**Migration Letters**

Volume: 21, No: S9 (2024), pp. 1267-1284

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

# The Role Of University Accounting Education In Qualifying Female Students To Use Information And Communication Technology: Case Study In King Khalid University

Abeer Bakri Siralkhatim Alhaj[1], Engy Ahmed Abdel Ghany Mostafa[2], Fahad A Al-Gmash[3], Alia Abdulrahman Assiri[4], Amina Mohammed Solyman[5]

## Abstract

*The study aims to measure the impact of the use of information and communication technology in accounting education on the skills of female students of the Accounting Department from the students' point of view who studying in fourth year in the Applied College in Khamis Mushait at King Khalid University (KKU). The study applied the quantitative methods to address the issue of this study. There 83 questionnaires were collected for final analysis. The SPSS program was used to analysis the results. The results showed that there is a significant relationship between university accounting education in increase the student qualification to use information and communication technology. The recommendation and other implications been discussed.*

***Keywords:*** *Accounting education, information and communication technology.*

## 1.0 Introduction:

Accounting education is one of the topics that are popular with those interested and researchers because of its strong connection to the society as a whole in various walks of life, where accounting education is concerned with preparing professionally and scientifically qualified human cadres, who are characterized by appropriate qualification and high efficiency, enabling them to carry out the tasks and duties entrusted to them and carry out them to the fullest. This is what necessitates the universities that support technical accounting education to introduce modifications and developments that occur continuously from one period to another in the accounting courses and curricula, and the change that occurs in the methods of university accounting education, especially those developments in the field of electronic accounting information systems, which have become one of the most important reasons for studying the accounting major in general, which has become highly dependent on information and communication technology.

## 1.2 The study Problem:

Despite the importance of accounting education, which no one disagrees with, there is an existing problem in accounting education that is limited to the lack of qualified female

[1] Assistant Professor, Applied College, King Khalid University, Abha, Saudi Arabia.
[2] Lecturer, Applied College, King Khalid University, Abha, Saudi Arabia.
[3] Assistant Professor, Applied College, King Khalid University, Abha, Saudi Arabia.
[4] Lecturer, Applied College, King Khalid University, Abha, Saudi Arabia.
[5] Assistant Professor, Applied College, King Khalid University, Abha, Saudi Arabia.

graduates who fit the specifications required in the labor market due to the presence of some gaps between the skills of female graduates and the labor market, and the academic universities have realized the importance of addressing this imbalance. Related to accounting education, it addressed this defect by developing and structuring accounting education so that it became more focused on developing those skills among female students in the accounting major through the use of information and communication technology in the teaching process. Hence, the study problem is summarized in the following main question.

1. Does the accounting education of King Khalid University contribute to promoting the use of information and communication technology? From the main question there are several sub-questions, which are:
2. Does the university accounting education at the Applied College at King Khalid University contribute to the development of intellectual skills?
3. Does the university accounting education at the Applied College at King Khalid University contribute to the development of technical skills?
4. Does the university accounting education at the Applied College at King Khalid University contribute to the development of job skills?

### 1.3 Objectives of the study

The study mainly aims to determine the role of accounting education in promoting the use of information and communication technology among students of the Applied College at King Khalid University in developing the intellectual, technical, functional and personal skills of the students.

### 1.4 The importance of studying

The importance of the study lies in the importance of the university accounting education through the use of information and communication technology and building the knowledge and professional skills required to meet the challenges of the accounting profession.

This study serves what will be explained by the results of the accounting education-based entities in developing university accounting education, whether in terms of programs and curricula or in terms of methods and teaching methods to qualify accounting graduates and provide them with the required skills.

### 1.5 Hypotheses of the study

Through this study, the researchers propose the hypotheses related to the relationship between communication and information technology and accounting education as follows:

H1: the availability of infrastructure and human capabilities to use information technology in accounting education.

H2: the extent to which information and communication technology contributes to developing the skills of female students of the Accounting Department.

H3: there is a role for university accounting education in qualifying female students to use information and communication technology from the point of view of the students.

## 2.0 Literature review

**1/ Tarbag Sakina study, 2021 AD:**

This study aims to measure the impact of the use of information and communication technology in accounting education on the skills of accounting science students at AL-ARABI Ben Mhidi University, through the viewpoint of students and professors at Oum El Bawaghi University in the same college. The sample of the study using the SPSS statistical analysis program, relying on the descriptive and analytical approach, and it was concluded that there is a positive linear effect of the impact of infrastructure and human capabilities for the use of e-learning in the university.

