

# The Degree of Application of Modern Teaching Strategies for First- Grade Teachers in Jerash Education from Their Point of View

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#### **Abstract**

This study aims to reveal the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view. T During the academic year 2022/2023 he study used the descriptive survey method. To achieve this, the researcher designed a questionnaire consisting of (30) paragraphs It consisted of (315) female teachers studying the first three grades. The results indicated that the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view, came to a medium degree, and the results showed that there were no statistically significant differences at the significance level (0.05) due to the variable of academic qualification from a bachelor's degree And postgraduate studies, and years of experience from less than 5 years, from 6 to 10 years, and more than (11) years.

Keywords: Modern Teaching Strategies, Teachers of the First Three Grades

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#### INTRODUCTION

Life has developed and advanced in all fields, and the share of education in this rapid development is very large, and the view of the teacher has changed from a transmitter and source of information to a facilitator and its average is one of its sources. The educational system is considered very sensitive to the changes taking place around it, and it is required to always interact with them without lags behind its scientific, cultural, technological and knowledge movement, as true modernity is linked to the essence of the educational process, the consolidation of human rights, the consolidation of human rights, and the promotion of freedom of work. Building the human mind, adapting to life, acquiring knowledge, developing personal capabilities, and other things (Khattab, 2012).

The teacher is the basis of the educational process; It builds minds, and raises generations that will benefit their societies, and it affects the learners, guiding them to learning, and spreading comfort and tranquility in their souls; On the other hand, it is worth noting that the teacher is the one who is able to know the weaknesses and strengths of his students, which helps him to direct them in a sound direction that reflects the principles of unity among them, and also contributes to the refinement of their morals, and providing them with the ability to think. logical, in addition to the fact that the great importance of the teacher cannot be neglected, which is that he is a maker of men; Since education is a divine message that elevates the human mind and transcends it (Bohni, 2014).

Even the teaching aids have developed greatly. The blackboard and chalk are no longer the only teacher's means. The teacher can use much computer software and the web to design activities and teaching aids that ensure positive student interaction in the class and be the center of the educational process, as they use some computer software and the web in home games. (The Arab Cadre, 2007)

With the population and knowledge explosion in the modern era and the technological revolution that the world is witnessing in all areas of life, especially in the field of communication, it has become imperative for the educational system to respond to the data of the times and to harness the data of technology from materials and devices to develop and modernize the educational process. (BaniDoumi and Omari, 2005). In order to keep pace with scientific and life developments, and to reach an interactive class, where the student is the center for it, and to be a human being who possesses life skills as problem solving, and for the teacher to exercise his role as a facilitator and maker of educational aids, this research came to identify the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view.

# STUDY PROBLEM:

Through my work as an English language teacher for 17 years and as an assistant for four years, I have noticed that female teachers who teach the first three grades have a clear tendency to use traditional methods of teaching that are usually teacher-centered. Although I felt the impact of using modern educational strategies on my students when I was a teacher, I tried hard to apply everything I learned in educational courses held by the Ministry of Education, or those I joined on the recommendation of the Ministry at the British Council, or what I learned in the Diploma in Education in Technology Information and communications. As a former winner of the



Queen Rania Prize for the Distinguished Teacher for the first category (the first three grades stage), she noticed that all the winners were implementing modern educational strategies and using traditional methods only when needed.

Because of the enrollment of many female teachers in studying the Diploma of Education in Information and Communication Technology, and because of the presence of many ambassadors of the award in the field, all of them offer exemplary classes and have the desire to transfer some of their knowledge using modern educational methods combined with ICT tools, so I felt the school needed to prepare this study To determine the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view by answering the study questions, which are as follows:

The first question: What is the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view?

The second question: Are there any statistically significant differences at the significance level ( $\alpha = 0.05$ ) in the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view that are due to the variable of academic qualification: (Bachelor, postgraduate studies), and the variable of experience: (Less than 5 years, 6-10 years, more than 11).

