The effectiveness of using e-learning in discovering gifted students from the point of view of their teachers

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Abstract---The current work aimed to identify the effectiveness of using Electronic learning in discovering gifted students from the opinion of their teachers. The descriptive-analytical method was used in this work. The sample population of this study included teachers of both genders working in government schools who teach gifted students in the Amman capital of Jordan. In this work, we selected random samples consisting of 56 teachers, and data was collected from them. Through this study, results were obtained that showed the effectiveness of using e-learning in discovering gifted students, it has a high level and the arithmetic means was 4.7. Moreover, the obstacles faced by teachers of gifted students in using E-learning came arithmetic mean (3.60), and the score to which teachers of gifted students practiced using E-learning differed by gender, academic qualification, and experience, and there were no statistically significant differences. The most important thing recommended by this study is the necessity for workshops and hold courses for gifted students and teachers to develop their trends toward E-learning commensurate with their abilities and talents, and to train them on how to use it. In addition to that, attention by offering the equipment and techniques to use electronic learning and including all schools. Moreover, this study also suggested that the curriculum should be amended in line with their application in E-learning.

Keywords---effectiveness, e-learning, gifted students.

Introduction

The present century has witnessed many changes in all areas of life, most notably the electronic technological fields that have emerged tremendously, such as mobile phones, computers, and the Internet, accompanied by a set of recent
developments and new challenges. This resulted in the disappearance of spatial and temporal barriers, which provided fast and effective communication through the role of communication and technology of the information in the flow of information and news and facilitating the process of communication between others, especially between the teacher and the student. Generally, education is one of the most important basic ingredients upon which countries and governments rely in building their future in the age of information and electronics. Furthermore, with the emergence of personal computers and their operating programs, along with information and communications technology, the Internet, and their continuous development, E-Learning has emerged. Where it spread rapidly, and it became clear that it has a brilliant future, to the extent that it is expected and even certain that E-learning will be the best and most widespread method for education and training (Al-Subai and Manasra, 2017).

Educational institutions are social institutions that play a leading role and a major responsibility in achieving the development of intellectual capital, developing the knowledge economy, and technological progress. In addition to that the balance between preserving self-identity and openness to the global community. Education throughout the developed world is undergoing changes and transformations as a result of contemporary civilizational developments, contemporary technological, informational, and ways to make optimal use of them. Perhaps this represents the real challenge for educational institutions in less advanced societies in particular. On the contrary, developed societies have taken the reasons for developing and worked to keep pace with modern developments to serve their interests and achieve their desired goals (Bezan, 2015).

E-learning in its various forms is the most important and prominent of these alternatives, as this type of education contributes to facilitating communication between teachers and students, and students among themselves. This is through discussion boards, e-mail, and virtual dialogue rooms. Where e-learning contributes to clarifying different points of view, a sense of equality, ease of access to the teacher, the possibility of modifying the teaching method, and providing study over time. Also, continuity in access to the curriculum, ease, and multiplicity of ways to assess learners’ development, taking into account individual differences and transforming education into self-learning (Al-Hazmi, 2019). The role of the teacher and the learner has clearly changed with the advent of E-learning. Where the teacher is no longer a tutor and the learner is no longer a passive recipient, it was necessary for them to be active during the educational situation. The curricula, their content, activities, methods of presentation, and evaluation methods have been affected by E-learning, and providing learners with self-education skills has become an essential matter. Thus proficiency has become the first criterion for education systems and equal opportunities (Al-Baghdadi, 2015).

E-learning has helped students to rely on themselves and explore their energies and talents, as the process of detecting talented people is an important step. Where it occupied a prominent position in the literature of talent in terms of practice and research. Recently, the field of talent detection has witnessed a large development in terms of designing and preparing detection tools globally. The
initial procedure for the gifted identification program is to nominate teachers to students who are expected to be talented for this program by observing and assessing the behavioral characteristics of the talented student. This is through a specific measure prepared for this purpose.

Given the importance of E-learning to detect talented people on the one hand, and the failure of traditional education in achieving its goals, on the other hand. E-learning is not only one of the important and supportive tributaries of traditional education, rather it is also the ideal solution to meet the challenges facing traditional education. Thus, E-learning is no longer a secondary option, but rather a strategy that must be dealt with and interacted with, and harnessed to achieve a qualitative shift in the way of learning. Hence, this study came to show the effectiveness of E-learning to detect gifted students from the perspectives of their teachers.

**Study problem**

In the age of electronics, information networks, and the Internet, the teacher plays a major role in preparing, qualifying, and training a learner to become a qualified self-learning coach, research, and investigation skills. In addition to how to deal with the available information, selecting and organizing it. This contributes to the development of the learner’s character in an integrated way and the development of his confidence and makes him talented and active in society, able to confront the problems in society. The role of the teacher differed under E-learning from his role in traditional education. Furthermore, there are necessary and important factors that help in the success of E-learning is evaluation and knowledge of the effectiveness of its use, especially by teachers, as several attempts have emerged recently to apply e-learning in the field of education. But there were no attempts to evaluate and know the effectiveness of using these experiences to discover gifted students from the opinion of their teachers, and the difficulties they face. Therefore, the current study problem is determined by identifying the effectiveness of E-learning in discovering talented students from the opinion of their teachers, by answering the following questions:

**Study questions**

1. How effective is the use of E-learning in discovering gifted students from the point of view of their teachers?
2. What are the obstacles that teachers of gifted students face in using E-learning from their point of view?
3. Does the degree to which teachers of gifted students practice using E-learning differ vary by (gender, educational qualification, and experience in the job)?

