

A program based on Multiple Intelligences in the light of the second-generation web technology to develop the teaching performance of classroom teachers in Jordan

¹Dr. Samaher Khalid Alkhatatneh

¹*Prince Sultan Military Collage of Health Sciences*

Abstract

The aim of the current research is to develop the teaching performance of classroom teachers in Jordan using a program based on Multiple Intelligences in the shade of the second-generation web technology.

To achieve this, the researcher prepared a list of criteria for designing the proposed program, a list of teaching performances, a proposed program based on multiple intelligences in the light of the second-generation web technology, a cognitive test for teaching performances, and a note card. The research sample consists of a sample of (30) female teachers.

The results of the research concluded that there were statistically significant differences between the mean scores of the research group in the two applications, the pre and post applications of the teaching performance test, in favor of the post application. This indicates the effectiveness of the proposed program in developing the teaching performance of classroom teachers in Jordan..

Keywords : Multiple Intelligences, the second-generation web technology, teaching performance.

INTRODUCTION

The cognitive and technological changes and developments imposed on the teacher the necessity of keeping pace with these developments, and imposed on the teacher preparation institutions the need to review their objectives, curricula, strategies, techniques and activities related to preparation and development; Therefore, the teacher needs to be open to civilizational experiences and achievements and make full use of these achievements and modern technologies in order to be able to perform all of his past and future roles.

The teacher is one of the main dimensions in the success of the educational process, as development or reform in the educational process must begin with the teacher, and this means that the teacher bears the greatest burden in the success of the educational process.

The importance of in-service training comes in response to the circumstances and changes imposed on them by the rapid and

multiplying scientific and cognitive developments, in addition to the knowledge explosion taking place in the twenty-first century, in addition to the educational role that society expects from teachers. By training during the service to overcome these difficulties and negatives and keep pace with development and progress on the other hand (Al-A'jib, Al-Jabr, 2004, 43).

In-service teacher training is a continuous education for the teacher from the beginning of his entry into the profession until his exit from it, and this means that the teacher's education does not end with the completion of the preparation stage before service in teacher preparation colleges and institutes, but rather it lasts and continues throughout his professional life, in order to master the use of educational technology innovated materials New educational and teaching methods and in order to identify the social, economic and political changes and developments (Barakat, 2010, 8).

In the light of e-learning, we find that the role of the teacher has differed greatly from his roles in traditional education, as his role is no longer limited to mere indoctrination, memorization and memorization for his students, but rather his role has become renewed and developed, as he acts as a mediator between learners and e-learning tools, as he plays the role of a guide and guide for learners.

Al-Abidin (2008) indicates that the teacher's new roles are represented in using websites and how to benefit from them and how they benefit his students, as well as his role in deepening the concept of self-learning and continuous education among learner.

Al-Hadi (2005, 75) stresses that training teachers and developing their skills and attitudes that will allow them to work and perform effectively in assisted learning environments with modern educational technology should be one of the first concerns of educators in faculties of education; Because employing such technological innovations in teacher preparation programs can break the traditional pattern that is now dear to preparation programs, and it can also contribute effectively to preparing the future teacher who deviates from dealing with these innovations, and who can employ them in the educational process efficiently and competently. Technological innovations are extremely important for the teacher, who contributes to the preparation of future generations. This goal is technological innovations, which impose themselves strongly on all elements of the teacher preparation organization, and this depends to a large extent on the size of the employment of these technological innovations in the preparation process, and the speed of this recruitment

In view of the continuous technological developments, modern and contemporary teaching methods have emerged, which have led to the development of the level of teaching and professional performance of the teacher, as these methods depend on computer-based teaching and the Internet, which helps the teacher to perform his work perfectly and improve teaching methods, which contributes to the effective achievement of the desired educational goals. Students have, among these methods, virtual teaching, and teaching based on web applications, which depend on the

electronic learning environment. (Al-Safi and Al-Jahmi, 2019, 590)

With the advent of the second generation of the web, the user is the one who makes websites and adds, edits and comments easily through content management systems, and it also allows sharing files with others, and accordingly, the web has become read and write instead of reading only, and this generation has many advantages, the most important of which is the ease of content creation The educational environment and the participatory educational environment and participation in educational resources, which made this generation one of the foundations of the school of the future, especially after the impact of the second generation (Web2.0), which has become intertwined in all life activities, and no one can dispense with it, as it helps in how to communicate, shop and share (safety, 2014, 22-35)

Ahrens, Zascerinska, 2010,4-5 have pointed out the need for teachers to use the second generation web applications (Web2.0) in the teaching and learning processes, and to employ them in building educational content, achieving the objectives of the study materials, and enriching interaction during the process of learning. Teaching and learning, which contributes to raising the efficiency of the educational process, and the need to train teachers on how to design and employ it in teaching and learning

Several studies have emphasized the importance of using technology in developing teachers' performance, including Saqr's study (2006), which found the effectiveness of using electronic assessment files on developing the teaching skills of trainee students at the Teachers College in Al-Jouf and their attitudes towards it

And Badawi's study (2014) aimed at the effectiveness of a proposed program in e-learning to develop electronic test design skills and the trend towards electronic evaluation among graduate students.

Al-Tabbakh's study (2014) aimed to identify the skills of electronic assessment (designing and publishing electronic tests) and developing them using different types of social networks in virtual training environments based on a participatory learning strategy. Some web

applications (0.2) to provide students with electronic assessment skills

And the study of Hafez (2017), the results of which showed the effectiveness of the training program in providing mathematics teachers with lifelong learning skills and that it had a positive impact on developing their teaching performance and appreciating the professional learning community despite their need to provide the requirements of the professional learning community. Students were clearly positively affected and there was growth in their level achievement and lifelong learning skills

The results of Othman's study (2018) found the effectiveness of an educational program based on web applications to develop the competencies of technological design of lessons and productive thinking skills among student teachers, Psychology Department, College of Education

Al-Jundi study (2019) also found the effectiveness of a program based on web applications in developing the electronic assessment skills of social studies teachers

Hussain's study (2019) also aimed to measure the effectiveness of a training program for mathematics teachers at the primary stage based on the international gifted teacher standards approved by the National Association for Gifted Children

The study of Al-Safi and Al-Jahmi (2019) also found the effectiveness of a program based on web applications 0.2 in developing the cognitive and performance aspects of e-teaching skills among students of the research group, and the program also achieved effectiveness in achieving the trend towards web-based learning among students of the research group.

Al-Wakeel's study (2020) found the effectiveness of using a virtual learning environment based on reflective teaching in developing effective teaching skills for student teachers in Libya and their attitudes towards it.

The first international conference on e-learning and distance education (2009) under the slogan "Education Industry for the Future" urged to encourage the use of learning management systems and e-learning techniques and strategies for students in academic bodies and to work on developing a clear system to

motivate and support those interested in this, establishing an infrastructure that includes providing networking As well as building virtual electronic environments equipped with the latest technologies used in this, supporting targeted research in the field of e-learning and distance education, and cooperating with private, non-profit and governmental institutions to develop e-learning and distance education programs, and providing training programs for students with e-learning programs that ensure their acquisition of skills necessary to deal with its programs and efficiently.

