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The Effectiveness of E-Training in Developing the Skills of Designing E-Courses for Teachers of Arabic in the Colleges of Education in Iraq

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Abstract

This study aimed to examine the effects of electronic training to improve the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq. The descriptive approach is applied and the sample included 145 teachers of Arabic who were selected randomly from the colleges of education in Iraq. Moreover, the results reflected that e-training is effective in improving the skills related to designing online educational courses for teachers of Arabic in the colleges of education in Iraq. Besides, there was no difference between the mean of the respondents' responses to the total score of the tool on the role of electronic training to develop the skills related to electronic courses designing for teachers of Arabic in the colleges of education in Iraq according to gender, year of experience or academic qualification.

Keywords: *E-training, electronic courses, course design skills.*

1. Introduction

There has been a strong debate on the effectiveness of technology in facilitating and enhancing the process of learning and teaching since the early years of technological revolution. Different theories have been proposed in this regard with the aim to keep up with the rapid advancement in the field of technology. In this respect, the adoption of technology as an effective means of teaching and learning has become the subject of many researches worldwide. However, this subject is still under discussion in the Arabic world.

Therefore, this research is motivated by the idea that the adoption of technology by the Iraqi educational authorities would help overcoming the existing challenges that obstacle the processes of teaching and learning in the Iraqi educational colleges. Its main purpose is centered on highlighting the significance of e-training as it mainly seeks to investigate the effectiveness of e-training to improve the skills related to designing e-courses for teachers of Arabic in the colleges of education in Iraq.

1.1 Statement of the Problem

Education is an essential pillar of human development. This requires the adoption of modern technology if it were to improve and facilitate the process of learning. In this respect, technological advances have provided many opportunities to improve the quality of education. Online training is one of these opportunities, and it has become increasingly

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popular in recent years (Shaaban, 2023: 298). In Iraq, the Ministry of Education is working to improve the quality of education, including departments of Arabic in colleges of education. In this regard, e-training can be an effective way to improve the skills of designing e-courses for teaching Arabic language in the colleges of education in Iraq. Through their good experience in this field, the researchers noticed an obvious decline in the skills related to designing electronic courses for these teachers. By reviewing a number of previous studies, it was also found that e-training has an obvious and significant role in improving and enhancing these skills. Some studies recommended the need to use e-training to increase the level of e-course design skills in general. In this context, Al-Jalhami (2021: 105) revealed that the designed training program is effective in developing the cognitive as well as performance aspects with regard to the skills related to electronic courses designing for academic staff at Princess NouraBint Abdul Rahman University. The study also sought to determine the effects of utilizing electronic training to improve the skills of electronic courses designing for teaching Arabic language in colleges of education in Iraq. Through this, the study problem is represented in the following:

1) What is the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic in the colleges of education in Iraq?

2) Are there statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the means of the estimates of the research sample regarding the effectiveness of electronic training in developing the skills of designing electronic courses for teaching Arabic language in the colleges of education in Iraq due to the variables of (gender, academic qualification, years of experience)?

1.2 Research Significance:

1.2.1 Theoretical Significance:

This type of significance is evident in the fact that it adds much to the existing knowledge and scientific research with regard to the concepts of e-training and the skills related to designing e-courses. The researchers believe that this research will contribute to increasing knowledge and enriching information in this field and that it will be classified as a new scientific addition to the Iraqi and Arab libraries.

1.2.2 Practical Significance:

The practical importance in the context of this research emanates from the fact that it highlights one of the most important topics that institutions and organizations need in general to achieve the maximum possible benefit, which is the development of workers' skills.

Therefore, it could be a valuable reference for principals and heads working in educational institutions. It could help them develop their skills in order to increase the skills of designing electronic courses for teachers.

Moreover, this research derives its importance from the expected future benefit, the amount of return that educational institutions can achieve, and its implications for society, if its results and recommendations are taken into account.

Therefore, the importance of the research is that e-training contributes to developing the skills related to electronic courses designing through developing and increasing the skills of teachers in the Arabic language departments in the Iraqi colleges of education. This is done by refining their capabilities and increasing their skills in this field, and this certainly contributes to achieving the maximum benefit for them and for the colleges of education in Iraq in general.

1.3. Research objectives:

1) To identify the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic in the colleges of education in Iraq.

2) To find whether there are statistically significant differences in the estimates of the research sample regarding the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic in the colleges of education in Iraq due to the variables (gender, educational qualification, and teaching experience).

1.4 Limits of the research:

The research was conducted within the following limits:

Topic: The effects of electronic training in developing the skills related to designing electronic courses for teaching Arabic language in the departments in colleges of education in Iraq.

Place: Colleges of Education in the State of Iraq.

Time: 1444 / 2023.

Study population: Teachers of Arabic language in the colleges of education.

1.5 Terms used:

The research included the following definitions:

E-training: “Using digital technologies to provide content and training materials to learners. It can include a range of different methods and tools that include virtual classrooms, seminars, online courses, e-learning platforms, and interactive multimedia resources” (Al-Qahtani, 2023:512). It is defined procedurally as "a modern training system, based on the use of technology, characterized by freedom, breaking the traditional stagnation in the training process, and supporting the expansion of the training process in all its aspects for teachers of Arabic in the colleges of education in Iraq.

