

### 5- Blended Accounting Education Challenges

Infrastructure and access to technology can cause some limitations to the successful integration of Blended Education (BE), and a range of challenges add to the restrictions in implementing blended education, including lack of clear policy, lack of faculty support, and lack of technology skills computer literacy, too many classrooms, and insufficient technological resources. Smith and Hill (2019) identified a set of disadvantages, such as the need for clear goals and objectives for blended learning, as well as that pointed out by Mirriahi, Alonzo, and Fox (2015). That the lack of an institutional definition of blended learning causes some challenges, in addition to the lack of staff able to deal with blended learning BL, as he confirms in this regard, Namyssova et al. (2019) indicate that it is generally believed that blended learning is an effective method of education because it consists Among the best advantages of both traditional face-to-face education and online education. In a study conducted by Grabinsk, Kedzior, and Krasodomska (2015), the results of the survey showed the following:

- Blended learning was viewed positively by the students.
- More than half of the students did not find any difference in the degree of difficulty in the classroom compared to the traditional one.
- The most important benefits of electronic classes are The ability to learn anywhere and anytime, which saves time and reduces education costs.
- The most severe defects involved: the impossibility of asking questions regularly, the lack of direct contact with the instructor, and the need for it

Among the most critical challenges faced by blended education in Iraqi universities are the following:

- 1. The difficulty of transitioning to blended education: If there is one thing that the forced and sudden shift to distance education has shown, it is that not all families are equally prepared to transition to distance learning using a personal device and a stable connection to the internet as requirements so that students do not fall behind and that the digital divide between Those who can meet the new basic needs of the modern world and those who cannot are broader than ever. Traditional (Usban) education is still the only option for a large number of people who live in low-income families where they see the educational institution not only as a place to learn but as a place Safe Provides Supervision of Their Children While Both Parents Work Given this mixed situation blended education considers these factors as the ideal compromise for a post-COVID-19 society.
- 2. Society's culture towards the orientation of blended education: the belief was that the problem, especially in the Arab countries and Iraq in particular, is not related to technology, curriculum, or assessment but instead is to redefine the concept of learning. There is resistance and objection to this approach by stakeholders (students, parents, business owners, recruitment agencies, etc.).
- 3. Strategies and policies of general education, higher education, academic accreditation for programs, recognition of educational institutions, and academic certificates and degrees related to the practice of blended education are still deficient and do not have a clear vision.

4. The presence of weakness in the current infrastructure, the low volume of investment in it, and the possibility of access to technology commensurate with the educational approach are still limited. Figure (2) shows the most critical challenges facing blended learning Figure (1) The most critical challenges facing blended accounting education in Iraq.

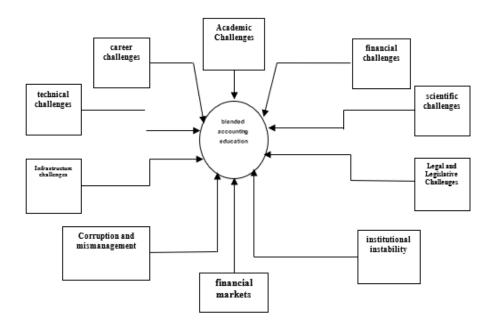


Figure 1. Challenges facing blended accounting education in Iraq

### 6- The Electronic Accounting

Electronic accounting represents a new development in the field of accounting, as electronic accounting helps companies maintain their financial statements and accounting software in a safe place, i.e., a secure environment that allows authorized users to access in real-time regardless of their location or their computing platform through new technologies such as internet and mobile phone (Topor, Akram, Fülop, Căpușneanu, & Ionescu, 2021). Advances in information technologies have changed the function of accounting in business and the role of accountants. Many employer bodies and professional associations of accountants have called for good IT skills, whether in auditing, financial accounting, Or management accounting. The relevant and appropriate information technology tools at the industry level need to be included in accounting curricula and taught with the help of modern teaching methods. Including information technology tools and concepts related to accounting units is necessary to ensure deep learning, understanding of the curriculum, and appreciation of information technology issues (Seethamraju Dr, 2010). The changes in the global economy caused by globalization have tightened the requirements for the transparency of financial information reports due to the emergence of the economic crisis and the moral responsibility of companies as an essential and integral element of business behavior. Since information is an important resource, new and significant challenges have been presented to accounting professionals. To face these challenges, information technology (IT) affects the accounting profession. It is developing and advancing with it at an increasing pace, as modern information technology systems enable accountants to access new types of information in real time, given that new technologies have the extraordinary analytical ability, thus creating a situation. It allows extensive data to be collected, processed, and presented in ways and at times that would have been unimaginable in the past. These developments have necessitated the expansion of the role of accountants concerning information technology systems from ordinary users to managers, designers, and