While the second annual scientific conference entitled "E-Learning and Distance Education (2011) recommended the necessity of activating learning environments in the stages of university education and benefiting from Web2 applications in including e-learning curricula in higher education institutions, which is beneficial in developing and changing the university learning environment, and creating an educational environment More appropriate to prepare teachers, assistant teachers and graduates, and increase the response to their needs, in addition to the need to urge research centers in universities to conduct a set of scientific research that helps to use, disseminate and share educational resources and experiences for teachers

Given the importance of the teacher in the educational process and the role that he can play in this field, we note that there has been a recent trend towards reviewing educational systems, especially with regard to teacher preparation, training and qualification, so that he is able to adapt to any new teaching approach, because The level of the student's performance is related to the level of his teacher's performance, so the formation of teachers becomes a necessity to improve their teaching performance. Hamadna, 2007, 5), including Al-Hashemi's study (2018), which aimed to reveal the effectiveness of a training program for the development of teaching performance for teachers of philosophical subjects in unaccredited secondary schools from the perspective of quality and accreditation standards. For teachers of philosophical subjects in teaching skills in favor of the post-application. And the Qanaw study (2017), which found the effectiveness of a proposed training program based on reflective teaching to develop

the teaching competencies of social studies teachers, cycle two, in Libya.

Based on the foregoing, the researcher believes that the teacher is required to read, have extensive knowledge, self-development of his skills and mastery of foreign languages for the professional development of the teacher, in addition to technological skills as one of the modern skills that help him to access all that is new of knowledge in the subject of his specialization, and to employ that knowledge so that it is reflected Through his teaching performance on his students to give them the ability to seek knowledge and information and the ability to critique and benefit from it, This is what the current research seeks to achieve by preparing a proposed program based on multiple intelligences in the light of the second generation of web technology to develop the teaching performance of class teachers.

Study problem

Among the most important problems that have emerged in the educational field is the huge amount of information, especially as the complaint about the rigidity of the study materials and the difficulty of understanding and assimilation has increased, and many educators have attributed this weakness to the teachers' use of the traditional method used by the classroom teacher in teaching, which To memorize and teach information and facts without focusing on the diversity of teaching skills or multiple intelligences in general and not paying attention to educational activities that help develop them. Therefore, the current research attempted to answer the following main question:

How can a program based on multiple intelligences be developed in light of the second generation of web technology to develop the teaching performance of the female classroom teachers in Jordan?

The following sub-questions are derived from the main question:

1-What teaching performances are necessary for classroom teachers in Jordan to have?

2- What are the educational design criteria for a program based on the theory of multiple intelligences in light of the second generation of

web technology to develop the teaching performance of classroom teachers in Jordan?

3- What is the proposed scenario for a program based on the theory of multiple intelligences in the light of the second generation of web technology to develop the teaching performance of classroom teachers in Jordan?

4-What is the effectiveness of a program based on multiple intelligences in the light of the second generation of web technology in developing the cognitive aspects of the teaching performance of classroom teachers in Jordan?

5- What is the effectiveness of a program based on multiple intelligences in the light of the second generation of web technology for developing the performance aspects of the teaching performance of classroom teachers in Jordan?

The study aims

The current study aims to:

1. Determining the required teaching performances for classroom teachers in Jordan.

2. Determining the educational design criteria for a program based on the theory of multiple intelligences in the light of the second generation of web technology to develop the teaching performance of classroom teachers in Jordan.

3. Develop the proposed scenario for a program based on the theory of multiple intelligences in the light of the second generation of web technology to develop the teaching performance of classroom teachers in Jordan.

4. Knowing the effectiveness of a program based on multiple intelligences in the light of the second generation of web technology to develop the cognitive aspects of the teaching performance of classroom teachers in Jordan

5. Knowing the effectiveness of a program based on multiple intelligences in the light of the second generation web technology for developing the performance aspects of teaching performances among classroom teachers in Jordan.

The study importance:

The importance of the research was as follows:

1. Shed light on the necessary teaching performances for the teachers of the basic classes.

2. The teacher's familiarity with the most important technological innovations that can be employed during the teaching process.

3. Paying attention to planning, implementation and evaluation skills as important steps in his performance of teaching tasks integrated with technological techniques contributes to preparing and qualifying them professionally to achieve aspects of growth in competencies related to the nature of research.

4. Addressing one of the important issues facing the Jordanian education system, which is the issue of preparing an efficient teacher by providing him with the necessary effective teaching skills.

5. Presenting a set of recommendations and proposals that may be useful in conducting further studies and research related to training programs.

The study limits:

1 Objective limits:

- Cognitive and skill aspects of teaching performance: planning - implementation - evaluation - modern skills.

- Some of the second generation web applications, including: (the social network facebook - Google Drive - e-mail).

2- The human limit: a sample of class teachers in the Directorate of Education and Teaching Karak Kasbah affiliated to the Ministry of Education, consisting of (30) female teachers.

3- Time limit: the school year 2021 AD.

4. Spatial Limit: The current research was limited to private schools in the Karak Kasbah Education Directorate of the Ministry of Education.

Research Tools and Materials

Research tools: (prepared by the researcher)

1- Cognitive testing in the teaching performance of female teachers.

2- A note card for the teachers' teaching performance.

Research materials: (prepared by the researcher)

A questionnaire to determine the necessary teaching performance of the teachers of the basic stage.

List of criteria for designing a program based on multiple intelligences.

The program based on multiple intelligences in light of the second generation web technology.

The proposed program scenario in light of the second generation web technology

Search terms:

The second generation of the web

Al-Qahtani (2010, 37) defined it as: "The kind of education that depends on employing Web 0.2 services such as social networking service, media sharing service, collaborative software service, participatory web editor service, and blogging service.

The researcher defines it procedurally as: a set of interactive websites, services and applications, including (Facebook, Google Drive, and e-mail) that allow class teachers to participate in modifying and editing electronic content over the Internet, synchronously or asynchronously.

Multiple Intelligences:

According to Jaber (2003, 9) that the multiple intelligences are: the developmental mental skills that Howard Gardner reached, which are: linguistic intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, social intelligence, interpersonal intelligence Natural intelligence.

The researcher defines it procedurally as: the set of procedures and teaching using the multiple intelligences suggested by Gardner, which are used to develop the academic performance of class teachers.

Teaching performance

Al-Laqani and Al-Jamal (2004) defined performance as: verbal or skill behavior that an individual emits, and it is based on a certain cognitive and emotional background, and this performance is usually at a certain level, showing his ability or inability to perform a certain work

The researcher defines it procedurally as: everything that the classroom teacher does in terms of educational practices, such as planning, implementation, classroom management, evaluation and modern skills, that help in the development of the learner.

Research Methodology:

The researcher used the experimental method in the current research:

- The experimental approach: to determine the effectiveness of a program based on multiple intelligences in the light of the second generation of web technology to develop the teaching performance of classroom teachers in Jordan.