**2/ Abd al-Rahman's study, 2021 AD:**

This study mainly aimed to identify the role of digital transformation in improving the accounting education environment and reducing the Covid-19 pandemic, and to answer the questions and test the hypotheses of the study, the researchers relied on the descriptive analytical approach in showing and clarifying the theoretical aspect through previous studies, periodicals and scientific messages, and analysis The results of the applied study and hypothesis testing using the statistical program (SPSS). The questionnaire was distributed after evaluation and arbitration by a number of specialists to the study sample consisting of faculty members in the accounting departments that were selected from the Palestinian universities in the Gaza Strip in southern Palestine, and their number is (83), and (76) questionnaires were retrieved, and then they were excluded 7 questionnaires, some of which were incomplete, so the number that could be analyzed was (76) with a response rate of 91.5%. The results of the study proved that digital transformation allows students and faculty members to discover recent trends in terms of new teaching methods and adapt to them, and digital transformation also contributes to providing educational sites The study recommended the need to re-adjust the organizational structure of universities, and digital transformation requires the availability of infrastructure and technological techniques available to students and faculty members, and a set of basic foundations and rules on which the transformation is based. Digital and based on it when doing electronic accounting education

**3 / Study of Khaled Abdel Rahman, Adel Abdel Ghani, 2020 AD:**

The study aimed to know the extent to which accounting education contributes to the development of professional skills required by the third international accounting standard among students. The descriptive analytical approach was adopted. This study concluded that accounting education contributes to a moderate degree in developing those skills required by the standard and recommended the need to restructure accounting education in universities. The Yemeni government in accordance with the requirements of the third international accounting education standard.

**4/ Study: Joanna Krasodomska, uek krakow (2020):**

This study aimed to identify the benefits and drawbacks resulting from the application of e-learning in accounting units among teachers, and the study dealt with the extent to which e-learning is included in accounting units "from the teachers' point of view". The primary source of data was a survey of 79 accounting lecturers hired by the leading Polish economic universities. Survey results showed that e-learning is not widely used by accounting academics in Poland. The most important benefits of e-courses included enhancing the efficiency and flexibility of the educational process. The most serious difficulties were the huge amount of work associated with the design and updating of course materials and technical problems. The effectiveness of e-learning techniques in teaching accounting subjects is determined by the ease of introducing e-learning and the systematic learning process, the further development of students' social competencies during e-learning classes, and a more effective process for checking students' progress compared to traditional classes. Moreover, the study provides

evidence that the lecturers those who decided to use e-learning believe that this method of teaching is more efficient, and at the same time more demanding than traditional classes. The study contributes to understanding the use of e-learning in accounting education and presents findings that may be useful to both policy makers and practitioners.

**5/ Study: Joanna Krasodomska, justtyna godawska (2020)**

« E-learning in accounting education: the influence of students' characteristics on their engagement and performance »

The study talked about e-learning in accounting education "the impact of students' characteristics on their participation and performance", as it examined the relationship between university students' participation in the blended learning course and their performance. She also explored the roles that gender and sexuality may play in the learning process. The sample consisted of 335 students in the international accounting course. The results of the study revealed that the participants' involvement in e-learning had a positive impact on their final performance. The study was also able to confirm that the relationship between students' participation in e-learning and their performance varies according to nationality. It did not identify a significant difference between students' participation and performance according to gender.

**6/ Study of Abdul Rahman Muhammad Suleiman, 2018 AD:**

The study aims to identify the role of using accounting education in the field of accounting to develop the skills of graduate students. Questions were answered and the study hypotheses were tested. The researcher relied on the descriptive analytical approach. The results concluded that the current applied accounting curricula in Palestinian universities do not provide graduate students with the required modern technological capabilities and skills. The study also recommended the need to reconsider the current plans and curricula in the accounting departments in Palestinian universities.

**7/ Rashwan study, 2018AD**

The study aims to determine the extent to which there is a role for academic and practical accounting qualification in Palestinian universities in promoting the ethical and professional practices of the accounting profession, and to identify the most important obstacles faced by accounting education in Palestinian universities. For the accounting profession, in addition to the fact that the teaching staff in accounting programs is interested in instilling ethics and credibility by clarifying them in the prescribed curricula. The study recommended the necessity of linking

Academic courses in universities with the nature of the labor market, and attention to academic decisions related to professional ethics.

**8/ Rashwan study, 2017AD**

This study aimed to identify the impact of the use of social networks in accounting education on developing the capabilities of accounting students, qualifying accounting students scientifically and professionally, and developing curricula for accounting education to suit the requirements of the labor market. The study tool was a questionnaire applied to fourth-level students who are candidates to graduate from the accounting major in the universities of the Gaza Strip. A random sample of 239 students was selected from the study population of 630

students. The results of the field study were analyzed and hypotheses were tested using the SPSS statistical program.

The study concluded that the use of social networks leads to the development of students' skills and to the rehabilitation of students scientifically, professionally and technologically to suit the labor market, and also concluded that the curricula of accounting education in Palestinian universities do not lead to providing graduate accountants with skills to deal with modern technology.