residents. Thus information technology has become one of the basic skills required for professionals or modern accounting and financial professionals (Santouridis, 2015). It must be linked to information technology with curricula. Higher education in accounting and finance. The contemporary business environment has changed drastically in a short time, and electronic accounting or online accounting is a new development in the field of accounting, as most accounting services are done using technologies such as the internet and mobile phones instead of recording documents on paper. Thus, source documents and accounting records exist in digital form rather than on paper and in an electronic accounting system format. It also helps businesses maintain their financial data and accounting software is stored in a secure environment allowing real-time access by authorized users, regardless of Their website or computing platform, this means that transactions will be recorded in an online server or database, and an electronic accounting system can be helpful in the effectiveness of the accounting process through the following advantages: (Hajera, 2016:260-261)

- 1. Universal access.
- 2. Extensive business track record.
- 3. Access to multiple websites.
- 4. Zero system management for end users.
- 5. Savings or economy due to serving a large number of customers.
- 6. Single/multiple and shared databases.
- 7. Improvements and fixes are constantly evolving and installed by the service provider.
- 8. Fast registration with advanced technology.

In the context of the importance of specialization, he asserts Oseni (2017) indicate that addressing the need for discipline within the profession requires adjusting the curriculum appropriately so that students should only address topics related to the field of specialization they choose, where a person can obtain Bachelor of Accounting in (taxes, auditing, financial management, etc.). Auditing activities carry out electronic auditing through electronic documents in the electronic environment. The most crucial impact of electronic accounting is to develop technology and achieve time savings. And the cost to the user and that electronic accounting provides opportunities for companies to perform accounting more effectively and efficiently by adapting the accounting functions in companies to advance towards paperless offices and also helps to reduce the cost of clerical work by providing sufficient space for storing data and processing information for management decisions in a computerized manner, Where accounting systems can be used by companies and is characterized by easy-to-use accounting, tools such as the exchange of data and money electronically and can provide opportunities for companies to progress and is a more system Effectiveness and contributes to saving money (Fatima, 2016).

### 7- The importance of international accounting education standards

The independent standards body that develops accounting education standards is the International Accounting Education Standards Board (IAESB). The importance of having exceptional standards for international accounting education is evident through the role assigned to it, which includes the following: (IFAC, 2010:10)

- 1- Reducing international differences regarding qualification and the work of a professional accountant.
- 2- Facilitating the global mobility of professional accountants.
- 3- Providing international standards that can be referenced to measure the extent to which educational institutions comply with the requirements of international accounting education standards, which necessarily help in measuring the efficiency of outputs.

The International Federation of Accountants issued six international educational standards in 2003, including www.IFAC.org, October 2003

First: Entry requirements for a professional accounting education program. IES1: Entry Requirements to A Program Of Professional Accounting Education

Second: the content of professional accounting education programs. IES2: Content Of

Professional Accounting Education Program Professional Skills

Third: professional skills. IES3 . Professional Skills

Fourth: Values, ethics, and professional conduct. IES4: Professional Values, Ethics, and Attitude

Fifth: Requirements for practical experience. IES5: Requirement Experience Practical Sixth: Assessment of professional competence and capabilities. IES6. Assessment of Professional Capabilities & Competence