**Importance of study**

This study is characterized by looking at an important topic, which is the effectiveness to use e-learning in discovering gifted students from the opinion of their teachers and the difficulties they face. Thus it is expected that this research can investigate the desired objectives and that it can be able to:
1. To highlight the significance of E-learning as it is most important to the discovery of gifted students in general, as it is a modern strategy in the educational method.
2. Knowing the effectiveness of using e-learning in discovering gifted students.
3. The importance of this study also lies in considering it among the few studies conducted in Jordan - according to the author's knowledge - in the field of research on the effectiveness of using e-learning in discovering gifted students from the viewpoint of their teachers and the difficulties which they were found.

**Study objectives**

The study attempts to investigate some objectives such as:

1. Reveal the effectiveness of using E-learning to detect gifted students.
2. Identifying the obstacles that teachers of gifted students face in using E-learning from their perspective.

**Study limits**

Spatial limits: This work was applied in the government schools that care for the gifted and are affiliated with the capital Amman.
Time limits: The work was done in the period from the 2021-2022 academic year.
Human limits: The teachers (male and female) of gifted students in government schools that care for the gifted and are affiliated with the capital Amman.
Topic limits: This dealt with the efficiency of using Electronic learning in discovering gifted students from the opinion of their teachers and the obstacles they face.

**Terminology of study**

**E-learning procedurally**

It is the level of training of E-learning kinds, which are indicated in (educational computers, phones, the Internet, and other techniques) to communicate the content of the education for learners through the interaction between the student and teacher, and between the student and content of education.

**Definition of gifted students (Procedurally)**

They are students who have extraordinary preparations and capabilities from the rest of their peers in one or more of the areas valued by society. Particularly in the field of mental superiority, innovative thinking, educational attainment, and special skills and abilities. Moreover, gifted students need different and varied educational programs, especially through E-learning, which may not be available to them in an integrated and comprehensive way in the regular study programs.
Theoretical framework

With the great advances in information technology, and because of the sequential changes in the world today, knowledge advance at rapid rates have resulted in an information revolution that has led to a significant change in the perceptions of individuals, most notably the concept of education, which has been influenced by the improvement of information of technology, and it also resulted in a reconsideration of the method of education used in educational institutions with the use of computers, phones, and the website in the education, and the improved communication. The traditional investment and its challenges to the emergence of e-learning.

The concept of E-learning

E-learning is an incorporated system that depends on the efficient use of technology of information in the processes of teaching and learning, by generating an environment rich in computer and Internet applications. In addition, the learner has access to learning sources anytime, anywhere, and to realize combined interaction between the system's components. E-learning is a new tendency in the technology of education and e-learning is the most used, and other terms such as (Electronic Education/ Online Learning/ Virtual Learning) are also used.

Al- Qudah and Meqabelh (2013), demarcated e-learning as that education depends on the use of computers devices and the use of the website to transport the educational material to the students from the interaction between the teacher and the student (Al- Qudah & Meqabelh, 2013). Qassem (2005) defines e-learning as the system that these recent electronic means coupled to the computer do in the all or part of the educational method, where the student can be learned by using the computer and they don’t need a teacher, and the presence of teachers here is just a guide in it. The device of the computer plays a role similar to the role of a teacher in the case of explanation, education, investigation, and assessment (Qassem, 2005).

E-learning can be described in the terms of communication techniques that rely on electronic components in its production such as radio TV, etc., and the related on it using computers and networks in the modern period may increase the definition and exclude the trend toward the coverage of the concept of radio and TV even if it is described by electronic communication, and accordingly, e-learning is defined as an interactive system of distance education, provided to the learner according to demand, and depends on an integrated digital electronic environment aimed at building and connecting the course by Electronic networks, guidance, testing organization, direction, resource management, and processes and evaluation (Abdulaziz, 2010).

According to the researcher, e-learning is a wide term offered by an institution of education or utilized by the student on himself, and depends on various non-traditional electronic means in the transfer of information and to communicate and interact with his fellow teachers and colleagues, which leads to overcoming the concept of the process of learning and education classroom, and allows the
teacher for assistance the learner at any time, either synchronously or asynchronously.

E-learning has various features such as it can overcome the increasing number of learners’ problems, as well as the tightness of the lecture halls and the absence of some capabilities, particularly in colleges and theoretical disciplines. Focusing to utilize all the means of technology to link the teacher and the student, and the ease of calling auditors by the Internet screen whenever the need, as well as its advantages the possibility of organizing meetings or seminars with students through the Internet at a low cost, investigate the desired learning. It also helps to attract the learners to learning (Ismail, 2010; Istitiah et al. 2008).

