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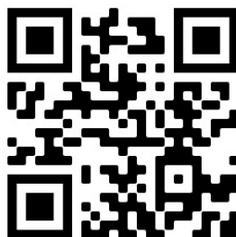
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## **A training program based on electronic active learning strategies in the Edmodo environment to develop the skills of dealing with them for general education teachers**

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### **Abstract**

The aim of the research is to develop the skills of dealing with one of the electronic educational platforms (Edmodo platform, one of the second generation Web 2.0 applications) among general education teachers through a training program based on electronic active learning strategies In the Edmodo environment. The research group was selected from thirty public education teachers. The research tools in the experimental treatment material consisted of a training program based on electronic active learning strategies. These strategies and tools for their implementation were numerous according to the educational objective, namely: (Private teacher - electronic brainstorming - electronic discovery - assignments / assignments - peer interaction - project-based learning - information gathering and analysis strategy - electronic problem solving - electronic participatory learning). The performance note card for skills in dealing with the Edmodo environment, and the evaluation card for the effectiveness of learning and training in the Edmodo environment. The results showed the effectiveness of the training program in developing the skills of dealing with the Edmodo environment (the cognitive component and skill performance) through electronic active learning strategies for general education teachers. And the existence of a positive significant correlation between the scores of the individuals of the research group in the cognitive and skill aspect through the training program based on

electronic active learning strategies, and the effectiveness of learning and training in the Edmodo environment.

**Keywords:**

A training program, Skills of dealing with the Edmodo environment, active electronic learning strategies.

**Introduction:**

The era of digital learning requires the transformation of learning systems commensurate with the current needs of learners in conjunction with changing teaching methods so that teachers and learners interact better in their educational environment, and the introduction of electronic educational platforms in the educational process, and digital curricula in the educational system to create new generations of learners with special skills, and build the learner The innovator, the conscious thinker in the age of digital learning, and the adoption of teaching curricula and methods to focus mainly on digital technological innovations, and overcoming the problems of formal education, which the Egyptian state realized to enter the era of Digital learning, including technological innovations and digital curricula, and what it requires to prepare a teacher to be a leader learning system in the digital age.

With the spread of social networks, there was a need to replace traditional learning management systems with other more open systems that keep pace with the rapid changes in web technologies and are compatible with the way the new generation deals with the network, which resulted in a new form of learning management systems that combines the characteristics of traditional learning management systems and social networks , including: Edmodo platform, a free social platform that provides teachers and learners with a safe environment for communication and collaboration, and the exchange of educational content and its digital applications, in addition to homework, grades and discussions, Edmodo combines the advantages of the Facebook network and the Blackboard Learning Management

System LMS, It uses Web 2.0 technology, and is an educational social network that aims to connect all learners with the community and the learning resources they need to enhance their capabilities and build their skills.

The Edmodo environment combines a dynamic learning environment and social networking, and is one of the best Ten Web 2.0 platforms, which are used in electronic training and are considered one of the technological innovations that have gained popularity in the field of training in general and teacher training in particular. It aims to provide training content through an intermediary of modern communication mechanisms such as computers or web networks, and the Edmodo environment is similar to that of Facebook.

One of the most important advantages of Edmodo is in addition to being a free social learning network for teachers, learners and schools, it changes the way of teaching in the classroom and makes it a twenty-first century chapter that depends on digital, interactive courses, social communication and increasing interaction between learners and the use of smart devices. It also has technical advantages as a network dedicated to education, including Grading system, message archiving and retention feature, use of different applications, educational programs and websites, And the possibility of accessing it, whether through smart devices or through personal computers, transfers the method of learning and teaching to depend on the digital environment, smart devices, electronic interaction, group learning, continuous self-learning, thinking and problem-solving skills, innovative learning and critical thinking in light of the digital world. , 2018, 47) , (and Youssef Al-Enzi, 2017), (Nora Al-Muqrin, 2016).

Active learning via the web is an essential component of building meaningful learning and requires participatory tasks for learning teams across social learning systems and processes. It also

allows the acquisition of experiences through cooperation and sharing among learners to build knowledge through social interactions that take place over the web, and depends on the sharing and interaction between teachers and learners. Learning resources, active learning strategies based on participation and interaction via the web, a set of overlapping

and integrated procedures that are carried out with the aim of managing learning activities with guidance and guidance from trainers or teachers in order to achieve educational goals (Two Hegazy and Hassan Mahdy, 2016, 33, 40), One of the advantages of active web-learning strategies for teachers is; Training them to master some educational skills and processes according to the educational situation (Taghreed Omran, 2004, 89).

**Sensation of the research problem:** The feeling of the research problem stemmed from several sources, including:

**First- Personal / Field Observation:** The scarcity of applied training programs for teachers on the Edmodo environment, and this was demonstrated through the researcher's work. The teacher is required to create an account for him and virtual classes through the Edmodo environment, and to include the learners in it, and most of the teachers only know about registration and often It is done by one person or through Internet cafes, except for a few of them, due to the shortcomings in their digital culture in dealing with technologies and technological innovations.

**Second - The exploratory study:** The exploratory research carried out by the researcher on (40) teachers of Minya Governorate for different educational stages showed the following: 65% of the size of the exploratory group do not know how to register on the Edmodo environment and make virtual classes, 85% of the size of the exploratory group They do not realize the educational return from the advantages of the Edmodo environment as a technological innovation in the educational process and its role in distance education.

**Third - Recommendations of the conferences:** The Digital Learning Conference (2018) at the Future University in Egypt recommended the necessity of forming centers specialized in training human cadres of specialists and faculty members to use digital applications in the field of education. Development demands and current developments at Umm Al-Qura University in Saudi Arabia, the necessity of preparing the

teacher according to the changes and developments of the era and technological developments and training him on how to use and employ modern technology within the educational institution. And the Use of technology in the development of education and in the learning process itself.

**Research problem:** In light of the transition to digital learning, the Ministry of Education provided the Edmodo platform as an electronic educational platform in light of the current challenges, to provide digital curricula to be available all the time to serve the teacher and the learner through virtual classrooms, and to overcome the problems and defects of traditional teaching, and help to make learning available For the learner all the time and anywhere, and to gain remote learning experiences, and general education teachers are not good at dealing with it, to allow digital learning through it for learners, and to help them teach and provide digital learning experiences that are difficult to provide in traditional teaching, as well as the scarcity of training programs that allow teachers Knowledge of the Edmodo environment, Especially in light of the gradual transformation of digital learning, and the shift in the traditional role of the teacher, who became a digital teacher, and the learner, who in turn became a digital learner to deal with digital curricula, and emphasizes the idea of distance learning through a digital learning system, nor the how or the environment through which this is made available. Digital learning, which integrates teachers, learners, and digital learning resources together so that it is easy for the learner to access the teacher as well as digital learning

resources through them, and to be available to the learner all the time, and provide the elements of attraction for learning through a social Environment that is enticing for that for distance learning.