The first international standard for accounting education emphasizes the importance that those who enroll in the study of accounting obtain a high level of adequacy in the previous education stage, intending to ensure success, as the high level may be considered evidence of possessing the necessary level of knowledge, skills and mental abilities that are being developed through knowledge Professional Accounting Education Program. Furthermore, the understanding and interests acquired through education and experience represent knowledge, which means an accumulated balance of information, experience, and studies in a particular field (Khaghaany, Kbelah, & Almagtome, 2019). The following table shows the standards that regulate accounting education in Iraq:

Table (1) Standards governing accounting education in Iraq

#	Standard name	Icon	Number of criteria
1	Accounting education standards	IAES	8
2	International Audit Standards	IAS	36
3	International Internal Audit Standards	I IAS	48
4	Accreditation criteria for the Faculties of Management and Economy	AACAB	15
5	Accreditation criteria for accounting departments	AACSB	6
6	Transparency indicators	S&P	80
7	Sustainability Accounting Standards	SASB (11) Sector	78
8	Global Reporting Initiative Standards	GREY	37
9	Standards of work ethics for Islamic institutions	AAOIFI	2
10	Sharia standards for Islamic financial institutions	AAOIFI	41
11	Standards of sharia controls for Islamic financial institutions	AAOIFI	7
12	Audit standards for Islamic financial institutions	AAOIFI	5
13	Accounting standards for Islamic financial institutions	AAOIFI	24
14	International Financial Reporting Standards	IFRS	17
15	International Accounting Standards	ISA	41
16	Iraqi laws and instructions		

Source: Table prepared by the two researchers in the light of accounting literature

In a study conducted by Lubbe (2020), where accounting education systems were examined in three countries - Australia, Japan, and Sri Lanka - to see and test the development (by applying)

a global model for accounting education, and the results showed that there are differences in accounting education systems, which are found all over the world. Where three countries were tested, the main differences between accounting education systems (some significant, others subtle) include professional entry requirements, programs, accreditation processes, and standard discipline standards. The researchers emphasized that understanding accounting education systems enhances the opportunity for global convergence of accounting education. The research provides an important starting point for considering issues of importance in developing the accounting education system or better understanding the similarities and differences across current systems. It is worth noting that the International Accounting Education Standards Board was established as an independent board that sets standards and operates under the supervision of the International Federation of Accountants. Its primary role is to set standards for education, practical experience, and continuing education for accountants, and it is represented by professionals and academics from all over the world. Basic rules can be used to guide the development of accounting curricula, where standards contribute to improving the efficiency of the outputs of the educational process. Universities, professional associations, and governments that seek to improve the quality of accounting education and professional development are committed to these standards to enhance the quality resulting from graduates and professionals alike. Watty, Sugahara, Abayadeera, Perera, and McKay (2014) have concluded that the model cannot meet all the diverse needs of different countries with unique cultural, political, social, and organizational environments well as their own needs. As the world is witnessing a shift towards a knowledge society, the university must provide a work environment that stimulates the spirit of initiative and creativity. Programs, courses and curricula must be knowledge-generating, as one of the challenges of global education reform is the need to graduate with a curriculum capable of delivering knowledge to students in The twenty-first century and in all fields of study for higher education institutions, then emphasizing that qualified graduates are the product or fruits of higher education institutions. There is no doubt that wars and economic sanctions in Iraq have led to the weakness of technology and education in Iraq (A. Almagtome, Khaghaany, & Önce, 2020).

### The Methodology of The Study

The accounting teaching staff in Iraq has contributed to solving many problems and obstacles related to blended accounting education. Still, despite all these efforts, the integrated accounting education inside the country suffers from many obstacles and challenges that hinder the work of teachers and students in accomplishing their tasks, including challenges The financial and technological challenges associated with the country's infrastructure without any tangible attempt, whether by researchers or national accounting associations, to study and diagnose these challenges and present proposals to solve them, whether in the short or long term. The research problem is limited to answering the following question:

What are the nature and extent of the challenges of blended accounting education in Iraq? To answer the previous problem, the research is based on the hypothesis that: "Studying and diagnosing the challenges facing the integrated accounting education in Iraq and seeking to provide the proposed solutions regarding them can contribute to obtaining a set of positive

results, including facilitating the task of the accounting teaching staff and students in accomplishing the tasks assigned to them." Therefore, the following hypothesis can be tested to achieve this question:

(There is a significant effect relationship between the application of the integrated accounting education curriculum and the quality of education in Iraqi universities)

The importance of the research stems from the importance of challenges, as the source of the study's strength is that it touched on the most critical challenges and problems that faced integrated accounting education in Iraq. The importance of the survey appears clearly through

the diagnosis of these challenges and issues that hinder the teaching staff and students in the accounting field and work to find the proposed solutions.

