



The use of educational technologies and modern electronic educational media in teaching science subject to grades (fourth, fifth and sixth) and their impact on the educational process from the viewpoint of teachers of government schools affiliated with the Jordanian Ministry of Education.

Dr. Safa Samih Ekrayyem Aladwan

Abstract- This study aimed to know the effect of using educational technologies and modern electronic educational media in teaching science subject to students of grades (fourth, fifth and sixth) and its impact on the educational process from the viewpoint of teachers of government schools affiliated with the Jordanian Ministry of Education, and the study sample consisted of (249) teachers and teachers Those who study the first basic grades in public schools affiliated with the Ministry of Education. The researcher used the descriptive approach in this study. The study tool consisted of a questionnaire, and the results of the study showed that a large percentage of the study sample in general feels the presence of a number of educational obstacles using methods and technical means, that a moderate percentage of the study sample believes that the lack of availability of a teacher who is good at designing or generalizing e-learning and the lack of training What is appropriate for e-learning in addition to the lack of physical capabilities to connect to the electronic network and the weakness of the infrastructure of the Internet are among the factors that hinder the use of electronic technologies and means in teaching the third grade basic, and it also showed that a large proportion of the study sample estimated the contribution of using e-learning methods in The school considers its role positive and reaches a great degree in terms of effectiveness if it is employed by individuals who possess sufficient skills and experience in the field of teaching methods and educational strategies in general. However, most of them do not possess these skills or the infrastructure does not allow him to use them to the fullest extent. And it also showed that a large percentage of the study sample greatly appreciated the negatives surrounding the use of educational techniques and methods They consider it a hindrance that makes it difficult to use it in the classroom.

Keywords: educational technologies, modern electronic educational media, e-learning

I. INTRODUCTION

The world today is a small village, and education became possible from anywhere and at any time without the need for a face presence. Today, we see many major educational institutions, especially schools, universities and colleges, heading towards electronic education using various media and technologies to facilitate everyone who wants to obtain information and skill. And to receive it simply and easily, through many technical tools and software that are used in the field of education, as scientific and knowledge progress has contributed to many changes in various fields of life, and our society has entered the age of technology from its widest doors and we must keep pace with these developments in all fields, including the field. Educational.

The emergence of educational technologies led to successive developments until they reached what we are witnessing today, and we hope to have the ability to stand in front of this rapid development in this changing world and try to keep pace with everything that is new and useful.

study Problem

The educational system's use of electronic educational technologies and means is no longer optional nor an individual desire. Rather, it has become a necessity, especially after most schools have been trained on educational development programs based on the introduction of methods and means based on information technology as an essential element in teaching, but some teachers are still He is not convinced of the importance of entering the age of technology, and wants to preserve the traditional character despite the fact that it does not meet the requirements of the new era, and is unable to follow and assimilate the data of the modern technological revolution in a way that contributes to preparing students for new tasks and roles that are required by the necessities of the times and to meet the needs of society. In general, we have a problem with the lack of interest of some in employing educational technologies in

most school subjects. However, in this study, we will take a study sample from the fourth, fifth and sixth grades.

Study questions

This study seeks, through research and survey, and after defining the study problem, to answer the following basic question:

What is the reality of the weekly use of electronic applications, technologies and means by fourth, fifth and sixth grades teachers?

Study hypotheses:

- The first hypothesis: There are no statistically significant differences at the level ($0.05 \geq \alpha$) in the fact that fourth, fifth and sixth grades teachers use technologies of modern electronic educational media (educational technologies) as a teaching method with students of fourth, fifth and sixth grades in the educational process due to gender.

- The second hypothesis: There are no statistically significant differences at the level ($0.05 \geq \alpha$) of the fact that fourth, fifth and sixth grades teachers use technologies of modern electronic educational media (educational technologies) as a teaching method with students of fourth, fifth and sixth grades in the educational process due to scientific qualification

- The third hypothesis: There are no statistically significant differences at the level ($0.05 \geq \alpha$) of the fact that fourth, fifth and sixth grades teachers use technologies of modern electronic educational media (educational technologies) as a teaching method with students of fourth, fifth and sixth grades in the educational process due to the experience

- The fourth hypothesis: There are no statistically significant differences at the level ($0.05 \geq \alpha$) of the fact that fourth, fifth and sixth grades teachers use modern electronic educational media technologies (educational technologies) as a teaching method with fourth, fifth and sixth grades students in the educational process due to the geographical area.

