# Availability of E-Learning Skills among Computer Teachers in the North-Eastern Badia Education Directorate

**Mariam Hamad Odeh Dahilan**
Jordanian Ministry of Education
Directorate of Education for Northeastern Badia

**Abstract**

*The study aimed to reveal the Availability of Skills E-learning for Computer teachers in the North Eastern Badia Education Directorate Inin addition to the Availability of Skills Design of electronic courses Sub: (Skills Planning، Skills Managing and implementing the decision, Skills Design and setting). The descriptive survey method was used and prepared Researcher The questionnaire Skills to ensure the sincerity and stability of the tool, and the study sample was formed from (246) members and faculty members in North-Eastern Badia Education Directorate They were randomly selected. The results showed that Skills the use of computers cameto In first place. Upstairs My average account was (3.96), and came Skills Internet use ranked second with an average account of 3.92, while Skills Design of electronic courses In the last place, with an average account of ()3.84), and the arithmetic average Total degree (3.89). The results showed that Skills Design of electronic courses Sub, onecomet in order، (Skills Planning، Skills Managing and implementing the decision, Skills Design and setting), the arithmetic average for skills Design of electronic courses as a whole (3.84). The results showed Variation outwardly In calculation averages and standard deviations Availability Skills E-learning due to different categories of sex variables، experience, and to the existence of statistically significant differences between both professors, and lab values On the one hand and computer teacher, On the other hand, the differences came in favor of Computer teacher. And to There are differences. Statistical function Between less than five years, و 10-15 years old The differences came in favor of fewer than five years.*

**Keywords:** E-learning, teaching skills, Availability among faculty members, North Eastern Badia Education Directorate, Hashemite Kingdom of Jordan.

## Introduction

Efficiency and efficiency in performance and production can be achieved by training and practice, which is used as a tool for development. Training also plays a key role in the growth of culture and civilization in general, and the importance of this is highlighted, in that training is the basis of all learning, development, and development of the human element, and thus the progress and construction of society. Training is also an important factor that helps administrative creativity and distinctive functionality, especially since organizations, with their various activities, face multiple changes and developments in the face of increasing trends towards globalization (Shawaf, 2000).

The role of the teacher is changing in an ever-changing era, as the new roles of the teacher require a new look at the philosophy and objectives of teacher preparation programs to suit the nature of these roles.

The rapid and successive development of technology and e-education has made the Researcher in the field of education in constant need to look for new educational methods that fit the features of development and help the learner to learn.

Educators were interested in modern technology at the level of planning and curriculum development, moving from tactics to strategy, from partial ways to solve topical problems to be one of the key components of the education strategy (Jabr, 2007).Teachers had to have many electronic skills in order to keep up with those innovations and the ability to use them consciously and knowingly.

One of the basics of e-learning skills is the use of computers and their various software, whether on closed networks, shared networks, or the Internet, and e-learning has become the most common form of flexible learning, which is flexible, open, and remote, including information, communications, education and training, and e-learning is not just a means of e-training but is used for purposes. Many others, such as knowledge management, performance management, virtual office construction, and other activities, e-learning depends on technology, organization culture, leadership and change management, and e-learning cannot succeed without the commitment and conviction of senior management, implementers and training, as it complements traditional training (Galagan), 2001).

As a result of the spread of e-learning in universities with the increasing progress and expansion of information, universities have to adopt this type of education in order to reach the student's self-learning (Sharawi, 2008). The development of curricula, courses, and educational activities has led to the development of the roles of teachers and learners, and to refine the skills of learners, and to make them able to face different situations in everyday life easily and efficiently (Richards & Rodgers, 2001).

Thus, the teacher's use of educational methods, methods and e-learning techniques has become urgent in achieving communication between him and his students because e-learning brings together elements of the educational system, which has become a way of working and thinking, and a way of thinking and solving problems. Although e-education has traditionally become the result of the tremendous development of technology and technology, and traditionally in developed countries, in developing countries, we still talk about e-education as an urgent need, the need to employ it in the educational process, and the Availability of its skills among teachers, part of the many challenges and constraints that developing countries continue to suffer from, and are trying to overcome them in the great efforts of universities and public education.

Teaching skills reflect the new and new roles of the teacher on the one hand, and as the main starting point for developing a clear vision of teacher preparation and training programs on the other, and these programs must include the teaching skills necessary for teachers on which the process of training in the course of service depends, to follow the process of preparation and advancement of performance levels, including pedagogical knowledge, education strategies, learning environment, communication, planning for teaching, evaluation, technology, thinking, Professional growth, cooperation, ethics, and relationships.

In order to be able to perform the main and basic tasks assigned to him, the teacher must have a number of e-learning skills that qualify him to perform his role as required.

**Theoretical framework**

**Use of e-learning in university education**

There is a growing demand for higher education, and the widespread of ICT and modern technology has become an influential variable in the present era, whose effects have been reflected on the educational institution in particular, and educational problems have become realistic and require non-traditional solutions, and these variables have led to the inability of traditional educational institutions and their staff to cope with these problems, putting increasing pressure on current educational systems, which have led to the adoption of new patterns of education, the most important of which is e-learning.

The use of e-learning has spread significantly, and the growing growth of e-learning has faced many challenges to its application in university education, including providing an electronic learning environment with human requirements, forming a diverse and experienced team that collaborates with each other in the performance of specific and planned functions, and the success of e-learning depends on the university's readiness and acceptance of such adoption through a number of components. The most important of which is the readiness of its faculty members and the extent to which they have the values, beliefs, and skills necessary for this type of education; the higher the level of ownership, the higher their level of readiness and the greater the claim to the success of e-education (Masilehi and Mohammed, 2007; Sword, 2009; Sonhwa, 2006).