Experimental design:

The experimental design, before/after, was used for one group, as shown in the following figure:

Figure (1) shows the quasi-experimental design of the research

THE SAMPLE	Pre application	processing	After application
Experimental sample	Teaching skills achievement test -note card	Implementation of the proposed program in light of the second generation technology for the web	Teaching skills achievement test -note card

Research hypotheses:

1) There is a statistically significant difference at the level ($\alpha \leq 0.05$) between the mean ranks of the pre and post application scores for the experimental group in the cognitive test of female teachers' teaching performance in favor of the post application.

2) There is a statistically significant difference at the level ($\alpha \leq 0.05$) between the mean ranks of the pre and post application scores for the experimental group in the teachers' teaching performance observation card in favor of the post application.

Theoretical framework and previous studies:

The concept of the second generation of the web:

McHamey (2010): defines a ubiquitous social network that includes a suite of applications, collaborative tools, and online services that provide the opportunity to create educational and electronic materials, and personal learning environments.

Azmy (2014, 551) asserts that it is "a new philosophy or method that depends on supporting communication between Internet users in building participatory electronic societies.

Khamis (2015,19) refers to the second generation concept of the web as "sites that are individual, social, dynamic, and interactive, using social programs and applications that support active participation, creation of content and media, sharing and distribution of knowledge and ideas, and social communication with others. On-line.

Osman (2018, 31) defines it as "those multiple tools that are used to improve the e-learning environment, such as (social networking tools such as Facebook, YouTube, e-mail, and Google Drive) to deal and interact with educational content over the Internet at any time and anywhere. , where communication, guidance and instructional guidance between the teacher and the learner take place synchronously or asynchronously.

The researcher defines it as: a set of interactive websites, services and applications, including (Facebook, Google Drive, and e-mail) that allow class teachers to participate in modifying and editing electronic content over the Internet, synchronously or asynchronously.

Features of the second generation of the web:

Studies have confirmed, including the study of Elliott (Elliott, 2007); (Gonzalez & Louis, 2008) that Web 2 is characterized by a set of advantages, including:

1- Low cost educational process compared to web1; It is free which makes it accessible to everyone.

2- Flexibility, ease of use and relative speed of access to information at any time and any place; It has digital tools and applications that make it flexible and easy to use.

3- Take an active role in the educational process: using a variety of web2 applications in

teaching and learning activities, and defining special learning strategies.

4- Very interesting due to the modern technology, aesthetics and interactive media available.

5- Wide opportunities for information and collaboration thanks to a flexible learning space that allows for the integration of video, graphics, and audio.

6- It is social in nature, which contributes to reducing the available social isolation

7- The ability to control access to resources by verifying the identity of users

8- The ability to share with others the accumulated experiences and resources through various services such as: (blogs, participatory web editors, photo sharing).

9- Enhance class management such as using Rss summaries for course updates and materials.

10-It helps build digital content for learning. for web 2.0.

11-It is educational and interactive because it combines constructivist learning theories and social learning theories; Where the Web 2 services are compatible with the elements and mechanisms of the educational field is widespread.

Characteristics of second generation applications:

The second generation adds new concepts that have been circulated among experts, specialists and network users since the first conference of the second generation was held to announce the emergence of the concept, its definition, its characteristics and applications, and there were many trends around it between supporters and opponents of it and many (Al-Muhaisen, 2009; Al-Amoudi, 2010; Khalifa, 2009, Jawdat, 2008). Al-Khalifa, 2009) they agreed on a number of features and characteristics of it, the most important of which are:

1) Interactive websites: providing a high level of interaction with the user; Where it relied on the emergence of interactive platforms such as blogs and social networks that allow everyone to participate and interact in them, and this

interaction represents the feeling of the user, as if he is using a desktop application on his device.

2) Attention to the characterization of content and data: Since the main nerve in second generation technologies is based on content presentation methods, content quality, and the availability of content for everyone, special services to take full advantage of this data. More simply, we can say that the quality of the displayed data and the ways to benefit from this data, which the user contributed directly or indirectly, had to find a way to help the user also to describe these contents to sort and arrange them for later reference and benefit from.

3) Browsing: ie allowing users to use browser/site-based software only, where users can have their own database on the site in addition to being able to control it.

4) Participation: Users are the ones who build web services 2.0, not the owner of the site. The owner of the site provides the system as a service or as an idea based mainly on the interaction of users by participating in this service, and the user's participation in the content, and the user has become the main focus in the process of enriching the web content and that With the ability to participate in the creation of content, applications such as blogs and wikis contributed to making the web a reading and writing platform (Read/Write web) after it was a read-only platform.

5) Self-service to reach everywhere: One of the characteristics of Web 2.0 sites is the possibility of spreading the service outside the scope of the site, and support for communication, as second-generation applications make communication easier in the Internet community, as it connects sites to each other, brings individuals into social networks, and links Between internet technologies and mobile world technologies

6) visitor trust: on WEB2.0 sites the user builds content, or actively participates in its construction; Therefore, the most important principles here is to give full confidence to the user to contribute to building the service, services such as: (Flickr, Facebook, and Wikipedia) give the user complete confidence in using the system and the inclusion of any content he wishes to include, and after that comes the role of the site monitors to filter out content that violates the laws Location.

7) Supportive Development Techniques and Integration: The second generation of the web is a combination of working environments and languages used that have proven effective in creating applications via web browsers, making the most of supportive development technologies such as: Java Script, CSS, XML, and trying to maintain standards in design from a technical point of view. Or schematically by achieving accessibility, sharability, and usability.

8) Centralization of construction: centralization in building content and disseminating it easily and easily, in addition to ease of use and benefit on devices other than the computer, such as portable devices such as phones and iPods.

9) Self-service to reach everywhere: It means the possibility of publishing the service outside the scope of the site, and linking the content with other elements of the content automatically so that the same original element changes the course content, depending on techniques such as Rss - Atoms - Block.

10) The shift from the dominance of educational content management systems to open source systems and pluralism of systems with achieving compatibility between them, and the term virtual learning environments (VLE) has shifted to personal learning environments (PLE) as the future virtual learning environments, which depend on Integration of several online systems with each other according to the user's needs.

From the above, we can conclude that Web 2.0 is (applications based on the World Wide Web) that has a number of characteristics that distinguish it from "Web 1.0". These characteristics can be summarized as follows:

- Allows users to use browser-based (website) software only. Therefore, these users can own their own database on the site in addition to the ability to control it.

- It is primarily concerned with users and the ability to communicate with them, whether they are friends you know in the real world, or they are friends you know in the virtual world.

- These technologies provide the opportunity for users to express themselves, their interests and their culture through interactive conversations, starting with

interaction via instant messaging, and continuing until asynchronous interaction through online group work spaces, such as: (comments, discussions on blogs).

- Allows users to categorize, or describe content, i.e. sort the contents, and tab them for later reference.

- To imitate users' experience with desktop operating systems by providing them with features and applications similar to their PC environment.

- Provide users with interactive systems that allow their participation in a social interaction that allows the group to evaluate each other's contributions, and also provides support for creating and managing digital expression between users and helping them create new social relationships.