The study recommended the need to pay attention to the development of curricula for accounting education by paying attention to the aspects related to the computer and the Internet, as they are among the most important modern tools, and to focus on the qualifying aspect for students through holding continuous courses related to the use of computers and social networks.

**9 / A quick study, 2016 AD:**

The study aimed to identify the extent of the contribution of electronic accounting education to the development of the capabilities and skills of accounting students in Algeria, in addition to knowing the extent to which the use of information and communication technology means in accounting education affects the skills of accounting students. The role that information and communication technology plays in developing the student's personal, technical, intellectual, managerial and communication skills.

It was concluded that e-accounting education contributed to the speed of access to information and increased interaction between students in the classroom, in addition to increasing the speed of obtaining information, in addition to helping to solve accounting problems in creative ways. However, the use of this method of education suffers from material and technical problems. .

The study necessarily recommended paying attention to continuing education, establishing training courses on the use of technological means in the educational field, and introducing electronic accounting programs into the professional reality within the accounting curricula.

**10/ John A, van der poll (2016).** - E-learning and technologies for open distance learning in Management accounting »

The study talked about e-learning and open learning techniques in management accounting, as this study works on developing methods for acquiring knowledge and building e-learning for management accounting students at the University of South Africa, which is an open institution for distance learning that uses e-learning, that is, transferring skills and knowledge from a distance, and it is important The process of building knowledge is understanding how students learn in order to identify a set of appropriate learning strategies, as studies have shown that e-learning is rarely used in applications sometimes due to inappropriate content and technologies, for this this study suggested a framework to address these concerns and consider how theories Constructivism enriches such a framework. The study reached the following results:

Improving knowledge bases in management accounting research.

The use of the framework will test some educational designs in e-learning and may contribute to benefiting from the designs.

The framework can be used as a tool for further research in online management accounting education.

Successes in using the framework may encourage policy makers to implement e-learning methodologies in their institutions.

By addressing the previous studies and reviewing the most important results that it reached and the goals it sought, the most important feature that distinguishes our study from others is the impact of the use of information technology in accounting education on the skills of fourth-level students in the Accounting Department at the Applied College in Khamis Mushait at King Khalid University , where we found that there is a positive impact when applying accounting education using technology and communications, and most of the previous studies were urging to encourage and generalize the application of e-learning, including electronic accounting education - which was optionally taught to students - and this is after providing and improving the requirements of its application more, Only one study dealt with the subject of electronic accounting education in light of the Corona pandemic.

Despite this, and the difference that distinguished our study from previous studies, we cannot ignore the similarities with our study, so we touched on the theoretical literature and the various concepts and historical backgrounds related to accounting education through the use of information and communication technology and electronic accounting education.

**2.2 Theoretical framework:**

2.2.1 The concept of accounting education:

Accounting education is considered one of the most important basic sciences in societies in general, and accounting education is defined as the one that works to provide the labor market needs of qualified and trained manpower, scientifically and practically, which can keep pace with the economic and social development plans that societies seek to achieve. The importance of accounting education comes from the importance of accountability itself and the benefits it can provide to society in general. Accounting is an organized profession governed by international standards that are updated by the bodies related to the accounting profession in all countries. Accordingly, the practice of accounting work requires academically and technically qualified cadres according to a Scientific and practical foundations, in addition to the need to provide a sufficient amount of dealing with accounting problems using information and communication technology, and therefore the availability of scientific foundations for its education and practice, and from here we find the growing interest in accounting education through its development using modern technology means that it have become a necessity of advanced societies. This is achieved through the availability of scientific bases through which the goal of accounting education can be achieved. (Saleh, 2014 AD)

There is a very close and interdependent relationship between accounting education in general and technical accounting education and the existence of the accounting profession in any country, as the quality and development of the accounting profession is positively related to the quality of accounting education and training, the way accountants learn and the degree of development of the education and professional requirements they receive and educational opportunities, which must be obtained to join the profession, and the available opportunities for further education are of crucial importance to the profession in terms of its ability to carry out the responsibilities entrusted to it. Hence, the trends of accounting education using information and communication technology used have a decisive role in the continuity and development of the accounting profession around the world, and in turn this affects the efficiency and growth of the national and global economy. (Jabar, 2017 AD).

Therefore, accounting education is of great importance because it allows the accounting profession to carry out the growing responsibilities entrusted to it by providing it with distinguished accountants. In contrast, the quality of accounting education is linked to the quality of the profession, as it is expected that accounting education will be of higher quality when the accounting profession occupies a high qualitative position. This is because any attempts to improve accounting education in any country are unlikely to achieve significant success until the quality and status of the accounting profession reaches a certain level, because the educational program that prepares students for a profession with a low status does not attract the best teachers and the smartest students, nor does it attract government money. And supporting the private sector does not bode well for a huge and fulfilling career, and without these elements, the quality of accounting education will not be good in any environment. (Ibid.)