Therefore, the current research sought to try to find a solution to this problem by answering the following main question

**"What is the effectiveness of a training program based on electronic active learning strategies in developing the skills of dealing with them among the general education teacher?"**

Branching out from the main question are the following sub-questions:

- 1- What is the effectiveness of a training program based on electronic?  
Active learning strategies in developing the cognitive component of His skills of dealing with the Edmodo environment among general education teachers?
- 2- What is the effectiveness of a training program based on electronic active learning strategies in developing the skill component of the skills of dealing with the Edmodo environment among general education teachers?
- 3- What is the effectiveness of learning and training in the Edmodo environment in developing the skills of dealing with it through a training program based on active learning strategies for general education teachers?

**The importance of the research:** the continuous professional development of teachers, relying on active electronic teaching methods, benefiting from the advantages of social learning platforms in the educational process, and exchanging educational experiences through learning management platforms, including the Edmodo platform, focusing on the outcomes of the learning process, achieving communicative, interactive and interconnectedness between Parties to the elements of the educational system, integrating teachers and learners with common interests and goals through an active electronic platform based on the effective integration of technological innovations

in a social framework, activating active learning strategies and electronic interaction via the Web.

**Research Objective:** The current research aims to: develop the skills of general education teachers in dealing with the Edmodo environment through a training program based on electronic active learning strategies in the Edmodo environment.

**Research limits:** The current research was limited to the following limits:

**Content limits:** represented in the development of the knowledge and skill component to develop skills in dealing with the Edmodo environment: skills the cognitive and performance of the Edmodo environment, which is intended to be developed by teachers of general education.

**Human limits:** the selection of the research group from general education teachers, and they were chosen in a deliberate way, but participation in the research experiment according to their desire, and a group of thirty teachers was selected for different subjects.

**Spatial limits:** The application was implemented remotely (via the Internet) to allow the learning of skills for all trained teachers, and The entry of the trainees through their computers, smartphones or tablets, as they are All devices are connected to the Internet for learning through the Edmodo environment (for asynchronous application) and what it requires. Headphones and Internet browsers, as the application is done anywhere or anytime according to the trainee's desire, so that it allows the trainee can learn and train in an Edmodo environment.

**Time limits:** The application period was set during the first semester of the academic year (2020-2021 AD) to develop skills for dealing with the Edmodo environment from a distance.

**Research group:** The research was applied to a group of (30) public education teachers from Minya Governorate from four schools (Al-Saeediya Elementary, Al-Salam Elementary, Othman Bin Affan Elementary and Al-Fath Elementary), and they were chosen in a

deliberate way, but participation in the research experiment according to their desire In participating in the research experience.

### **Research Variables:**

**Independent variable:** a training program based on electronic active learning strategies in Edmodo environment.

The dependent variable: represented in the skills of dealing with the Edmodo environment, and included: the achievement of the cognitive component, the skill component of the skills of dealing with the Edmodo environment.

**Research Hypotheses:** The current research sought to test the validity Of the following hypotheses:

- 1- There is a statistically significant difference at the level of  $\leq (0.05)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the achievement test for the cognitive aspect of the skills of dealing with the Edmodo environment through a training program based on electronic active learning strategies.
- 2- There is a statistically significant difference at the level of  $\leq (0.05)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the research group's performance observation card for the skills of dealing with the Edmodo environment through a training program based on electronic active learning strategies.
- 3- There is a statistically significant high level in the performance of learning and training skills in the Edmodo environment among the members of the research group in the post application on the performance evaluation card for the effectiveness of learning and training in the Edmodo environment in increasing cognitive achievement and skill performance through a training program based on electronic active learning strategies.

### **Research Tools:**

**First - Experimental processing:** a training program based on electronic active learning strategies in Edmodo environment that

includes the acquired experiences of skills in dealing with the Edmodo environment, and it was built according to the educational design model of an e-learning platform, and the educational goals and teaching strategies used (active learning with multiple strategies according to the

educational goal) were determined. The evaluation method in an achievement test for the cognitive component of skills to deal with the Edmodo environment was applied before and after the application of the research, and a note card for the skill performance of the skills of dealing with the Edmodo environment was applied before and after the application of the research, and an evaluation card for the effectiveness of learning in the Edmodo environment after the application of the research.

**Second** - Measurement tools: The following tools were used, all prepared by the researcher:

1. An achievement test to measure the cognitive component of skills to deal with the Edmodo environment, which was applied before and after the experiment.
2. The performance note card for the skills of dealing with the Edmodo environment to measure the skill component was applied before and after Experimentation.
3. A score card to measure the effectiveness of learning and training in the Edmodo environment, which was applied after the experiment.

**Research Methodology:** The one-group quasi-experimental approach was used and represented in the use of the pre- and post-application of the achievement test for the cognitive component of the skills of dealing with the Edmodo environment, the observation card for the skill component of the skills of dealing with the Edmodo environment, and an evaluation card for the effectiveness of learning and training in the Edmodo environment for the performance of the members of the research group that were exposed To the experimental variable and

compare the performance results before and after the experiment to verify the validity of the research hypotheses.

**Search terms:** procedurally define active learning strategies in the Edmodo environment: electronic active learning strategies designed and placed in the Edmodo electronic environment, and these strategies

are multiple according to the educational objective, through which training content was made available, based on the active participation of the trainee to acquire the skills to be developed (skills dealing with Edmodo environment).

### **The Theoretical framework /Edmodo e-learning platform:**

There were many definitions that dealt with the Edmodo environment, and it was concluded that the Edmodo e-learning environment:

A virtual learning environment consisting of an integrated system that enables teachers to create and manage electronic courses through content management systems. It provides second generation services from the web and depends on the interaction between the parties to the learning network, the teacher and the learner, the educational content, educational activities, learners and other teachers to share in the learning activities and experiences, and enables conducting Electronic tests and parents' review of their children's results, and it is an attractive \form for learning because it combines the advantages of Facebook and the LMS learning management system, but it is more private and secure.