The levels of use of e-education in university education include **the enriching level,** where electronic media and the Internet are used to describe this level as a source of general and specialized information, which makes it a source of general and specialized information, which makes it a failure to acquire the learner and acquire various

skills, including research skills, computer and Internet skills to do so. **The second level is complimentary;** all the characteristics of the enriching level are used to ensure that the electronic media and the Internet are used as a vessel for teaching and learning sources and expertise for the course or its content, as a key element of the educational process through the Availability of online programs and applications by the faculty, and guidance and guidance on the course, so that education becomes integrated into more than one educational pattern.

There is **a basic level,** where this level expands in reliance on the Internet, the construction and design of electronic courses and the provision of their requirements, interactions, activities, and tests, and the faculty member through the system provides interaction interfaces that guide the teacher in his educational path, direct him to the tools of interaction, communication, and request of an address, and provide the faculty member with the tools of communication with the learner and follow-up and various calendar images. The **integrative level**is not limited to teaching and learning; it also includes online teaching through digital photography and lesson explanation by the faculty member himself, which allows learners to communicate over the site and access materials, whether simultaneous or non-synchronized and to benefit from sources (Al-Saif,2009; Abdul Hamid, 2005:54).

Al-Hadi (2007:6) defined e-learning as a comprehensive system as "multimedia e-learning that includes academic content and accompanying activities that are prepared, designed and produced in the form of an electronic program in the light of codified standards and specific educational purposes, focusing primarily on positive interaction with the learner."

Al-Musa and Mubarak (2005:113) also defined e-learning as "a way to teach using modern communication mechanisms from a computer and its networks, its multiple media of sound and image, drawings, search mechanisms, and electronic libraries, as well as internet portals, whether remote or in the classroom, which is the use of technology of all kinds in communicating information to the learner in the shortest time, least effort and most useful."

Accordingly, the university professor has become a new role in the light of e-learning and the innovations of constantly developed technology, as the university professor must be able to teach using modern techniques, design the digital course, and adapt teaching methods to the characteristics of learners and the possibilities available, as it changes from teacher to simplified content and facilitator of educational processes and mentor and wave, requiring him to acquire special knowledge, skills, and experience through the Availability of his e-learning skills.

***E-learning** skills **of university faculty***

Sufficiency is the skill, ability, or ability to perform a particular work, or it is the actual practice of performing a task with a certain level of mastery, or it is a specific level of performance for the purposes of achieving the desired results according to predetermined objectives. Thus, performance skills within the field of work, which from others cannot be assured of the results achieved (Hazani, 2005).

The World Council for Training, Performance, and Learning Standards defined sufficiency as "the knowledge, skills, and tendencies that make someone able to effectively perform a job or job at a level of required and expected specifications" (Hazani, 2005:27).

Song Moy (SoWing-Mue, 2004) referred to a number of perceptions of the concept of sufficiency: 1) conduct or performance to do something independently to achieve a particular goal. 2) Knowledge and skill that requires the choice of the best, namely, a person's possession of a number of skills, performance, knowledge, good behavior, and motivations.

One of the most important inputs of the educational system is that the Availability of the necessary educational skills requires two basic elements: knowledge and performance, knowledge here is essential and necessary for the performance that shows the degree of adequacy, and knowledge is important because it largely determines the patterns of educational behavior of the teacher, as it relates to the knowledge of the teacher with the scientific subject in which he teaches The characteristics of learners and the demands of their physical, mental and cognitive development, the methods of learning and the underlying theories of education, knowledge of the good planning

of the educational process, the use of appropriate teaching methods, the organization of teaching positions and other factors that guide and define educational behavior (Ershid, 2001).

Al-Shahri, 2008; Al-Saif, 2009; Al-Ajrami, 2012; Salam, 2013) noted that the most important skill's that faculty must have are (basics of computer use and accessories, internet use and services, design of electronic courses, and management of electronic courses).

**The teacher's acquisition of educational skills** increases his **professional performance, abilities, skills, and trends, depending on his possession and practice in the educational situation, in order to carry out his educational tasks with mastery and effectiveness, and determines the required skills and then trains** the **teacher** and prepares him with training programs in order to master the use and production of **multiple mediations and various software,** and shows the process of **mastering his performance and behavior when presenting and producing** various educational **materials** and **then evaluating them (Sinidi,** 2000).

***Bani Domi*** (2010)*pointed out the need for the teacher to have the* ***capabilities and skills in e-learning that he practices in the field of various education technology, especially the design, production, use, and evaluation*** *of educational* ***materials. Education cannot be good*** *and meaningful without a well-trained teacher who is well equipped to use techniques in education in educational situations, and the teacher must have the ability and competence to* ***use e-learning and technological innovations so that he can play his role effectively in education (Flampan,*** 2005).