Objectives of the study

This study aims to identify:

1. The importance of using educational technologies and their role in developing teaching methods used by teachers of fourth, fifth and sixth grades.
2. The importance of educational technologies in organizing and selecting the type of teaching method.
3. The effect of educational technologies in organizing and selecting the type and method of teaching.

The importance of studying

The importance of this study is as follows:

1. The study provides an image of the actual reality of electronic technologies and electronic means and their role in teaching for students of grades four, five and six.
2. This study contributes to uncovering some of the causes and difficulties that hinder teachers' use of electronic means and technologies.
3. Contribute to developing recommendations and suggested solutions for how to use electronic means in activating and developing the educational process.

Procedural definitions of terms

1- Educational techniques:

The programmed method in education aims to increase the effectiveness of the axes of the educational process and raise its efficiency, which is the method of employing technical programs in education with the aim of increasing the effectiveness of the educational process, re-planning, organizing and implementing it and evaluating educational outputs, which is an integrated system of hardware (Hard Ware) and software (Soft Ware), And procedures and processes used by the teacher in the educational process in order to help learners achieve goals effectively and efficiently.

2- Electronic means:

The concept of educational technological technologies: It denotes the organization of the teaching and learning process, and the conditions related to it, differentiating it from the concept of educational technologies indicating the organization of the educational system, and its development in a comprehensive manner that extends its impact to the development of the curriculum, the writing of

textbooks, the availability of educational tools, the training of the educational system, the school building and research About the best teaching and learning strategies, and employing them in the educational process.

Limitations of the study

- 1- The study population was limited to a sample of female teachers and teachers for the first three grades in government schools in the Hashemite Kingdom of Jordan.
- 2- As for the spatial determinants, they are three geographical areas (south, center, north).
- 3- The time limit is the period of sample distribution.

II. THEORETICAL FRAMEWORK

The method of teaching has great importance in the educational process to develop the personality of the learner, and it is not one. Modern methods are many and varied, taking into account the individual differences of learners, materials, educational curricula and stages of education in selecting and applying them, and the teacher has to adapt his method to suit these differences.

Whatever the method adopted, what is important is that it is based on modern and effective foundations that are able to stimulate the thinking of the learner, take into account his tendencies, develop his abilities, and enable him to take personal initiative and free choice. The general goal is to form the independent creative personality of the learner, which contributes to the development of special abilities and skills.

The fields of using computers in education varied and varied, from using it as a subject, to developing methods and methods used in teaching, or developing new methods and methods that could contribute to achieving the desired goals of the teaching process.

The educational aids (models, drawings, maps, models and other educational technologies that are based on the use of the data show device and its features and ease of use in addition to the presence of the suspense element and its contribution to the approximation of the abstract scientific material makes it one of the teaching methods that it employs in the process. Learning is meaningful in the educational process, concrete and direct.

As a result of the tremendous development in educational theories and practical practices, and the entry of technology into multiple areas of life, the entry of these media and technologies into the field of education was imperative in order to serve the goals of education, and a solution to the problems the teacher faces.

Therefore, these different means entered the fields of education under many names. At first they were known by the name of "assistive" means or audiovisual aids. The teachers used them in their teaching with varying degrees of enthusiasm, each according to his understanding of it and his belief in its importance.

Since the learning process is a deliberate and organized process in terms of preparation, implementation and evaluation, all its elements must be integrated in all stages of work to reach better education, so a new conceptualization of more powerful concepts and practices and the ability to bring about change for the better was necessary.

The development of the use of electronic technologies in education:

It was stated in the study (Yahya Lal, Zakaria 2008: 27) review, "The beginning of the use of computers in education in 1958 - as indicated by each of Salama and Abu Raya (2002: 138) when John Kemeny and his assistants at Dartmouth University in the United States of America developed the first model of the BASIC language, and it was used in writing and developing educational programs that were widely accepted in schools and universities in that period, and these educational programs were The basis for the development of what would later become known as Computer Assisted Instruction (CAI).