To investigate the best of e-learning, a social society needs to prepare its members to accept this kind of education, and the need for educators to contribute to the design and preparation of this kind of education, and to offer the appropriate infrastructure for it, which helps to transfer education from one place to another, as well as training programs, are developed for students, teachers, and administrators, each separately, to benefit from an adequate degree of educational technology and e-learning. Also, the success of e-learning can be when used the quality of the programs and determining the proper strategy of learning for both students and learners, as well as using the strategy of integrating e-learning and conventional education, with consideration of the curriculum nature and the material of educational (Hassani, 2008; Abdulaziz, 2010).

Teaching students different knowledge and skills are one of the most important requirements of the current era to extract gifted students who possess this knowledge and skills. Al-Zilei (2008) points to the growing human sense in this era of the importance of E-learning, especially for gifted students, which confirms this by the increase in the number of schools and institutes for teaching these students spread around the world. The great competition between these educational institutions lies in their invitation to attract gifted people and take care of them, with the different educational methods offered to them (Al-Zilei, 2008).

The increasing number of teachers and students using computers and the Internet in the learning process indicates the importance of E-learning and the positive effects of computers and the Internet, especially in learning new knowledge and skills. On the other hand, the integration of E-learning tools into the educational process is one of the factors that encourage and support students to engage in the learning process to achieve learning goals. Where the use of multimedia in student learning leads learners to appreciate the importance of learning and cultural communication between different civilizations (Marie-Anne, 2010).

Although the important the e-learning, it has various difficulties that prevent to use of the method of education. The most important of these obstacles and difficulties include the absence of clarity on the method and goals of this type of education for those responsible for the educational operation, that needs a great effort to train and qualify the teacher and student in preparation for this
experiment and the material cost of purchasing the necessary equipment and other auxiliary devices and maintenance. Among these obstacles and difficulties also weaken the teacher's role as an important educational and educational supervisor and his direct association with his students and thus his ability to affect directly. Weak role of the school as an important institution of education in the society, with its role in the upbringing of successive generations, weak infrastructure for both equipment and prepared personnel, and high cost in the design and production of educational programs (Manasra et al., 2017; Abu Alama et al., 2017).

**The gifted**

Civilizations depend largely on their energies and human resources because they are among the most important of their wealth after natural and material resources. However, the human factor is what the current countries and societies are interested in, with the aim of achieving development and keeping pace with the era of technology characterized by the massive knowledge explosion that we are living in now. The gifted are considered among the most important groups that must be relied upon due to their high capabilities, skills, and preparations, as well as their enjoyment of characteristics different from their ordinary peers, which can enable societies to exploit them for the benefit of states. The influential role of the gifted in society helps the nation as a whole to advance in global rankings. Moreover, the care of the gifted encourages them and increases their effectiveness. Also, interest in developing their capabilities is one of the most vital demands so that they are able to move development forward (Al-Mashhadani, 2016).

The issue of discovering and nurturing the gifted has become an urgent necessity for societies, especially in the era of globalization and the abundance of information. Where the care of the gifted takes the forefront of plans and strategies in the field of educational development, due to the realization of the leaders in the countries and their firm conviction that the struggle in our time is the struggle and the conflict of minds. This conflict includes several aspects, including the field of detection and practical, technical, and cultural care in all areas of human life. The process of preparing the gifted is a continuous series of procedures, starting with the process of identifying the gifted, followed by preparing their own programs through specialists and presenting them to them, and then measuring the results of those programs and the extent of their impact on the gifted individual (Fakhro, 2015).

Klaus (1999) defines the discovery of gifted students as the process of guiding students at different levels of study to excellence, by providing them with equal educational opportunities and appropriate possibilities to meet their needs, satisfy their desires and develop their abilities and talents, making them always distinguished from their ordinary peers (Klaus, 1999). Alaajz (2012) also defines it as the process through which a set of educational experiences, methods, and services are provided, planned, organized, and directed to identify gifted students in educational institutions. Which contribute positively to discovering the talents of these students, in addition to identifying their characteristics, and providing
integrated and continuous care programs for them to meet their needs and develop their abilities (Alaajz, 2012).

Detecting gifted students and identifying their talents is one of the most important goals that schools must achieve, in order to be able to provide care programs that develop their skills and talents and help develop them (Ben Yacoub, 2015). Also, caring for the talented is an important path to the advancement of nations. The importance of the gifted detection process is highlighted, not only for the purpose of diagnosing it but rather, it aims to renew students’ abilities, inclinations, interests, and patterns of thinking, making the possibility of developing them easily. This is done by providing appropriate programs that create a climate for students to be creative, taking into account individual differences (Al-Mashhadani, 2016).

The process of detecting gifted students is an organized but complex process that requires teachers and specialists with superior abilities in the discovery process and cooperative administrative bodies in schools with a high level of communication and communication skills. As well as relying on academics, psychologists and sociologists who have experience in that field (Fakhro, 2015). Jarwan (2002) and Al-Surour (2010) indicate that the process of detecting gifted people is one of the most important steps in designing programs designed to take care of them. Which aims to identify the category that needs care. The success of the program designed to care for the gifted depends on the accuracy of the detection process (Jarwan, 2002; Al-Surour, 2010).