***To link the relationship, multiple studies such as the study(Al-Sharif,*** 2005;***Al-Saif, 2009;*** Baird & Love, 2003),*have shown a weakness in* ***electronic educational skills, especially in the production*** *of* ***electronic educational materials*** *prior to the* ***training program, and*** *the ability of* ***teachers to*** *use and produce them after the application of the training* ***program, and this It demonstrates*** *the need for* ***teachers*** *to train* ***in*** *educational and technological* ***skills, and some results have shown that*** *teachers have the* ***educational skills*** *of* ***teachers*** *due to the change in experience in all* ***areas of skills, particularly with long experience, sex, and bachelor's degree, and that there is interest among teachers in skills*** *related to the production of materials and means, and ways of* ***maintaining them and their work tool.***

***Countries that are trying to achieve a comprehensive renaissance in all aspects of life need teacherswith*** multiple ***skills, including rigorous planning,*** effective and modern ***teaching methods, and evaluation,*** and successful ***class management. A*** successful teacher ***is*** a ***teacher*** who can handle ***many mistakes, which can appear in*** the elements of the learning process ***effectively and efficiently (Habib,*** 2003).

Mr.(2002) identified four types of skills:

Cognitive skills: It is referred to the information and mental skills necessary for the performance of the individual (teacher)in various areas of his educational and learning work.

Emotional skills: It refers to the preparations, inclinations, trends, values, and beliefs of the individual, and these skills cover many aspects such as the teacher's sensitivity, self-confidence, and attitude towards his profession.

Performance skills: It refers to the performance competencies shown by the teacher, including motor self-skills, such as the recruitment of teaching methods and technology, and practical presentations, so the performance of these skills depends on the teacher's cognitive skills.

Productivity skills: It refers to the impact of the teacher's performance of previous competencies in the field of education, i.e., the impact of the teacher's skills on learners and their adaptability in their future learning.

*E-learning has differently developed the educational process, following the impact of technological innovations on education, and with the spread of this technology, the form of electronic educational design has come to need to be changed in proportion to the new technology.*

*Al-Shahrani* (2009)*pointed out the importance of the role of the teacher in determining the level of skill of his students in using the computer in the electronic course, determining their previous requirements when using it, continuing to present their skills and trends towards the computer, diversifying educational components, and*

*providing students with technical support, the electronic course put in front of the teacher modern challenges and rapidly changing, and imposed on him more knowledge and the ability to develop oneself to keep up with the times.*

Studies have classified: Ayad (2005),Shaqfa (2008), and Abdul Ati (2001)technological technical skills as follows:

- **Computer skills:** a set of skills that enable the individual to manage and perform the computer tasks necessary for contemporary humans, such as skills to use operating systems, knowledge of the physical components of the computer (hardware) and non-physical (software),internet and-mail skills, and the skill of using computer accessories, such as printers, scanners, cameras, etc.
- **Communication technology skills:** a set of skills that enables the individual to communicate with others, using orderly and conscious of all modern technological capabilities and means, such as the Internet, cell phone, and satellite communication.
- **Engineering drawing skills:** a set of skills in which ideas, information, and technological and scientific designs are clarified, identified and transmitted, in a language, terminology, and universal symbols understood by different nationalities.

Al Saif (2009: 39) added e-learning skills with **electronic course design** skills that are concerned with analyzing the needs of the course and then designing and developing it, and the skills of managing the course and activating it on the Internet, which summarizes the stages of educational design (analysis, design, development, implementation, evaluation, and management of a course).

It is no longer hidden the role played by modern technologies and educational programs, especially in improving the performance of the teacher, developing the skills of the learner and increasing his achievement, and influencing his orientations, especially ifthe form in which the information appears is designed in a clearly arranged way, increases the student's motivation and attention (Sharawi, 2008).

*The teacher became required to achieve the superior ability and renewed awareness of him in dealing with information, as the role of the teacher in the school of the future is no longer limited to indoctrination and measuring the extent to which this information is stored in the minds of his students and their recovery in the test, but has become the facilitator of the process of self-learning to access information, and training students to search for it, in the easiest, fastest and most recent ways (Rizk,* 2008).

The teacher is the most targeted element in the educational process for its development and reform and has a key and effective role in advancing scientific, technological, and civilizational progress, so he must be qualified to perform his role as a technologically educated teacher, who is proficient in the use of technology leading to educational objectives, so that his role, not only as a conveyor or distributorof information but also as a facilitator and provider of students with diverse technology sources, is highly efficient(Al-Sarhan,2012).

It has become necessary to prepare teachers and give them the knowledge, skills, abilities, and directions in the light of specific foundations to master educational experiences by training and practice.

He pointed out that the preparation of the technological teacher is based on the skills and skills needed, in proportion to the spirit of the times and scientific and technological changes, to become the leader of the educational process, and to design education and produce various educational materials and software, and uses the appropriate materials, tools, and educational devices to carry out the required tasks, and follows the innovative technological developments of all kinds.

***Educational technical and technological innovations in keeping with the age and development work to raise the level of the teacher,*** *as well as satisfy the needs of the* ***learner, increase his positive participation, develop his abilities to meditate and creative scientific thinking in reaching problem-solving, arrange ideas and organize them in an acceptable manner, raise his level of learning quickly and deeply, improve the quality of education and increase its effectiveness, and achieve educational goals aimed at developing new trends, and modifying different behavior patterns (Abdul Jalil,*** 2003).

Al-Husari (2002)pointed out the need to prepare learners with skills and experience to deal with the data and challenges of the times, as well as the need to employ technological innovations and invest their potential in the field of education, in order to achieve these trends. This requires identifying the most important features of e-learning technology, its electronic educational media, and various tools, which in turn require recognition of their use in educational institutions in order to achieve trends in the preparation of individuals capable of dealing with the variables of this era.