Then, in the early 1960s, IBM, in cooperation with Stanford University, developed the first computer-aided teaching program (Computer Curriculum Corporatio) comprehensive for the elementary school curriculum, and the Computer Curriculum Foundation was established to market and follow it. So that a large number of students can work on it simultaneously. And it has spread in the United States of America and Europe, and there have been successive improvements to it, so in 1972 the program had seven hundred terminal endings, used in four hundred different places, and it was developed five times and is used in teaching most stages of education. (Al-Mughira 1998: 132)

Technology is a systematic method that proceeds according to organized knowledge, and uses all available capabilities, whether material or non-material, in an effective manner to accomplish the desired work, to a high degree of proficiency or adequacy. Technology can also be described as the science of applying knowledge for practical purposes. Therefore, it appears that educational technology includes the application of available knowledge in a systematic way to solve problems in education and training.

Technology has three meanings:

1- Technology: It means the systematic application of scientific knowledge.

2- Technology as products: it means tools, devices and materials resulting from the application of scientific knowledge.

3- Technology as a process and products together: It is used in this sense when the text refers to processes and their outcomes together, such as computer technologies. (Al-Ghazawi, 2007: 5)

After the flourishing of the behavioral goals movement and programmed education, the term educational technology or educational technologies has emerged that did not focus only on production processes or personnel management, but rather concerned with production, development, use, evaluation and management processes as elements that interact with each other.

The concept of educational technologies related to educational technology:

It denotes the organization of the teaching and learning process, and the conditions related to it, differentiating it from the concept of educational technologies indicating the organization of the educational system and its development in a comprehensive manner that extends its impact to developing the curriculum, writing textbooks, availability of educational tools, training the educational system, the school building and searching for the best teaching and learning strategies And employing them in the educational process.

As for educational technology, it is called educational technologies, it is a subset of educational technologies, which is a complex and integrated process that includes individuals, methods, ideas, tools and organizations that are followed in analyzing problems, devising appropriate solutions for them, implementing them, evaluating them, and managing them in situations where education is purposeful and a direction that can be controlled. Hence, it is the management and development of the components of the educational system.

The more the educational experiences that the learner goes through, the closer to realism, the more tangible it becomes, closely related to the goals that the teacher seeks to achieve and the learner's desires that he craves to be fulfilled.

Studies have shown that the participation of more than one of the senses in the educational processes leads to the consolidation and deepening of this learning. The educational techniques help the participation of all the senses of the learner, and the human senses are the outlets for the mind to obtain knowledge and thus help to create relationships between what the learner has learned, and this results in the survival of the learning effect (Al-Nadawi, Fawaz 2012: 4).

Concept of education technologies:

According to the study (Al-Nadawi, Fawaz. 2012), the concept of educational technology carries with it three main meanings: a system, an output, a mixture of results and a system, and educational aids as part of the teaching techniques, although there are those who use the two concepts as if they are synonymous, confusing the teaching techniques. Which is a systematic method that proceeds according to organized human knowledge, and uses all available resources, material and immaterial, in an effective manner to accomplish the desired work, with a high degree of proficiency or efficiency.

And that the ultimate goal of introducing modern technology to the field of education is to modernize the educational process in order to serve development. This requires the possibility of benefiting from the developments of science and employing this development in changing the course of the educational process from traditional means to modern methods.

The application of e-learning requires the availability and use of many tools and electronic means, including:

- Computers. Data show
- World wide web. - Internal network (LAN) and wide area network (WAN).

- CDs. - E-Book.

Electronic Course. - Electronic library.

Electronic laboratories. - All kinds of electronic audio and video devices.

- Interactive TV. - Multimedia.

The mobile phone (Al-Shannaq, 2009: 219).

The importance of the mandates for adopting educational technologies:

The importance of education technologies in the educational aspect is highlighted by the fact that they help to arouse the interest of the learner and satisfy his needs for learning, and help to increase the learner's experience, which makes him more willing to learn. And contribute to the involvement of all the senses of the learner.

Examples of some educational (educational) techniques:

Multimedia:

A word that means the use of a group of media such as sound, image, or video in a coherent and integrated manner, in order to improve the learning process. (Abu Zaida 2006: 12-20)

The most important applications for multimedia:

There are many practical applications of multimedia, including not limited to the educational aspect. We mention, for example, but not limited to:

1- Training: Multimedia applications can be used in the fields of training for workers in companies, institutions or the educational sector, whether training for new workers or old workers, in order to train to enter any new technologies for the institution.