#### The importance of study:

The importance of this study stems from the importance of the teacher's role in all stages of the educational process, especially the teachers of the first basic grades. A study conducted by the Rand Corporation for Research and Development indicates that the influence of the teacher on student achievement outweighs the influence of other school factors; Such as modern facilities, and various school support services, as the distinguished teacher has a high ability to develop the outcomes of the educational process, and achieve what is higher than the desired performance of the student, as the teacher goes beyond the stage of interest in achieving good results in standardized tests to challenge students and reward them for critical thinking skills. (Dowd, 2018)

This study has an impact on the teacher, student and school administration in terms of.

#### IMPORTANCE FOR THE TEACHER:

- 1. Increasing flexibility in the methods used in the classroom.
- 2. Increasing the interaction of students with the teacher on the one hand and with fellow students and the subject on the other hand.
- 3. Facing the evolution of the philosophy of education and the changing role of the teacher.

#### FOR THE STUDENT:

- 1. Increasing the positive participation of students in the educational process.
- 2. Providing the student with important life skills after school, such as: problem-solving and communication skills
- 3. Arouse students' interest and satisfy their learning needs.

# FOR SCHOOL ADMINISTRATION: (EL-SAYED, 1999).

- 1. Improving the quality of learning and increasing its effectiveness.
- 2. The goal of education today, which aims to develop attitudes and modify behavior, has been achieved.
- 3.Providing exemplary classes to be attended by colleagues from other schools and under the supervision of the Supervision Department in Jerash Directorate of education.
- 4. Increasing the administration's acceptance and encouragement to replace the traditional patterns of teaching by providing some simple tools that we need for change.
- 5. Creating a positive interaction between the teachers to exchange experiences.

# **OBJECTIVES OF THE STUDY:**

The study aims to achieve the following:

- 1. Revealing the degree of application of modern teaching strategies among first-grade teachers in the education of Jerash from their point of view.
- 2. Detecting the impact of the variable years of experience, academic qualification, and the degree of application of modern teaching strategies among first-grade teachers in Jerash education from their point of view. Identifying the methods used by teachers (sample members) to motivate students and encourage them to practice moral values.

### **TERMINOLOGY OF STUDY:**

Information Technology: Finding appropriate ways and tools to store and organize information, quickly retrieve it when necessary, and present it in the best useful forms that help to take appropriate decisions (Ministry of Education, 2002)

Modern Teaching Strategies: A coherent set of follow-up actions or activities that it is selected and planned according to certain variables, sequentially using the available capabilities, and works the teacher must guide the choice of the appropriate method that determines the optimal teaching method, and it is one of the components.

The basic curriculum, which serves as the link between the student and the components of the curriculum, and includes the educational situationInside the classroom organized by the teacher (Al-Adwan and Daoud,



#### 2016, p. 28)

First-grade teachers: They are the teachers who teach classes from the first to the third grade in schools affiliated with the Jordanian Ministry of Education.

# THE LIMITS OF THE STUDY:

- **OBJECTIVE LIMIT:** This study determines the degree of application of modern teaching strategies for first-grade female teachers in Jerash education from their point of view.
- TEMPORAL LIMIT: The study was conducted on the teachers of the first three grades in Jerash Education for the academic year (2022/2023).
- **-SPATIAL LIMIT:** The field steps of this study were applied in the basic government schools affiliated to the Ministry of Education in the Jerash Education.
- **HUMAN LIMIT:** The study was limited to the category of female teachers in government schools affiliated to the Ministry of Education in the Jerash Education.

#### THEORETICAL FRAMEWORK:

The concept of educational strategy, The teaching strategy is known in English as the teaching method used in communicating knowledge and scientific material to students, as these strategies vary and differ according to the students and the subject of the lesson and their academic level (Goodwin, 2018)

The educational strategy is concerned with finding possible solutions and choosing the most appropriate ones to solve educational and academic problems for students, in addition to choosing the appropriate ones to achieve educational goals, tasks, and serving the educational process, taking into account the time, place, circumstances, and conditions necessary to implement a particular activity or lesson. (Law Insider, 2022)

Elements of the Educational Strategy (Dr. Al-Aboudi, 2022)

The educational strategy is based on a set of elements that complement each other, and which ultimately concern the achievement of the objectives behind the lesson or activity, as follows:

- 1- Objectives to be achieved from behind the lesson.
- 2- Activities, tools, and teaching aids used in the lesson.
- 3- Learning environment and classroom management.
- 4- Feedback based on the extent to which students interact with the strategy used.