***Al-Qurashi*** (2013) *pointed out that the techniques are educational* ***means, they are part of an integrated system is the educational process, and began to pay great attention to them in the educational process learning, it has become called educational techniques or the system of multiple means, it does not mean just the use of modern machines and devices, but means more comprehensively, taking into account all human potential, educational resources, level of learners and their needs and educational goals.***

There are IT tools in e-learning where appropriate skills are obtained to master the use of technology elements. The CPU, which can be counted by the computer mind, has three parts that specialize in calculations, logic, controls, and storage processes. As well as special or sub-volumes, the most famous of which are CD ROM and Flash Memory.

And there, as al-Mubarak and Moses(2005) mentioned, Software: Which carries instructions that allow the operation of devices and includes: operating systems drivers), interpreters Compilers, application software, the most important of which are word processing software, and account tables software Spread Sheet ( Excel), Database Software, Presentation Software, Graphics Software, Communication Software, Games Software, educational software.

It should be noted that there are several factors involved in the manufacture, development, and widespread of different media and software technology: the tendency of computers to accelerate processes more effectively in the performance of their functions, greater capabilities in their capabilities, the use of digital systems instead of analog signals and, as a result, the equipment can be connected to the computer, with performance quality, work accuracy, cheaper cost, and speed. Support the change in the pattern of handling equipment so that one machine performs multiple tasks, especially if itis easy to handle. Benefit from ARTIFICIAL INTELLIGENCE RESEARCH, ACHIEVEMENTS IN THE FIELDS OF PROGRAMMED MACHINE MOVEMENT TECHNOLOGY, COMPUTER VISION, CHARACTER RECOGNITION, AND SPEECH RESEARCH.Trade, wars of economic domination, and internet growth (Shafiq, 2006).

The study sees e-learning skills as a necessity at present, and it is necessary to measure the Availability of e-learning skills among faculty members and their preparations for e-learning to determine the need for more training to gain faculty members sufficient skills and experience. Sufficient skills, and therefore the role of universities in preparing training programs for training faculty.

**The problem of the study and its questions**

The success of e-learning depends on teachers' possession of skills related to this type of education, their ability to provide this type of modern education to students, and the problem of study comes from a lack of research and disclosure of the Availability of e-learning skills among faculty members in the Hashemite Kingdom of Jordan universities, knowledge of their e-learning skills enough to exercise the basic role of teachers of education technology, basic skills in computers and the Internet, the production of electronic educational materials, the designof electronic courses, or the use of software that benefits the learning process.

Although there are many studies that have given many results in this aspect, the Researcher believes that it is necessary to reveal the Availability of e-learning skills in computer teachers in the Directorate of Education of the North Eastern Badia- according to the science of the Researcher- there is no study in the Hashemite Kingdom of Jordan that revealed this aspect, and thus to identify the performance of teachers, and their professional skills in e-education, and studies that referred to the skills of education E-staff in terms of Availability of e-learning skills; study (Sword, 2009; Monthly, 2008; Sharif, 2002; Ajrami, 2012 Salam, 2013). In answering the following questions:

1- How well are the e-learning skills available to the faculty members of the northeastern Badia Education Directorate in the Hashemite Kingdom of Jordan?

2- Are there statistically significant differences at the level of significance$\alpha$ ($\leq$ 0.05) among faculty members in the Availability of e-learning skills attributable to variables (sex, experience).

**Study objectives**

The study sought to achieve the following objectives:

1- Revealing the Availability of e-learning skills among faculty members of the northeastern Badia Education Directorate in the Hashemite Kingdom ofJordan.
2- To know the level of Availability of e-learning skills among faculty members in theNorthEastern Badia Education Directorate in the Hashemite Kingdom ofJordan compared to gender variables and experience.

**The importance of the study**

The importance of the study lies in the following:

1- Statement of the need to keep up with the progress and employment of educational, technological innovations, including e-education in university education.
2- Identify e-learning skills and Availability among faculty members as they have a significant impact on the learning process.
3- The results of the current study may benefit university specialists from the need to prepare training programs to qualify and acquire e-learning skills from faculty members, from the necessary experience and skills in education.
4- Encourage other researchers to build programs in e-learning,modern technologies, andvarious subjects.

**The limits and limitations** of the study

1- The study was limited to revealing the Availability of e-learning skills among faculty members.
2- The study was limited to the Northeastern Badia Education Directorate in theHashemite Kingdom ofJordan in the second semester of 2020/2021.
3- The study is specific to the tools used and to the extent to which these tools are true and stable.

**Procedural definitions**

- **E-learning:** "An educational system that uses information technologies and computer networks to strengthen and expand the educational process through a range of means including computers, the Internet, and electronic programs prepared by specialists in the ministry or companies"(Glum, 2003:3).

**The Researcher** defines **e-learning** as "the teacher's ability to use and deal with the educational system, which relies on electronic and technical sources such as computers, multimedia, the Internet and others, provides an interactive learning environment with multiple sources and rules of information that provides university students with diverse information in all areas that can be used through direct communication through the Internet, devices, and media, and can be retrieved and saved electronically, as well as the possibility of managing this learning, its content electronically and its production."

- **Adequacy: "Knowledge,** skill or direction that enables individuals to perform a task or function with a level of effectiveness that corresponds to the standards of the individual's organization"(Richey, Fields & Foxon, 2001: 31).
- **E-learning skills:** a certain level of information, skills and trends that are committed to having e-learning technology teachers with the aim of bringing the educational process to a degree of competence and effectiveness" (Age, 2009: 14).