2-Education: The use of multimedia applications makes the educational process an enjoyable process, whether for the teacher or the student, and these applications explain the lesson to students by displaying graphics, pictures and sound, which display the goal of the class in the form of a film that makes students' attention and interaction greater so that students follow without boredom and the benefit Larger .

3-Entertainment: Many of the games available now are considered a kind of multimedia application and many of the games are educational and entertaining, and a number of them are useful in developing the thinking processes and intelligence of its users. (Shalabaya, Murad et al. 2002: 18-19)

The role of multimedia in improving the teaching and learning process:

He cited (Clinics, 2004: 210) in a study that had a number of points and emphasized those points (Abu Zaida 2006: 12-20) in another study on multimedia and its role in improving the educational process. Through a number of reviews of many studies, we can enumerate the most important roles. Multimedia in improving teaching and learning processes includes the following:

1- Enriching the education process by expanding the learner's experiences, facilitating the building of his own concepts, overcoming natural and geographic boundaries and obstacles, and creating a learning environment that challenges the methods of education because of the various means of communication in this environment that present the educational material in useful and attractive ways.

2- It contributes to arousing the learner's interest and satisfying his need for learning by acquiring real experiences that become tangible with us when the teacher becomes an active participant in their implementation and design, which contributes to strengthening the link with the goals that the teacher seeks to achieve and the desires that he craves to satisfy the learners.

3- It helps to increase the learner's experience, making him more ready to learn, and it helps to engage all the learner's senses, which leads to deepening and deepening learning.

4- Diversity in the use of multimedia leads to the formation of sound concepts, and helps to increase the learner's positive participation in gaining experience as it develops for the learner the image of contemplation and accuracy of observation and following scientific thinking to reach the solution of problems.

5- It leads to arranging ideas through diversifying learning styles to face individual differences between learners, which contributes to achieving qualitative rather than quantitative learning, as professors aim for students to learn the principles and foundations of science in meaningful ways, and not by encouraging learners to understand the required. It requires the use of deep approaches to learning and the adoption of new methods of teaching that are more effective and learner-centered.

Principles and criteria for choosing the educational method:

The teacher, before confronting his students, must design and prepare the educational situation before the confrontation and the occurrence of educational contact, as he performs the process of mental preparation and written planning, and this preparation may require the teacher to prepare some educational aids, and there are scientific methods that the teacher follows when choosing these means, including:

- 1- The teacher determines the goal that he wants to achieve the lesson or class.
- 2- After determining the goal, he must define the content.
- 3- After determining the goal and content, he must review the capabilities of the educational means in order to help him make the scientific choice of the educational method.

The foundations of using the educational method

The teaching method has foundations for selection, and it also has foundations in use. If the teacher follows the scientific methods in choosing the educational method and does not follow the scientific methods in using it, he may lose the desired benefit from that, and from the foundations and standards of use that the teacher must apply the following:

First: Scientific standards in use during the preparation process, and include:

- 1- Trying the method.
- 2- Choose the right place.
- 3- Providing the means, tools or materials in the classroom.
- 4- Determine the activities and experiences that he will organize for the students.

Second: scientific standards in use during the use process, including:

- 1- Ensure the positive participation of the student.
- 2- Planning to use the method in a way that raises astonishment and raises questions among students.
- 3- Presenting the means before displaying it.
- 4- Ensure the clarity of the method for all students during the presentation.
- 5- Making use of the medium as a means of learning.
- 6- Hiding the medium immediately after completing the presentation.

Third: scientific standards in use after the use process, including:

- 1- Discussion after the presentation.
- 2- Evaluation of the method.
- 3- Follow the method.

The impact of educational technology on student achievement

Officials and decision-makers are trying to deal with difficult choices among the options for improving education, whether their focus is on reducing class size, teacher training, early childhood education, textbooks or testing, but the research is focused for the vast majority on the impact of educational technology in developing Knowing and learning process.

The analysis of a group of important studies in educational technology, chosen for their field, comprehensive samples, the possibility of generalization, and the fact that they provide insights on new uses of technology in the field of learning and education.