One of the methods of detection of gifted people is what relied on the studies of Al-Zoghbi (2003), Suleiman (2004), Alaajz (2012), and Fakhro (2015), as being based on the following criteria:

1. Intelligence tests: They are considered one of the most effective criteria due to the accuracy of their results through scales such as the Stanford and Wechsler performance test.
2. Academic achievement tests: This criterion includes students who are able to perform tests that deal with the degree of their achievement being above the normal academic subjects, and in order for the student to be considered gifted, his achievement must be 90%.
3. The criterion for innovative thinking: This criterion depends on the innovative abilities, and the extent to which students have fluency, flexibility, and originality in presenting their ideas.
4. The test of special talent: In which the student is distinguished from his peers in a field that qualifies him to obtain higher grades in the activities offered to them.
5. Productive performance criterion: It is expected in this criterion that the talented student will give outstanding performance and production in a specific field.
6. Nomination of the teacher: He must nominate talented students after adequate identification of their characteristics, far from prejudice to any of the social or psychological factors, and a student is not selected except through the specified criteria for that.
7. Assessment scales: These scales provide important information that may not be available through tests, and be in several forms to be filled out by teachers, specialists, parents, or the child himself if he is of an age that allows this. These assessments include the student’s personal and behavioral characteristics.

8. Parents’ observations: Parents’ assessments are valuable in detecting talents early, and it is noted that parents’ ability to discover talent is high if they are educated. These observations must be characterized by not exaggeration and bias, to avoid the negative effects resulting from it.

9. Peer assessment: the student distinguishes his or her friend who turns to him when he needs study assistance or in carrying out study tasks and projects.

Challenges facing gifted discovery and sponsorship programs

In the presence of a society dominated by rapid changes to a world of rapid knowledge of the many renewable information. Therefore, this requires preparing individuals capable of advancing this task and relying on the gifted. However, the internal and external environment for the gifted is not prepared to achieve this goal, as it faces a number of challenges. Where gifted students often ask many questions and need more information about their ideas, which puts a strain on their teachers. Also, gifted students may reject homework as boring. Moreover, the gifted student is always full of challenges, enjoys enthusiasm, and has a high physical and mental level. These qualities do not constitute problems in themselves, but they can represent real problems for him later.

The problems of the gifted have been identified in three types identified by Jarwan (2013), as follows:

1. Cognitive problems: They are concerned with the achievement performance of the gifted student, in the form of inappropriate curriculum and low academic achievement.
2. Emotional problems: They address their emotional characteristics such as excess sensitivity, perfectionism, and acuity in expressing their emotions.
3. Occupational problems: Such as the difficulty of exams and the desire to change professional specialization.

Previous studies

Ahmad, 2015, conducted a study to find out the effect of using e-learning contracts on readiness for self-organized learning, including English language students as a sampling community. An experimental design was used, which consists of one group of students for the third year in the Department of English, numbering 36 students, and the content was presented in a manner E-learning contracts. Through the study, the researcher found the effectiveness of e-learning contracts and its role in improving readiness for self-organized learning. This helped improve students' performance in English language skills and recommended expanding the use of electronic learning contracts in teaching English. (Ahmad, 2015).
While Abdul Rahman (2013), referred in the study to the obstacles facing the use of e-learning through the opinions of primary school teachers, the number of sample members in this study was (90) teachers. The descriptive approach was used to analyze the data, and one of the results they reached was a lack of The teachers in the basic stage of implementing this system of education, as well as the lack of infrastructure that helps to use it, and they also made it clear that the curricula used do not keep pace with the e-learning system. (Abdul Rahman, 2013).

Helene et al., (2012) aimed to study and evaluate the effect of training on E-learning for South African teachers. The study used the descriptive method and 304 samples for education, science, and mathematics teachers. The researcher reached a set of results, most notably that teachers very benefited, and the must hold training for teachers before and as well at the time of the work on modern technology and its use in education (Helene, Mankato & Gumbo, 2012).

The study by Palitha et al., (2007) addressed the efficiency of e-learning by incorporating podcasts into the English course and communication for the undergraduate students of first-year at Kingston University. A podcast 6 has been established to develop learning approaches, and skills also, to assist students to prepare the semester work which is requested of them during the study period. The experience was evaluated from two groups of observations, interviews of 6 students, and 35 students who applied questionnaire at the end of the semester. The research described contexts for teaching and learning and how to introduce podcasts as part of integrated learning and measure their ability to achieve results. The study found the effectiveness of e-learning by employing podcasts in activating the learning process and helping students perform semester work. Thus, the attitudes of students towards learning were positive (Palitha, Chiara, Ming & Libby, 2007).

Al-Ghamdi, (2019) studied the identification of the prominent obstacles facing the activation of the gifted care program in the primary government schools implementing the program in Jeddah. The study followed the descriptive survey method on (49) samples of individuals representing female principals, teachers, and educational supervisors who supervise the government schools implemented for the program in the city of Jeddah. The study relied on the questionnaire as a tool for their work. They found a significant weakness in the budget and financial allocations related to the program, which was reflected in all stages of the program, from planning to evaluation. There is also an absence of awareness-raising role of the importance of the program, whether for those in charge of the program or families of gifted students. Therefore the order of the obstacles in descending order was as follows: (financial and administrative obstacles, obstacles due to parents, administrative obstacles, personal obstacles) (Al-Ghamdi, 2019).