The importance of using the second generation web 2.0 in education:

Piotrowski, 2015: 2, (Jimoyiannis, 2013: 252), Madani Muhammed and Al-Abassi Mustafa (2011, 77) pointed out the importance of the second generation's use of the web in education as follows:

1- They formed the basis for social network systems that improve student outcomes.

2- It enhances student participation in the college, academic performance, and interaction with faculty and administration.

3- Stimulate opportunities for students and faculty members towards positivity and creativity in the learning process.

4- It contributes to the exchange of experiences between educators in the educational field, and helps to maintain the impact of learning.

5- It helps with social and not just cognitive learning.

6- Develop the student's role to serve as the producer of substantive content and evaluation of themselves.

7- Electronic means such as the course site, mailing lists, and discussion forums no longer attract many students to their trend of the latest Web 2.0 technologies such as blogs, wikis, and others.

8- Web 2.0 technologies are characterized by interactivity and flexibility that will transfer

teaching to learning, and make the student a recipient, a sender, an interactive and a participant, not just a passive receiver and receiver

9- It contributes to making education collaborative and integrative among students, as everyone participates in editing, publishing, adding and commenting.

10-It contributes to raising students' ambition and encourages them to participate in teaching and learning more strongly by participating in Web 2.0 technologies or inventing a new similar technology.

First: Planning Skills for Teaching:

Planning is generally a scientific method whereby practical measures are taken to achieve certain future goals. Planning is one of the most important and most powerful operations in the teaching process, which the teacher performs before confronting his students in the classroom. Planning refers to that aspect of teaching in which the teacher formulates a plan of action to implement teaching. Whether it is for the whole year, for half the year, for a month, or for a day. (Olive, 2003, 371-372).

Al-Tanawi Effat (2009, 35) believes that the effectiveness and feasibility of teaching depends on the amount of efforts made in planning it, and that planning for teaching is necessary to achieve good teaching in light of knowing the nature of learners and their capabilities, taking into account the available capabilities and means.

Al-Menoufi (2009) defines teaching planning as: a process in which a comprehensive framework is developed for the steps, procedures and methods used, to achieve specific goals within a certain time and to ensure the degree of attainment of these goals.

Teaching planning includes the following sub-skills: Khalifa (2007, 47)

1- Defining precisely the educational objectives of the lesson.

2- the formulation of goals a behavioral formulation that allows observation and measurement

3- Classification of educational objectives into cognitive, emotional and skill

4- Formulate verifiable objectives for the lesson time

5- Determine the appropriate content to achieve the desired goals

6- Analyze the content of the lesson into its basic elements.

7- Determining the appropriate teaching methods for the teaching situation.

8- Choosing the appropriate teaching aids for the topic of the lesson.

9- Determining the appropriate educational activities for the students.

10-Determining the appropriate methods for evaluating the extent to which the objectives have been achieved.

11-11) Determine the appropriate homework for the students.

12-Developing the lesson plan in light of the feedback.

Second: Teaching implementation skills:

The teacher seeks to accomplish what he planned in the first stage, and the events of the implementation stage begin with the teacher entering the classroom, announcing the beginning of the class, a large part of which is devoted to the implementation of the lesson, and the other part to the evaluation. He achieves his chosen educational goals through the methods of the selected teaching strategies, the teaching methods used, and the educational activities practiced by the students. This stage includes a large variety of skills that the teacher must master, the most important of which are:

1- Preparation for the lesson: It is everything the teacher says, does, or directs the students before they begin to learn the content of a new lesson or learn one of the points of the content of this lesson for the purpose of preparing the students mentally and emotionally and physically to learn this content or one of its points, and put them in a state of readiness to learn." (Zaytoun, 200, 73).

2- The skill of arousing motivation among students: It is "that internal subjective force that motivates and directs the behavior of the individual, such as achieving a specific goal that he feels the need for or its material or moral importance to him, and this dynamic force is accounted for by factors that stem from the

individual himself or from the surrounding physical or psychological environment B. Zaitoun Hassan (2001, 340-356).

3- Reinforcement skill: It is the process of increasing the frequency of the occurrence of a behavior of little repetition or maintaining the degree of repetition of a highly repetitive behavior, that is, the reward for the desired behavior of the student. (Zaytoon, 463, 2003).

Third the evaluation :

Research literature in mathematics curricula and teaching stresses the imperative of evaluating learning in terms of its outcomes and outputs to know the extent to which the desired goals and objectives are achieved, strengthening, approving and rewarding elements of strength, and addressing weaknesses and gaps in them to improve the quality of learning and teaching. (Zaytoon, 2007).

In order for the learning assessment process in teaching to take place correctly, accurately and objectively, the teacher should look at the assessment as a diagnostic, preventive, curative, and a developing and continuous process that occurs before, during and after the teaching process, and that it is a comprehensive process that includes all the three domains of educational objectives: cognitive, skill, emotional . It relies on various tools such as testing, observation, achievement files, and interviews. The teacher, colleagues, parents, and students participate in the evaluation process. (Zaytoon, 2006).

Search procedures:

First: Determining the necessary training needs for the teaching performance skills of class teachers:

Since the current research aims to determine the teaching skills that must be available for class teachers, the researcher determined the training needs in the light of the teaching performance skills, by designing a questionnaire to estimate training needs according to the following steps:

1. Preparation of the questionnaire in its initial form: The training needs questionnaire was prepared according to the researcher's knowledge of the studies conducted on teacher training programs before and during the service, especially those that prepared questionnaires about the training needs of the teacher, both in terms of the quality of these programs and the

planning requirements that must be taken into account when implementing, and their suitability The target audience, as well as in terms of the quality of teaching skills that represent the necessary training needs of the teacher. The questionnaire included (73) performance indicators distributed over four main skills, which is the planning stage for the teaching and learning processes and includes (5) sub-skills and includes (25) performance indicators, and the teaching implementation stage includes (5) sub-skills and includes (24) performance indicators As for the stage of evaluation and preparation of tests, it included (9) performance indicators, and finally, modern skills, and it included (15) performance indicators.

2. The validity of the questionnaire: After preparing the questionnaire in its initial form, it became subject to arbitration, in order to reach its applicable image, and to identify the most important training needs of teaching performance skills in light of it. A number of arbitrators were surveyed in the field of curricula, teaching methods and educational technology. The opinion poll aims to know the opinions of the arbitrators about the clarity of the formulation of those needs and the possibility of reformulating them. And reviewing the targeted learning aspects and the possibility of adding, modifying or deleting them. The extent to which the list of training needs in the professional field includes the skills of teaching performances that represent training needs for the teacher. How appropriate the sub-skills are for each major skill. Degree of training need for each sub-skill. It is worth noting that the terms of this questionnaire have been modified in light of the opinions and suggestions expressed by the arbitrators that require modification by deletion or addition.

3. The reliability of the questionnaire for determining the training needs of female teachers: The questionnaire was applied to (25) female teachers who were not from the experimental study sample.