To illustrate this purpose, James Colek (1994) used a statistical analysis technique to synthesize the results of more than 500 individual research studies related to computer-based education, which imparts the educational process an individual character to suit the student's needs, interests, preferences, current knowledge, and learning styles. Kollek arrived at the following conclusions: (On average, students who used computer-based education scored higher on the achievement test compared to control sample students who learned without computers, and it was also found that students learn more in less time when they receive computer-based education. Their classes are more, and they show more positive attitudes when their classes include computer-based education. Computers did not give negative effects in all the fields covered by the study.

To evaluate future computer classrooms, Baker, Gerhart, and Herman (1994) assessed the impact of interactive technology on teaching and learning in five American schools. The goals of the computer classroom included encouraging educational innovation in support of student initiatives, long-term projects, availability of varied educational resources, and collaborative learning. Throughout the five-year study period, a comparison was made between: (a) the performance of future computer classroom

students in basic skills compared to national standards (b) students' progress in future computer classes and their achievement over time (c) the educational practices of future computer classroom teachers. The study concluded with a number of positive results as it indicated that the experience of future computer classrooms from "Apple" led to new educational experiences that require a higher amount of logical reasoning and problem solving, although the study supervisors claim that these results are not comprehensive.

Barriers to Multimedia Usage:

There are many obstacles to using multimedia, whether at the level of the school classroom, and these obstacles include:

- 1- Material obstacles: one of the biggest obstacles, due to the financial allocations required for the production of multimedia programs, as the production of programs requires specialized teams and experts in various editing programs, and the presentation of some programs requires a special display room and suitable devices.
- 2 - Human obstacles: It is meant by students and teachers, as each of them has different needs, and they are the two parties who are integrated with the new technology and deal easily with the computer, while the teachers have to prepare the devices and solve any technical problem.
- 3- Practical obstacles: It is represented in the necessity to be assured of the safety and maintenance of devices and the presence of more than one reliable party to provide these requirements (Zaitoun, 2002: 264)
- 4- Procedural factors: This is because choosing the educational material to be converted into multiple media, or solving a problem during the program's work, requires a practical and scientific effort.
- 5- Lack of teacher experience and know-how in using multimedia programs, which is what many teachers in our schools lose (Abu Zaida 2006: 12-20)
- 6- Teachers' fear of losing control and control in the classroom, when using the computer and devices accompanying some multimedia program (Khamis, 2003: 197)

Methods of dealing with obstacles to the use of electronic technologies and multimedia in education:

- 1- Training educational leaderships in the management of educational institutions on the belief in the importance of educational technologies and the necessities of change and technical development of educational means
- 2 - Ensure the allocation of halls equipped for the use of educational technologies in all educational institutions, by allocating budgets to educational institutions to be spent for educational means.
- 3- Granting incentive material rewards for teachers who create new educational methods and creating administrative formulas that facilitate the process of acquiring educational aids. (Al-Khasawneh, 2015: 38-40).

Previous studies:

The study (Al-Enezi, 2004 AD) is a study aimed at identifying the obstacles to implementing science activities in the elementary stage for boys in Arar from the viewpoint of teachers and educational supervisors, in which he followed the descriptive approach and used the questionnaire as a tool to complete the study, where the study was applied to (72) teachers and educational supervisors. The results: There is no integrated laboratory in most schools, science teachers are not familiar with the basics of preparing activities, and there is no special budget for science activities in schools.

The study (Al-Muntashari, 2007 AD) is a study aimed at knowing the reality of using the school laboratory in the teaching of biology at the secondary stage, and revealing the obstacles to its use, in light of the opinions of teachers, educational supervisors, and school laboratory attendants, and the study sample included all members of the community, their number (88) individuals, With 46 teachers, 35 school laboratory lecturers and 7 educational supervisors, the researcher used in his study the descriptive survey method, using the closed questionnaire as a tool in conducting his study, and the results were as follows: There is a decline in the level of the role hoped to achieve from the use of the laboratory, and the existence of similar differences Statistical significance at the level of 5% in the response of the study community in their evaluation of the reality of laboratory use is in favor of the educational supervisors, and the results indicated that there were deficiencies in the financial allocations related to school laboratories, the lack of materials needed to conduct laboratory experiments, and the weakness of secondary school students in dealing with materials The results also indicated that there are no statistically significant differences at

the level of 5% in the responses of the study population in their evaluation. To use the school laboratory in teaching biology at the secondary level.