The study by Miedijensky, (2018) aimed at surveying and evaluating the views of gifted teachers regarding the challenges related to the learning environment for gifted students. The study sample was (30) teachers who were interviewed, and the opinions of teachers were divided according to the following topics: (A) Characteristics of gifted students, (B) Characteristics of gifted teachers, (C) The
impact on the society and the physical environment in which the gifted lives, (D) The educational environment for the gifted, (E) The social and emotional aspects of the gifted, and (F) Curriculums outcomes and the need for teacher training in relation to the appropriate environment and teaching strategies. They found their results that learning for the gifted takes place in light of the needs and characteristics of the gifted, thus suggesting an appropriate teaching method that enhances the talent of students. The study also indicated the possibility of its results contributing to teacher programs of educational and curriculum design for gifted students (Miedijensky, 2018).

Al-Araydah, (2015) aimed to identify the obstacles facing talented students from the viewpoint of teachers in the Qassim region. The study followed the descriptive survey method on 86, teachers, as samples of both genders, and relied on the questionnaire as a tool to investigate the objective of the study. The results displayed that the problems were between high to medium in descending order as follows: (educational obstacles, administrative obstacles, family obstacles, self-obstacles, social obstacles) (Al-Araydah, 2015).

The study of Al-Hawamdeh and Banat, (2012) aimed to identify the problems that gifted students face in leadership centers. The study followed the descriptive survey method on a sample of (81) male and female students from the leadership centers. Thus It relied on the scale of the problems that the students suffered, and the scale of strategies for dealing with problems. The results of the study concluded that gifted students suffer from problems arranged in descending order as follows: (emotional problems, decision-making problems, academic problems, social problems, and family problems) (Al-Hawamdeh and Banat, 2012).

The study by Al-Ghorani, (2011) also aimed to identify the obstacles to creativity among male and female teachers of gifted schools in Jordan. The study followed the descriptive survey method on a sample of (225) male and female teachers from four schools for the gifted. The results of the study indicated that the obstacles to creativity were between a large and medium degree in descending order as follows: (working conditions, social and cultural environment, school administrative environment, school organizational climate, incentives, personal factors) (Al-Ghorani, 2011).

Commenting on previous studies

Based on the previous studies, the researcher found many important results, most notably: students should be involved in using e-learning techniques to enhance their different skills, and students should be directed to educational websites on the web. It is also necessary to send assignments by e-mail and assign students to submit assignments by e-mail to improve skills in using e-learning technologies, in addition to training teachers and students on the use and practice of e-learning technologies. And also interested in the gifted by preparing and designing many programs that seek to discover talented students, in addition to studies of obstacles, problems, and challenges they face. This study agrees with previous studies in the primary goal it seeks, which is e-learning and the discovery of talented students. This study benefited from the results of previous studies in enriching its theoretical framework and interpreting its
results. Perhaps what distinguishes this study from previous studies has been addressed by dealing with an important group in society: the category of gifted students, their teachers, and the obstacles they face, and also the most important characteristic of this study is the lack of studies dealing with the use of e-learning to discover talented students according to the researcher's knowledge.

**Study Methodology**

To answer the questions of the study and realize the objectives, the researcher used the analytical descriptive approach due to suit the kinds of this study, which aims to reveal the trends of English teachers in the public schools of the Directorate of Education of the Southern Mazar Brigade in Karak governorate towards e-education in teaching English and the obstacles they face from their opinion.

**Study Community and sample**

The community of the study consists of all gifted students of the Directorate of Education in the government schools in the capital Amman, in the year (2021/2022). The study sample consisted of (56) male and female teachers, who were selected in a random manner as shown in Table 1.

<table>
<thead>
<tr>
<th>variable</th>
<th>variable category</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>17</td>
<td>30.4</td>
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<tr>
<td></td>
<td>Female</td>
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<td>69.6</td>
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<td></td>
<td>Bachelor of</td>
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<td>Master’s</td>
<td>8</td>
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<td>33.9</td>
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<td>23.2</td>
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<tr>
<td></td>
<td>From 5 to 10 years</td>
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<td></td>
<td>11 years and over</td>
<td>15</td>
<td>26.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Study tool**

The scientific research was used specific tools to collect data and the information which built on the kind of the data to be collected, and the study's approach has shown that the suitable tool for achieving its goals is: a questionnaire, that is designed after a review of the literature, methods of scientific research and arena studies relevant to the subject of the study.

The instrument involved (32) terms, concerned with knowing the effectiveness of e-learning in discovering gifted students. The paragraphs from 1 to 15 were concerned with knowing the efficiency of e-learning in discovering gifted students, and the five alternatives which are: (always, often, sometimes, rarely, never) are in front of each paragraph, then followed by the scores (5, 4, 3, 2, 1) respectively, as well as the scale was distributed in the 5 groups: (high negative, it has (1-1.8),
negative and it has (1.81-2.94), neutral and it has (2.95-3.21), positive and it has (3.22-4.08).), and lastly high positive and it has (4.09-5)).