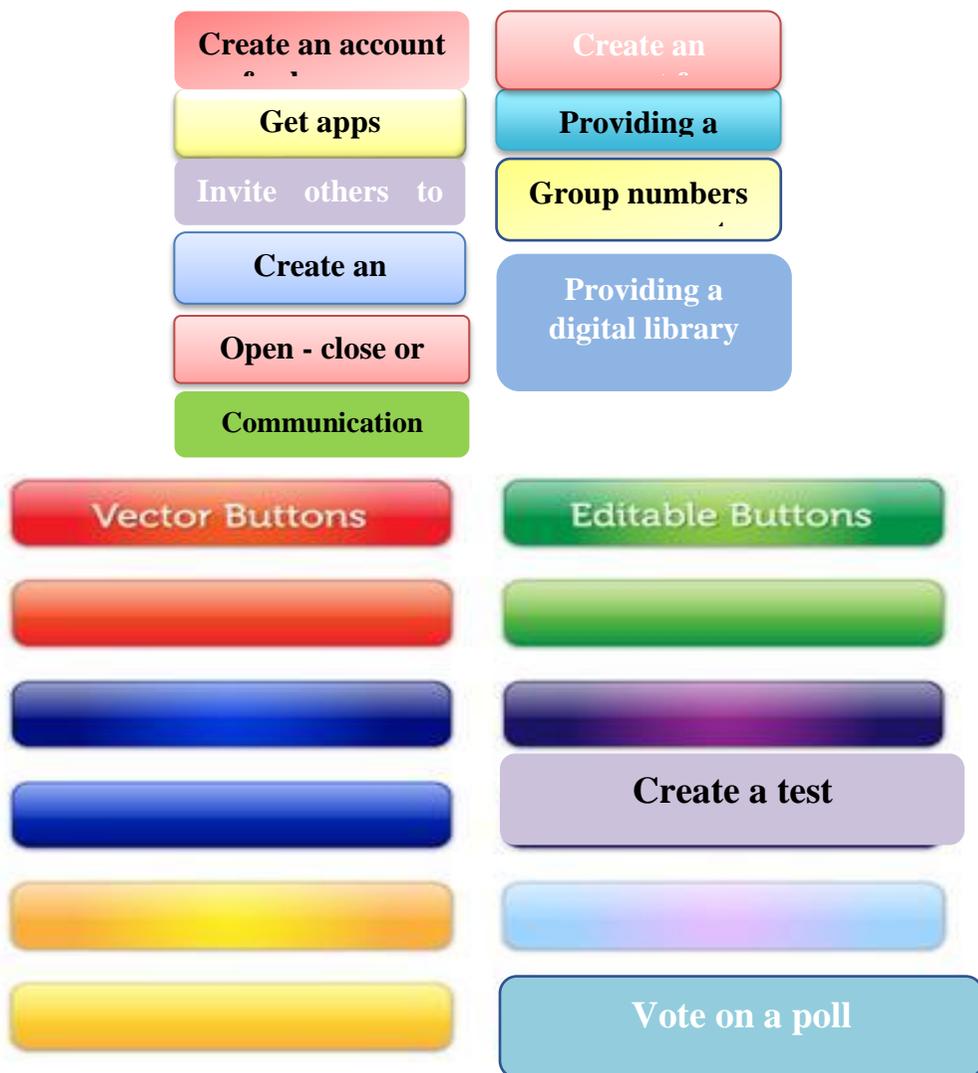
The advantages of using the Edmodo electronic educational platform in the educational process: Combining content management systems and social networks, helping learners to exchange opinions and ideas, which help creative thinking, enabling teachers to create virtual classes, conducting group discussions, sending messages and exchanging files between teachers and learners, creating many groups on the online platform.

It provides a digital library that contains many learning resources for educational content, which helps in creating exams Easily electronic, provides feedback on the level of performance of learners, ease of communication between the teacher and parents Informing

them of their children's results helps teachers follow up on learners' performance to perform some skills and their progress in them Encouraging learners for participatory learning, easy access to scientific material, and communication of teachers in a particular country or countries.

Numerous exchange of ideas, participation and educational discussions, support interaction between teacher and learner, solving the problem of private lessons by reaching unconventional solutions to the problems of traditional teaching methods, providing the opportunity for learners to retrieve what has been studied at any time (Abdel Al-Saied, 2016). For learners, they can create an account for the learner, share content, submit assignments and homework, answer periodic quizzes, view their grades, provide feedback, notes and alerts from their teacher, write notes to the learner and peers, in addition to voting for any teacher survey (Yagci, 2015).

**The services provided by the Edmodo electronic educational platform in the educational process, including:** The Edmodo platform offers three types of accounts: the teacher's account, the learner's account, and the parents' account (Alqahtani, 2019), and an account can be created on the Edmodo platform by entering the site: [https:// new.edmodo.com](https://new.edmodo.com), the most prominent educational services of the Edmodo platform can be summarized in the following form:



**Figure (1) the services provided by the Edmodo environment in the educational process**

By reviewing the educational literature: Edmodo educational environment is an educational platform that combines the advantages of the LMS learning management system and Facebook, offering many advantages and services available through this electronic platform Edmodo, providing an interactive social learning environment that helps provide the opportunity for learners and teachers to exchange opinions ideas and learning experiences, making electronic content and

electronic learning resources available, encouraging the exchange and sharing of files, contents and educational curricula, assisting participatory learning and supporting interaction between the teacher and the learner to achieve the goals of the educational process, creating a psychological and social atmosphere between teachers and learners, and enabling the creation of a digital library containing many Learning resources, creating electronic tests, In addition to many other advantages and characteristics, it links the elements of the educational system between the teacher and the learner, teachers and other learners, and the activities and resources of electronic and digital learning and parents in a social learning network via the web.

### **Virtual or electronic training via the Edmodo platform:**

a set of practices and performances in which the learner/trainee is active in the learning or training process and positively participates in educational and training activities and practices via the Edmodo electronic platform through content implementation tools that define and direct his activity, and the role of the teacher or The trainer guides, supervises, assesses, facilitates and supports the learner/trainee during the learning or training process; To create virtual learning communities, and the role of the teacher/trainer in active learning through the Edmodo electronic platform is like (the digital teacher/trainer through that electronic platform), and the role of the digital learner/trainer in that electronic platform has become more effective based on the development and development of his skills and abilities In receiving the content of learning and training through that electronic platform, and his contributions, activities and participation in the production and generation of knowledge, including the elements of attraction and interest it provides, and placing it within learning communities that arouse his attention and attract him towards it.

## **The theory on which the electronic platforms (Edmodo platform) are based: Communication theory:**

Downes and Siemens (2008) introduced a communicative learning theory in line with the needs of the twenty-first century, which takes into account recent trends in learning, and the use of technology and networks, in combining relevant elements in many learning theories, social structures, and technology to build a strong theory For learning in the digital age, according to the communication theory, learning is a process that includes linking contact points or specialized information sources (Siemens, 2004).

This theory is considered the latest learning theories, and the main application of this theory is the diversity of information sources, thlink

between multiple sources of information, the creation of a continuous learning environment, and the benefit of knowledge management activities. These applications depend on techniques such as social networks (Nilgun, Matcalf, 2011).

**The principles of communication theory, and identified by Siemens (2004) as follows:** Acquisition of more knowledge is more important than what is currently known, learning and knowledge lies in the diversity of opinions, learning is a process of linking between specialized sources of information. The learner can improve the learning process by working over the local network, providing and maintaining connections.

Necessary to facilitate continuous learning, accuracy and updating knowledge, are the goal of all communicative learning activities, as well as decision-making itself is a learning process, as learning occurs in different ways, including: courses, e-mail, communities, chats, web research, and reading blogs Courses are not the main source of learning.

Learning is the process of creating knowledge, not just consuming knowledge. Learning tools and design methods should take advantage of this feature of learning. It is important that cognition and feelings integrate into meaning-making, and that different approaches and interpersonal skills are important for learning effectively in today's society. Learning It has an ultimate goal, such as developing the ability to perform a specific skill or the ability to work effectively in the age of knowledge through the development of self-awareness skills, and the management of personal information, and mastery and access to modern knowledge are the goal of communicative learning.