Thus, accounting education using information and communication technology represents the starting point towards the vocational rehabilitation of the students by preparing them to become active members in a constantly growing and developing profession that works to organize itself. Strength of weighting and continuity of progress.

Accounting education is required to balance scientific progress, scientific components and scientific applications in the accounting program in a template that serves the learners and the profession alike.

University accounting education enables female students to practice the accounting profession through the advantages that female students obtain through university studies, such as developing electronic skills through the use of information and communication technology in the educational process.

Hence, it has been emphasized and recommended the need to formulate accounting educational curricula to ensure that students can practice analysis and self-learning, address accounting issues and problems from non-traditional angles, and think of solutions to accounting problems in a logical and scientific manner. This is done only by using information and communication technology during the teaching process.

2.2.1 Information and communication technology:

Information and communication technology has great importance and an important role in promoting human and economic development, and this importance is as follows:

* ICT contributes to economic development as it allows societies and individuals to access information and knowledge available anywhere in the world at the same time.

* ICT is a clear, simple and easy tool to deliver the benefits of reading, writing, education and training to all countries and regions of the world, especially the less developed regions.

* Information and communication technology increases the ability of people to communicate and share information, knowledge, and raises the chances of turning the world into a more peaceful and prosperous place for human society.

* Information and communication technology, as well as traditional and modern media, enables marginalized and isolated people to express their opinion in the global community, regardless of their nationality, ethnic, national or religious affiliation, and enables individuals, communities and countries to improve their lives in a way that was not possible in the previous.

* Contribute to saving a lot of files such as: photos, videos, letters of electronic correspondence and retrieve them whenever the user wants to.

* As well as being new means of interaction and simulation between individuals, which provides opportunities to improve the quality of education through the exchange of information between them. (Hiam, 2020).

2.2.2 The characteristics of information and communication technology

Modern information and communication technology has many characteristics that can be summed up in the following:

1- Interactive: This characteristic is called the degree to which the participants in the communication process have an influence on the roles of others and their ability to exchange them, and their practice is called mutual or interactive practice.

The modern information and communication technology has changed the tasks of the recipient and earned him the feature of participating in the act of communication, just like the sender, who became active in the communication process.

2- Mobility: i.e. transmitting and receiving information from anywhere else, using various devices such as:

Mobile phone, TV built into the wristwatch, portable electronic computer...etc. (Rabiha, 2018)

3- Asynchronous: It means the ability to send and receive messages at a suitable time for the user. It does not require all participants to use the system at the same time, for example, the e-mail system sends the message directly from the message producer to its recipient at any time without the need for the recipient of the message to be present.

4- The ability to connect and install: The development of communication technology has led to the union and integration of communication systems, for example: the units of the receiving system through concave antennas that are collected from different models, but they perform their function in the field of receiving and transmitting signals to the fullest, and they facilitate the work of the caller or the future.

5- Community and diffusion: It means the systematic spread of the communication system around the world and within every stratum of society, and it is not restricted to the wealthy only, but rather includes all groups and classes of society.

6- Universality: The new basic environment for the means of communication is a global and international environment so that information can follow complex paths.

7- Decentralization: a feature that allows the independence of information and communication technology.

8- Non-publicity: that is, the possibility of controlling it as it reaches directly from the producer to the consumer, that is, it can direct the communicative message to one individual or a particular group, and it also allows the combination of different types of communication, whether it is from person to person or from group to group.

9- Monopolism: The technology industry is characterized by a lot of focus on a limited number of major industrial countries and within monopolistic companies, not only on the process of transferring and marketing this technology in less developed countries, but also in influencing the way it is managed, used, and often maintained in these countries. This enhances the tight grip of the manufacturing societies of this technology on the importing countries and the consolidation of the subordination of the second to the first in the cultural field.

10- Flexibility and ease of transportation: For example, a mobile phone or a laptop computer allows an individual to connect to the network from anywhere, so he no longer has to sit in the office in front of a desktop computer. With the use of wireless networks, it is possible to identify stock exchange prices and currency rates while the individual is sitting at home, and e-mail can be checked. (Rabiha, 2018).

2.2.3 Advantages of using information and communication technology:

• The possibility of using its tools easily and in various places, where modern digital technology tools are suitable in terms of their size, starting with the personal computer and laptop (laptop), all the way to the tablets (tablets), and finally the smart phone, which resulted in flexibility and ease in their use for different circumstances.

• Diversity of the applications they provide: The applications that operate by digital technology devices are characterized by diversity, as we find many applications that deal with the same specialization and scientific content.