Study (Al-Moosa, 2007 AD) This study aimed to know the requirements of e-learning in the educational process, and the researcher used the survey method by analyzing and synthesizing many results from previous studies and writings. This study concluded: There is a disagreement between those interested in the concept of education. Some researchers are satisfied that it is an aid in the method of teaching using technology, while the other team believes that the concept of e-learning includes the other elements of the whole process. As for devices, tools and equipment, the study concluded that the basic elements of the infrastructure in this area were laid. In the field of curricula, the study concluded that there are special standards for electronic curricula that must be followed when designing the curricula used in e-learning. In the field of the teacher, the study proved that training the teacher and the learner on new technologies and teaching strategies is a basic requirement for the educational process. Finally, it became clear through research that a positive educational environment is necessary for every change, especially in the field of technologies and their use in education.

Study (Al-Hudhaifi, 2007): This study aimed to identify the effect of the use of e-learning on the level of achievement in science for middle school students, and its effect on the development of mental abilities of intermediate school students, and its effect on the attitude of intermediate school students towards the subject of science. The study used the following tools: aptitude test, an achievement test in the third-grade science subject, intermediate prepared by the researcher, and a measure of attitude toward science prepared by the researcher. The study sample included 60 middle school students in Riyadh, 29 students, representing the experimental group, and 31 students representing the control group. The study found the following results:

- There was no statistically significant difference between the mean scores of the experimental group students and the control group students before using e-learning in the level of achievement, development of mental abilities and the trend towards science. ·
- The existence of a statistically significant difference between the mean scores of the experimental group students in the pre and post application of the achievement test and the trend scale in the level of achievement and the trend towards science subject. ·
- There was a statistically significant difference between the mean scores of the experimental group students and the control group students after using e-learning in the level of achievement.

Study (Xi'an, 2011) The study aimed to know the effect of integrating e-learning in biology teaching on the development of scientific thinking and on developing the trend towards a knowledge society among second-grade secondary students. The importance of the research lies in that it deals with an important aspect of the educational process, as it is the integration of E-learning during teaching as one of the solutions to activate e-learning in biology teaching, and it contributes to directing biology teachers to take care of the development of scientific thinking among students, and it also provides a measure of the trend towards a knowledge society, which can be used by researchers and those interested, and helps spread the culture of a knowledge society in circles Educational needed to transform into a knowledge society. The study population consisted of all students of the second grade of normal secondary in government secondary schools in the city of Riyadh, whose number is (26,106) students who study in the first semester of the academic year. While the study sample consists of eighty pupils of the second grade of normal secondary who study in the first semester of the academic year 1431-1432 AH, in a secondary school, divided into two groups, one of which is control and the number of its pupils (40), and the other is experimental and the number of its pupils is (40). , And the researcher chose the secondary stage due to the availability of computer labs in it. The researcher used the quasi-experimental method. Among the results of the study: 1 The presence of a statistically significant effect at the level of significance (0.05) in the integration of e-learning in the teaching of biology on the development of scientific thinking among second-grade secondary students. On developing the trend towards a knowledge society among second-grade secondary school pupils.

Previous studies varied between Arab and foreign studies, as some of them focused on traditional scientific laboratories, and the use of the Internet and computers and their applications in laboratory experiments. Previous studies have agreed in indicating the importance of e-learning or one of its

applications in the educational process, and its role in developing the educational process and increasing its effectiveness, and a number of previous studies mentioned the degree of importance of using e-learning in teaching in public education, as well as the requirements that must be met for the use of e-learning in The educational process, some of which dealt with the aspect of virtual laboratories, their importance in education and their positive impact on increasing the educational achievement of students, such as the study (Baraka, 2011) and the study (Ding & Hao Fang 2009).

Study Approach

The method of the study can be considered as the method followed by the researcher, ultimately reaching results related to the topic under study, and it is the structured method used to solve the research problem, and because the researcher knows in advance the aspects and dimensions of the phenomenon under study by familiarizing him with previous studies related to the research topic, and as the study seeks To find out "the effect of using modern electronic educational media (educational technologies) as a teaching method with students in grades four, five and six on the educational process from the viewpoint of teachers of government schools affiliated with the Jordanian Ministry of Education."