A number of references have been reviewed on the subject and I have mentioned a number of Justifications for the Use of Modern Educational Strategies (Al-Hilah, 2000)

- 1- The explosion of knowledge.
- 2- Population explosion.
- 3- Heterogeneity of learners.
- 4- Lack of qualified teachers.

Advantages of the modern method of education (Cox, 2017)

One of the main advantages of modern education methods:

- 1. Encouraging the student to be creative through his research activities, which take a competitive aspect among students
- 2. Providing the student with a high ability to express his opinion on academic and life matters facing him.
- 3. Crystallization and formulation of the student's personality in a holistic manner that includes the mental, psychological, emotional, and other aspects.

Among the obstacles to the use of modern educational strategies in teaching (BaniDoumi and Al-Omari, 2005)

- 1. Inadequate classroom design, equipment and capabilities.
- 2. The lack of educational materials and equipment in schools so that they are only enough to use one teacher at the same time.
- 3. Increasing the teacher's academic load and increasing his share of class sessions.
- 4. Insufficient training of teachers to use modern strategies.

The benefits of using modern educational strategies for both the teacher and the student (El-Sayed, 1999)

- 1. Develop in the learner a curiosity and a desire to learn.
- 2. Expanding the scope of the senses and the possibilities of benefiting from them.
- 3. Improving the quality of education and bringing it to the degree of mastery.
- 4. Reducing education costs without affecting its quality.
- 5. It helps to bring the outside world into the classroom (rekindling the learner's sense of time and space)
- 6. Strengthens the spirit of contemplation in the learner and the development of new knowledge.
- 7. Facilitate and facilitate the process of learning and teaching.

# COMPARISON OF TRADITIONAL AND MODERN TEACHING STRATEGIES:

There is no doubt that the strategies used in teaching are considered one of the most important foundations on which the success of the educational process depends.

Disadvantages of the traditional method of education (Smith, 2015)

Among the disadvantages of traditional methods of education are the following:



- 1. The stagnation in the curriculum and the method, by neglecting the views of teachers, parents, and the student who is considered the important party and axis in the educational process.
- 2. The role of the educational teacher is limited to memorization and indoctrination, as the role of the teacher goes much beyond that, as he should be the supervisor, follower, educator, and friend of the student.
- 3. Making the extent of the student's success a success for the teacher, and that neglecting and ignoring the individual differences between students. The large number of subjects included in the curriculum, and this exhausts the student and kills his creativity.
- 4. The student's aversion to education in general, and the school in particular, because the title of the student's success is limited only to the extent of his superiority in grades due to the neglect of other aspects of the student in which he can be creative.

Various strategies have appeared on the educational scene based on the use of modern methods and methods of teaching that differ from the traditional methods used by teachers previously.

In the following lines, we will make a comparison between traditional and modern strategies in teaching in terms of

- · Methods and methods used
- Teaching aids used

The role of the student

The role of the teacher

# FIRST: THE METHODS AND TECHNIQUES USED IN BOTH TRADITIONAL AND MODERN STRATEGIES IN TEACHING: (FATAH AL-BAB, 1993)

Education in light of traditional strategies depends on simple methods and methods that do not meet the needs of the learner and do not care about his personality in all aspects. As for the modern strategies, they are based on educational foundations that depend on modern methods and methods of teaching, the most important of which are:

•Cooperative Learning (Arab Cadre, 2007)

A learning strategy in which students are divided into small groups of 4-6 members in each group, and through which group members cooperate to achieve a common goal or goals based on the task entrusted to them.