Learners are engaged through creative learning activities, course structure, focus on motivation, and active learning (Iarkley, 2010, 46-69).

**The characteristics of learning in the light of the communicative theory as defined by Darrow, (2009) as follows:**

Learning involves the learner's dealing with a huge amount of information spread across networks, and therefore the learner needs knowledge management skills in terms of assessment, classification, arrangement and optimal use. The learning process occurs in interactive environments that are constantly changing and evolving. Social networks are one of the important tools in evaluating the effectiveness of learning. Distribution of knowledge across a network of diverse electronic sources.

**The communicative theory was adopted in the current research for the following reasons:**

1. The principles of communication theory agree with the following concepts:
  - a. Informatics: It is represented in the use of electronic means in the processes of storing, preserving, retrieval, broadcasting and disseminating information instead of traditional means by investing it in school curricula and developing manpower in developing technology and exporting it abroad (Gabriel Al-

Areshi, 2007), and this is achieved by obtaining information and expertise through What it provides of saved interactive electronic lessons and curricula for the curricula by retrieval and the ability to memorize them, and make them available to all learners in the different academic levels through the Edmodo platform.

- B - Communication: It is achieved by sharing ideas and information through the processes of sending and transmitting meaning, directing and managing it, and then receiving it with a certain efficiency to achieve a specific response in a certain social environment (Mohammed Al-Mousawi, 2010), and this can be done by supporting the interaction between learners through the web in an unlimited manner, especially With the new technologies that appear daily, allowing the free sharing of information (Darrow, 2009), this is done through obtaining digital information and the possibility of sharing it through social media and platforms.
2. The learning process is the creation of knowledge and the communication process takes place to exchange knowledge and obtain it through the learning resources available through the Edmodo environment, and thus create virtual knowledge societies, which is that society that is based mainly on the dissemination, production and employment of knowledge efficiently in the areas of community activity i.e. establishing development Humanity, in line with the scientific and technical developments of the educational era (Arab Human Development Report, 2003, 39), and consists of teachers, learners and parents at the level of the educational institution and other educational institutions.
  3. Access to more knowledge: through the diversity of sources and experiences of knowledge by making them available in different sources and images to enrich the learning process.
  4. It provides resources and learning experiences in different forms, including videos, magazines, books, etc.

5. The Edmodo platform allows copying, saving, retrieval and sharing of information sources through social networks, forums, meetings, conversations, and others, which saves time and effort in the search process.
6. Learning to mastery occurs through the presentation of experiences and information through it and it can be repeated and repeated to reach the required level of mastery according to the learner and his own step.
7. It enhances personal knowledge management, allowing for arrangement, classification, indexing, optimal use of knowledge sources and their preservation, whether in files, folders, or others.
8. Knowledge is also distributed and utilized in interactive knowledge societies that have been obtained, exchanged and shared with other individuals in the knowledge society through social networks, forums, newsgroups, learning management platforms, e-mail or other sources of communication and communication.

### **Among the studies that proved the effectiveness of the Edmodo platform in learning:**

The study of Hala Soliman (2021) sought to address the shortcomings in programming skills and the development of self-regulation skills among secondary school students by studying the impact of the sharing pattern via the Edmodo platform. The results showed the positive impact of the sharing style via the Edmodo platform in developing the cognitive achievement and the skill aspect of programming and self-regulation skills. Recommended for use in the educational process, study M Alamsyah et .all (2021) , aimed to determine the application of blended learning with edmodo based on the POE (predict-observe-illustration) learning model on secondary school students in Jakarta. The results showed improved understanding of students' concept, and students were more active and highly motivated in learning science.

Study Heny. K I (2020) tried to check if there is an effect of inverted Edmodo apps in Classes on students' ability to think creatively in the context of the Indonesian language. The results showed that the use of Edmodo applications in flipped classroom learning has a better effect on students' creative thinking ability, and flipped classroom learning has a better effect on students' creative thinking ability.

Samah Ismail (2020) study aimed to identify the manifestations of vocal weakness and writing skills and the development of those skills through interactive participatory learning in the Edmodo environment. The results proved the positive impact of the Edmodo

platform in treating the vocal weakness and writing skills of primary school students.

Ibrahim Al-Kandari's study (2019) indicated that the Edmodo social platform is one of the virtual classroom models that can be used in education. The results showed the effectiveness of Edmodo in improving academic achievement, and increasing students' motivation towards learning. Sameh Al-Ajrami's study (2019) aimed to identify the effectiveness of employing the educational social networking platform (Edmodo) on developing digital image processing skills and achievement motivation among female students of technology education at Al-Aqsa University in Gaza. The results showed the effectiveness of the Edmodo platform in increasing cognitive achievement, skill performance of digital image processing skills, and achievement motivation scale.

Hikmat Al-Masry and Ranan Al-Ashqar (2018) study on teacher training on the use of the Edmodo platform, the preparation of guidelines by the educational technology departments in the faculties of education on electronic learning platforms, including the Edmodo platform, for the benefit of students and faculty members, also during practical education and when they are appointed to Schools, as Asmaa Seif's study (2018) recommended using the Edmodo platform to teach different courses.

## **Skills for dealing with the Edmodo platform and the new teacher roles:**

Employing technological technologies in the educational process has many advantages represented in the advancement of the educational situation in the educational process as a whole, in addition to its contribution to solving many problems of the educational system and increasing the positive and effective participation of the learner in the learning process, encouraging active learning and the participation of learners in the learning process, and this depends It is essential and essential for teachers to develop themselves, increase their

competencies and develop them, keep pace with the technological change, training and practice in order to improve the outcomes of the educational process and to actively contribute to the development process and improve professional and performance practices (Zainab Amin, 2015, 36-40), (Amani Barhoum, 2012, 19 ).

The light of new practices in the world of advanced technology In order for there to be an ideal use of technological innovations in the educational process, appropriate training must be provided for the teacher and the learner on the skills of using these innovations (Emad Mulki, 2009, 7)

From the above it can be concluded that: The role of the teacher has shifted to keep pace with modern changes, and his task has become to motivate learners To raise questions about knowledge and not just acquire it and encourage them to form new knowledge, and to gain learning experiences from multiple sources, especially from digital sources available in the era of digital learning and digitization of educational curricula. his work, and choosing what makes his teaching successful, as the educational process focuses on experiences rather than content, so the learner becomes the focus of the learning process.

The teacher has to take advantage of the new technological innovations, especially the electronic educational platforms, including the Edmodo platform, and to develop his skills and experiences to be

able to deal with them to keep pace with what is imposed by the development of the educational system and to be keen on activating its performances and practices for use in teaching and relying on it in a fundamental and effective manner as required by the situation The successful teacher is the one who develops himself professionally and seeks to gain experience, and to keep pace with the era of digital learning with the development imposed by the educational system, and to master and possess the necessary skills and tools that enable him to do so and to deal with digital technological innovations. teachers aware of it, This stems from their complete conviction to lead the process of

change for the objectives and practices of the educational process, the shift towards digital learning, and their possession of the necessary skills and competencies to deal with them, especially digital ones, through their new role in the era of digital learning, and their keenness to develop their performance and continuous professional growth, and develop their skills.