• Its support for different types of digital content: It includes many multimedia components, such as audio, image, video, animation, motion, text, sound and colors. These components contribute to transforming the educational content of academic subjects into a diverse and interactive digital content that addresses many of the human senses, which contributes to attracting their attention and change their convictions and tendencies towards learning.

• Its high ability to communicate: It includes the ability of digital devices to communicate with each other, through many media, including: wired and non-wired networks.

• Its ability to simulate the work of educational environments: This is the most important point in this aspect, as digital technology has been able to build virtual educational environments that are very similar to what is found in regular classrooms, where these environments combine: the teacher, the student and the curriculum, which contributes to make communication between individuals easier.

• Providing cloud computing and storage services: The concept of cloud computing refers to the technology based on transferring, processing and storing data, information, commands and settings for the user (teacher and student).

• Integration and compatibility of its applications: The concept of integration and compatibility refers to the ability to use digital applications regardless of the type of computer, smartphone or tablet device, in addition to the ability to work on various devices regardless of their specifications or operating systems. (Badarna, 2020 AD)

2.2.4 Advantages of using information and communication technology in accounting education:

- Developing the self-skills of accounting students to deal with information and communication technology during the study first, and then during the practice of accounting work later.

Take advantage of applied accounting programs and use them in the field of accounting teaching.

Enhancing the fields of self-learning and research for female accounting students, which leads to improving the quality of their accounting education.

- The rapid development of academic courses and accounting programs on the global information network in line with the plans of universities and the requirements of the times.

Re-formulate the role of faculty members and students in line with the latest developments in accounting education.

- Exchanging experiences and accounting skills by creating communication channels that enable faculty members and students to discuss and exchange constructive opinions, and to provide a rich educational environment in which there are many educational resources, allowing the presentation of lectures in an exemplary manner.

- Diversity of sources of accounting knowledge as a result of contacting various sites on the World Wide Web. (Al-Sharif and Khaled, 2020).

**3.0 Methodology**

**3.1 About the Applied College in Khamis Mushait:**

The vision of the Kingdom of Saudi Arabia 2030 aims to improve the outcomes of the education and training system in all its stages from early education to lifelong education and training, to reach global levels through education, rehabilitation and training programs that keep pace with the developments of the age and its requirements, and in line with the needs of accelerated and renewed development, and therefore the vision adopted The concept of shifting from theoretical education to applied education, and to achieve the goal of this project, the It was transferred from community colleges of all kinds (applied studies, community service, community colleges) to applied colleges, and the general structure of applied colleges was developed and worked on its governance by preparing and developing a special regulation that makes it more flexible to cope with the variables and requirements of development.

**3.2 Population and Sample**

The research's population is represented in higher education institutions in the Kingdom of Saudi Arabia, where the researchers focused on taking a sample from this community represented by the fourth-level accounting students at the Applied College in Khamis Mushait at King Khalid University. Then, the research sample is represented at King Khalid University, and due to the large vocabulary sample of the King Khalid University community, the research community categories were limited to the fourth level students in the Applied College in Khamis Mushait, who numbered (112) students, and an electronic questionnaire was distributed to them, and the response was done by (83) female students, who were represented in the study sample population.

1/ Distribution of the study sample by area of residence

Table No. (1): Distribution of the study sample by area of residence

| Type | Frequency | Percentage |
|---|---|---|
| City | 72 | %86.7 |
| Deira | 11 | %13.3 |
| Total | 83 | %100.0 |

2/ Distribution of the study sample according to age:

Table No. (2): Distribution of the study sample by age

| Age | Frequency | Percentage |
|---|---|---|
| Less than 20 years | 74 | %89.2 |
| More than 20 years | 9 | %10.8 |
| Total | 83 | %100.0 |

**The reliability and validity coefficients for the questionnaire list:**

A- Scale stability: It was found that the reliability coefficient for each of the dimensions and axes of the study was higher than (0.50) and that the reliability coefficients of the questionnaire as a whole amounted to (0.959), and thus the questionnaire list is characterized by a high degree of stability.

Table No. (3): reliability and validity of the questionnaire list

| Dimensions | stability | honesty | number of paragraphs |
|---|---|---|---|
| First Axis | 0.865 | 0.930 | 7 |
| Second Axis | 0.968 | 0.984 | 14 |
| All items of the questionnaire | 0.959 | 0.979 | 21 |

A - Scale validity: it is found that the degree of the validity coefficient for each of the dimensions and axes of the study is higher than (0.60) and that the validity coefficients of the questionnaire as a whole amounted to (0.979), and thus the questionnaire list is characterized by a high degree of honesty, and this means that the questionnaire list is true to what it was developed for.

**Descriptive statistics for the results of the field study**

1. The first hypothesis: the availability of infrastructure and human capabilities to use information technology in accounting education at the Applied College in Khamis Mushait at King Khalid University.