Division of groups

#### **RANDOM METHOD:**

It is the group chosen by the teacher at random without determining the individual differences between the students in the following ways:

- a) In alphabetical order
- b) According to the spatial convergence of the class
- c) According to the students' desire

#### **CLUSTER METHOD:**

It is the group in which the teacher takes into account the homogeneity of students in terms of:

- a) Students' academic levels
- b) Psychological conditions
- c) Age levels
- d) Attitudes, tendencies, and ideas

#### **HETEROGENEOUS METHOD:**

It is the group in which the teacher takes into account the differences of students in terms of:

- a) Academic achievement level.
- b) Individual differences.

#### ADVANTAGES OF COOPERATIVE LEARNING:

- 1- Increasing educational attainment
- 2- Building positive attitudes towards school
- 3- Develop critical thinking competencies
- 4- Develop the relationship between the student and the teacher
- 5- Developing the relationship between the student and the student
- 6- Acquisition of many cooperative skills
- 7- Improving mental health
- 8- Increasing the motivation towards learning

# KEYS TO SUCCESSFUL COLLABORATIVE LEARNING:

- 1- Positive interdependence
- 2- Enhanced face-to-face interaction
- 3- Individual and collective responsibility
- 4- Team skills and interpersonal skills
- 5- Handling group work



#### STUDENT ROLES IN COOPERATIVE LEARNING:

- 1- The leader or leader: He is the one who leads the group, directs it, follows up the work of its members and coordinates among them.
- 2- The recorder or reporter: he is the one who writes down all the findings of the group.
- 3- Abstract or writer: It is the one who summarizes what the group has reached.
- 4- The researcher: the one who prepares the sources and materials for the group.
- 5- Encouraging or boosting: It is the one who arouses enthusiasm and vitality.
- 6- social learning (learning by model)

Social learning means: an individual acquires or learns new responses or behavioral patterns through a social situation or framework, as most human behavior is learned through observation, whether by chance or intentionally. A young child learns to talk by listening to and imitating other people's words. If language learning was entirely dependent on adaptation or classical or procedural conditioning, then this means that we will not achieve this learning. (Mohammed, 2011 AD, pp. 162-163). El-Shinawy (1998) defines social learning as the individual's acquisition or learning of new responses or behavioral patterns through a social situation or framework.

#### **SOCIAL LEARNING FACTORS:**

Abu Asaad believes that the factors affecting the motivation to imitate or not imitate the model can be summarized in the following points: (Abu Assaad, 2011, p. 291) Factors related to the individual observing, including (chronological age and mental readiness, his appreciation of the scientific and social status of the model and personal attractiveness and psychological comfort of the model)

Factors related to the observed model, including (social status - fame – gender)

Factors related to environmental conditions or situational determinants.

Educational applications of modeling learning theory:

Zaghloul (2014, p. 219) believes that learning procedures by modeling can be used in learning and teaching situations as follows:

# FIRST: DEVELOPING THE HABITS, VALUES AND ATTITUDES OF LEARNERS THROUGH:

- -The teacher should be a role model for learners by practicing customs and values.
- -Use examples of students who practice such habits and values and reinforce them in front of other students.
- -Use films that include material related to those values, habits, and tendencies.
- -The use of stories, novels, and purposeful biographies that ensure the provision of ideal models for learners

# SECOND: DEVELOPING SPORTS, TECHNICAL AND CRAFT SKILLS:

It related to teaching academic subjects through the use of direct and indirect forms such as people, films, and images.

# THIRD: MODIFYING THE BEHAVIOR OF INDIVIDUALS:

By stopping or eliminating certain behaviors in individuals when they see patterns of behavior that have been punished (or positive patterns of behavior that have been rewarded)Numerous studies have shown that students are affected by the behavior and behavior of their teachers more than they are affected by their words and advice, especially when the two contradict each other. (Sheikh et al., 2011 AD, p. 255)