The researcher found that this is consistent with the descriptive and analytical approach, which aims to provide data and facts about the problem in question, to explain it and to determine its implications. The researcher relied on this approach to reach accurate and detailed knowledge about the research problem, and to achieve a better and more accurate perception of the phenomenon under study.

The field study method was used to collect data, as well as office sources such as books, references, periodicals, newspapers and journals were used, and through studies, letters and research related to educational technologies and the use of modern electronic educational media in education, and based on all of the above, the researcher developed a questionnaire based on a group of Previous studies for the purpose of achieving the objectives of the study.

Study Population and Sample:

The study population consists of a number of female teachers and teachers who teach the first basic grades in public schools affiliated with the Jordanian Ministry of Education. The number of the sample that was recovered reached (249), and the number of the approved sample whose answers were drawn from the study population was as follows: Distribution of the study population according to geographical regions.

To collect data, random samples were selected from the study population, and the questionnaires were distributed among the members of the study community, and most of the questionnaires were retrieved, and after examining them, a number of questionnaires were excluded due to the lack of fulfillment of the conditions required to answer the questionnaire, and thus the number of questionnaires subject to the study is (249) questionnaires, Thus, the recovery rate was 72.7%. Noting that the owners of non-recovered samples have been contacted more than once.

III. STUDY TOOL AND DATA COLLECTION METHODS

The researcher relied on two types of data

Raw data.

The primary data was obtained through the field side by distributing the questionnaire to study, inventory and collect the necessary information in the subject of the research, and then unpacked and statistical analysis using the (Statistical Package for Social Science) SPSS program and use appropriate statistical tests in order to reach valuable indications and indicators that support the subject of the study.

Secondary data.

Secondary data was obtained by reviewing books, periodicals, and publications on or related to the subject under study, and secondary sources were used in the study, to identify the sound scientific foundations and methods in writing studies, as well as taking a general view of the latest developments that occurred and occur in the field of study.

The axes of the study tool (questionnaire):

The questionnaire included the following axes:

The first part: It consists of the personal data of the study sample

The second part: deals with "the effect of using modern electronic educational media (educational technologies) as a method of teaching with students of fourth, fifth and sixth grades on the educational

process from the viewpoint of teachers of government schools affiliated with the Jordanian Ministry of Education," and it was divided into four axes as follows:

The first area: the axis of learning obstacles using technical methods and means.

The second area: the axis of the extent of the underutilization of e-learning methods in the school

The third area: the focus of teachers' attitudes towards the use of educational technologies

The fourth area: the axis of negatives of using educational technologies and electronic means in the classroom

Validity and reliability of the study tool (questionnaire):

The researcher has implemented a set of procedures to ensure the validity of the study tool, as follows:

Validation of the paragraphs of the questionnaire

The validity of the paragraphs of the questionnaire was verified in two ways.

The apparent validity of the tool: - The researcher presented the study tool in its initial form to a group of arbitrators, which consisted of a number of faculty members in Jordanian universities and academies, specializing in administration, statistics, and scientific research methods.

The validity of the internal consistency of the paragraphs of the questionnaire: The internal consistency of the paragraphs of the questionnaire was calculated on the survey sample, where the correlation coefficients between each paragraph and the total degree of the axis related to it were calculated, as it was found that the correlation coefficients function at the level of (0.05) as the level of significance for each paragraph is less than (0.05)) And the calculated value of r is greater than the tabular value of r which is equal to (0.396) and the degree of freedom is equal to (23)

Stability of the study tool (the questionnaire):

As for the stability of the study tool, it means making sure that the answer will be close if it is repeatedly applied to the same people at different times. The researcher has performed steps of stability on the same exploratory sample by the half-segmentation method.

Statistical processors:

To analyze the collected data, various appropriate statistical methods were used using the SPSS (Statistical Package for Social Science).

The following is a set of statistical methods used in analyzing the data:

1- Coding and entering statistical data according to a gradual scale divided into (5) points, as the value (1) means the least approval of the paragraph content, and the value (5) means the highest approval of the paragraph.

2- Frequencies and percentages were calculated to identify the personal characteristics of the study items and determine the responses of their individuals towards the phrases of the main axes that are included in the study tool.