While the parts from 16 to 32 measure the difficulties that gifted students face in e-learning from the opinion of their teachers, the five alternatives which are strongly agreed have five scores, agree has four scores, neutral has three scores, disagree has two scores, strongly disagree has one score, in front of each paragraph. Furthermore, the scale was distributed into the five groups (a very poor score its has (1-1.8), a poor score it has (1.81-3.09), a medium score it has (3.10-3.60), a high score (3.61-4.07), and a high score and it has (4.08-5)).

**Validity of tool study**

To study the validity of the tool, we presented to (8) experienced and expert arbitrators to know their opinions on the reliability, clarity, and comprehensiveness of the questionnaire, including the paragraphs which belonged to the scale as a whole, questions were modified and formulated on the recommendation of the arbitrators. So based on the arbitrators' proposals for modification, the amendments agreed upon by the arbitrators had been made, and a number of them had been amended and deleted, in addition, to redrafting some paragraphs to refer directly and briefly to the purpose of the paragraph, thus investigated apparent truthfulness.

**Stability of tool study**

To investigate the instrument's internal consistency, the coefficient of Cronbach, s Alpha was calculated on a survey sample which is similar to the sample of the study and consisted of 15 male and female teachers. The stability coefficient was (0.821) with high-resolution stability, which is suitable for the aim of the study.

**Results and Discussion**

**Results related to answering the first question**

How effective is the use of E-learning in discovering gifted students from the opinion of their teachers.

The arithmetic means and standard deviations of the responses of the member's sample were used to know the answer to this question, and Table (2) displays these results.

<table>
<thead>
<tr>
<th>NO</th>
<th>Paragraph</th>
<th>Arithmetic means</th>
<th>Standard deviations</th>
<th>Level</th>
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<tbody>
<tr>
<td>1</td>
<td>Gifted students send assignments through e-mail and electronic learning platforms used in education.</td>
<td>4.10</td>
<td>1.09</td>
<td>high positive</td>
</tr>
<tr>
<td>2</td>
<td>Gifted students collect information using</td>
<td>4.11</td>
<td>1.05</td>
<td>high</td>
</tr>
<tr>
<td></td>
<td>the web to enrich the educational material.</td>
<td></td>
<td>positive</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------</td>
<td>---</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I note that gifted students are quick to respond when explaining lessons through virtual rooms in e-learning</td>
<td>4.07</td>
<td>1.19</td>
<td>positive</td>
</tr>
<tr>
<td>4</td>
<td>Gifted students are constantly following courses on e-learning tools and programs that improve their education.</td>
<td>3.99</td>
<td>1.11</td>
<td>positive</td>
</tr>
<tr>
<td>5</td>
<td>Gifted students design their lessons through electronic programs that help their teachers present them.</td>
<td>4.09</td>
<td>1.22</td>
<td>high positive</td>
</tr>
<tr>
<td>6</td>
<td>They share gifted students with their teachers using e-learning techniques because it enhances their different skills.</td>
<td>4.08</td>
<td>0.99</td>
<td>positive</td>
</tr>
<tr>
<td>7</td>
<td>I note that gifted students possess a vast amount of information and linguistic knowledge of various scientific terms through their practice of e-learning.</td>
<td>4.05</td>
<td>1.02</td>
<td>positive</td>
</tr>
<tr>
<td>8</td>
<td>Gifted students use e-learning on a permanent and regular basis.</td>
<td>4.02</td>
<td>1.05</td>
<td>positive</td>
</tr>
<tr>
<td>9</td>
<td>Gifted students respond to the scientific duties assigned to them, such as reading books, articles, and publications through e-learning technologies.</td>
<td>4.10</td>
<td>1.03</td>
<td>high positive</td>
</tr>
<tr>
<td>10</td>
<td>I notice that gifted students are imaginative and creative during their answers to questions and discussions in virtual classes.</td>
<td>4.11</td>
<td>1.12</td>
<td>high positive</td>
</tr>
<tr>
<td>11</td>
<td>Gifted students have the ability to offer several solutions or various answers when a question, issue, or problem is raised in the virtual classroom or homework through educational electronic platforms.</td>
<td>4.07</td>
<td>0.99</td>
<td>positive</td>
</tr>
<tr>
<td>12</td>
<td>Gifted students design scientific experiments through virtual laboratories.</td>
<td>4.08</td>
<td>1.05</td>
<td>positive</td>
</tr>
<tr>
<td>13</td>
<td>Note the gifted students who are distinguished by their ability to explain scientific phenomena in the light of the information available to them through the electronic educational platform.</td>
<td>4.06</td>
<td>1.09</td>
<td>positive</td>
</tr>
<tr>
<td>14</td>
<td>I distinguish gifted students through their ability to memorize, their memory, and the speed of information retrieval within the virtual rooms.</td>
<td>4.03</td>
<td>1.12</td>
<td>positive</td>
</tr>
<tr>
<td>15</td>
<td>Gifted students have a high ability to analyze a scientific topic or a subject in</td>
<td>4.05</td>
<td>1.02</td>
<td>positive</td>
</tr>
</tbody>
</table>
Table (2) displays that the arithmetic means of the answers members of the study on the effectiveness of e-learning in discovering gifted students from the opinion of their teachers were in a range level between positive and high positive, with arithmetic means range (4.03-4.11), and the total score of the tool came at the positive level, and with an arithmetic average (4.07). Where the top of the paragraph was for the gifted students to collect information using the web to enrich the educational material. Then, I noticed the gifted students that they were imaginative and creative during their answers to the questions and the discussion within the virtual classes. Then, they respond to gifted students with the scientific duties assigned to them, such as reading books, articles, and publications through e-learning technologies. At the same level, there was a paragraph about gifted students sending assignments through e-mail and electronic learning platforms used in education, while the paragraph “gifted students use e-learning on a regular and permanent basis.” The lowest arithmetic average (4.02), with a deviation (1.12).