The researcher calculated the mean, standard deviation, training need ratio and degree of class teachers for planning skills for the teaching and learning processes, teaching implementation skills, assessment skills, test building and modern skills, as follows:

First: Planning for the teaching and learning processes: The responses of the teachers came about the educational goals: the average percentage of need (95.48%) was very large.

Second: Teaching implementation phase: The percentage of need (93.21%) is very large.

Third: Evaluation and Test Building Phase: The percentage of need (94.9%) was very large.

Fourth: Modern skills: The percentage of need (95.1%) is very large.

Given the importance of these skills, the researcher took into account including them in the program so that the teachers have a great opportunity to learn about the dimensions of these skills and how to benefit from them through training them on them so that they have the ability to apply what they have learned in teaching and learning situations in their classrooms.

Second: Preparing a list of criteria Designing a program based on multiple intelligences in light of the second generation web technology:

The following are the procedures taken by the researcher to prepare this list:

1- Determining the goal of the list: The general goal of building the list is determined by arriving at the design criteria for a program based on multiple intelligences in light of the second generation of web technology for the current research.

2- List building and organization: through:

-The researcher was informed of many studies and research that concerned electronic programs by setting standards and indicators to control the design of electronic programs.

3- Validity of the list of criteria: after preparing the list in its initial form, it has become subject to arbitration; In order to reach the final picture of the list of standards, and to ensure the validity of these standards, the researcher surveyed the opinion of arbitrators from professors in the field of educational technology.

The purpose of the opinion poll was to know the opinions of the arbitrators about determining the degree of importance of each of the criteria for the training environment by

placing a mark (□) in the box that expresses this (large, medium, few), and the opinion poll aimed to add, delete or modify what they saw. appropriate, and the extent to which the indicators are related to the standards, the adequacy of those indicators, the linguistic formulation and the scientific accuracy of each standard and indicator. For some indicators, and based on what was mentioned, the list of standards in its final form includes (12) main standards, and (84) performance indicators. The researcher calculated the relative weights of the arbitrators' responses to each of the standards as follows:

- Monitoring the arbitrators' responses on the importance of each standard and its indicators; By making a frequency table; Where the response (great) was given three degrees, the response (medium) was given two degrees, and the response (low) was given one degree.

- The researcher extracted the percentage of responses for each standard and its indicators as well, and its value ranged from 89%-100%, and thus the researcher reached the final picture of the list (1).

Third: The educational design of a program based on multiple intelligences in light of the second generation web technology:

In light of the researcher's knowledge of many literature that concerned with educational design procedures, as presented in the second chapter of the research in the light of which a set of steps was organized to design a program based on multiple intelligences in light of the second generation of web technology, the researcher prepared a proposed schematic form for a program based on multiple intelligences In light of the second generation web technology to develop teaching performance, the following is a presentation of the steps and procedures of the proposed program, which are as follows:

First: the analysis stage: it includes the following steps:

This stage is the starting point in the educational design process, through which the characteristics of the trainees are determined, the educational needs of the training environment are determined, as well as the normative needs, and a study of the reality in which the proposed program will be applied and the learning resources available and pending research, and

the following is a presentation of the procedures for this stage.

Determining the characteristics of the learners: the female trainees were identified as a sample of the research by the class teachers.

-Determining the characteristics and previous experiences of the trainees: The trainee must have a set of characteristics and experiences, especially for dealing with electronic programs and web applications, using computer skills, using search engines, and dealing with web applications (Facebook, YouTube).

- Determining educational needs: In this step, the most important skills and experiences associated with the implementation of the proposed program were identified, and the most important shortcomings or weaknesses in dealing with some of the skills of web applications, or the skills of dealing with the Internet, or the educational computer were identified. The educational needs of the trainees for the current proposed program were represented in the low cognitive aspect of the trainees about the skills of teaching performances before the application, which was shown by the results of the pre-application of the cognitive test and the observation card, and then the proposed program aims to acquire these skills.

- Studying the reality of educational resources and materials: Since the current proposed program relies on web applications, it needs resources and devices to implement its effectiveness, identifying the electronic resources that the learner refers to during learning and the resources available in the training environment. The learner has a computer connected to the Internet at home.

Second: The design stage: After the analysis stage was completed, the design stage of the program based on multiple intelligences came in light of the second generation of web technology. The final implementation of the proposed program was designed by designing the interaction interface and training environment tools. The proposed program was designed according to the following steps:

1-Formulating the objectives of the program: the researcher formulated the educational objectives specific to each module of the program, then these general objectives

were analyzed into educational behavioral objectives.

2- General Objectives of the Adaptive Training Environment:

3-Defining the procedural objectives of the modules within the program and applying them according to the knowledge levels:

4- Determining the content elements of the modules of the adaptive training environment: The content elements of the modules of the proposed program were selected, and the researcher took into account the relevance of the content to the program's objectives. Scientific accuracy of the content. Content related to parameter needs. A balance of content in terms of depth and comprehensiveness. Taking into account the content of the material capabilities necessary to learn it.

5- Selection of educational media and materials: in light of the objectives of the training environment, the characteristics of the research group, the program implementation strategy, and the material requirements available for implementing the proposed program.

6- Determining the measurement tools: In this step, the appropriate measurement tools were identified to ensure that the objectives of the training environment were achieved, and included: a cognitive test to measure knowledge, information, concepts, facts and generalizations about the content of the proposed program and a note card for the performance aspects (before / after) to measure the development of the performance of the parameters.

7- Designing the content of the program: preparing the educational content and elements of the training process in a way that ensures arousing the attention of the trainees by explaining the importance of the adaptive training environment and the justifications for studying each module, introducing the trainees to the training objectives, presenting the text and various activities, recalling previous learning, interim evaluation and feedback at each stage , directing learning, activating the teacher's response, providing feedback, as well as measuring performance in addition to helping trainees retain what they have learned or trained on.

The researcher designed the program's content by writing the text in a clear style, taking

into account the diversity of text organization and the use of shapes and graphics. The interaction and communication tools that the researcher used in the proposed program were identified as follows: The interaction of the trainees with the content: This type of interaction took place through Facebook, and also by roaming between the program screens, answering questions of the constructivist calendar, carrying out tasks and training activities, and clicking on the icon Or a hyperlink, an icon, or a visual shape on the screen. And the interaction of the trainees with the trainer: When designing the training environment, it was taken into account to provide tools that achieve interaction and communication between the trainer and the trainees, including (Facebook, the chats and dialogue rooms it contains, and the trainer's feedback).

8- The entered on the proposed program, by entering the name and password of each trainee, and the trainee reads the instructions for the proposed program and knows its objectives and information about it, and then performs the pre-test through Its icon, then you enter the program by clicking on the name of the module of the program, in order to start studying the content of its program, which aims to develop the skills of the teaching performances of the class teachers, then the trainee enters the post-achievement test within the program.

9- Scenario design: - In light of the procedures followed in the previous steps, the researcher prepared the program content for the modules (4), and the modules included a visualization of the specifications of the proposed program screens for each module of the program, which shows a description of each of the read and written texts that express the training content of the teachers, pictures and some Fixed graphics on each screen that serve a specific training objective.