Table No. (4): Arithmetic mean, standard deviation, and the relative importance of the first dimension paragraphs

| N | Paragraph | arithmetic mean | Standard deviation | Relative importance | Rank |
|---|---|---|---|---|---|
| 1. | The Applied College has all the material capabilities that qualify students to use information technology in accounting education. | 4.10 | 0.726 | 81.93% | 5 |

| | | | | | |
|---|---|---|---|---|---|
| 2. | There is a strong internet network in the applied college that allows the effective use of e-learning platforms. | 3.82 | 1.095 | 76.39% | 7 |
| 3. | The Applied College has a qualified educational staff that works to provide students with the skills and professional competencies necessary to enter the work environment | 4.39 | 0.778 | 87.71% | 1 |
| 4. | The courses are prepared in a way that allows for comprehension through electronic means through the use of information and communication technology | 4.08 | 0.844 | 81.69% | 6 |
| 5. | Information and communication technology helps to provide various electronic reports professionally and professionally | 4.19 | 0.723 | 83.86% | 3 |
| 6. | The availability of infrastructure in e-learning motivates accounting students to deal with modern devices and means | 4.30 | 0.711 | 86.02% | 2 |
| 7. | The availability of the infrastructure in e-learning motivates the students to continue learning in an enjoyable way and away from boredom | 4.13 | 0.58 | 82.65% | 4 |
| **Average dimension** | | **4.14** | **0.591** | **82.89%** | |

**It is clear from the previous table that:**

-The total degree of the responses of the sample members to the paragraphs related to the first dimension: “There is a strong internet in the Applied College that allows the use of e-learning platforms effectively” was medium, with an arithmetic mean of (4.14) and a standard deviation of.(0.591)

-The highest answers of the sample members came to the paragraph that states: "The Applied College owns the qualified educational staff that works to provide students with the skills and professional competencies necessary to enter the work environment".

-The least answers of the sample members came to the paragraph that states: "There is a strong internet in the applied college that allows the effective use of e-learning platforms".

-It is clear from the previous tables that there is a great degree of agreement among the study sample about this variable, as the arithmetic mean of the study sample on this variable was higher than the assumed arithmetic average (3), and then it is possible to accept the alternative hypothesis that says the availability of infrastructure and human capabilities to use information technology in Accounting education at the Applied College in Khamis Mushait at King Khalid University.

2/ The second hypothesis: the extent to which information and communication technology contributes to developing the skills of female students of the Accounting Department at the Applied College in Khamis Mushait at King Khalid University.

Table No. (5): Arithmetic mean, standard deviation, and the relative importance of the paragraphs of the second dimension

| N | Paragraph | arithmetic mean | Standard deviation | Relative importance | Rank |
|---|---|---|---|---|---|
| 1. | Technical accounting education provides students with the skills and professional competencies necessary to enter the work environment. | 4.13 | 0.64 | 82.65% | 11 |
| 2. | Accounting education qualifies students to deal with culturally and intellectually diverse individuals through the use of information and communication technology. | 4.08 | 0.752 | 81.69% | 12 |
| 3. | Technical accounting education enhances students' ability to adapt to face professional changes. | 4.14 | 0.912 | 82.89% | 10 |
| 4. | Accounting education helps students to submit various electronic reports professionally and professionally through the use of information and communication technology. | 4.22 | 0.812 | 84.34% | 6 |
| 5. | Accounting education helps female students to deal with information technology applications in professional fields. | 4.31 | 0.748 | 86.27% | 4 |
| 6. | Technical accounting education reduces error rates in the accounting business environment. | 4.17 | 0.819 | 83.16% | 8 |
| 7. | Accounting education helps students to be able to discuss solutions to technical problems professionally. | 4.02 | 0.943 | 80.26% | 13 |
| 8. | Technical accounting education increases the students' ability to organize and carry out tasks professionally. | 4.16 | 0.773 | 83.11% | 9 |
| 9. | Students' practical skills increase when applying technical methods during the educational process. | 4.30 | 0.866 | 86.02% | 5 |
| 10. | Technical accounting education qualifies female students to compete in professional jobs through the use of information and communication technology | 4.35 | 0.788 | 86.99% | 3 |

| | | | | | |
|---|---|---|---|---|---|
| 11. | Accounting education using modern technical methods helps students to improve productivity. | 4.21 | 0.766 | 84.34% | 7 |
| 12. | Technical accounting education develops students' abilities to present, discuss and present different points of view in writing and orally. | 4.01 | 0.89 | 80.24% | 14 |
| 13. | Technical accounting education is one of the requirements of the modern era for the development and development of societies. | 4.46 | 0.86 | 89.16% | 2 |
| 14. | Technical accounting education provides modern patterns for acquiring professional skills. | 4.57 | 0.666 | 91.33% | 1 |
| average dimension | | 4.22 | 0.678 | 84.46% | |

**It is clear from the previous table that:**

-The total degree of the sample members' answers to the items related to the second dimension was medium, with an arithmetic mean of (4.22) and a standard deviation of.(0.678)

-The highest answers of the sample members came to the paragraph that states: "Technical accounting education provides modern patterns for acquiring professional skills".