**The Researcher** defines it **procedurally** as "the minimum e-learning skills needed for faculty members in the North Eastern Badia Education Directorate in the North Eastern Badia Education Directorate in the Hashemite Kingdom of Jordan to perform the teaching profession with a level of effectiveness and competence within the procedures for applying e-education at the university."

- **Faculty:** A person who works in teaching at the university level and works as a professor, laboratory curator or computer teacher and holds a degree in a scientific or humanitarian discipline" (Hamdi, 2001: 510).

**The Researcher** defines **faculty members procedurally as "a** science with a degree in a human or scientific discipline, and holds a position of scientific rank."

**Previous studies**

Al-Ajrami Study (2012) the study aimed to identify the Availability of e-learning skills among technology teachers in schools in Gaza governorates in the light of some variables. The results showed that teachers have e-learning skills in the field of basics of computer use at 82%, in the service of the network 76%, in the design and construction of electronic courses by 66%, and in the management of electronic courses, 64%, and the results did not show statistically significant differences in the degree of availability Adequacy is due to the variable of scientific specialization, or years of experience, while statistically significant differences have emerged due to the variable of the study stage in all areas of study except the field of basics of computer use, and for the benefit of experienced (5) years and over, as opposed to experienced people less than (5) years.

Ahmed Al Baddah Study (2013) aims to identify the Availability of e-learning skills among faculty members at Al-Majma University. Scientific findings are also recommended to help develop and formulate a setof practical proposal and procedures that will help improve the skills and skills of faculty members suitable for the use of e-learning. The results showed the Availability of e-learning skills among faculty members at medium rates, as well as the validity of the second assumption that there are no significant statistical differences in the responses of the study sample due to the following variables: sex, age, specialization, and training courses.

Salam Study (2013) The study aimed to identify the degree of Availability of e-learning skills among faculty members at the University of Ibb in the Republic of Yemen. The results showed that faculty at Ibb University in the Republic of Yemen have e-learning skills in the axis of computer use and accessories, and the axis of the use of networks and the Internet is high, while they have skills of e-learning culture and the design and management of learning for electronic to an average degree, and the results did not show statistically significant differences in the degree of Availability is due to academic rank, or the number of years of teaching experience, while showing differences in the axes and accessories of the computer, the use of networks and the Internet due to the change in college, and for the benefit of scientific colleges, as well as statistically significant differences in all axes of the tool due to the change in the number of courses For e-learning training.

**Comment on studies**

The current study was distinguished from previous studies because, according to the Researcher's knowledge, it may be the first of its kind in the Hashemite Kingdom of Jordan in relation to the subject, despite the Availability of relevant studies and relationship, but in the Hashemite Kingdom of Jordan it is few, where the current study revealed the Availability of e-learning skills among faculty members in the Directorate of Education of the Northeastern Badia in the Hashemite Kingdom of Jordan and has benefited from previous studies in terms of the sample, methodology and statistical methods, in addition to being used to prepare the current study tool.

**- Method and procedures**

**Curriculum**

The research adopted a descriptive survey method that is concerned with presenting the measured phenomenon as it is, as this approach is appropriate for the objectives and purposes of the current research and its variables.

**Study** community

The study community is made up of all the 680 faculty members of the Northeastern Badia Education Directorate in the Northeastern Badia Education Directorate of higher education in the Hashemite Kingdom of Jordan for the 2020/2021 academic year, which included (416) faculty members.

**Sample study**

The research sample was made up of (246) members and faculty members of the Northeastern Badia Education Directorate, randomly selected for the second academic year 2020/2021.

**Table (1)**
**Repetitions and percentages by study variables**

| | Categories | Iteration | Ratio |
|---|---|---|---|
| Sex | male | 148 | 60.2 |
| | female | 98 | 39.8 |
| Years of experience | Less than five years. | 140 | 56.9 |
| | 5-10 years ago, | 70 | 28.5 |
| | 10-15 years old | 36 | 14.6 |
| | Total | 246 | 100.0 |

**Study** tool

The Researcher prepared a questionnaire to reveal the e-learning skills of the faculty members of the Northeastern Badia Education Directorate in the Hashemite Kingdom of Jordan, and after reviewing previous research and studies including (Al-Saif, 2009; Monthly, 2008; Salam, 2013), the scale is two parts, the **first:** the inclusion of general and basic information on the sample including sex, years of university experience; **and part** 2: e-learning skills.

**Believe the study tool**

The Researcher to ensure the validity of the tool to measure virtual honesty by presenting it to a number of arbitrators specialized in curriculum and education technology in order to ensure that the appropriateness and affiliation of the paragraphs are measured, the clarity of the phrase, and the integrity of its formulation, and submit proposals for amendment, addition or deletion, the arbitrators have expressed the appropriate observations and opinions, and have been taken and made formal adjustments in the formulation, and to produce the questionnaire in its final form.

**Stability of the study tool**

To ensure the stability of the study tool, the test-retest method was verified by applying the scale and reapplied after two weeks to a group of30outside the study sample, and the Pearson correlation factor was calculated between their estimates both times.
The stability factor was also calculated in the internal consistency manner by the Cronbach Alpha equation, and table2shows the internal consistency factor according to the Cronbach Alpha equation, and the stability of the replay of the areas and instrument as a whole, and these values were considered appropriate for the purposes of this study.