### **The second axis / active learning:**

There were many definitions that dealt with active learning and it was concluded that: Active learning is the learner or trainee the main focus in the learning process, through the activities and practices he performs, whether inside or outside the classroom, his active and positive role in the learning process, and the learner or trainee interacts with the teacher and the content The teacher and his peers build on his experiences to form new knowledge that becomes meaningful, and learning is an active constructive process. As for the teacher's role, it becomes a planner of the educational situation, a facilitator, a guide, a guide, an evaluator and a supporter of the learner during his learning.

Active learning is one of the modern educational trends that have a positive impact on the education process. The field of active learning includes a set of modern strategies in teaching centered on the learner, making his role active and effective, and the importance of activating his practices during the learning process, and works to

develop the learner's skills, so he acquires knowledge and builds above his experiences, and develops his skills and abilities, and discovers creative abilities.

**Justifications for the use of active learning:**

The criticisms leveled at traditional education in teaching that violated the educational process (teacher - learner - educational material) and in which the learner is passive and has no role during learning, what characterizes the current era of knowledge and scientific revolution that includes all life activities that led To the accumulation and increase of human knowledge, the great cognitive explosion, and

the learner's active participation in the learning process through his learning activities, consideration of teaching methods, learning through memorization and the learner returns to memorizing and listening and is passive and does not help research and creativity, the integrative vision of curricula and school activity To achieve common concepts between teachers and learners in the local community, The interest of traditional methods in teaching is the role of the teacher, who plays the role of transferring the study material, and the learner does not have any role. Active learning combines theoretical learning, which the learner/trainee desires, and the applied learning that benefits from it. Learning Active makes the learning/training effect last for a long time.

**Principles of active learning:** promotes more cooperative work, encourages activity and interaction, provides prompt feedback, provides sufficient time for learning or training, sets high expectations for learner/trainee performance, recognizes that intelligence has many types Therefore, multiple methods of learning are used, familiarizing the learner/trainee with the basic skills to implement the active educational situation, Clarity of the study material and that it is meaningful to learners (Emad Mulki, 2013, 71).

**The importance of active learning:** Aqeel Rifai (2011, 63) stated that active learning is of great importance:

Active learning promotes cooperation and positive participation between learners/trainees, Develops positive attitudes towards the educational or training material and towards themselves and their teachers or trainers, helps the learner/trainee to assume responsibility and self-reliance and recall their previous experiences, learners/trainees work in active learning by doing and employing Knowledge by practicing what they have learned, develops the spirit of teamwork among learners/trainees.

Osama Sayed and Abbas Al-Jamal (2011, 103) added that active learning is of great importance and its use is beneficial, so educators should pay attention to it and encourage its use because it can teach what is difficult to learn in the classroom environment, increases the integration of learners/trainees at work and makes Learning is fun.

### **Active Learning Strategies in the Edmodo Electronic Environment:**

It is intended in the current research to design different learning/training strategies, including the system (Edmodo electronic platform) of the second generation web services and electronic tools in the Conveying and implementing content and creating learning or training. Learning strategies include a number of actions to deliver content Educational or training in a way that helps learners/trainees achieve educational goals.

These strategies vary according to the diversity of objectives, among which were mentioned (Mustafa Saleh, 2020), (Haidar Faleh, 2017, 58-62), (Nabil Azmy, 2008, 415), (Walid Al-Halafawi, 2011) as follows:



**Figure (2) Electronic Active Learning Strategies**

All previous strategies were used and employed in the application of the research experience except for the membership strategy and the Ask an Expert strategy.

It can be concluded from the above that: Digital learning has led to a change in teaching methods and strategies, so learning strategies have emerged via electronic learning platforms to suit that digital environment (electronic active learning strategies via the Edmodo electronic platform), and include electronic active learning methods and strategies, virtual training and e-training via electronic platforms. (including the Edmodo platform), which is a set of practices and performances in which the learner/trainee is active in the learning or training process and positively participates in educational and training activities and practices via the Edmodo electronic platform through the content implementation tools that define and direct his activity.

The role of the teacher or trainer is to guide, supervise, assess, facilitate and support the learner/trainee during the learning or training process; To create virtual learning communities, and the role of the

teacher/trainer in active learning through the Edmodo electronic platform is like (the digital teacher/trainer through that electronic platform), and the role of the digital learner/trainer in that electronic platform has become more effective based on the development and development of his skills. And his ability to receive learning and training content through that platform e-mail, and its contributions, activities and participation in the production and generation of knowledge, with the elements it provides of attracting, craving and placing it Within learning societies, it attracts his attention and attracts him towards it.

### **Among the studies that have proven the effectiveness of active learning:**

The study of Majed Al-Zabel (2021) aimed at revealing the effect of using three active learning strategies in physics for upper basic stage students in Jordan, which are strategies of mind maps, cooperative learning, and modeling learning. The results showed a positive effect in developing creative thinking skills. It recommended conducting more studies to find out the effect of using active learning strategies in developing other skills of the twenty-first century among students of the upper basic stage in Jordan.

Madyan Khamis study (2021) aimed to reveal the effect of a proposed educational program based on active learning in developing creative thinking skills for seventh grade students in Jordan. The results showed the impact of the proposed program on developing creative thinking skills. One of the most prominent recommendations is the use of active learning strategies in teaching the subject of vocational education.

The study of Maged El-Deeb (2020) aimed at identifying the effectiveness of employing active learning strategies on developing academic achievement and mathematics teaching skills among female students of the College of Education at Al-Aqsa University in Gaza Governorate, and their attitudes towards active learning strategies. It recommended the need to reconsider the programs and plans of colleges of education in line with the importance of active learning

strategies in achievement and the development of mathematics teaching skills and trends towards active learning.

The study of Wael Al-Asi (2019) revealed the effectiveness of teaching with active learning strategies in providing second-grade students in Gaza with national and life knowledge. The results showed the effectiveness of active learning strategies in providing second-grade students in Gaza with national and life knowledge.

### **The research procedures:**

The motives of the trainees were aroused to learn and motivated to learn the content to be trained on, by preparing them either through contact and interaction between the facilitator and the trainees face to face by meeting the trainees three times before the actual application of the research experience, or after entering to receive training, in Form brainstorming questions for them, interaction, discussion and dialogue, by introducing them to the importance of digital learning and electronic educational platforms, specifically the Edmodo platform, its advantages, ease of learning and receiving training programs through it, technological development for them in line with current developments and challenges, professional and academic advancement for them, as well as to keep pace with recent changes to the role of The teacher being a digital teacher to suit the digital learner and digital learning resources, The trainee receives assignments and notices, enters to pass the pre-test, and then trains on the educational content provided to him to learn Edmodo skills (as an electronic educational environment to provide virtual training on it from a distance to learn its skills, and for its multiple advantages, and to keep digital contents in the Edmodo library, exchange and publish it with others), and watch educational videos By the facilitator's channel and access to the educational content to explain the Edmodo environment.