# PROBLEM SOLVING STRATEGY:

The problem-solving strategy is defined as an organized plan followed by the teacher to push the student to use his stock of knowledge that he gained from the educational process at an earlier time, or from the reality of his life, and to follow some procedures and systematic activities within a group of students in order to reach a solution to the problem he poses to him, as it serves as a form of Linking what the student has learned previously with the problems he faces, which motivates him to collect information, understand facts, and analyze them to reach generalizations. (Nouri, 2021)

# FEATURES OF PROBLEM SOLVING STRATEGY:

The problem-solving strategy has many advantages that are positively reflected on the quality of the educational process, including: (Nouri, 2021)

- 1- Ease of application in all curricula, and with all age groups.
- 2- Adding a touch of interactivity and breaking routine in the educational process.
- 3- Involve all students in an atypical manner in the educational session.
- 4- Develop communication skills and teamwork among students.
- 5- Motivating the student to think, analyze, and evaluate, and transform him from a mere recipient to an interactive one in the educational process.

#### -BRAINSTORMING (THE ARAB CADRE, 2007)

The process of stimulating students to think in all directions to generate and produce the largest number of diverse and innovative ideas about a specific problem or topic spontaneously and spontaneously and in an open atmosphere that is not critical or evaluative, and then sifting these ideas and choosing the appropriate ones.



#### **OBJECTIVES OF THE BRAINSTORMING SESSION:**

- 1- Classroom management and developing students' awareness of the importance of time
- 2- Develop students' communication, leadership and thinking skills
- 3- Motivating learners to generate ideas about a situation or problem
- 4- Accustom learners to respect the opinions and ideas of others
- 5- Activating the role of learners in educational situations

#### **BRAINSTORMING SESSION RULES:**

- 1- Respect the opinions and ideas of others
- 2- Don't judge the ideas generated
- 3- Generate as many ideas as possible
- 4- Try to build on and develop the ideas of others
- 5- Encourage and motivate the participating students

# KEYS TO A SUCCESSFUL BRAINSTORMING SESSION:

- 1- Preparing students for how to conduct brainstorming sessions so that each participant takes his or her role in brainstorming ideas without comment or insult from anyone.
- 2- Organizing the teacher by the teacher within the student groups so that no specific students are allowed to dominate one session and leave the others as listeners
- 3- The teacher chooses a specific and clear problem so that he directs the students to present ideas and creative solutions to the problem
- 4- Asking questions in the form of questions that start with interrogative tools such as what and how

#### **MENTAL MAP (THE ARAB CADRE, 2007)**

A technique through which the brain is employed to the fullest extent of its energies to organize ideas and find relationships between them around a problem or topic with the aim of gaining knowledge of all its implications and developing creativity, it is an important technique for improving the way an individual takes notes and organizes information.

- Brief history
- Mind maps were developed in the late 1960s by Tony Buzan
- Nature of mind map
- Quick setup
- Easy to remember and review due to its visual nature
- It includes colors and images that stimulate the brain
- Keywords that facilitate linking between ideas and topics

# MIND MAP USES:

- 1- A mind map helps the student to acquire, organize and store as much information as possible
- 2- It helps the student to link scientific concepts in an organized and smooth manner
- 3- It increases student focus

# **HOW TO PREPARE A MIND MAP:**

- 1- Start with the center and use shapes or pictures to express the main idea
- 2- Connect the branches of the main levels with the idea in the center
- 3- Connect the branches of the different levels together because the mind works in the way of mental association
- 4- Use curved and interconnected lines because they are more attractive to the eye
- 5- Use key keywords while preparing the map because keywords give strength and flexibility.

# THE IMPORTANCE OF USING IMAGES AND COLORS:

- 1- Recalling information is easier
- 2- It helps the bug to maintain attention and focus
- 3- Arouse the mind
- 4- Add strength and impartiality to the mental map
- 5- It gives creative thinking tremendous energy
- 6- More fun

# STRATEGY (K.W.L):

He defined it (Bahloul, 2004, 183) as one of the metacognitive strategies that are used in teaching reading and reading comprehension, as it aims to activate students' previous knowledge and make it a starting point or a focal point to link it to new information.