Electronic courses: “They are educational courses that are delivered through digital platforms, such as learning management systems or other online platforms that include different forms of content. These forms include texts, images, videos, and interactive activities, which learners can access from any Internet-connected location (Mura’i, 2023:6). And it is defined procedurally as: “the educational and training programs that are provided in whole or in part by the teachers of Arabic in the colleges of education in Iraq through electronic means, which can be accessed through a variety of digital devices.

Electronic course design skills: “They are the capabilities and expertise required to create effective and attractive e-learning courses. These skills include instructional design, multimedia production, content development, and user experience design” (Al-Sherbiny, 2023:12). It is defined procedurally as "the competencies and knowledge necessary to design, develop, and implement electronic courses that meet the learning objectives of the target audience. These skills include the ability to analyze learning needs, create educational materials, design interactive activities, and use digital tools and platforms to present and evaluate learning outcomes for teachers of Arabic in the Colleges of Education in Iraq.

2. Theoretical background and previous studies

2.1 The theoretical background:

Modern technology has imposed itself on many areas such as teaching and learning methods, as advanced technology has facilitated the process of teaching and learning, and computers have become easy to access and use with the diversity of their programs. This led some to feel illiterate if they were unable to use it. In this regard, developed countries

competed to provide training and educational programs for their people through e-training since it is an important and effective method contributing to the educational quality.

E-learning, to a great extent, denotes distance learning that uses technology to provide educational content to learners. It also has many advantages such as flexibility, convenience and cost-effectiveness. Nevertheless, the effectiveness of e-training heavily relies on several factors. Such factors include the quality of the educational content, the level of learner participation, and the availability of support and feedback (Saqr, 2023:76).

Designing e-courses also requires a set of skills that go beyond traditional teaching methods as teachers must be able to use digital tools, create multimedia content, and design interactive learning experiences. They should also be able to evaluate the effectiveness of their courses and make improvements accordingly. Therefore, it is important to identify the specific skills required to design electronic courses before starting them (Zaki, 2023:82).

Accordingly, e-training can be an effective way to improve the skills related to designing e-courses for teachers of Arabic in the colleges of education in Iraq. But the effectiveness of e-learning is conditioned by the availability of several factors that must be taken into consideration. The design of electronic courses also requires a set of skills that go beyond traditional teaching methods. Therefore, it is important to examine the effectiveness of e-learning, identify the specific skills required to design e-courses and address the specific needs of Arabic language departments in colleges of education.

Technology has become an integral part of our lives, bringing about great changes in various fields, including education. One of the most important changes brought about by technology in education is the emergence of online courses. This type of courses is becoming increasingly popular due to their flexibility and accessibility. They provide an alternative to traditional face-to-face courses. With the advent of online courses, teachers have been able to design courses that can ultimately be accessed and completed from anywhere whenever Internet connection is available.

Online courses are an essential component of the modern education system as they provide students with access to quality education regardless of their location or time constraints. Advantages of online courses include accessibility, flexibility, and personalized learning opportunities. There are several types of online courses, including MOOCs, hybrid courses, flipped courses, and fully online courses. Despite the many benefits, online courses also reflect the presence of some challenges. These include the lack of interaction in addition to the need for reliable Internet connections, and the need for trainers to learn new techniques and teaching strategies. Thus, online courses are an excellent source for students who need a more accessible and flexible way to learn (Campos, 2015:277).

2.1.1 The electronic courses:

Online courses are online courses that learners can access through various electronic devices, including computers, smartphones, and tablets. These courses are designed to provide students with access to a quality education, regardless of their location or time constraints. Online courses have gained popularity in recent years and have become an integral part of the education system in many countries around the world (Younes, 2017:906).

Rugube (2019:169) defined e-courses as “online courses that are delivered through various electronic devices such as computers, smartphones, and tablets. These courses are designed to provide students with access to quality education regardless of their location or time constraints. Online courses can be offered synchronously or asynchronously, depending on the needs of the students. Synchronous online courses require students to

come to classes at a specific time, while asynchronous courses allow students to access online course materials and lectures at their preferred time.

On the other hand, (Campos, 2015:235) addressed electronic courses as a form of distance learning that uses modern digital technologies such as the Internet and multimedia to provide educational content to learners. These courses can be accessed anytime and anywhere. They also provide flexibility and convenience for both teachers and students.

Hamad (2018:410) classified electronic courses as one of the types of online learning that uses electronic devices and applications to provide educational content and facilitate communication between teachers and learners. These online courses can be self-paced or instructor-led. It can also be delivered through various platforms such as learning management systems or video conferencing tools.

The researchers define them as "educational programs that use digital technologies to present educational materials and provide interactive learning experiences for students. They may include multimedia content such as videos, animations and simulations, as well as online assessments and collaboration tools that enhance the learning process and contribute to facilitating and accelerating the educational process."

The researchers also see that electronic courses are courses that are designed and delivered via electronic means. Such means include the Internet, computer networks, as well as other digital technologies. These courses can be asynchronous, allowing students to access online course materials and perform assignments at their places, or synchronous, which requires students to participate in online classes and discussions in real time.