-The least answers of the sample members came to the paragraph that states: "Technical accounting education develops the students' abilities to present, discuss and present different points of view in writing and orally".

-It is clear from the previous tables that there is a great degree of agreement among the study sample about this variable, as the arithmetic mean of the study sample about this variable was higher than the assumed arithmetic mean (3), and then it is possible to accept the alternative hypothesis that says the contribution of information and communication technology to the development of the skills of the students of the Department Accounting at the Applied College in Khamis Mushait at King Khalid University.

3/ The third hypothesis: There is a role for university accounting education in qualifying female students to use information and communication technology from the point of view of the students of the Applied College at King Khalid University

**To test this hypothesis, a number of tests were carried out, as follows:**

**a. correlation coefficient:**

The following table shows the correlation coefficient between university accounting education as an independent variable and information technology as a dependent variable.

Table No. (6): Correlation coefficient for the first hypothesis

| variable | Test | information technology |
|---|---|---|
| University accounting education | correlation coefficient | 0.649 |
| | Morale | 0.000 |

It is clear from the previous table that there is a statistically significant correlation of 64.9% at the level of significance of 0.05 between university accounting education and information technology.

**a. The coefficient of determination:**

Table No. (7): coefficient of determination for the first hypothesis

| The independent variable | coefficient of determination | Modified determination factor | standard error |
|---|---|---|---|
| University accounting education | 0.421 | 0.414 | 0.51906 |

The previous table shows that the coefficient of determination R2 = 0.421, which means that the university accounting education explains the change in information technology by 42.1%, and the rest is explained by other variables that were not included in the regression relationship, in addition to the random errors resulting from the method of sampling, measurement accuracy and others.

**a. ANOVA Test:**

Table (8): Analysis of variance for the first hypothesis

| **Statement** | **sum of squares** | **sum of squares** | **mean squares** | **F** | **morale** |
|---|---|---|---|---|---|
| regression | 15.875 | 1 | 15.875 | 58.923 | .0000 |
| the rest | 21.823 | 81 | 0.269 | | |
| the total | 37.698 | 82 | | | |

It is clear from the previous table that there is a direct significant correlation between university accounting education and information technology, and this is shown through the value of "P", which is statistically significant at a significant level of 0.05 and indicates the validity and essentiality of the relationship between the two variables, the quality of the framework and the validity of relying on its results without errors.

**a. Regression analysis:**

Table (9): Regression analysis of the first hypothesis

| Sample | | non-standard transactions | | Standard coefficients | T test | morale |
|---|---|---|---|---|---|---|
| | | Beta | standard error | Beta | | |
| 1 | Constant | 1.13 | 0.407 | | 4.7770 | 0.000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | University accounting education | 0.746 | 0.097 | 0.649 | 7.676 | .0000 |

It appears from the previous table that the values of the t-test for the university accounting education variable are significant at the significance level of 0.05, and this shows the strength of the regressive relationship between university accounting education and information technology.

•From the above, the hypothesis can be accepted, meaning that:

There is a role for university accounting education in qualifying female students to use information and communication technology from the point of view of the students of the Applied College at King Khalid University.

**4.0 Results and discussion**

The results of the study demonstrated the acceptance of the alternative hypothesis that the availability of infrastructure and human capabilities to use information technology in accounting education at the Applied College in Khamis Mushait at King Khalid University, where the following has been proven- :

The Applied College has a qualified educational staff that works to provide students with the skills and professional competencies necessary to enter the work environment. Moreover, availability of e-learning infrastructure at King Khalid University helps motivate female students of the Accounting Department to deal with modern devices and means.

Acceptance of the alternative hypothesis that information and communication technology contribute to the development of the skills of female students of the Accounting Department at the Applied College in Khamis Mushait at King Khalid University, as it turns out the following- :

Technical accounting education provides modern methods for acquiring professional skills.

Technical accounting education is one of the requirements of the modern era for the development and development of societies.

Technical accounting education qualifies King Khalid University students to compete in professional jobs through the use of information and communication technology, and accounting education helps female students to deal with information technology applications in professional fields.

There are some students' practical skills increase when applying technical methods during the educational process. First, there is a statistically significant relationship between university accounting education and the use of information and communication technology from the point of view of the students of the Applied College at King Khalid University. Next, the study proved that there is a statistically significant correlation of 64.9% at a level of significance of 0.05 between university accounting education and information technology.

**6.0 Recommendations:**

1/ Information and communication technology should be used in the development of university accounting education in all its stages.