And he (Al-Ghouri, 2012, 18) defined it as a set of procedures that are based on asking questions about the information the student has, what he should reach, and transforming verbal relationships into visual or spatial relationships through the use of various formal organizations with the aim of activating thinking processes and beyond. Knowledge before, during and after carrying out various activities and cognitive processes, and



contributing to planning to improve achievement, deepen understanding, follow up on learning processes, and monitor aspects of accuracy and error in student behavior. While Kopp (2010) defined it as a good strategy used by teachers to activate students' thinking about the topic of the lesson before new learning takes place.

#### **BLENDED LEARNING:**

Al-Sharman (2015) defined it as learning that combines the best of direct classroom learning and online learning. Blended learning is also defined as: "learning that combines the characteristics of both traditional classroom instruction and online learning in an integrated model, taking advantage of the maximum available technologies for each." (Milheim, 2006: 44)

#### **BLENDED LEARNING LEVELS:**

There are several levels of blended learning, which may be classified according to its nature, the degree of integration between its components, and the degree of complexity, as indicated by Al-Fiqi (2011) as follows:

First: the complex level: In this level, the tools that communicate information and the content of learning are linked, for example, the two-component model, and this is done through the use of e-learning resources and tools, and then learning in the classroom, using the method of dialogue, discussion and lecture, There is a three-component model, and this is done by determining the level of students' learning through feedback, after which students' learning is corrected through the usual methods and methods of teaching, and then e-learning is used to enrich and enhance the learning process.

Second: The integrated level: At this level, the integration of the various elements of e-learning takes place, for example, the integration of three components, such as the integration between the source of information available online, online discussion groups, and the online assessment process.

Third: The cooperative level: At this level, the teacher is merged, whether the teacher is traditional or electronic, and the learning groups inside the traditional classrooms, or the cooperative learning groups through the Internet. Examples of this level are the integration between the traditional roles of the teacher And the learner, and the eteacher through the Internet, or the combination of traditional roles of the teacher and the learner in the classroom, and collaborative learning groups through the Internet.

Fourth: The level of outreach and spread: At this level, traditional education is combined within the traditional classroom, and unconnected e-learning resources, such as e-mail, electronic media, computer software, and portable cellular devices.

#### **BLENDED LEARNING FEATURES:**

The combination of face-to-face teaching and electronic interactive practice can lead to effective, stimulating and efficient teaching and learning, as well as help in focusing on individuals and their interaction with educational technology and its developments, using the international and internal network. (Daoud, 2012: 326)

# **INVERTED LEARNING:**

It is a form of blended learning that involves the use of technology in learning skills in the classroom, so that the teacher can spend more time interacting with his students rather than delivering lessons in the usual way. This is most commonly done using pre-made software, videos, or demonstrations, prepared by the teacher, for students to view outside of class time, and may also be known as Back Classroom, Flipped Learning, Flip Class, Reverse Teaching, Tucker, 2012)

#### **ACTIVE LEARNING STRATEGY:**

Active learning strategy is defined as an educational method in which all students participate in the learning process from engaging in purposeful activities while reflecting on their actions (Al-Takhayna, 2020), the student is an active participant inlearning process, some ask questions and some reading experiment and write about the content they have learned.

According to (Alghamdi, 2012), active learning is one of the most modern forms of learning, where active learning provides learners with a good opportunity to participate, interact and work in the studied scientific material, and enhances the concept of activity and vitality for both the teacher and the learner and enables them to build or create and modify ideas through Interact with the environment around them.

## FOUNDATIONS AND STANDARDS FOR ACTIVE LEARNING:

Active learning is subject to foundations and criteria, including (Elayyan, 2016): Students' participation in choosing the work system, and its rules, the participation of students in determining their educational goals, the diversity of educational resources, and the use of teaching strategies. Student-centered and commensurate with his abilities, interests, learning styles, and intelligence, relying on student assessmentthemselves and their colleagues Providing communication in all directions between learners and the teacher Allowing students to self-manage To create an atmosphere of calm, fun and enjoyment during education Each student learns at his own pace which helps him to understand himself and discover his strengths and weaknesses.