2.1.2 Effectiveness of electronic courses:

With the advancement of technology, online courses have become a popular alternative to traditional classroom learning, as they provide flexibility, convenience, and accessibility to learners who may not have the opportunity to attend traditional classes for various reasons. However, the effectiveness of electronic courses in teaching is a topic that has been discussed by many teachers and researchers (Al-Rahily, 2020:96).

One of the main advantages of an e-course is the flexibility it provides to learners as it allows them to access e-course materials at any time and from any place connected to the Internet. This flexibility is particularly useful for learners who have work or family commitments that may prevent them from attending traditional classes.

Another advantage of online courses is the ability to customize the learning experience. In this respect, online courses can ultimately be designed to meet the specific needs and learning styles of individual learners. For example, online courses can include interactive multimedia content such as videos, animations, and simulations that provide a more engaging learning experience and effectiveness. In addition, online courses can include assessments and feedback tailored to each learner's progress and needs (Zagloul, 2017:92).

Online courses also provide opportunities for collaborative learning, and learners can interact with each other and their teachers through online discussion forums, chat rooms, and video conferencing tools. In this respect, cooperative learning has been shown to develop learners' skills of critical thinking, communication and problem-solving abilities.

2.1.3 Electronic course design skills:

Designing electronic courses is a complex process that requires a set of specific skills and knowledge. In recent years, the demand for e-courses has increased dramatically, but teachers and instructional designers face the challenge of designing effective and

attractive e-courses that meet the needs of learners. Therefore, the skills required to design electronic courses are as follows (Ruijan, 2014:56):

1. Knowledge of the principles of instructional design: The first and most important skill required for designing e-courses is having knowledge of the principles of instructional design, which is a systematic process for designing, developing and delivering effective and efficient educational experiences. Educators need a deep understanding of instructional design principles to create engaging and effective e-courses.

2. Technology skills: Designing online courses requires teachers to have a good understanding of technology and the way it can be used to create effective learning experiences. Thus, teachers must be familiar with the different software tools and technologies used in e-learning such as learning management systems, multimedia software and authoring tools.

3. Visual design skills: Online courses rely heavily on visual design to engage learners and communicate information effectively. Teachers need strong visual design skills. These include knowledge of color theory, typography, as well as layout principles. They should also be able to create online courses which are characterized by being visually appealing and easy to navigate and use.

4. Content development skills: Teachers must have excellent content development skills to create effective online courses. They must be able to analyze and organize content, develop learning objectives, and create assessments that measure learners' understanding of the material. In addition, they must have strong writing skills and be able to create clear, concise, and engaging content.

5. Collaboration and Communication Skills: Online course design often involves collaboration with subject matter experts, instructional designers, and other stakeholders. Teachers must be able to work effectively in teams and communicate their ideas clearly and effectively. They must be able to collaborate with others to develop a common understanding of course objectives and to create a course that meets learners' needs.

Therefore, designing electronic courses requires a set of specific skills and knowledge. Teachers must also have a deep understanding of instructional design principles, technology, visual design, content development, and collaboration and communication skills. With these skills, teachers can create effective and attractive online courses that meet the needs of learners and provide an effective learning experience (Al-Harbi, 2019:219).

2.1.4 The importance of e-training in designing e-courses:

E-training has become an essential tool in developing and enhancing these skills. It allows instructional designers to stay up-to-date with the latest technologies, best practices, and principles of instructional design. The importance of e-training in the design of e-courses is evident in the following (Carlos, 2009:103):

1. Keeping up with technological developments: e-training allows instructional designers to stay up-to-date with the latest technologies and tools used in developing e-courses, and helps them understand how to use the latest software, authoring tools and multimedia elements to create attractive and effective e-courses.

2. Enhancing Instructional Design Skills: e-training provides designers with an opportunity to enhance their skills in instructional design, and they can learn about the latest principles and techniques of instructional design, and how to apply them in the development of electronic courses.

3. Enhancing content development skills: e-training can also help designers improve their content development skills, including how to analyze and organize content, develop

learning objectives, and create assessments that measure learners' understanding of the material.

4. Reducing costs and development time: e-learning can help instructional designers to save time and reduce costs associated with e-course development. By learning about the latest technologies and best practices, designers can create e-courses more efficiently and effectively.

5. Increasing learner engagement: e-learning can help instructional designers create more interactive e-courses for learners. Designers can learn about the latest technology to create interactive and immersive learning experiences that keep learners engaged throughout the course.

6. Meeting the needs of diverse learners: e-learning can help designers create online courses that meet the needs of diverse learners. Designers can learn about the latest accessibility standards and technologies to create online courses that are accessible to learners with disabilities.

The researchers believe that e-training is necessary in the design of e-courses, as it enables instructional designers to keep up with the latest technologies, best practices, and principles of instructional design. E-training also helps instructional designers to enhance their skills in instructional design, visual design, and content development. By reducing development time and costs, increasing learner engagement, and meeting the needs of diverse learners, e-learning is an important tool in developing effective and engaging e-courses.

2.1.5 Obstacles and challenges of e-training in course design:

With the increasing importance of e-training in the design of e-courses, many challenges and obstacles that individuals and organizations face in implementing effective e-training programs have emerged. However, by understanding these challenges and adopting effective strategies to overcome them, individuals and organizations can maximize the benefits of e-learning in e-course design.