2/ The educational systems should be reconsidered to take advantage of information and communication technology in education, in order to be able to face various challenges in the future.

3 / Focus on education strategies based on information and communication technology such as flipped classrooms, exploratory and cognitive trips via the Internet, simulation method, strategies for digital self-activities and others.

4/ Focus on digital information and communication technology resources: such as: educational channels on YouTube, where the teacher can explain the lesson, store and present it free of charge, and students can attend those lessons at any time.

5 / Focus on real and virtual learning environments with each other.

6/ Activating education through virtual classrooms by switching to a digital learning environment that combines the student, teacher and curriculum, and is similar to real classes, and enables the teacher to communicate with students, ask questions, receive answers and provide feedback.

**Acknowledgement**

"The authors extend their appreciation to the Deanship of Scientific Research at King Khalid University for funding this work through Review Research Project under grant number (project number (151) / Academic year (1444)".

## 7.0 Conclusion

The study focused in addressing the of the use of information and communication technology in accounting education on the skills of female students of the Accounting Department from the students' point of view who studying in fourth year in the Applied College in Khamis Mushait at King Khalid University (KKU). The study applied the quantitative methods to address the issue of this study. There are 83 questionnaires were collected from the females' students for the final analysis. The data analyzed through using the SPSS program for extracting the results. Thus, the results showed that there is a significant relationship between university accounting education in increase the student qualification to use information and communication technology. Finally, the recommendation and other implications were drawn carefully.

## References

Abdul Rahman Muhammad Rashwan, 2021 AD - The role of digital transformation in improving the accounting education environment and reducing the Covid-19 pandemic. Journal of the Association of Arab Universities for Research in Higher Education - Issue 4 - Volume 41.

Torbag Sakina, 2021 AD - The impact of the use of information and communication technology in accounting education on the skills of accounting science students - a master's thesis (unpublished).

Khaled Abdul Rahman Ahmed, Adel Abdul Ghani Qaid Al-Zaitari, 2020 AD - The extent to which accounting education contributes to Yemeni government universities in developing students' professional skills - Journal of Educational Sciences and Human Studies - Volume 4 - Issue 8.

Hiam Khazal Nashour Jaafar, 2020 (The contribution of the information and communication technology sector to the process of economic development in the United Arab Emirates. Journal of North African Economics, Volume 16 - Issue 24.

Abdullah Badarneh, 2020 AD - The role of digital education in facing current crises and challenges, a research paper presented at the electronic conference, virtual education and quality of life in

sustainable development. 6/ Nabar Rabiha, 2018 (Information and Communication Technology "Characteristics and Effects." Journal of the Researcher in Humanities and Social Sciences, Volume 9-No. 2.

Muhammad Al-Tayeb Ali Al-Sharif, and Khaled Al-Bashir Muhammad Ahmad, 2020-The role of electronic accounting education in raising the efficiency of scientific achievement for students of the accounting departments in Libyan universities, "The Universities of Al-Zawiya and Sabratha as a model-The first virtual international conference at Al-Zawiya University.

Rashwan, Abdel Rahman. 2018 - The role of accounting education in Palestinian universities in promoting the professional and ethical practice of the accounting profession from the point of view of faculty members, Al-Quds Open University Journal for Research and Studies - Issue 43 - Volume 2.

Suleiman, Abdul Rahman Muhammad, 2018 AD - The role of using e-learning in the field of accounting education to develop the skills of graduate students. Kerala Magazine.

Rashwan, Abdel Rahman 2017- The impact of the use of social networks in accounting education on the development of students' skills to meet the requirements of the labor market: An applied study on universities in Palestine, Journal of Studies and Research, University of Djelfa, Algeria - Issue 26 - Volume 1.

Jabbar Jassim Al-Rubaie, 2017 AD - Factors for Building Technical Accounting Skills for Students of the Technical Education Authority - Al-Taqni Magazine - Volume Twenty - Issue7.

Ajlia, Muhammad and Qunai', Ahmed (2016 AD). The contribution of electronic accounting education to developing the skills of students of accounting departments, the Algerian Journal of Accounting and Financial Studies, (1), 47-37.

Saleh, Abdullah Suleiman, 2014 AD - The interaction of modern trends in education and accounting qualification between the quality of accounting outputs and the requirements of the labor market in Arab countries in light of the trend towards the application of standards.

Grabinski, K., Marcin kedzior, Joanna Krasodomska, & Agnieska Herdan (2020). Embedding E-learning in accounting modules: the educator's Perspective. Education sciences.

Kashora, T., Huibrecht M. van der poll, & John A. vander poll. (2016). Elearning and technologies for open distance learning in management accounting. Africa Education Review.

Krasodoska, J., & Justyna godawska. (2020). E-learning in accounting education: the influence of students' characteristics on their engagement and performance. Routledge.