**Table (2)**
**The internal consistency factor Cronbach alpha and the stability of the replay for the fields** and the overall **degree**

| Domain | Stability of replay | Internal consistency |
|---|---|---|
| Computer skills | 0.92 | 0.87 |
| Internet skills | 0.91 | 0.86 |
| Electronic course design skills | 0.90 | 0.84 |
| Total degree | 0.91 | 0.90 |

**Statistical standard**

The pentagram ladder was adopted to correct the study tools, giving each of its paragraphs one in five grades(very large, large, medium, very weak, weak)and representing digitally (5, 4, 3, 2, 1) respectively, and the following measure was adopted for results analysis purposes:
From 1.00- 2.33 a few
From 2.34- 3.67 medium
From 3.68- 5.00 large
And so on.

The scale was calculated by using the following equation:

$$\frac{\text{Upper scale (5) - minimum scale (1)}}{\text{Number of categories required (3)}} \quad \frac{5-1}{3} = 1.33$$

And then add the answer (1.33) to the end of each category.

**Search execution procedures**

To achieve the research objectives, the following steps and actions were followed:

- Identify a random sample of the entire community of faculty members in the North Eastern Badia Education Directorate.
- Set up the search tool and present it to arbitrators to take advantage of their feedback and take it.
- The Researcher distributed the questionnaire to a reconnaissance sample of faculty members in the Northeastern Badia Education Directorate, and then after the extraction of honesty and stability, the questionnaire was distributed to the sample.
- The Researcher unloaded the questionnaires and conducted a statistical analysis using appropriate statistical treatments to present, discuss and make recommendations.

**Statistical treatment**

In the light of the study's questions, the Researcher used appropriate statistical treatments by analyzing them on spas,and the Researcher used mathematical averages and standard deviations, internal consistency factors, alpha Cronbach and the stability of replay and repetitions, as well as analysis of quadruple variability to show the variables of the study, and the use of the Chevy method for remote comparisons of the impact of variables.

**Presentation and discussion** of results

**Question 1: "What** is the **Availability of e-learning skills** among faculty members of the **northeastern Badia Education Directorate** in the **Hashemite Kingdom of Jordan?".**

To answer this question, arithmetic averages and standard deviations of the Availability of e-learning skills have been extracted among faculty members of the northeastern Badia Education Directorate in the Hashemite Kingdom of Jordan, and the table below shows this.

**Table(3) Arithmetic averages and standard deviations for** the **Availability of** e-learning **skills among faculty members of** the northe**astern Badia Education Directorate** in the Hashemite **Kingdom of Jordan ranked downwards according to calculation averages**

| Rank | figure | Domain | Arithmetic average | Standard deviation | Level |
|---|---|---|---|---|---|
| 1 | 1 | Computer skills | 3.96 | .563 | High |
| 2 | 2 | Internet skills | 3.92 | .615 | High |
| 3 | 3 | Electronic course design skills | 3.84 | .629 | High |
| | | Total degree | 3.89 | .583 | High |

Table (3) shows that the calculation averages ranged from(3.84-3.84),where computer use skills came first with the highest average calculation (3.96), and came Internet usage skills ranked second with an average calculation of 3.92, while electronic course design skills came in the last place with an average account of3.84and a total score of 3.89.

This result is due to the fact that the faculty members of the North Eastern Badia Education Directorate at the university have high skills due to the awareness of the faculty of the importance of possessing those skills, especially computer skills and then the skills of using the Internet and designing electronic courses, and this indicates that the faculty try to keep up with technological development through the use of computers, the Internet and design in public life to overcome difficulties and provide For time and effort, since these special computer use

skills are basic skills that cannot use the computer without mastering it, and therefore the need to master the use of the Internet because it prepares the network between member and student, the dissemination of courses, browsing and the use of engines and others, this means the need to master the design of electronic courses, and with the use of the Internet has become an integral part of scientific life and The process of integrating communications with technology has become a requirement for academics to learn the skills needed to use them, especially the basic ones, a comprehensive and integrated process in which faculty members seem to know, making their performance high.

The results of the current study agreed with the study (Saif, 2009; Sharif, 2002; Al-Ajrami, 2012) in terms of the Availability of skills, especially the use of computers and the Internet to a high degree, and differed with the study (Salam, 2013) in terms of the degree of design and management of e-learning was at peace (2013) Medium while in the current study is high, and the results of the current question differed with the study (Ahmed al-Badah, 2013) in terms ofskill grade was medium, and current studies are high.

The calculation averages and standard deviations of the study sample members' estimates were calculated on the design skills of the sub-courses, as follows:

**Table (4)**
**Calculation averages and standard deviations of the study sample members' estimates on sub-e-course design skills ranked downwards by calculation averages**

| Rank | figure | The efficiency | Arithmetic average | Standard deviation | Level |
|---|---|---|---|---|---|
| 1 | 1 | Planning skills | 3.89 | .698 | High |
| 2 | 3 | Decision management and implementation skills | 3.84 | .649 | High |
| 3 | 2 | Design and preparation skills | 3.81 | .655 | High |
| | | Electronic course design skills | 3.84 | .629 | High |

Table4 shows that the calculation averages ranged from (3.81-3.81), with planning skills ranked first with the highest computational average of(3.89),while design and preparation skills came in the last place with an average calculation of (3.81),and the computational average of electronic course design skills as a whole (3.84). This indicates that the level of performance is similar to that of faculty skills as a result of the practice and experience of faculty members in the design stages of their courses on a daily basis. This result was agreed with the study (Sword, 2009) in terms of the Availability of planning skills to a high degree, and differed with the current study in terms of the degree of Availability of design and preparation skills and came to an average degree while the result of the current study was high, while the skills of managing and implementing the course came in the current study high, while the study (Sword, 2009) came with an average degree.