The present study agrees with the one conducted by Gumbo, Mankato, and Helen (Helene, Mankato, Gumbo, 2012), where teachers have benefited greatly from e-learning, and that teacher training on e-learning tools and techniques is of great importance before and during service on modern technology and its employment in education, and the study of Palita, Chiara, Ming, and Libby (Palitha, Chiara, Ming & Libby, 2007), have found the efficiency of using e-learning in the activating of podcasts in the learning process helping students to perform classwork, and student trends toward learning have been positive. As well, agreed with Ahmed’s study (Ahmad, 2015), which explained the efficiency of contracts in e-learning to improve readiness for self-organized learning, which is reflected in students’ performance, and recommended the expansion of e-learning contracts. The results showed that the effectiveness of using e-learning to discover gifted students came with a positive level, and the researcher attributes to the consciousness of gifted students of e-technologies and how to use them, their nature by testing, experimenting, developing, and increasing their knowledge of each new, especially in technical and electronic matters that they have always been interested in through various programs, which has helped them to use this technical and electronic knowledge and expertise in the educational process, whose use has become a necessary and fundamental method which is called e-education, which is the focus of our study, and their student peers have the same conditions and possibilities, but they do not have those skills, knowledge, responsiveness, and initiative as gifted students. This distinguishes them from their peers, especially in technical matters that encourage students to be distinguished from each other by the degree of practice, use, and use of technical and electronic matters in the educational process. e-learning “, which refers to the (positive) approval of the effectiveness of using e-learning by revealing gifted people.
Results related to answering the second question

What are the difficulties that teachers of gifted students face in using e-learning from their opinion?

The arithmetic means and standard deviations were used to find the responses of the member’s sample and help to answer this question as appeared in Table (3).

Table (3): Arithmetic means and standard deviation of the responses of the members of the sample, and the teachers' difficulties in using e-learning

<table>
<thead>
<tr>
<th>NO</th>
<th>Paragraph</th>
<th>Arithmetic means</th>
<th>Standard deviations</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of electronic educational programs that take into account the abilities of gifted students.</td>
<td>3.82</td>
<td>1.05</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Weakness of teachers in by use of e-learning techniques.</td>
<td>3.10</td>
<td>1.12</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Weak interaction through e-learning between teachers and students directly.</td>
<td>3.20</td>
<td>1.19</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Weak training and qualification of teachers and students on e-learning techniques.</td>
<td>3.52</td>
<td>1.22</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>Increase the material cost of procuring the necessary equipment and hardware.</td>
<td>4.10</td>
<td>0.99</td>
<td>Very high</td>
</tr>
<tr>
<td>6</td>
<td>Difficulty in implementing certain means of e-learning.</td>
<td>3.87</td>
<td>1.20</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>Teachers stuck to traditional teaching methods and did not pay attention to e-learning, its methods, and strategies</td>
<td>4.05</td>
<td>0.88</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>Believe that using e-learning is a waste of time.</td>
<td>3.66</td>
<td>1.05</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>Lack of computers for students to use e-learning.</td>
<td>3.62</td>
<td>0.97</td>
<td>High</td>
</tr>
<tr>
<td>10</td>
<td>Time of class is not sufficient to use e-learning in teaching gifted students.</td>
<td>4.05</td>
<td>0.67</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Low effectiveness of educational devices and technologies available in schools.</td>
<td>4.16</td>
<td>0.75</td>
<td>Very high</td>
</tr>
<tr>
<td>12</td>
<td>Lack of encouragement from the educational supervisor for teachers to benefit from e-learning.</td>
<td>3.08</td>
<td>1.09</td>
<td>Weak</td>
</tr>
<tr>
<td>13</td>
<td>Weakness of the Internet when using e-learning.</td>
<td>4.20</td>
<td>0.86</td>
<td>Very high</td>
</tr>
<tr>
<td>14</td>
<td>Intensity of the scientific material hinders the use of e-learning.</td>
<td>4.32</td>
<td>0.77</td>
<td>Very high</td>
</tr>
<tr>
<td>15</td>
<td>Lack of knowledge of gifted students using different types of e-learning.</td>
<td>2.24</td>
<td>1.22</td>
<td>Weak</td>
</tr>
<tr>
<td>16</td>
<td>Decreased motivation of gifted students towards using e-learning.</td>
<td>2.26</td>
<td>1.07</td>
<td>weak</td>
</tr>
</tbody>
</table>
Table (3) indicates that the arithmetic means of the responses of the members of the study to the difficulties that teachers face for gifted students in the use of e-learning was a range between the level weak and the very high, with the arithmetic means values between a range (2.24-4.32), and the total score of the tool has come at the level of medium which has arithmetic means value (3.60), where the highest of the paragraph was “intensity of the scientific material hinders the use of e-learning.” Then it was followed by “weakness of the Internet when using e-learning. While the paragraph "Lack of knowledge of gifted students using the types of e-learning", got the lowest arithmetic mean (2.24), with a deviation (1.22). The current study agrees with the study of Abd al-Rahman (2013), which attempted to recognize the obstacles to the application of e-learning from the opinion of primary school teachers. The most important results indicated the teachers’ unwillingness to apply e-learning, the lack of infrastructure, and the failure to keep pace with the current curricula for applying e-learning at the basic stage.