Where the researcher wrote the content of the program's production and processing into the multimedia elements that express it, in addition to clarifying the methods of interaction, navigation and linkage that the trainees will follow within the program and the method of tracking the display of screens and their branches followed in the program.

10-Designing the interaction interface for the adaptive training environment: The adaptive

training environment website included many sections, each with specific functions and objectives, as follows:

user designing the methods of navigation in the proposed program: where the parameters are

Title frame: The researcher designed the title frame for the adaptive training environment site. In this frame, the title and logo of the site appear, in line with the current research topic.

- Learner Login Screen (Registration Tool): The researcher prepared a database for the trainees, the research sample, using two fields to record the data of each trainee, one for writing the name and the other for writing the password. By identifying each trainee in the database, the researcher was able to track the training steps within the training environment .

- Writing texts: Microsoft Word 2010 was used to write all texts related to the introduction, objectives, content elements, explanation, and educational activities (font type Simplified Arabic, size 18 for the main headings, size 16 for sub-headings, size 14 for the body, and it was taken into account The design aspects of the texts included in the current Special Standards list.

- Still images: The static image needed by the training environment was obtained through image search engines on the Internet, and most of these images were processed so that all technical and educational specifications are taken into account in terms of color adjustment, reducing size, or writing data on them using a program Cs6 Adobe Photoshop.

programs (Adobe Photoshop Cs5) were used to process still images, on which the educational content was uploaded, and it is a modern and distinctive version. The use of many programs in the design, such as: the programming language (PHP), which was used to build an electronic portal for the training environment.

Third: The stage of production and educational development: In this stage, the educational materials and media that were identified and selected in the design stage were obtained, through acquisition from available, modification from available or new production, then numbering and storing these elements, creating modules, and interaction tools for the environment Training, registration of trainees,

making links of the elements of the adaptive training environment, then designing the training environment and implementing the prepared scenario, after which the program was uploaded, according to the steps of the proposed model (Al-Butcher Abdul Latif, 2002) used in the program, and to carry out the production process, the following steps were followed:

- Obtaining the available media, resources, activities and learning objects: At this stage, the researcher produced the scenario for the experimental treatment within the proposed research program, and also produced the educational elements included in the scenario, using the appropriate software for each element in order to achieve all the desired goals.

- Digitization and storage of the multimedia elements of the adaptive training environment: in this step, all the different elements of images, snapshots, video and graphics were produced, in light of the previous set of steps in the different stages, and these procedures were carried out according to a set of technical and educational specifications that were previously identified, and using many Of the advanced programs and techniques necessary for program programming.

- Producing information and elements of the formal scheme of the program: the program and learning resources were produced to develop teaching skills in light of the scenario of the training environment, which included the following components:

- A. Login page: It is a page where the learner writes his user name and password, which is designed for the trainees by the researcher and distributed to them in one of the meetings held with them.

- B. Environment interface: in which information about the program appears.

- Producing the initial program model: To achieve this, the program must be in conformity with the set of standards in light of which it is designed, and to identify the shortcomings resulting from the design of the program and to make the necessary adjustments for the analysis stage, in order to obtain accurate specifications for the requirements and needs of program development, and then improve the quality of the program. The design process is in light of the previously derived design criteria, so in this step the prototype of the proposed program is produced from the production stage.

- Production of modules: where the researcher produced educational modules after completing their design in the previous stage of developing the teaching performance of class teachers, according to educational design standards. Before and after each module and add questions to it. The module included navigation buttons inside and help buttons, and the module includes the following:

- A. Module Title: It expresses the content of the module in a short phrase

- B. Module objectives: It is a set of objectives presented to the trainees before studying modules, and they are measured after completing their studies.

- C. Module content: where the content of the module study is displayed, in order for the trainees to achieve the desired educational goals.

- D. Making links between the elements of the proposed program: At this stage, the researcher prepared the links within the program pages through the control panel of the adaptive environment content pages, which was obtained by booking a server for the researcher, in order to raise the main interface to the environment. With all its contents, the program has been uploaded to the server so that the trainee can access the program at any time and from anywhere, and the trainee is also supported through the program's control panel, through which trainees can communicate with the trainer for assistance, inquiries and solving technical problems, which can be The trainee encounters when using the program, through which it is possible to monitor and follow up on the trainee's performance, which is carried out through the program. Since the program is limited to training a specific group of parameters, the researcher has been keen on a system to register and access the proposed program, through the user name and password provided by the researcher and appear at the bottom of the proposed program interface

- System approval: The researcher has adjusted the proposed program and verified The program was presented to a group of specialists and experts in the field of educational technology, in order to express their opinion about it in terms of the extent to which the content of the training environment is related to the goals that were set for it. Appropriate content for class parameters. Appropriate content for the

application. The correctness of the information contained in the content of the program.

1. Application of the exploratory experiment. The program was tested on a sample consisting of (15) parameters other than the basic research sample, and the aim was to verify the suitability of the modules to the objectives and characteristics and needs of the research group, and to make the necessary adjustments in light of that. Knowing the problems and difficulties that the researcher may encounter during the application to address them. Verify the integrity of links, links and program tools.

A- Experiment with a cognitive test. Get to know the opinions of the teachers about the method of registering to enter the program. The ease and difficulty of dealing with the program.

B- How easy and difficult it is to communicate with the teachers. The clarity of the content and multimedia elements included in the program.

In light of the foregoing, modifications were made, to reach the final image of the program based on multiple intelligences in light of the second generation of web technology, to be used during implementation.

Fourth: Application and Support Phase: This phase includes the following:

1- Practical application: After testing the environment and presenting it to specialists, making the necessary adjustments, and acknowledging the validity of the program and its suitability to achieve the goals for which it was set and developing the teaching performance, the actual application of the program was done by presenting it to the research group of class teachers, from the period 21/2/2021. -22/4/2021.

2- Technical support during the application: During the actual application and implementation of the program, the researcher monitored the performance of the teachers and recorded all the notes and comments written by the teachers, and observed the interactions and communication between the parameters and the program and monitored their results, and the extent of their participation and interaction with the program.

Fifth: Evaluation stage:

1- Evaluation of the trainees' learning of the course: through the post application of the research tools, and after applying the proposed program and presenting it to the trainees through the teaching and learning processes to ensure their ability to perform the skills required to be developed, through the program, and measuring the achievement level of the trainees, and ensuring the effectiveness of the program. View the results later.

2- Evaluation of the course: In this step, judgment is made on the program and its validity by extrapolating the results of the pre and post application, and it became clear to the researcher that the program had an impact on developing the teaching performance of the class teachers. This will be explained in the search results.

In light of this, a guide was prepared for the trainer, to be used during the application to serve as a guide to work, and in light of it, a guide was prepared for the trainee to deal with the current program.

Fourth: Preparing the measuring tools:

1) Preparing the cognitive test for teaching performance:

1-The objective of the test: The test aimed to measure the cognitive aspect of mathematics teachers in the basic education stage about the levels (remember-understand-apply) that are related to the teaching performance and included in the proposed program, in the light of a set of objective questions of the multiple-choice type that require one correct answer It measures the extent to which female teachers are familiar with the set of knowledge, information and mental abilities associated with the teaching performance of the current programmer.