In the following, a discussion of the obstacles and challenges facing e-training in designing courses, along with potential solutions, is provided:

Limited access to technology: One of the main challenges in online training is the limited access to technology and the Internet, especially in developing countries or remote areas. Without access to technology and the necessary tools, individuals may have difficulty participating in e-training and developing the skills needed to design e-courses. To overcome this challenge, organizations can invest in providing access to technology and the Internet for their employees or offer online training programs designed to work with limited technology or offline resources. Additionally, individuals can look for low-tech or offline training options, such as attending workshops or using printed materials (Fouad, 2019:630).

Time constraints: Another common obstacle to e-raining is the lack of time that individuals may have to devote to training programmes, especially if they work full time or have other commitments. This can make it difficult for individuals to complete e-learning courses or fully engage with the materials. Organizations can address this challenge by offering flexible training options such as self-paced online courses or part-time programs that allow individuals to balance their training with their other responsibilities. In addition, individuals can prioritize their training by allocating specific times for learning and dividing the training into smaller, more manageable tasks (Ahmed, et al., 2022:260).

Resistance to change: Many individuals may resist adopting new technologies. They may feel uncomfortable switching to online training. This can make it difficult to engage employees in e-training programmes. It may hinder their ability to develop the skills

necessary to design electronic courses. To overcome this challenge, organizations can emphasize the benefits of e-training and provide support and resources to help employees adapt to new technology. They can also encourage the development of a culture of learning, as employees are encouraged to adopt new technologies and rewarded for their efforts to improve their skills (Al-Qahtani and Al-Bishi, 2017:487).

Language and cultural barriers: Language and cultural barriers can be a challenge in e-learning, especially in global organizations that may have staff from diverse linguistic and cultural backgrounds. Without effective communication and understanding, individuals may struggle to engage with training materials or to collaborate effectively with their peers. Organizations can provide training materials in multiple languages and can provide translation and interpretation services as needed. They can also promote a culture of inclusivity and diversity as employees from diverse backgrounds feel valued and supported in their learning and development.

By understanding and addressing the challenges and obstacles of e-learning in course design, individuals and organizations can maximize the benefits of e-learning and develop the skills needed to design effective e-courses. This is done either by providing access to technology, offering flexible training options, emphasizing the benefits of e-learning, providing attractive training materials, or promoting a culture of inclusivity and diversity. In this regard, there are several strategies that can be used to overcome these challenges and create effective e-training programs (Suleiman & Hassouna, 2019:97).

2.2 Previous Studies:

A number of studies have examined the effectiveness of e-training to improve e-course design skills. These studies confirmed the importance of these skills. Therefore, this part is a presentation of studies related to the current research topic. Below is a presentation of these studies according to their chronological order from newest to oldest:

1- Al-Jalhami (2021) conducted a study aimed at designing an e-training program which is based on the systems approach and measuring its effectiveness in improving the skills related to designing electronic courses for academic staff at Princess Noura Bint Abdul Rahman University. The semi-experimental design, which is based on experimental approach, was used to verify the effectiveness of the electronic training program in developing the skills of electronic courses designing for faculty members at Princess Noura University. The most important results of the research identified the skills of designing electronic courses needed for faculty members at Princess Noura Bint Abdul Rahman University. The results also showed that the electronic training programs on designing electronic courses at Princess Noura University are few and limited, and revealed that there is a great effectiveness of the designed training program in developing the cognitive and performance side of the skills related to designing electronic courses among faculty members at Princess Nora bint Abdul Rahman University.

2- Al-Mo'men (2020) did another study that aimed at revealing the effects of an electronic training environment based on Web 2 applications in improving the skills of electronic lessons for teachers of electricity and electronics. The researcher applied the analytical descriptive approach. Besides, the research tools included an achievement test and a note card to measure the skills of producing electronic lessons. The research sample consisted of (30) teachers of electricity and electronics in the intermediate stage in Kuwait. The results revealed the presence of differences at the level of ($\leq$0.05) between the mean scores of the pre and post application of the experimental group in the achievement test and the observation card in favor of the post application.

3- Rugobe (2019) conducted another research to propose a design model for integrating LMS and MOOCs on a digital learning platform to make relevant learning content available to students using existing infrastructure. The researcher used the experimental method to verify the effectiveness of the proposed model, and experts and

lecturers in software engineering were invited to verify the validity of the proposed designs. The most important results included a significant effectiveness in designing the integration of Learning Management Systems and Massive Open Online Courses (MOOCs) on the educational digital platform. It also showed that integration business interventions will support the decision-making process, which influences the choices that policy makers make when making decisions about the technological infrastructure of higher education.

4- Al-Harbi (2019) carried out a research with the aim to determine the effects of e-training in improving e-course design skills. The researcher applied the analytical descriptive approach by investigating the theoretical aspect of the effectiveness of electronic courses. The most important results showed that e-courses do not meet the quality standards set for them, represented in ensuring learning resources, interaction, e-course technology and assessment. It was also found that the electronic courses are not in line with those standards so as to achieve the educational objectives of the courses.