The research aims to achieve the following:

- 1. Providing an integrated conceptual framework on the most critical challenges and problems facing integrated accounting education in Iraq.
- 2. Seeking to present a set of proposed solutions and recommendations that can help solve these problems and overcome the challenges that hinder the work of the accounting faculty and students.
- 3. See how the developed countries deal with these challenges and how they can be used to develop integrated accounting education in Iraq.

Two aspects were adopted to complete the research, the theoretical side, and the practical side. First, research, books, and scientific articles were used, as well as the internet concerning the theoretical part. In addition, a questionnaire was used for the practical side of the research.

### The Results And Hypothesis Testing

Hypothesis: There is a significant effect relationship between the application of the integrated accounting education curriculum and the quality of education in Iraqi universities

Students' questionnaire: The data were entered into the SPSS statistical program and analyzed according to the steps below:

First: The validity and reliability of the questionnaire were checked, and the ratio of the Alpha Cronbach scale = 0.861, which is a significant percentage.

#### Second: descriptive criteria

1) The student sample size (161) students divided between institute and university, males and females, and the questionnaire was distributed to them randomly.

Table (3). Sample distribution

Туре	Student Institute	University student	Total
male	37	40	77
female	55	29	84
Total	92	69	161

2) Source: Preparing the researchers by adopting spss V.23 outputs

Table (4). Students by stage and practice e-education in preparatory school

State of education stage	The	2nd	Third	Fourth	Total
	first				
I didn't practice e-learning in middle school.	6	60	8	31	105
I practiced it	31	25	0	0	56
Total	37	85	8	31	161

#### Source: Preparing the researchers by adopting spss V.23 outputs

From the observation of Table (4) above, we conclude that middle school students in Iraq who did not practice e-learning before the Corona pandemic reached 105 students and constituted 65% of the sample size. From Table (4), we note that the number of students who practiced e-learning in middle school was (56) students only, and the method of their practice was as shown in Table (5) as follows:

Table (5). E-Learning Method

E-learning method	Number	Ratio
It is limited to social media sites such as WhatsApp and Tilly Kram.	29	51.8%
E-learning platforms such as classroom only.	2	3.6%
Electronic education platforms ( Class Room ) and social media sites	25	
such as WhatsApp and Tilly Kram	23	44.6%
Total	56	100%

#### Source: Preparing the researchers by adopting spss V.23 outputs

From the above table (5), we conclude that (51.8%), the highest percentage, relied on social networking sites such as WhatsApp and Telegram. On the other hand, %) relied on the classroom only, which is the lowest percentage, and the rate (44.6%) mixed between the classroom and social networking sites. By extracting the arithmetic means for each of the blended accounting education curricula and the quality of e-learning, the results were as below:

Table (6). Integrated accounting education

Variables metrics	Arithmetic	Standard
	medium	deviation
Integrated accounting	3.8279	.66358
education curriculum		
Quality of education	4.0901	.55308

#### Source: Preparing the researchers by adopting spss V.23 outputs

From the observation of Table (6), we find that the arithmetic means of the integrated accounting education curriculum variable is (3.8279). Therefore, according to the quintuple staff scale, it falls within the OK category. This is a good thing, and the same for the education quality variable, as the standard deviation of the education quality variable is equal to (55308). Therefore, it is less and better than the standard deviation of

the integrated accounting education curriculum, which is similar to (.66358), and both have minor variations, which is a good indicator.

Figures (3) and (4) illustrate this.