**Question 2: States: "Are there statistically significant differences at** the level of significance**$\alpha$ ($\leq$ 0.05) among faculty members in** the availability of e-learning **skills attributable to variables (sex, experience)?"**

To answer this question, arithmetic averages and standard deviations have been extracted for the Availability of e-learning skills according to gender variables, experience and the table below shows this.

**Table 5**
**Arithmetic averages and standard deviations for the Availability of e-learning skills** by **gender variables, experience**

| | | Arithmetic average | Standard deviation | Number |
|---|---|---|---|---|
| Sex | male | 3.91 | .585 | 148 |
| | female | 3.87 | .582 | 98 |
| Years of experience | Less than five years. | 3.98 | .536 | 140 |
| | 5-10 years ago, | 3.87 | .621 | 70 |
| | 10-15 years old | 3.62 | .608 | 36 |

Table5showsa seeming variation in arithmetic averages and standard deviations in the Availability of e-learning skills due to different categories of sex variables, experience, and to indicate the statistical differences between mathematical averages.

**Table7**
**Analysis of triple variation of sex effect, experience on Availability of e-learning skills**

| Source of contrast | Total squares | Degrees of freedom | Average squares | Value in | Statistical significance |
|---|---|---|---|---|---|
| Sex | .260 | 1 | .260 | .836 | .362 |
| Years of experience | 3.061 | 2 | 1.531 | 4.922 | .008 |
| Error | 74.640 | 240 | .311 | | |
| Total | 83.219 | 245 | | | |

Table7showsthe following:

- The lack of and existence of statistically significant differences (0.05 = 0.05) due to the impact of sex, with a value of 0.836 and a statistical allowance of 0.362,and the differences came in favor of males.

- The existence of statistically significant differences(0.05) due to the impact of years of experience, with a value of 4.922 and a statistical allowance of 0.008, and to indicate the statistically significant marital differences between mathematical averages, remote comparisons were used in a chevy manner as shown in table(9).

**Table (9)**
**Remote comparisons in a chevy** way **to the impact of years** of experience on the **Availability of e-learning skills**

| | Arithmetic average | Less than five years. | 5-10 years ago, | 10-15 years old |
|---|---|---|---|---|
| Less than five years. | 3.98 | | | |
| 5-10 years ago, | 3.87 | .10 | | |
| 10-15 years old | 3.62 | .36* | .25 | |

*** Function at the semantic level (≤ = 0.05).**

Table9shows statistically significant differences (0.05) between less than five years and10-15 years and differences in favor of fewer than five years. This finding is due to the fact that experienced members under five years ofage are the most available for their e-learning skills as a result of their young age, often more in line with technology and techniques and their applications, more aware of e-learning and their knowledge skills, more receptive to technology and its innovations, and a desire to acquire skills and experiences more than others. This

finding is consistent with the study (Sword, 2009) and the current result differed from the study (Ajrami, 2012) where no statistically significant differences were shown due to the change of experience.

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Join (1)