5- Muhammad (2017) carried out a research with the purpose to develop the skills of designing electronic courses for middle school science teachers based on quality standards. The researcher applied the analytical descriptive method in collecting, analyzing and evaluating the necessary information and sources. The most important results showed the need to reconsider how to design and implement training programs provided to teachers in educational departments and directorates and the gradual transformation of e-training programs, provided that this is a systematic scientific process and not just an addition to technology.

6- Ruijan (2014) conducted a study that sought to reveal the effects of an electronic training environment, based on Web 2, applications in improving the skills of electronic lessons for teachers of electricity and electronics. The researcher used the analytical descriptive approach. Furthermore, the research tools included an achievement test as well as an observation card to measure the skills of producing electronic lessons. The research sample included 30 teachers of electricity and electronics in the intermediate stage in Kuwait. The most important results showed that there were differences at the level of ($\leq$0.05) between the mean scores of the pre and post application of the experimental group in the achievement test and the observation card in favor of the post application.

2.3 Comparing the previous studies with the current study:

By reviewing previous studies, the researchers highlight the similarities and differences between this study and relevant previous studies with regard to the topic, objectives and methodology, in addition to the aspects of benefiting from previous studies, and the most prominent features that distinguish the current research from previous studies.

In this respect, Al-Jalhami (2021) aims to measure the effects of an electronic training program that is dependent on the systems approach in improving the skills related to electronic courses designing for female academic staff at Princess Noura Bint Abdul Rahman University. Al-Mo'men (2020) focused on the effects that an electronic training environment based on Web2 applications can have in developing e-lesson production skills for electricity and electronics teachers in Kuwait, while Rugobe (2019) proposed a design model for the integration of Learning Management Systems and Massive Open Online Courses on a digital learning platform for Zimbabwean universities. On the other hand, Al-Harbi (2019) aimed to identify the effectiveness of e-training in developing the skills of designing e-courses, and found that e-courses do not meet quality standards. Muhammad (2017) aimed to develop the skills related to designing electronic courses for science teachers in the preparatory stage, emphasizing the need for a systematic scientific process to design and implement training programs. Furthermore, Ruijan (2014) focused on the obstacles that may challenge designing online training courses in production technology and showed statistically significant differences in achievement test scores

between the pre and post application of the e-training environment. In general, these studies highlight the importance of e-training in improving the skills related to e-courses designing, and the need to improve the quality and effectiveness of e-courses to achieve educational goals.

Contrastingly, this research aimed to examine the effects of electronic training in improving the skills related to designing electronic courses for teachers of Arabic language working in the Iraqi colleges of education. It agreed with Al-Mo'men (2020), Al-Harbi (2019), Muhammad (2017) and Ruijan (2014) in applying the analytical descriptive approach, and the questionnaire for data collection. On the other hand, it disagreed with Al-Jalhami (2021) and Rugobi (2019), which used the experimental approach. The researchers have been enlightened by the previous studies in formulating the research problem and preparing its questions, the way to develop the research tool and select its sample, and to identify the most important points addressed by the theoretical framework, and in the statistical procedures for data processing.

3. Method and procedures:

3.1. Research Methodology:

The researchers applied the analytical descriptive approach that suits the nature of the research, as it is "a widespread approach in the humanities, describing the studied phenomenon, after collecting sufficient information, and providing a quantitative or qualitative description for it" (Ammar & Al-Musawi, 2014:20).

3.2. Research Tool Design Procedures:

The researchers applied the following steps:

1. Benefiting from the educational literature as well as previous studies in designing the research tool (Al-Mo'men, 2020; Al-Harbi, 2019; Muhammad, 2017; Ruijan, 2014).

2. Determining the form of the questionnaire: The initial draft of the tool included two sections. The first section embodied instructions for the respondents to find a way to answer the questionnaire items, while the second section included the questionnaire items.

3. Preparing the questionnaire in its initial form:

1- The questionnaire, in its initial draft, had (25) items, structured following the five-point Likert scale, and the subject is given the grades presented in Table (1).

Table 1: Distribution of answer choices and their scores on the scale

Response	**Very large**	**Large**	**Medium**	**Few**	**Very few**
The degree of respondents' response to the questionnaire items	**5**	**4**	**3**	**2**	**1**

Accordingly, the categories of arithmetic mean values were formed according to the Likert scale as follows:

Table 2: Criteria for judging the response of the respondents

Arithmetic mean value categories	**Criterion for judging the response of the respondents**
5 - 4.21	**Very large**
4.20-3.41	**Large**
3.40-2.61	**Medium**
2.60-1.81	**Few**
1-1.8	**Very few**

3.3. The validity and reliability of the research tool:

The researchers adopted several methods to verify the validity and reliability of the questionnaire as per the following:

3.3.1. The validity of the content (arbitrators):

The tool was shown in its initial draft to a group of arbitrators to get their view. Based on the reviewers' remarks, the researchers did the required modifications, such as deleting or modifying some phrases, and linguistic correction of the questionnaire items. Thus, the first draft of the questionnaire included 20 items, and it became valid for exploratory experimentation.

3.3.2. Exploratory Application:

The two researchers applied the tool on an exploratory sample that included 30 teachers of Arabic in the colleges of education in Iraq (from outside the original sample), and the questionnaire was applied for the first time on (1/3/2023). Then it was applied for the second time on (3/14/2023), with the aim of ensuring the clarity of the tool items and its instructions for the sample, and verifying the psychometric characteristics of the scale.