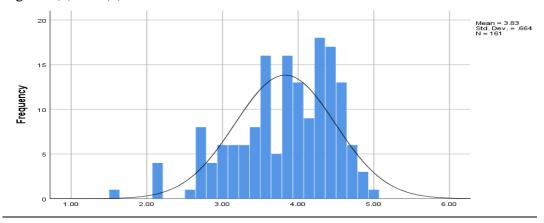


Figure 2. Integrated Education

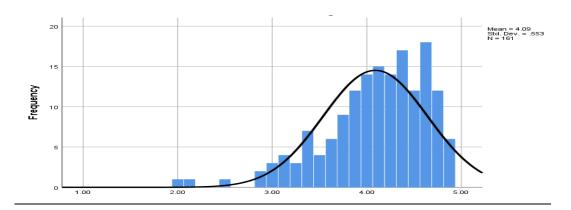


Figure 3. Education Quality

From observing the shapes of the two axes, we conclude that they are distributed normally. Therefore it is possible to calculate the effect of the blended learning axis on the quality of education, as shown below.

### **Third: Inferential metrics**

- 5) The value of the correlation between the integrated accounting education curriculum and the quality of education in Iraqi universities from the student's point of view is equal to (0.72), which is high and significant.
- 6) To show the impact of the integrated accounting education curriculum on the quality of education in Iraqi universities, we extract the following: Regression according to the following equation:

- A) From the ANOVA table, we find that the value of the F test = 170,281 and Sig = 0.0, which is less than 0.05, indicating a significant effect of the integrated accounting education curriculum on the quality of education in Iraqi universities.
- b) From the Coefficients table, we form the regression equation below

$$Y = 1.796 + 0.599X$$

Where X represents the blended accounting education curriculum variable

Y represents the education quality variable

It means that a change of one point for the integrated accounting education curriculum corresponds to a percentage of (0.599) for the quality of education in a direct direction. This indicates that there is a significant change.

### **Professors' questionnaire:**

First: The validity and reliability of the questionnaire were checked, and the ratio of the Alpha Cronbach scale was = 0.532, which is a good percentage.

Second: Descriptive Standards:

- 1. The questionnaire was randomly distributed to (100) accounting department teachers, including a university, private colleges, and institutes. The number of males was (47) versus (53) females
- 2. Table (7) represents the sample of teaching staff, classified according to the certificate and scientific title

Table (7). Distribution of the sample by Certificate

Certificate scientific	Assistant	teacher	Assistant	total
title	teacher		Professor	
Bachelor	1	0	0	1
High diploma	11	1	0	12
Master	47	17	0	64
Doctor	0	17	6	23
Total	59	35	6	100

Source: Preparation of the two researchers

2. How did you learn about e-learning: The answers of the teachers in Table (8) were as follows:

Table (8). Learn about e-learning

Learn about e-learning	Iteration	Ratio
I met him while studying in Iraq as a student	19	0.19 %
during the Corona pandemic.		
I met him while studying outside Iraq as a student.	13	0.13 %

I recognized him as a teacher and practiced it	60	0.60 %
inside Iraq during the Corona pandemic.		
I recognized him as a teacher and practiced with	3	0.3 %
him outside Iraq before the Corona pandemic.		
By looking at the websites before the Corona	5	0.5 %
pandemic		
Total	100	100 %

**Source: Preparation of the two researchers** 

Through the answers of the two teachers, we find that (60%) of the teachers practiced elearning during the Corona pandemic, which is a high percentage, which indicates that more than the sample size was not sufficiently familiar with e-learning. And that (19%) of the sample size got to know him during his studies in Iraq as a student during the Corona pandemic and then comes a percentage (13%) of him while studying outside Iraq as a student, which indicates that other countries practice e-learning even before the pandemic. And that (5%), which is a small percentage, I got to know him through the internet, and the nominal rate (3%) knew him as a teacher and practiced with him outside Iraq before the Corona pandemic. This indicates that the number of teachers who returned to Iraq is very few after they obtained opportunities to work outside Iraq.