### **The research steps and procedures were as follows:**

- 1- Reviewing previous studies, references, books and periodicals to determine the effectiveness of a training program based on active

- learning strategies for developing Edmodo environment skills for general education teachers.
- 2- Determining a list of the basic skills to deal with the Edmodo environment and presenting it to (9) arbitrators who are specialists in the field of educational technology.
  - 3- Determining the final picture of the most important skills needed to develop skills in dealing with the Edmodo environment.
  - 4- Determining the educational content to develop the skills of dealing with the Edmodo environment among general education teachers through Active learning strategies were presented to (7) arbitrators from specialists in the field of educational technology and proposed modifications.
  - 5-Defining active learning strategies and tools for their implementation and placing them in the Edmodo environment to develop the skills of dealing with them to develop a good design, and presenting them to (5) of the arbitrators from specialists in the field of educational technology and determining the final image of it before application.
  - 6- Building the instructional design of active learning strategies in the Edmodo environment to develop skills to deal with and present them Five (5) arbitrators from specialists in the field of educational technology.
  - 7- Preparing the achievement test for the cognitive component to develop the skills of dealing with the Edmodo environment among general education teachers  
It was presented to (7) arbitrators from specialists in the field of educational technology to judge the availability of good test conditions and to make the proposed amendments.
  - 8- Preparing a note card for the skills of the Edmodo environment for the research group and presenting it to (7) arbitrators from among the specialists in the field of educational technology and make the proposed modifications.

- 9- Preparing an evaluation card for the effectiveness of learning and training in the Edmodo environment and presenting it to (7) arbitrators who are specialists in the field of educational technology and making the proposed modifications.
- 10- Choosing a basic research group (a core group of thirty teachers for different subjects) to apply the basic experiment, and the exploratory application worked on an experimental group of (30) general education teachers for different set
- 11- The tribal application of the achievement test of the cognitive component of skills in dealing with the Edmodo environment, as well as the tribal application of the observation card for the performance and skill side of the teachers, the research group on the skills of dealing with the Edmodo environment.
- 12- The post application of the achievement test of the cognitive component of the skills of dealing with the Edmodo environment after the basic application experience, as well as the assessment of skill performance through the observation card on the research group, and the post application of the assessment card for the

effectiveness of learning and training for learning in the Edmodo environment.

**Research results:** To test the validity of the research hypotheses, the “T-test” was used to calculate the significance of the differences in the achievement test scores for the cognitive component of skills to deal with the Edmodo environment before and after the application, and the performance note card for the skill component of the skills to deal with the Edmodo environment before and after the application And the evaluation card for the effectiveness of learning and training in the Edmodo environment according to the active learning strategies after application. To perform these statistical treatments, the SPSS V. 18 statistical software package

was used, and the following is a presentation of the research results and their interpretation:

### The results of the first hypothesis and its discussion:

There is a statistically significant difference at the level of  $\leq (0.05)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the achievement test for the cognitive aspect of the skills of dealing with the Edmodo environment through a training program based on electronic active learning strategies, and to verify From the significance of the differences between the mean scores of the pre and post groups of individuals in the research group for the achievement test of the cognitive aspect of the skills of dealing with the Edmodo environment through active learning strategies, the “T-test” was used to indicate the differences between the mean of two related groups “paired Samples Test”

**Table (1) the results of the "t" test, the significance of the differences between the mean scores of the two groups, the pre and post groups of the experimental group in favor of the post application of the achievement test for the cognitive aspect of The skills of dealing with the Edmodo environment at n = 30**

The group	Dependent variable	Average	Standard deviation	Values T	Degrees of freedom	Indication level	effect size
Tribal application group	Achievement test	22.30	7.03	**18.85	29	0.00	0.922
Dimensional application group		50.33	4.28				

\*\* It means that the value of its function is at the level (0. 01)

It is clear from the previous table that the value of “t” is a function at the level  $\leq (0.01)$ , and this difference is in favor of the post application, which indicates a statistically significant difference between the mean scores of the research group in the pre and post application of the cognitive aspect of the skills of dealing with the Edmodo environment in favor of the post application, which means There is a statistically significant difference between the mean scores of the research group in the pre and post application of the cognitive aspect of the skills of dealing with the Edmodo environment through the training program based on active learning strategies in favor of post application at the level of significance (0.01), and thus the first hypothesis is rejected.

**It is evident from Table (1) that:** There is a statistically significant difference at the level of  $\leq (0.01)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the achievement test for the cognitive aspect of the skills of dealing with the Edmodo environment.

**Interpretation of the results of the first hypothesis:** The high level of achievement of the cognitive component of the skills of dealing with the Edmodo environment for the trained teachers (the research group) in the dimensional measurement may be due to:

**First: From the researcher’s point of view:** Designing educational content according to active learning strategies in the Edmodo environment for distance learning relied on the trainee’s activity and its effectiveness in obtaining learning experiences, as well as eliciting the trainee’s motives to learn, codifying and specifying the tools for implementing the content in advance by the facilitator, which facilitated and assisted the trainee in Access to learning experiences, use of many sources of learning to provide educational and training content, distance learning is effective in providing and learning content that suits the conditions of the trainee, the e-learning platform (Edmodo platform) allowed the provision of digital learning resources from

audio and visual effects in addition to video clips in presenting Educational content, focusing on learning objectives and its positivity.

Learning proceeded according to the self-paced step of each trainee teacher, as the educational content is available to him all the time and anywhere, and there is communication between the facilitator and the trainee teacher through the means of communication (Edmodo - Group Whats App conversations) available to him all the time to inquire and ask about anything, the effectiveness of second-generation technologies From the web in providing tools for implementing and learning educational content for the trainee, searching for learning experiences from other alternative learning sources, learning through electronic active learning strategies, which enhanced knowledge retention, and having assignments for some lessons in the educational content and sending them to the facilitator through means of communication and communication, which made teachers The trainees (research group) are searching for information themselves; This promoted effective, meaningful learning.

**Second: The active learning strategies in the Edmodo environment allowed:** the active and positive role of the trainee and his activity

And its effectiveness in receiving and participating in the learning content, as the educational content in which the trainee teacher participated allowed for the learning effect to remain, as he had an active positive role in obtaining learning experiences in accordance with the goals to be achieved at the end of the learning process, so he is an essential and effective participant in adding to the content Teaching through active learning strategies, so he felt himself, and these strategies varied with multiple goals and relied on assignments, appointments and electronic projects that prompted the trainee to search and electronic exploration.

**Third: According to the communicative theory** adopted by the current research: since learning is the process of building knowledge, not just consuming knowledge, and active learning strategies are

designed to allow the trainee to participate and search for knowledge, as the trainee builds on top of his experiences, and focuses on the diversity of learning sources and the link between multiple sources of information Creating a continuous learning environment, as it is in an active state of learning, looking for sources and learning experiences, communicating with the facilitator and with others in the Edmodo environment, and benefiting from knowledge management activities, working to generate innovative practices that promoted self-learning, and worked to maintain the impact of learning, and focused on the use of active learning methods The trainee's role is positive, and he controls his learning rate according to his own pace and self-stepping, and according to his circumstances.