3.3.3. Internal consistency (structural validity):

The researchers calculated Pearson coefficients between the score related to each item of the tool with its total score, in addition to its significance values. It became obvious that the correlation coefficients related to each item of the questionnaire with the total score are statistically significant at two levels (0.01/0.05), and that the correlation coefficients related to each item of the scale with the total score ranged between (0.33) and (0.97). Correlation coefficients ranging from acceptable to high are considered, indicating that the items of the scale have appropriate internal consistency and they measure what they were set to measure.

3.3.4. Reliability:

In their study of the reliability of the scale, the researchers relied on two methods, namely:

3.3.4.1. Reliability by re-application:

The researchers extracted the reliability coefficient by re-application on the exploratory sample. The scale was re-applied two weeks later after the first application. The reliability coefficients were then extracted by calculating the Pearson coefficient between the degrees of the two applications. It was found that the Pearson's value between the degrees of the first application and the degrees of the second application is (0.84), which is a high stability coefficient, and significant at (0.01).

3.3.4.2. Reliability using the ((Cronbach Alpha) method:

The internal consistency coefficient was calculated for the same survey sample using the (Cronbach Alpha) method. It was obviously noted that the Cronbach Alpha reliability coefficient's value for the items of the e-training effectiveness measure in improving the skills related to electronic courses designing for teachers of Arabic language in faculties of education in Iraq is (0.87). This value indicates high reliability coefficients, and it indicates that the scale is internally consistent and valid.

3.3.5. The tool's final draft:

After testing the validity and reliability of the questionnaire, it included 20 items in its final draft, based on the five-point gradient (five-point Likert scale) with alternatives to five answers, which are (very large, large, medium, few, very few). The maximum score for the scale is (100) and the minimum score is (20).

3.4. Research population and sample:

3.4.1. Research population:

The research population included teachers of the Arabic language in the colleges of education in Iraq.

3.4.2. Research sample:

The research sample was selected randomly, and included 145 teachers of the Arabic in the colleges of education in Iraq. The following table implies a description of the sample according to the main research variables:

3.4.2.1. Characteristics of sample members according to gender:

Table 3: Characteristics of sample members by gender

Gender	No.	Percentage
Male	**69**	**%48**
Female	**76**	**%52**
Total	**145**	**%100**

The above table embodies the distribution of the research sample according to the gender variable. The number of male teachers is (69), with a rate of (48%), while the number of female teachers is (76), with a rate of (52%) of the sample targeted by the application.

3.4.2.2. Characteristics of the sample according to the variable of years of experience:

Table 4: Characteristics of respondents as per the variable of years of experience

Years of experience	No.	Percentage
Less than 5 years	**21**	**%14**
5-10 years	**108**	**%75**
More than 10 years	**16**	**%11**
Total	**145**	**%100**

The above table embodies the characteristics of the sample as per the variable of years of experience. The number of teachers with years of experience (less than 5 years) was (21), with a rate of (14%), and the number of those with experience from (5-10) years (108), with a rate of (75%). The number of those with experience of more than (10 years) was (16), with a rate of (11%), from the sample targeted by the application.

3.4.2.3. Characteristics of the sample according to the qualification variable:

Table 5: Characteristics of sample according to the qualification variable

Qualification	No.	Percentage
Ph.D.	**137**	**%94**
Master's	**8**	**%6**
Total	**145**	**%100**

The above table shows the characteristics of the sample as per the educational qualification variable. The number of teachers whose academic qualification is (Ph.D.) is (137), at a rate of (94%), and the number of teachers whose academic qualification is (Master's) is (8), at a rate of (6%) of the sample targeted by the application.

3.5. Field application procedures: The field application required the following procedures:

• The two researchers distributed the questionnaire to teachers of the Arabic language in the colleges of education in Iraq on (3/25/2023).

• Tabulating the results, and processing them statistically, using the (SPSS), and analyzing and interpreting the results.

3.6. Statistical methods:

The researchers used the statistical package (SPSS) in analyzing the research data, and these methods are as follows:

• The Pearson correlation coefficient to check structural validity and repetition reliability.

• Alpha Cronbach's coefficient to calculate the internal consistency of the questionnaire items.

• Arithmetic means and standard deviations.

• t. test for two independent samples to identify the difference between the averages of the respondents' responses to the total score of the questionnaire of the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq according to the variables of (gender, years of experience and educational qualification).

• One-Way ANOVA to find out the significance of the differences between the averages of the respondents' answers on the total score of the questionnaire.

4. Results and discussion

4.1. Results:

4.1.1. Results related to the first question:

- What is the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq?

The researchers calculated the arithmetic means and standard deviations to determine the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, as shown in Table (6).