1. By extracting the arithmetic means for each of the blended accounting education curriculum and the quality of e-learning, the results are in Table (9) as below:

Table (9). The blended accounting education curriculum and the quality of e-learning

Variables metrics	Arithmetic	Standard
	medium	deviation
Integrated accounting	4.2086	0.27046
education curriculum		
Quality of education	4.2538	0.26971

Source: Preparing the researchers by adopting spss V.23 outputs

From the observation of Table (9), we find that the arithmetic means of the integrated accounting education curriculum variable is (4.2186) and falls within the OK category according to the Lee Card five-point scale, which is a good thing. The standard deviation of the variable of education quality is equal to (0.26971), which is slightly less than the standard deviation of the integrated accounting education curriculum, which is equivalent to (0.27046), and both of them are minimal deviations, and this is a good indicator, and figures (6) and (7) illustrate this

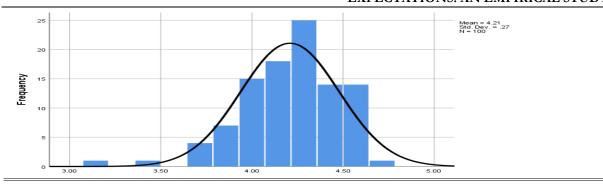


Figure 4. integrated education

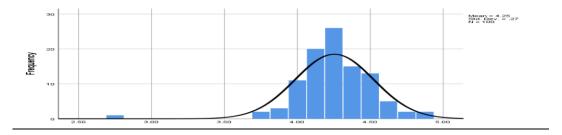


Figure 5. education quality

From observing the shapes of the two axes, we conclude that they are distributed normally. Therefore it is possible to calculate the effect of the blended learning axis on the quality of education, as shown below.

Third: Inferential metrics

- 5. The value of the correlation between the integrated accounting education curriculum and the quality of education in Iraqi universities from the teachers' point of view is equal to (0.33), which is significantly significant, although it is positively significant.
- 6. To show the impact of the integrated accounting education curriculum on the quality of education in Iraqi universities, we extract the following: Regression according to the following equation:
- A) From the ANOVA table, we find that the value of the F test = 11.809 and that Sig = 0.001, which is less than 0.05, indicating a significant effect of the integrated accounting education curriculum on the quality of education in Iraqi universities.
- b) From the Coefficients table, we form the regression equation as shown below:

$$Y = 2.877 + 0.327 X$$

Where X represents the blended accounting education curriculum variable Y represents the education quality variable

It means that a change of one point for the integrated accounting education curriculum corresponds to a percentage of (0.327) for the quality of education in a direct direction. This indicates that there is a significant change.

#### **Conclusions and Discussion**

There is a significant impact of the integrated accounting education curriculum on the quality of education in Iraqi universities. The teaching process in universities and institutes in the Ministry of Higher Education and Scientific Research did not practice e-learning before the COVID-19 pandemic. Modern electronic means relate to all advanced technical standards that can be used and benefited from in the blended learning process, which represent computers as one of the main pillars as well as all devices, equipment, and all means of communication used, such as computer networks of all kinds. There is a strong moral relationship between the quality of education and integrated accounting education, and Iraqi universities must develop it. There is no doubt that the multiplicity and diversity of modern technical means and their rapid development have contributed to the increase in the need to take advantage of the advantages of their use in blended accounting education. It is necessary to continue with e-learning, even for some subjects, such that the theoretical lectures are electronic and the practical ones are in attendance, or some auxiliary materials are electronic. The main ones are in my presence. It is possible to benefit from the advantages of modern electronic means within the methods of elearning in the field of blended accounting education. Accounting education is an integrated system that consists of a set of interrelated elements to achieve its goals. Through the accounting education system, the efficiency of the system can be judged by the relationship between its inputs and outputs, which comes through the availability of operational processes represented by the various educational means of curricula, accounting laboratories, and field applications, in addition to the availability of qualified scientific staff to do so. The system's effectiveness can be judged by the relationship between the outputs and goals that the system aims to achieve through the provision of accounting cadres (academic and professional) and the extent of the ability to accomplish the system's goals. A set of requirements can contribute to increasing the efficiency and effectiveness of the accounting education system by using e-learning methods in blended education, which relate to both technical specifications and knowledge requirements. Accordingly, we suggest the following.