**Fourth: The Edmodo platform used in the application of the current research:** This platform is characterized by flexibility in the delivery of content and access to assignments, instructions, notices and alerts to the trainee, to be aware of developments in the learning or training process within that environment, which attracted him to learn the content and participate in it through Providing files and learning experiences and accessing them directly in the Edmodo platform,

which worked to achieve the educational goals desired to be achieved at the end of the learning process, and knowing its performance and evaluating it with the feedback it provides to know the extent of its progress in the learning process; This enabled the teacher/trainee to gain new knowledge and learning experiences, as well as a result of identifying the needs associated with the profession As a result of the adoption of distance education and what is required of the teacher is to provide electronic lessons and send and receive assignments to and from the learners without knowing that environment before and how to include the learners in it and communicate between them, which helped and motivate him to learn from that environment and the desire to learn its skills, and the skills and experiences of dealing with the Edmodo environment , All of this

led to a high level of cognitive achievement to meet the professional needs of the trainees (research group).

**Fifth: According to the results of previous studies**, where the achievement of the cognitive component of the skills of dealing with the Edmodo environment increased according to active learning strategies, it was consistent with the results of the study of: Majid Al-Deeb (2020), Wael Al-Asi (2019), Asmaa Seif (2018), Hamza Abdel Qader (2018), Iman Hammad (2017), Yahya bin Amer (2017), Intisar Asha, Suhair Al-Sayed (2016), and Saleh Abu Talib (2011) in the high level of cognitive achievement in learning through active learning Strategies.

**Sixth: According to the educational design model used in the current research (the developed butcher model 2013):**

The instructional design model made it possible to present the educational content in the Edmodo environment, specify the exact requirements to be accomplished by the trainee, inform him of his learning objectives, how to communicate with the facilitator and other trainees from a distance, as well as ease of access to tests, how to evaluate it, obtain the results of its evaluation, obtain direct feedback, and ease of access to The educational content is available to the trainee teacher, where he can enter the Edmodo environment at any time; Which enabled him to refer to the learning content several times through asynchronous learning/training, and also provided him with educational videos that enable him to learn more, in addition to other learning resources and links, and his positivity, effectiveness and activity in obtaining many sources and learning experiences, providing assignments for activities and the tasks he is required to perform.

**The results of the second hypothesis and its discussion:**

There is a statistically significant difference at the level of  $\leq (0.05)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the observation card of the research group members' performance of skills to deal with the Edmodo environment through a training program based on active

learning strategies. In order to verify the significance of the differences between the mean scores of the research group members in the pre and post application of the observation card of the research group members' performance of skills to deal with the Edmodo environment, the T-test was used to indicate the differences between two average groups:

**Table (2) the results of the "t" test, the significance of the differences between the mean scores of the research group members in the pre and post application in favor of the post application of the observation card of the research group members'**

**Performance of skills to deal with the Edmodo environment at n = 30**

The group	Dependent variable	Average	Standard deviation	Values T	Degrees of freedom	Indication level	Effect size
Tribal application group	Achievement test	69.33	4.77	**67.16	29	0.00	0.993
Dimensional application group		143.36	3.89				

**\*\* It means that the value of its function is at the level (0.01)**

**It is clear from Table (2) the following:** There is a statistically significant difference at level  $\leq (0.01)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the research group members' performance observation card for skills in dealing with the Edmodo environment.

**Interpretation of the results of the second hypothesis:** The increase in skill performance among the trained teachers (the research group) in the post-measurement may be due to:

**First, from the researcher's point of view:** The Edmodo environment is an effective and supportive environment for teaching and learning activities. The development and learning of skills is consistent with the actual needs of the trainees, providing the opportunity for the trainee teachers (the research group) to practice each major skill and its sub-procedures, and follow-up their performance, making assignments to perform skills for trainees (research group) and sending them to the facilitator, which enabled them to perform, master and learn skills, dividing the skill into steps that facilitated the trainee's knowledge and understanding of the nature of the skill and how to perform, mastery and mastery, as well as identify the main skills And organizing and arranging the related sub-skills in a sequential, organized and interconnected manner, which helped the research group members to learn and practice them until they mastered them, and it also has the ability to control the number of times the video clips are shown to learn the skill.

**Second: The Edmodo environment:** made it possible to observe the performance of the trainee teacher, and enable him to reach the required level of performance with the help of the facilitator through assignments and appointments, sending screens to the facilitator to perform and learn skills from a distance and receive feedback; Which allowed the trainee to raise the level of his performance of skills, and the link between the Edmodo environment and their professional life in that it is an educational environment approved by the Ministry of Education to provide education and explain lessons to learners with the presence of shortcomings in the exercises on that environment and their lack of knowledge of how to prepare electronic lessons and present them to learners and how to communicate with them and how Their evaluation.

**Third: Active learning strategies in the Edmodo environment:** made it possible for the trainee teacher: an explanation of the skills to deal with them through the facilitator, as each main skill and its subsidiary procedures are explained through educational videos for the

facilitator and the trainee watches them from a distance, or by providing skills learning from more than one educational source, whether links educational, accompanying videos or other learning resources and enabling him to practice them in practice and send them to the facilitator through assignments in the Edmodo environment, and electronic communication to inquire about anything, through asynchronous learning / training; Which allowed him to perform the skills and implement them in a correct manner.

**Fourth: According to the communication theory adopted by the current research:** which confirms the ability to work effectively in the age of knowledge through the development of self-awareness skills, and management of personal information in terms of arrangement, organization and use, and teaching activities, as it works to develop those activities and includes teamwork and participatory work that are implemented usually by practice; Which promoted meaningful learning based on real activities, to gain multiple experiences, and to exchange educational experiences, and this made the trainees (the research

group) more interested in learning and mastering the skills of the Edmodo environment through active learning strategies.

And keenness on professional development and their integration within the framework of e-project-based learning through the Edmodo environment, indexing and saving them in the Edmodo library, electronic communication with their colleagues and peers, and electronic sharing among them, and thus each trainee has digital lessons kept in the Edmodo library through his page on the Edmodo platform Thus, he has a digital library that he presents to the learners through his account in the Edmodo environment.

**Fifth: The results of previous studies:** The results of the hypothesis were consistent with the results of the study of: Shadi Khamis, Abdul Majeed Al Nasser (2019), Abdul Rahman Al-Hubaishi (2017), Hind Hassan (2016), Ibrahim Shaheen (2015), Heba Farhat (2014) , Amani

Jaber (2013), Scheyvens, Griffin, Jocoy, Liu, & Bradford (2008), which showed that active learning strategies enable trainees to acquire And learn skills.

**Sixth: The results of the hypothesis were consistent with the educational design model adopted by the research for the present (Developed Butcher Model, 2013):** it expresses the actual needs of trainees through the educational content of skills education that addresses performance deficiencies, knowledge is distributed through a network of various electronic sources, It also links teaching and learning activities with professional needs related to knowledge applications, and mastery and access to modern knowledge (digital learning skills) are the goal of communicative learning for trainee performance.