2 -Preparation of the test specification table: The test consisted of (25) items at the levels

of remembering, comprehension and higher levels, and related to the program topics.

3-Drafting of test instructions: The test instructions are formulated in a clear and concise manner.

4-Determining and formulating the type of vocabulary: The vocabulary of the cognitive test was formulated within the framework of objective questions of the type (multiple choice),

taking into account the scientific accuracy and clarity of the linguistic meaning. And its inclusion of the cognitive levels to be measured. The alternatives are equal in length as much as possible. And the use of randomness in distributing the correct answers so that it is not on the same pattern as the distribution of answers.

1. Test construction: based on determining the type of questions and how they are formulated, the researcher prepared the cognitive test in the teaching performance, and the test in its initial form consisted of (25) items, and the test items took the sequence (1, 2, 3....) while the alternatives were taken For each item, one of the letters (a-b-c-d), so that the correct answers to the test items are distributed randomly.

2. Determining the validity of the test: After preparing the initial image of the test, it was presented to a group of arbitrators in the Curriculum and Instruction Department and educational supervisors. To express their opinions on the safety of the test in terms of wording. The scientific content and the extent to which the phrases are related to the topics of the program and the required modifications were made.

The exploratory experience of the cognitive test:

1- Calculation of internal consistency: The validity of the internal consistency of the cognitive test of teaching performance was calculated after applying it to a random sample of (15) not from the research sample, through: Calculating the correlation coefficient of the degree of each dimension with the total score of the test. It is clear that the correlation coefficients are positive and statistically significant. At the level of significance 0.01, which indicates the sincerity of the internal consistency of the cognitive test of teaching performance.

2- Calculating the stability of the test using the alpha-Cronbach equation: The stability of the test was calculated using the alpha-Cronbach method, whereby this method is based on calculating the variance of the test items, through which the extent to which the test items are related to each other, and the correlation of each item with the total score of the test, is shown. It is clear from the previous

table that the reliability coefficient of the test as a whole = 0.79, which is an acceptable stability coefficient for alpha, which indicates the suitability of the test for research purposes.

3- Calculation of the Ease, Difficulty and Discrimination Coefficient for Test Items: The coefficient of ease and difficulty for each of the test items was calculated, and it was found that the coefficients of ease were limited to (0.2-0.8), and the discrimination coefficient was calculated for each of the test items from

4- Determining the test time The time required to answer the test items was calculated, by recording the time taken by each parameter of the exploratory sample to answer the test questions, then calculating the average time required to answer the test. The time for applying the test reached (30) minutes.

5- The final form of the cognitive test: The cognitive test in its final form consists of (25) items and is valid for experimental application.

6- Electronic test production: After formulating the test phrases and reaching the final image, the test was uploaded to the Moodle system, allowing the teachers to enter the test solution through the user name and password, and obtain the score immediately upon completion of the answer.

2) Preparing the skill performance note card for the teaching performances:

The following procedures were followed in preparing the card:

A- Determine the purpose of preparing the card:

The current card aims to measure the level of classroom teachers for teaching performance, both before teaching the proposed program and after teaching, in order to monitor the improvement in their performance of these skills or not, and thus to identify the feasibility of the proposed program they received in developing these teaching performances necessary for them.

B - Determining the axes of the note card: the axes of the card were determined in the light of a list of special training needs for teaching performances, which were identified in the previous procedure. associated with it, and this is illustrated by the following table:

Table(1) *Demonstrates the skills of the note card sub-skills*

Axis	Major skills	Miner skills
The first	Teaching planning	10 Skills
The second	Teaching implementation	10 skills
The third	Evaluation and Building tests	5skills
The forth	modern skills	10 skills

Thus, the observation card in its initial form consisted of (35) performance indicators, distributed over (4) main skills.

- Formulation of observation card phrases: The researcher took into account some things when formulating the observation card phrases to include a specific behavior or performance that is observable. Use short and clear statements as much as possible. Use expressions familiar to class teachers.

D- Data Recording Method: The card included a main field to determine the performance level of the parameters for the sub-skill, which is divided into three sub-digits to determine the degree of performance, which are:

- If the performance is performed at a high degree = 3 (three marks)
- If the performance is performed at a medium score = 2 (2 marks)
- If the performance is low = 1 (one score)
- If the performance is not performed = zero (zero)

The examinee's performance score is calculated by summing the examinee's grades on the items of the card as a whole to obtain the total score of the examinee.

E- Scientific control of the note card:

1-Calculating the validity of the card (the validity of the arbitrators): To determine the validity of the card, the researcher presented it to a group of arbitrators, in order to ensure the integrity of the linguistic formulation of the behavior related to the performance of the skill. The card should include appropriate teaching performances for the teacher. Match the sub-skills to each major skill.

2. Getting to know the opinions of the arbitrators on the mentioned performance levels. Amending the card according to the opinions of

the arbitrators, whether by addition, deletion or modification.

In light of the opinions expressed by the arbitrators, some sub-skills were rearranged and others reformulated, and accordingly the note card consists of (35) performance indicators distributed over the main skills.

The degree obtained by the female teachers ranges between (zero - 105) degrees, and the low degree reflects low performance, while the high degree reflects the high level of teaching performance.

The exploratory study of the note card:

- Calculation of the stability of the note card:

The stability coefficient of the card was calculated using the method of multiple observers on the performance of one individual. The coefficient of agreement between their estimates was calculated using Cooper's equation.

The researcher hired other female teachers after showing them the note card and knowing its content and instructions for use in the application of the card, by observing the performance of three of the parameters during the virtual classes, the agreement coefficient was calculated for each parameter and the following table shows the agreement coefficient on the performance of the three parameters.

Table (2) The coefficient of agreement on the performance of the three parameters

The coefficient of agreement on the performance of the first parameter	The coefficient of agreement on the performance of the second parameter	The coefficient of agreement on the performance of the third parameter
%93.5	%91.3	%87

It is clear from the previous table: that the average coefficient of agreement of the observers in the case of the three parameters is (90.6%), and this means that the observation card has a high degree of stability, and it is valid as a measurement tool.

Conduct a research experiment.

1)) Tribal application of search tools.

The researcher started applying the experiment on February 14, 2021. By applying the following steps:

The researcher applied the research tools (achievement test-observation card) previously to the research group, with the aim of measuring the level of knowledge and skills available to them about the content of the proposed program in question, before starting its application.

2)) Applying the experimental treatment to the proposed program based on multiple intelligences.

The researcher held an introductory session during which the mechanism of entering the program was explained, and the teachers were provided with Word files to explain how to enter the program, through the program's learning guide, which the researcher prepared in a previous step.

The experimental treatment was applied to the research sample, and this took 9 weeks, two days per week, and then the researcher explained the mechanism.

3)) dimensional application.