- 1. Giving importance to the positive directives of faculty members in Iraqi universities and students towards integrated e-learning and setting the necessary plans to benefit from these directives.
- 2. Conduct workshops for Iraqi university faculty members and students to explain the mechanisms of blended accounting education.
- 3. It is necessary to multiply and diversify modern technical means and follow their rapid development, contributing to the need to take advantage of the advantages of using them in integrated accounting education.
- 4. Training and encouraging the faculty in Iraqi universities to communicate with students through electronic pages and e-mail in light of the availability of Internet service.
- 5. Emphasizing the need for Iraqi universities to pay attention to the introduction of the integrated e-learning method even after the end of the pandemic and to spread electronic culture among students to achieve the most significant degree of interaction with this type of education.

- 6. Emphasis on the need to provide an appropriate educational structure for integrating accounting education in Iraqi universities and work to remove all material and technical obstacles that prevent the adoption and development of this type of education.
- 7. Conducting more studies and research to find out the effectiveness of blended learning in the presence of harsh conditions and holding conferences and seminars to develop and advance e-learning and attendance.
- 8. There should be regulations and laws like those in the present education that protect the teacher and student's rights.
- 9. The necessity of applying electronic accounting education in an environment that blends with traditional education so that conventional education is not dispensed with but complements each other.

#### References

- Affouneh, S., Salha, S., & Khlaif, Z. N. (2020). Designing quality e-learning environments for emergency remote teaching in coronavirus crisis. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, 11(2), 135-137.
- Al-Fatlawi, Q. A., Al Farttoosi, D. S., & Almagtome, A. H. (2021). Accounting information security and it governance under cobit 5 framework: A case study. *Webology*, 18(Special Issue on Information Retrieval and Web Search), 294-310.
- Al-Wattar, Y. M. A., Almagtome, A. H., & Al-Shafeay, K. M. (2019). The role of integrating hotel sustainability reporting practices into an Accounting Information System to enhance Hotel Financial Performance: Evidence from Iraq. *African Journal of Hospitality, Tourism and Leisure*, 8(5), 1-16.
- Al-Yasiri, A. J. (2021). Iraq's Post-2003 Environmental Pollution: Issues And Solutions. *Akkad Journal Of Contemporary Economic Studies*, 1(1), 1-16.
- Almagtome, A., & Abdlazez, M. (2021). Energy Accounting and Performance: A theoretical Perspective. *Akkad Journal Of Contemporary Accounting Studies*, *1*(4), 232-245.
- Almagtome, A., Khaghaany, M., & Önce, S. (2020). Corporate governance quality, stakeholders' pressure, and sustainable development: An integrated approach. *International Journal of Mathematical, Engineering and Management Sciences*, 5(6), 1077.
- Almagtome, A. H., Al-Yasiri, A. J., Ali, R. S., Kadhim, H. L., & Heider, N. B. (2020). Circular economy initiatives through energy accounting and sustainable energy performance under integrated reporting framework. *International Journal of Mathematical, Engineering and Management Sciences*, 5(6), 1032.
- Bonk, C. J., & Graham, C. R. (2012). *The handbook of blended learning: Global perspectives, local designs*: John Wiley & Sons.
- Campbell, A., Choo, F., Lindsay, D. H., & Tan, K. B. (2013). Accounting student characteristics from 2005–2010 archival transcript data. *Journal of Education for Business*, 88(2), 70-75.
- Çoban, B. T., & Vardar, A. K. (2021). Evaluation of Distance English Language Teaching Education during COVID-19 Pandemic from the Perspectives of ELT Student Teachers and Their Instructors. *Journal of Pedagogical Research*, 5(3), 198-220.
- Dangwal, K. L. (2017). Blended learning: An innovative approach. *Universal Journal of Educational Research*, 5(1), 129-136.
- Delaney, D. A., Fletcher, M., Cameron, C., & Bodle, K. (2013). Online self and peer assessment of team work in accounting education. *Accounting Research Journal*.