**The results of the third hypothesis and its discussion:**

There is a statistically significant high level at  $\leq (0.05)$  in the effectiveness of learning and training in the Edmodo environment according to the active learning strategies of the research group individuals on the assessment card.

To verify this hypothesis, a one-sample T-test was used to compare the hypothetical average and the real average to determine the level of performance of learning and training skills in the Edmodo environment among individuals in the research group (Ezzat Muhammad, 2016, 306-307) and the table shows the difference Between the real and the hypothetical average:

**Table (3) shows the results of evaluating the effectiveness of learning and training in the Edmodo environment among the study group members at n = 30**

Variable	Default average	True average	Standard deviation	Values T	Indication	Effect size	The level
Learning and training skills in the Edmodo environment	96	137.53	2.55	89.00**	0.000	0.966	High

**\*\* It means that the value of its function is at the level (0.01)**

It is clear from the previous table that the value of “t” is a function at level  $\leq (0.01)$ , and this difference is in favor of the post application, which indicates a statistically significant difference between the mean scores of the research group in the pre and post application of the performance observation card for skills in dealing with the Edmodo environment in favor of the post application. The value of the effect size indicates that the effect size was large in the pre and post application in favor of the post application of the observation card of the research group members’ performance of skills to deal with the Edmodo environment, which means that there is a statistically significant difference between the mean scores of the research group in the tribal and post application of the skill side of the skills of dealing with the Edmodo environment. In favor of the dimensional application on the performance note card at the significance level (0.01), and thus The second hypothesis is rejected.

**It is clear from Table (3) the following:** There is a statistically significant difference at level  $\leq (0.01)$  between the mean scores of the research group members in the pre and post application in favor of the post application of the research group members’ performance observation card.

**Interpretation of the results of the second hypothesis:** The increase in skill performance among the trained teachers (the research group) in the post-measurement may be due to:

**First, from the researcher's point of view:** The Edmodo environment is an effective and supportive environment for teaching and learning activities. The development and learning of skills is consistent with

The actual needs of the trainees, providing the opportunity for the trainee teachers (the research group) to practice each major skill

And its sub-procedures, and follow-up on their performance, making assignments to perform skills for trainees (the research group) and sending them to the facilitator, which enabled them to perform, master and learn skills, as well as identifying the main skills, and organizing and arranging the related sub-skills in a sequential, organized and interconnected manner, which led to helping the research group members to Learn it and practice it until you master it.

Developing the skills of electronic participation in the Edmodo environment by motivating them with the most electronically participating trainee with digital contents from his colleagues and supporting him morally through feedback, which worked to ensure learning and skills development, and increasing electronic participation in the Edmodo environment, follow-up by the facilitator of the trainees' performance of skills to reach The level of performance required with the work of immediate feedback to measure the level of performance and mastery, which led to reaching the required level of performance and raising the skill performance of the research group individuals.

**Second: The Edmodo environment** :made it possible to observe the performance of the trainee teacher, and enable him to reach the

required level of performance with the help of the facilitator through assignments and appointments, sending screens to the facilitator to perform and learn skills from a distance and receive feedback; This allowed the trainee to raise the level of his performance of skills, with shortcomings in the training in that environment and their lack of

knowledge of how to prepare electronic lessons and present them to learners and how to communicate with them and how to evaluate them through it.

**Third: Active learning strategies in the Edmodo environment made it possible for the trainee teacher:** an explanation of the skills to deal with them through the facilitator, as each main skill and its subsidiary procedures are explained through educational videos for the facilitator and the trainee watches them from a distance, or by providing skills learning from more than one educational source, whether links educational, accompanying videos or other learning resources and enabling him to practice them in practice and send them to the facilitator through assignments in the Edmodo environment, and electronic communication to inquire about anything, through asynchronous learning / training; Which allowed him to perform the skills and implement them in a correct manner.

**Fourth: According to the communicative theory adopted by the current research:** which confirms the ability to work effectively in the age of knowledge through the development of self-awareness skills, and management of personal information in terms of arrangement, organization and use, and teaching activities, as it works to develop those activities and includes collective and participatory work that are implemented usually by practice; Which enhanced meaningful learning based on real activities, to gain multiple experiences, and to exchange educational experiences, and this made the trainees (the research group) more interested in learning and mastering the skills of the Edmodo environment through active learning strategies and keenness on professional development and their integration into the framework

of learning based on e-project Through the Edmodo environment, indexing and saving them in the Edmodo library, electronic communication with their colleagues and peers, and electronic sharing among them.

**Fifth: The results of previous studies:** The results of the hypothesis were consistent with the results of the study of: Shadi Khamis, Abdul Majeed Al Nasser (2019), Abdul Rahman Al-Hubaishi (2017), Hind Hassan (2016), Ibrahim Shaheen (2015), Heba Farhat (2014), Amani Jaber (2013), Scheyvens, Griffin, Jocoy, Liu, & Bradford (2008), which showed that active learning strategies enable trainees to acquire and learn skills.

**Sixth: According to the educational design model adopted by the current research (the developed butcher model, 2013):** the learning content linked teaching and learning activities to professional needs related to knowledge applications, and it also helped self-learning and learning in groups that included linking between points of contact or specialized information sources. , diversity in information sources, creating a continuous learning environment and benefiting from knowledge management activities (particularly the Edmodo platform, one of the distance education platforms that guides and supports the Ministry of Education for teachers to teach and provide lessons through It to learners and communicate between them).

**From the foregoing, the results of the current research can be drawn:**

- 1- There is a statistically significant difference at the level of significance (0.01) between the mean scores of the research group members in the pre and post application in favor of the post application of the achievement test for the cognitive aspect of the skills of dealing with the Edmodo environment.
- 2- There is a statistically significant difference at the level of significance (0.01) between the mean scores of the research group members in the pre and post application in favor of the post

application of the performance observation card of the research group members for the skills of dealing with the Edmodo environment.

- 3- There is a high statistically significant level at the significance level (0.01) in the dimensional application between the real average and the

hypothetical average of the learning and training effectiveness assessment card in the Edmodo environment according to a training program based on active learning strategies in favor of the real average among the members of the research group.

**In light of the foregoing presentation of the results of the current research and testing the validity of its hypotheses, the following can be concluded:**

There is a positive direct relationship (statistically significant) for the training program based on the use of active learning strategies in the Edmodo environment and the development of the skills of dealing with them among general learning teachers.

**Research recommendations:** Paying attention to the role of electronic educational platforms, especially the Edmodo platform, and employing it in providing education and training, providing educational and training programs from a distance for university and pre-university education, paying attention to the continuous professional growth of public education teachers and their actual training needs, and good preparation for training programs.

**Suggested research:** Do research for other academic disciplines from a distance, according to active electronic learning strategies Through the Edmodo platform, conducting research on the advantages of electronic educational platforms and the level of technological acceptance of learning through them.

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