Table 6: The arithmetic means and standard deviations of the respondents' responses to the questionnaire items

No.	Items	Arithmetic means	Standard deviations	Response degree	Rank
1	The e-training helped me develop my professional performance in general.	**3.33**	**1.178**	**Medium**	**10**
2	The e-training played a role in increasing my motivation for the educational process.	**3.41**	**1.024**	**Large**	**9**
3	The e-training contributed to the delivery of information well to my students through the production of distinguished electronic courses.	**3.27**	**1.102**	**Medium**	**13**
4	The e-training introduced me to the modern methods of designing e-courses.	**3.06**	**1.075**	**Medium**	**15**
5	The e-courses that I designed through electronic training contributed to increasing the effectiveness of my students during the lectures.	**2.97**	**1.346**	**Medium**	**16**
6	The e-training contributed to the exchange of experiences between me and the educational frameworks in the field.	**3.19**	**1.203**	**Medium**	**14**
7	The e-training facilitated the process of communication between educational	**3.29**	**1.312**	**Medium**	**12**

	frameworks within the framework of designing electronic courses.				
8	The e-training helped me assess the quality of my e-courses according to modern evaluation methods.	**3.46**	**1.124**	**Large**	**8**
9	My college has provided the appropriate environment for using e-training in designing e-courses.	**3.33**	**0.979**	**Medium**	**10**
10	The e-training helped me to apply the tests and analyze the results of my students based on the e-courses that were designed.	**2.86**	**1.051**	**Medium**	**17**
11	E-training helped me keep up with the knowledge in the field of education.	**4.20**	**1.220**	**Large**	**2**
12	E-learning reduced administrative burdens.	**3.93**	**1.305**	**Large**	**4**
13	I acquire new knowledge of electronic course design in the shortest time through online training.	**4.93**	**1.192**	**Large**	**7**
14	I acquire modern teaching skills through e-training.	**3.35**	**1.244**	**Medium**	**11**
15	The e-training helped me to continuously communicate with my students based on the quality of the e-courses that I designed for them.	**4.50**	**1.361**	**Very large**	**1**
16	The e-training contributed to my access to creative ideas in the educational process.	**3.90**	**1.292**	**Large**	**5**
17	The e-training helped me to use modern methods in designing electronic courses in an attractive way.	**3.83**	**1.374**	**Large**	**6**
18	The e-training facilitated remote training during crises such as the Corona pandemic.	**3.90**	**1.360**	**Large**	**5**
19	The e-training played a role in solving educational problems for my students.	**3.00**	**1.207**	**Medium**	**12**
20	The courses that I designed with the help of e-training helped me implement the curricula with high quality.	**4.10**	**1.348**	**Large**	**3**
Total score		**3.12**	**10.696**	**Medium**	

Table (6) above reflects that the responses of the respondents to the total score of the questionnaire of the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq are average, with an arithmetic mean (3.12) and a standard deviation (10.696). The response scores for the items ranged between (medium and large). Item 15 came in first place (e-training helped me in continuous social communication with my students based on the quality of the e-courses that I designed for them) with a mean (4.50) and a standard deviation (1.361). Item (10) (e-training helped me apply tests and analyze the results of my students based on the electronic courses that were designed) ranked last with a mean (2.86) and a standard deviation (1.051).

The researchers attribute this result to the fact that we live in the era of the knowledge revolution, which impacted all aspects of life, especially the educational field, as

technological means played a major role in the renaissance of the educational process through the various modern technologies that entered the university lecture room and were invested by teachers in a qualitative way, especially during the process of electronic training in designing courses. It also helped the teacher to develop his performance in terms of keeping up with modern training methods, which certainly contribute to developing his skills in designing electronic courses.

4.1.2. Results related to answering the second question:

-Are there statistically significant differences between the averages of the respondents' responses to the total score of the questionnaire of the effectiveness of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq due to the variables of (gender, educational qualification and years of experience)?

It will be answered by discussing the following hypotheses:

H1:

There is a statistically significant difference between the mean of the respondents' responses to the total score of the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the gender variable.

To test the validity of the hypothesis, the t-test was applied to the independent samples, as the difference between the mean of the respondents' answers on the score was calculated to identify the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the gender variable, as shown in Table (7).

Table 7: The values of (t-test) indicating the difference between the averages of the respondents' answers on the total score of the questionnaire due to the gender variable

Gender	No.	Arithmetic mean	Standard deviation	t-value	Degree of freedom	P-value	Decision
Male	**69**	**62.92**	**9.973**	**0.409**	**143**	**0.683**	**Not significant**
Female	**76**	**75.62**	**11.367**				

Table (7) highlights that the value of the arithmetic mean of male responses to the total score for the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in colleges of education in Iraq is (62.92), with a standard deviation of (9.973). The average value of female responses was (62.75) with a standard deviation of (11.367). Moreover, the value of t = (0.409), and its level of significance equals (0.683), which is greater than the default level of significance (0.05).

Accordingly, the alternative hypothesis is rejected and the null hypothesis which states that "there is no statistically significant difference between the mean of the sample's responses to the total score of the questionnaire about the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the variable of gender" is accepted.

The researchers attribute this result to the fact that there is an agreement in the respondents' viewpoints about the role of electronic training in developing their professional performance, since many teachers follow training courses on modern learning methods and mechanisms for designing electronic courses in interactive ways,

which led to their access to creative ideas in this regard, especially in their desire for the presence and continuation of electronic training for them.

H2:

There are statistically significant differences between the averages of the respondents' responses to the total score of the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the variable years of experience.

To test the validity of the hypothesis, the arithmetic means and standard deviations were calculated on the total score to identify the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the variable of years of experience.