- Fatima, H. (2016). Impact of E-Accounting in Today's Scenario. *International Journal of Engineering and Management Research (IJEMR)*, 6(1), 260-264.
- Grabinsk, K., Kedzior, M., & Krasodomska, J. (2015). Blended learning in tertiary accounting education in the CEE region-A Polish perspective. *Accounting and Management Information Systems*, 14(2), 378.
- Güney, A. (2014). Role of technology in accounting and e-accounting. *Procedia-Social and Behavioral Sciences*, 152, 852-855.
- Hameedi, K. S., Al-Fatlawi, Q. A., Ali, M. N., & Almagtome, A. H. (2021). Financial performance reporting, IFRS implementation, and accounting information: Evidence from Iraqi banking sector. *The Journal of Asian Finance, Economics and Business*, 8(3), 1083-1094.
- Hussein Hakeem Barzani, S. (2021). Students' perceptions towards online education during COVID-19 pandemic: An empirical study. *International Journal of Social Sciences & Educational Studies*, 8(2), 28-38.
- Khaghaany, M., Kbelah, S., & Almagtome, A. (2019). Value relevance of sustainability reporting under an accounting information system: Evidence from the tourism industry. *African Journal of Hospitality, Tourism and Leisure*, 8, 1-12.
- Liu, Q., Chiu, V., Muehlmann, B. W., & Baldwin, A. A. (2021). Bringing scholarly data analytics knowledge using emerging technology tools in accounting into classrooms: A bibliometric approach. *Issues in Accounting Education*, 36(4), 153-181.
- Lubbe, I. (2020). Towards a global model of accounting education—a South African case study. *Journal of Accounting in Emerging Economies*.
- Lucianelli, G., & Citro, F. (2018). Accounting education for professional accountants: evidence from Italy. *International Journal of Business and Management*, 13(8), 1-15.
- Mirriahi, N., Alonzo, D., & Fox, B. (2015). A blended learning framework for curriculum design and professional development. *Research in Learning Technology*, 23.
- Namyssova, G., Tussupbekova, G., Helmer, J., Malone, K., Mir, A., & Jonbekova, D. (2019). Challenges and benefits of blended learning in higher education.
- Oliver, M., & Trigwell, K. (2005). Can 'blended learning' be redeemed? *E-learning and Digital Media*, 2(1), 17-26.
- Oseni, A. I. (2017). Forensic accounting and financial fraud in Nigeria: Problems and prospects. *Journal of Accounting and Financial Management*, 3(1), 23-33.
- Santouridis, I. (2015). Incorporating information technology into Accounting and Finance Higher Education curricula in Greece. *Procedia Economics and Finance*, *33*, 432-438.
- Seethamraju Dr, R. (2010). Information technologies in Accounting education.
- Smith, K., & Hill, J. (2019). Defining the nature of blended learning through its depiction in current research. *Higher Education Research & Development*, 38(2), 383-397.
- Topor, D. I., Akram, U., Fülop, M. T., Căpușneanu, S., & Ionescu, C. A. (2021). E-Accounting: Future Challenges and Perspectives. *CSR and Management Accounting Challenges in a Time of Global Crises*, 35-52.
- Turan, Z., & Gurol, A. (2020). Emergency Transformation in Education: Stress Perceptions and Views of University Students Taking Online Course During the COVID-19 Pandemic/Egitimde Acil Bir Donusum: COVID-19 Pandemisi Doneminde Cevrim Ici Ders Alan Universite Ogrencilerinin Stres Algilari ve Gorusleri. *HAYEF: Journal of Education*, 17(2), 222-243.
- Watty, K., Sugahara, S., Abayadeera, N., Perera, L., & McKay, J. (2014). Towards a global model of accounting education. *Accounting Research Journal*.
- Yap, C., Ryan, S., & Yong, J. (2014). Challenges facing professional accounting education in a commercialised education sector. *Accounting Education*, 23(6), 562-581.