3- The arithmetic mean was calculated in order to find out the extent to which the responses of the study members increased or decreased for each of the statements of the basic study variables, knowing that it is useful in arranging the phrases according to the highest arithmetic mean.

4- The Pearson Correlation Coefficient Test was used to measure the veracity of the paragraphs

5- The Spearman-Brown equation was used for stability

6- The Colomgrove-Smernoff test was used to find out the type of data whether it follows a normal distribution or not (1- Sample K-S

7- To find out the difference between the average of one or two samples, (t-test) was used.

8- One Way ANOVA test for the difference between three independent samples.

IV. RESULTS:

1- A large percentage of the study sample, in general, feels that there are a number of obstacles to education using technical methods and means, including: (that electronic devices are not compatible with the large number of students, which does not allow the use of electronic learning in an appropriate manner, and personal obstacles related to personal conviction that the use of Electronic technologies will limit the development of creativity and innovation elements among teachers who study the first three grades, in addition to the high cost of appropriate software at this stage, and the feeling of poor appropriate skills among students, and the educational system that does not allow the use of technologies easily due to the difficulty of applying e-learning in some subjects.).

2- A medium percentage of the study sample believes that the lack of availability of a teacher who is good

at designing or generalizing e-learning and the lack of appropriate training on e-learning in addition to the limited availability of the material capabilities to connect to the electronic network and the weakness of the infrastructure of the Internet are among the factors that hinder the use of technologies and means Electronic teaching in third grade basic.

3- A large percentage of the study sample appreciates the contribution of using e-learning methods in the school and considers its role positive and reaches a large degree in terms of effectiveness if it is employed by individuals who possess sufficient skills and experience in the field of teaching methods and educational strategies in general. However, most of them He does not have these skills or the infrastructure does not allow him to use them to the fullest.

4- However, a very large percentage of the study sample believes that there are not enough computer laboratories in the school and in the classrooms electronic learning devices sufficiently and that teachers are not trained to use methods and methods of learning based on electronic technologies and means in the appropriate manner that contribute to the employment of e-learning techniques in Third grade curriculum.

5- A large percentage of the study sample believes that the extent of using electronic learning methods in the school ranges from instructing the teacher to his students to use technologies and electronic means in their learning, and despite the lack of devices from Data Show and others in the classroom, the school teachers have some ready-made software. For school curricula that can help them use these technologies as a set for applying the curriculum in the event that appropriate tools are available in classrooms that are not equipped to apply learning using technical means.

6- A large percentage of the study sample has positive attitudes towards the use of electronic educational technologies and believes that it contributes to raising the level of achievement and motivation towards learning among students and increasing their orientation towards self-learning and increasing their level of comprehension

7- According to the viewpoint of the study sample, teachers' attitudes towards the use of electronic educational technologies are largely positive and appear through their belief that they contribute to raising the level of communication between students and their teachers, encouraging them to actively participate and self-learning, and contribute to taking into account individual differences between students and providing feedback. Prompt, which contributes to the formation and success of the learning process.

8- A large percentage of the study sample greatly appreciates the negatives surrounding the use of educational technologies and electronic means and considers them an obstacle that makes it difficult to use them in the classroom.

V. RECOMMENDATIONS:

The results of the study and research resulted in the following recommendations:

1- Providing the infrastructure in all schools in the Kingdom and in classrooms as a first step, and then preparing curricula and educational legislation that regulates the educational process in order to help the teacher get rid of many of the obstacles that force him to reduce his dependence on technologies in the generalization of the third grade.

2- Work to develop a training action plan for third-grade teachers for the purpose of training on how to overcome the obstacles they face in using technical methods and means in the classroom.

3- Working on exploiting the positive trends of some teachers and employing some of the available resources in implementing teaching methods based on electronic methods and technologies.

4- Establishing a comprehensive plan to overcome the difficulties and reduce the teachers' fears about the presence of negatives behind the application of teaching methods based on methods and techniques.

Proposals for future studies and research:

1- Study the impact of training and professional development on methods of implementing technology-based teaching strategies and methods in the educational process.

2- study on the student's role in learning based on technologies and electronic means.

3- study on the teacher's role in learning based on technologies and electronic means.

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