The results showed that the obstacles facing the teachers of gifted students from their opinion came to a moderate degree, and the researcher attributed the lack of sufficient training of teachers to use e-learning techniques, their low capability to use e-learning or their lack of awareness of the importance and advantages of e-learning. The academic courses may also be a cause of obstacles that cannot be covered by e-learning, as well as the lack of supportive e-learning tools inside schools, and the weakness of the Internet. So, the difficulties came at a medium level.

**Results related to the third question**

Does the degree of gifted students’ teachers’ practice of using e-learning vary by: (gender, educational qualification, and experience in the job)?

For answering this question we used a t-test, with two independent curses, to find out the degree to which teachers of gifted students practice using e-learning, according to the variable of gender (male/female) as appeared in Table (4). In order to find out the degree to which teachers of gifted students practice the use of e-learning, according to the educational qualification variable (Bachelor/Masters/Ph.D.) and the job experience variable (less than 5 years/from 5-10 years/11 years and over), the (one-way analysis of variance ANOVA) was used., and Table 5 illustrations the results.

<table>
<thead>
<tr>
<th>variable</th>
<th>Arithmetic means</th>
<th>Standard deviations</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.51</td>
<td>0.42</td>
<td>0.36</td>
<td>0.112</td>
</tr>
<tr>
<td>Female</td>
<td>3.45</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table (4) evident that there are no statistically significant differences in the score of gifted student teachers' practice of using e-learning according to the variable of gender, whereas the value of significance was more than (0.05), so the null hypothesis was accepted, that is, there was no difference.

The researcher attributes the result: that the equality of opportunities available between teachers' schools in dealing with the use of e-learning, in addition to their interest in e-learning, which saves time and effort and at the same time has fun for students, and achieves the desired goals, and what e-learning creates by integrating students into virtual rooms without any obstacles or problems, as happens in face-to-face education. The educational material is given, whether by female or male teachers, interestingly, so the male and female teachers' answers did not differ, and the answers were close.

Table (5): ANOVA results of the educational qualification and job experience variable

<table>
<thead>
<tr>
<th>variable</th>
<th>Variance source</th>
<th>Sum of squares</th>
<th>Freedom</th>
<th>Mean Squares</th>
<th>F. value</th>
<th>Sig. value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational qualification</td>
<td>between groups</td>
<td>0.90</td>
<td>2</td>
<td>0.45</td>
<td>1.407</td>
<td>0.254</td>
</tr>
<tr>
<td></td>
<td>within groups</td>
<td>17.02</td>
<td>53</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>17.93</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job experience</td>
<td>between groups</td>
<td>0.65</td>
<td>2</td>
<td>0.32</td>
<td>1.004</td>
<td>0.373</td>
</tr>
<tr>
<td></td>
<td>within groups</td>
<td>17.72</td>
<td>53</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>17.93</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table (5) can be noticed that there are no statistically significant differences in the degree of gifted students' teachers' practice of using e-learning according to the educational qualifications and job experience variables, whereas the value of significance is greater than (0.05) and thus accepting the null hypothesis, there is no difference.

The researcher attributes this to the full conviction of teachers to use e-learning, especially when the necessary technical tools are available, and also a conviction of the importance and requirements of e-learning, and their interaction with students, and students with their colleagues encouraged teachers to keep pace with these strategies with neglected their experience and scientific qualifications.

**Recommendations**

Depending on the findings of the study, the researcher state some recommendation which is as:

1. Holding courses and workshops for teachers and gifted students alike, to develop their attitudes towards e-learning, and to train them on ways to use it in line with the level and abilities of gifted students.
2. Interest in providing e-learning tools to include all schools, linking all schools to the Internet, and providing computers in proportion to the number of students in schools.
3. Modifying the curricula to match their application with e-learning.
4. Dissolving all obstacles to e-learning, in terms of providing Internet labs in schools in proportion to the number of students and academic courses.
5. Conducting more educational studies on trends and e-learning in terms of dimensions and applications in educational and other institutions.

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