After completing the presentation of the experimental treatment materials, the researcher applied the research tools afterwards on the research sample, as follows:

Table (3) *The value of "t" and its statistical significance for the differences between the mean scores of the pre and post application of the research sample in the dimensions of the teaching performance skills test and its total score*

Dimensions of the cognitive test of teaching skills	Practicing	n	Average	standard deviation	value of "t"	degrees of freedom	Indication level
التذكر	قبلي	30	2.43	1.092	14.342	29	0.01
	بعدي		6.06	0.873			
Understanding	Before	30	2.54	1.010	17.909	29	0.01
	After		5.91	0.818			
Practicing	Before	30	1.66	0.838	23.144	29	0.01
	After		5.54	0.505			
The overall score for the test	Before	30	6.63	2.059	27.718	29	0.01
	After		17.51	1.292			

Up to the previous table it is clear that:

There are statistically significant differences between the pre- and post-application of the research sample in the dimensions of the cognitive test of teaching skills in favor of the post-application (greater

A. The electronic objective achievement test and the observation card were applied remotely during the virtual classes, with the aim of identifying the degree of cognitive and performance aspects in teaching performance.

B. After completing the application of the basic experiment of the research, the researcher monitored the scores in preparation for dealing with them statistically.

Research results, discussion and interpretation:

First: The results of the achievement test related to teaching performance:

1) The first hypothesis: "There are statistically significant differences at the level ($\alpha \leq 0.05$) between the mean scores of the research sample in the pre and post application of the achievement test of teaching skills in favor of the post application."

To test this hypothesis, the researcher used a t-test for the linked groups to determine the significance of the differences between the mean scores of the pre and post application of the research sample in the dimensions of the cognitive test of teaching performance and its total score, as illustrated by the following table:

mean = 5.91 - 6.06 - 5.54 - 17.51), where the "T" values were equal to (17.909 - 14.342 - 23.144 - 27.718), They are statistically significant values at the 0.01 significance level.

And then we accept the first hypothesis: "There are statistically significant differences at

the level ($\alpha \leq 0.05$) between the mean scores of the research sample in the pre and post application to test the skills of teaching performances in favor of the post practicing."

Calculating the effectiveness of using the proposed program in developing teaching performance:

To show the effectiveness of the experimental treatment (the proposed program in developing teaching performance), the effectiveness was calculated, as shown in the following table:

Table (4) *The effectiveness of using the proposed program in developing the cognitive aspects of teaching performance*

achievement test levels	Value)G(
Remembering	%79.43
Understanding	%75.56
Practicing	%89.4
The overall score for the test	%81.38

It is clear from the previous table that the effectiveness of using a program based on

Table (5) *The value of "t" and its statistical significance for the differences between the mean scores of the pre and post application of the research sample in the teaching performance skills observation card*

Teaching Skills Note Card Dimensions	Practicing	N	Average	Standard Davion	T value	Freedom degree	Indication level
Planning	Before	30	27	6.598	23.838	29	0.01
	After		66.37	6.651			
Execution	Before	30	29.71	6.271	20.577	29	0.01
	After		68.74	9.391			
Evaluation	Before	30	11.63	2.777	17.658	29	0.01
	After		27.83	3.922			
Modern Skills	Before	30	33.95	3.351	22.145	29	0.01
	After		52.3	3.391			
Note card total score	Before	30	68.34	11.114	33.912	29	0.01
	After		162.94	12.979			

From the previous table it is clear that:

There are statistically significant differences between the pre and post application of the research sample in the dimensions of the teaching skills observation card and its total score in favor of the post application (greater mean = 66.37 - 68.74 - 27.83 - 162.94), where the "T" values were equal to (23.838 - 20.577 - 17,658) 33.912), which are statistically significant values at the 0.01 significance level.

multiple intelligences in the light of the second generation of the web in developing the performance aspects of the teaching performance of classroom teachers in Jordan is great, as the effectiveness values came to dimensions in the range (75.56%-89.4%), and for the test as a whole = 81.38 %.

Second: The results of the observation card related to teaching performance skills:

The second hypothesis: "There are statistically significant differences at the level ($\alpha \leq 0.05$) between the mean scores of the research sample in the pre and post application of the teaching skills observation card in favor of the post application."

To test this hypothesis, the researcher used a t-test for the linked groups to determine the significance of the differences between the mean scores of the pre and post application of the research sample in the teaching performance skills observation card. This is illustrated by the following table:

And then we accept the second hypothesis "There are statistically significant differences at the level ($\alpha \leq 0.05$) between the mean scores of the parameters of the research sample in the pre and post application of the teaching skills observation card in favor of the post application."

Calculating the effectiveness of using the proposed program in developing the performance aspects of teaching performance:

To show the effectiveness of the experimental treatment, the effectiveness was calculated, as shown in the following table:

Table (6) *The effectiveness of using experimental treatment in developing the performance aspects of teaching performance*

Teaching Skills Note Card Dimensions	Value)G(
Planning	%74.28
Execution	%70.6
Evaluation	%69.32
Modern skills	%76.21
Note card total score	%71.85

It is clear from the previous table that the effectiveness of using a program based on multiple intelligences in the light of the second generation of the web in developing the performance aspects of the teaching performance of classroom teachers in Jordan is great, as the effectiveness values for the card dimensions came in the range (69.32%-74.28%), and for the card as a whole = 71.85 %.

Discussion and interpretation of the results:

The researcher attributes the effectiveness of the proposed program to the following matters:

- The turnout shown by the research sample and felt by the researcher from their effective interaction with the program.

Serious participation by the trainees in various events and activities in the diversity of using modern technical means in training

The teachers' conviction that knowledge is the main gateway to improving positive attitudes towards employing technology in developing their performance.

The ability to access highly accurate and perfect educational products, and make it a contributor to enhancing the value of technological learning.

The integration of knowledge with the performance and production of female teachers contributed to the formation of positive trends towards employing technology in the development of their teaching performance.

- The modernity of training topics and their keeping up with the times.

- The content of the program is prepared in a way that enables teachers to teach in an easy and self-paced way as well.

- Presentation of the program for the educational material in an orderly manner that includes the implementation of the steps with pictures.

- The effort expended in preparing the program helped the program achieve its objectives.

- Practical training carried out by the teachers during the implementation of the program.

- Teachers race to know all that is new in technology, starting with their registration in the program until they can learn new skills in teaching and how to use technology in teaching.

- The use of web applications achieves the learner an active interaction in educational situations, given the multiple possibilities they provide for access to information, as well as the inclusion of the proposed program on a set of educational options that allowed teachers to use what suits them, and to follow regular steps in learning skills, in terms of Study the skill and read about it using the Google application, and note its performance by watching the videos and flash within the program during the sessions, then the practical application of the skill and training on it, then the evaluation and retraining again. Which contributed to an active role in enriching educational attitudes and raising the level of teachers' achievement in the cognitive and performance aspect. This means that the impact of the program is large.

This study agrees with previous studies, including: Saqr study (2006) Al-Tabakh study (2014) and Hafez study (2017) Othman study (2018) Al-Jundi study (2019) Hussain study (2019) Al-Safi and Al-Jahmi study (2019) Al-Wakeel study (2020) which She emphasized the effectiveness of electronic programs in training teachers and improving their professional performance.

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