| figure | Paragraph | Too big. | Big | Medium | Weak | Very weak. |
|---|---|---|---|---|---|---|
| **Domain 1: Computer skills** | | | | | | |
| | Open and close the computer correctly. | | | | | |
| | Dealing with computers easily and easily. | | | | | |
| | Use input, output and storage tools. | | | | | |
| | Store files on volumes (hard drives, CDs, flash). | | | | | |
| | Deal with files and folders, whether by deletion, transfer, or modification. | | | | | |
| | The ability to handle desktop icons and taskbar. | | | | | |
| | Use accessories such as: printer, scanner, speakers correctly. | | | | | |
| | Connecting computer connections and accessories. | | | | | |
| | Download ready-made software throughCD. | | | | | |
| . | Use multimedia software video, sound, flash. | | | | | |
| . | Insert tables, graphs, and hard images of documents. | | | | | |
| . | Use Word Text Editor software, edit and coordinate documents efficiently and effectively. | | | | | |
| . | Check volumes and make sure they are virus-free through antiviral software. | | | | | |
| . | Use presentations to create presentations and add kinetic effects, text, images, and hyperlinks. | | | | | |
| . | The ability to compress or decompress files using WinZip and WinRAR. | | | | | |
| . | Use publishing programs such as Acrobat Reader & Writer to convert documents to a publishable format, and distinguish files by extension. | | | | | |
| . | Evaluation of educational software ready-made from an educational point of view. | | | | | |
| **Domain 2: Internet skills** | | | | | | |
| . | Use email and send attachments through it. | | | | | |
| . | Connect to the Internet easily, whether from the phone, wireless or space. | | | | | |
| . | Use menus for different internet browsing programs effectively and efficiently. | | | | | |
| . | Download files and programs from the network and upload them to it. | | | | | |
| . | Use the Internet as support in conducting research, documenting it and linking it to its original source. | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| . | Send and receive files using instant chat programs such as Messenger. | | | | | |
| . | Use and supply of electronic libraries. | | | | | |
| . | Connect with universities and research centers to take advantage of their potential. | | | | | |
| . | Use video and audio conferences. | | | | | |
| . | Use electronic information bases such as eric educational information base for information that serves the educational process. | | | | | |
| . | Follow-up on professional development in the field of educational technologies and web applications. | | | | | |
| **Area 3: Electronic Course Design Skills** | | | | | | |
| | **Planning skills:** | | | | | |
| . | Identify the overall objectives of the decision and the sub-objectives it achieves. | | | | | |
| . | Divide the course into units by sub-objectives and formulate them in a clear and measurable manner. | | | | | |
| . | Set a timetable for the completion of different tasks to prepare the course. | | | | | |
| . | Identify the physical and human requirements for building the course. | | | | | |
| . | Determine the appropriateness of the decision to be presented over the networks. | | | | | |
| . | Identifying students' characteristics. | | | | | |
| | **Design and preparation skills:** | | | | | |
| . | Identify effective teaching strategies to achieve goals. | | | | | |
| . | Choose a variety of learning and learning strategies such as: collaborative learning, lecture, discussion, problem solving, simulation, projects. | | | | | |
| . | Set clear calendar criteria in the decision plan. | | | | | |
| . | Strengthening the course with multiple files and media (voice, video.) achieves the objectives of the course and suits students. | | | | | |
| . | Use positive and varied patterns of feedback. | | | | | |
| . | Analyze and interpret calendar results to be utilized in improving performance. | | | | | |
| . | Identify appropriate feedback patterns for students' characteristics, method and interactions. | | | | | |
| . | Apply a variety of calendar methods suitable for e-learning, such as: projects, student e-bag, tests. | | | | | |
| . | Develop a self-learning program such as: bag, software, media, suitable for students and achieve the goals of the unit. | | | | | |
| . | Develop links to related topics. | | | | | |
| . | Turn educational content into a program scenario that a programmer can understand. | | | | | |
| . | Determine the appropriate simultaneous or asynchronous electronic communication method between elements of the educational process. | | | | | |
| | **Management and implementation skills** | | | | | |
| . | Scheduling weekly learning activities to facilitate students' | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | learning. | | | | | |
| . | Provide clear information to students about each learning strategy used in terms of method and objectives. | | | | | |
| . | Dealing with the decision flexibly in terms of (deletion, addition and modification) depending on the course and circumstances of the decision. | | | | | |
| . | Motivating students to interact with the e-course. | | | | | |
| . | Directing students towards self-learning from courses offered over networks. | | | | | |
| . | Follow-up students' performance and progress in learning from the online course to provide assistance when needed. | | | | | |
| . | Manage the time to submit and develop the course on the network. | | | | | |

**Join (2)**
**Arithmetic averages and standard deviations**

| figure | Paragraphs | Arithmetic average | Standard deviation |
|---|---|---|---|
| 1- | Q1 | 4.13 | .899 |
| 2- | Q2 | 4.10 | 1.068 |
| 3- | Q3 | 4.05 | .889 |
| 4- | Q4 | 4.04 | .886 |
| 5- | Q5 | 4.02 | .880 |
| 6- | Q6 | 4.04 | .868 |
| 7- | Q7 | 3.98 | .876 |
| 8- | Q8 | 3.95 | .834 |
| 9- | Q9 | 3.91 | .904 |
| 10- | Q10 | 3.93 | .899 |
| 11- | Q11 | 3.87 | .960 |
| 12- | Q12 | 3.96 | .927 |
| 13- | Q13 | 3.85 | .886 |
| 14- | Q14 | 3.96 | .953 |
| 15- | Q15 | 3.92 | .916 |
| 16- | Q16 | 3.80 | .885 |
| 17- | Q17 | 3.85 | 1.056 |
| 18- | Q18 | 4.11 | .765 |
| 19- | Q19 | 4.18 | .908 |
| 20- | Q20 | 4.05 | 1.017 |
| 21- | Q21 | 3.99 | .878 |
| 22- | Q22 | 3.96 | .918 |
| 23- | Q23 | 3.88 | .951 |
| 24- | Q24 | 3.86 | .897 |
| 25- | Q25 | 3.85 | .991 |
| 26- | Q26 | 3.80 | .960 |
| 27- | Q27 | 3.65 | .955 |
| 28- | Q28 | 3.83 | 1.037 |
| 29- | Q29 | 3.96 | .918 |

| figure | Paragraphs | Arithmetic average | Standard deviation |
|---|---|---|---|
| 30- | Q30 | 3.93 | .962 |
| 31- | Q31 | 3.93 | .880 |
| 32- | Q32 | 3.79 | 1.027 |
| 33- | Q33 | 3.86 | .876 |
| 34- | Q34 | 3.85 | 1.025 |
| 35- | Q35 | 3.88 | .968 |
| 36- | Q36 | 3.85 | .890 |
| 37- | Q37 | 3.80 | 1.018 |
| 38- | Q38 | 3.91 | .895 |
| 39- | Q39 | 3.85 | .939 |
| 40- | Q40 | 3.82 | 1.030 |
| 41- | Q41 | 3.80 | .921 |
| 42- | Q42 | 3.78 | 1.035 |
| 43- | Q43 | 3.75 | 1.081 |
| 44- | Q44 | 3.83 | .893 |
| 45- | Q45 | 3.63 | .938 |
| 46- | Q46 | 3.79 | 1.107 |
| 47- | Q47 | 3.87 | .933 |
| 48- | Q48 | 3.86 | .929 |
| 49- | Q49 | 3.78 | .886 |
| 50- | Q50 | 3.90 | .951 |
| 51- | Q51 | 3.86 | 1.060 |
| 52- | Q52 | 3.84 | .905 |
| 53- | Q53 | 3.78 | 1.177 |