Table 8: Arithmetic means and standard deviations of the respondents' responses to the total score of the questionnaire due to the variable of years of experience

Years of experience	No.	Arithmetic mean	Standard deviation
Less than 5 years	**21**	**57.47**	**10.842**
5-10 years	**108**	**58.25**	**10.424**
More than 10 years	**16**	**57.68**	**9.184**
Total score	**145**	**62.54**	**10.696**

Table 8 implies that there are differences between the arithmetic means of the response of the respondents, according to their different years of experience, to the total score to the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq. The highest arithmetic mean is (58.25) for teachers with years of experience (from 5-10), followed by teachers with years of experience (more than 10) with a mean of (57.68), and the last rank shows teachers with years of experience (less than 5 years) with a mean of (57.47).

In order to reveal the statistical significance of the differences between the responses of the sample members according to the qualification variable, the One-Way ANOVA was calculated, and the results were as follows:

Table 9: The values of the one-way ANOVA of the respondents' answers to the total score of the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language departments in the colleges of education in Iraq, due to the variable years of experience

Source of variance	Sum of squares	Degree of freedom	Mean of squares	F-value	Sig.	Decision
Between groups	**1231.033**	**2**	**615.517**	**5.733**	**0.450**	**Not significant**
Within groups	**15244.926**	**142**	**107.359**			
Total	**16475.959**	**144**				

It is obvious that the value of “f” is (5.733) and the significance value is equal to (0.450), which is greater than the default significance level (0.05).

Thus, the alternative hypothesis is rejected, while the null hypothesis, which states that "there are no statistically significant differences between the averages of the respondents' answers to the total score for the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq due to the variable years of experience" is accepted.

The researchers attribute this result to the fact that the respondents, despite their different years of experience, supported the role of e-training by increasing and developing their skills in designing electronic courses, as their years of experience are not an obstacle in obtaining that result. Besides, teaching in university colleges requires knowledge and skills.

H3:

There are statistically significant differences between the averages of the respondents' responses to the total score of the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language departments in the colleges of education in Iraq, due to the educational qualification variable.

To test the validity of the hypothesis, the (t-test) was applied on independent samples. Differences were calculated between the averages of the answers of a sample of the total score for the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the educational qualification variable.

Table 10: The t-test values indicating the difference between the averages of the respondents' answers on the total score of the questionnaire due to the educational qualification variable

Qualification	No.	Arithmetic mean	Standard deviation	t-value	Degree of freedom	P-Value	Decision
Ph.D.	**8**	**58.12**	**8.442**	**1.204**	**143**	**0.230**	**Not significant**
Master's	**137**	**62.80**	**10.782**				

The previous table reveals that the value of the arithmetic mean of the responses of the sample (Ph.D.) on the total score for the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq is (58.12) with a standard deviation of (8.442). The average value of the answers of the sample (Master's) was (62.80), with a standard deviation of (10.782), and the value of t = (1.204), and its level of significance equals (0.230), which is greater than the default level of significance (0.05). Thus, we reject the alternative hypothesis and accept the null hypothesis, which states"There are no statistically significant differences between the averages of the respondents' responses to the total score of the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq, due to the educational qualification variable." The researchers believe that this result is logical since the respondents are most in need of employing technological innovations in electronic training, and this makes it easier for them to design electronic courses accordingly.

4.2. Conclusion:

The respondents' responses to the total score of the questionnaire of the role of electronic training in developing the skills of designing electronic courses for teachers of Arabic language in the colleges of education in Iraq are medium, with an arithmetic mean of (3.12). Their response scores on the scale ranged between (medium and large). There is no statistically significant difference between the mean of the respondents' responses to the total score of the questionnaire according to the gender variable. Moreover, there are no statistically significant differences between the averages of the respondents' responses to the total score of the questionnaire of the role of electronic training in developing the

skills of designing electronic courses for teachers of Arabic language departments in the colleges of education in Iraq, according to the variables of years of experience and qualification.

4.3. Recommendations:

• Enhancing the use of electronic training in developing the skills of designing electronic courses for teachers of the Arabic language in the colleges of education in Iraq, as the results of the research showed a good evaluation of this type of training.

• Motivating teachers to participate in e-training courses and developing their skills in designing e-courses. This could help in developing the quality of e-learning.

• Encouraging educational institutions in Iraq to provide an educational environment supportive of the effective use of e-training. This can be done by providing appropriate electronic platforms and encouraging their use.

• There is a need to work on increasing training courses to develop the skills of teachers of Arabic language departments in the colleges of education in Iraq on the use of electronic training in designing electronic courses, especially those newly appointed.

• Recommending the distribution of manuals for the methods of using e-training for teachers of Arabic language departments in the colleges of education in Iraq.

• Studying more factors influencing the development of the skills of designing electronic courses for teachers in colleges of education, such as the technical, methodological and psychological aspects, in order to improve the quality of education in general in Iraq.

• There is a need for cooperation between educational and administrative frameworks and the local community to provide universities and colleges with modern educational technologies to help increase the effectiveness of electronic training.

• Providing more support and motivation for scientific research and academic studies dealing with the subject of e-training and designing e-courses, in order to enhance knowledge and development in this field.

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