# THE SIX HATS (THE ARAB CADRE, 2007)

The idea of the six hats goes back to the thinker Edward de Bono, who put forward many ideas about teaching thinking, and this tool directs the person to think in a certain way and requires him to switch to another way. There are six different colored hats. It can be used by a thinker, and each of these colors symbolizes a way



of thinking.

#### -CHARACTERISTICS OF THE SIX HATS:

#### THE WHITE HAT:

White color indicates neutrality, objectivity and impartiality

Behavior related to the hat: wearing it requires the individual to be neutral and objective and the wearer provides information on: when, where, why

This hat includes facts, figures, and information

#### THERED HAT:

Color connotations: Red reflects warmth, feelings and passion

Behavior associated with the hat: the wearer must express his or her emotions without giving reasons. This hat includes intuition, emotions and feelings

#### THE BLACK HAT:

Color connotations: This color reflects reservation, criticism, accountability and warning

Behavior associated with the hat: whoever wears it must observe logic, pay attention to criticism, and focus on logical negatives. This hat includes caveats and judgments.

#### THE YELLOW HAT:

Color connotations: this color reflects hope

Behavior associated with the hat: the wearer should not wait for an optimistic look, and look for the positives, benefits and advantages of the subject. This is a positive hat that follows logic in knowing why something is successful.

#### THE GREEN HAT:

Color connotations: This color reflects growth and fertility

Behavior associated with the hat: the wearer should offer suggestions, alternatives, and new ideas.

This is a hat of creativity

#### THE BLUE HAT:

Color connotations: This color reflects the broadness of the horizon:

Hat behavior: the wearer should raise important questions, summarize the discussion and state the point reached This cap controls the operation or gives an overview

The importance of using the hats strategy:

- It encourages parallel thinking
- Encourages broad-spectrum thinking
- Separating the self from the performance
- -Provide a variety of activities according to the requirements of each hat
- -Giving the student an active and effective course in all stages of the lesson

It allows the student to investigate, think positively, think critically, think creatively, and express feelings Thinking through it is focused and deep

- -Develops the ability to solve problems, make decisions, lead, independence and self-confidence of students
- -It develops the student's ability to manage discussions and self-assessment, and makes collaborative work more effective and organized
- -Allows individuals to look at topics and problems from different angles, which gives flexibility in dealing
- -Facilitates communication between community members and facilitates group members' access to results that satisfy everyone

# SECOND: THE TEACHING AIDS USED IN BOTH TRADITIONAL AND MODERN STRATEGIES IN TEACHING: HAMDAN, 2005):

Under the traditional teaching strategies, there are no advanced teaching aids, but rather the textbook, the blackboard, chalk, and simple explanatory aids such as illustrative maps and simplified models. While modern strategies rely on advanced educational tools and devices, these methods and devices are available in the Learning Resource Center and are considered among the most important aids that help the teacher in teaching, the most important of which are:

- \*Over Head Projector
- \*Slide Projector

These are just examples of the most important devices in teaching, and there are educational devices that there is no space to mention. In light of modern strategies, the learner can obtain information in the simplest and easiest way, so he does not depend entirely on the textbook, but can resort to the Learning Resource Center to find what cures his cherished resources. A variety of information including books, references, educational tapes, etc. We also do not forget the role of the World Wide Web of Information (Internet) and the vital role it represents, as it is an important reference for the student through which he can obtain the information he needs on any topic.



# THIRD: THE ROLE OF THE STUDENT IN LIGHT OF THE TRADITIONAL AND MODERN STRATEGIES IN TEACHING:

The student in the light of the traditional strategies represents the role of the listener or receiver of the information. The traditional strategies of teaching are based on the principle of the sender and the receiver. The sender is the teacher and the receiver is the student. There is no class interaction mentioned in light of these strategies. The student, according to the traditional strategies, asks him to use the sense of sight and the sense of hearing only in the educational situation. The teacher explains the information and records it on the board, and the student listens to the teacher's explanation and then transfers the information as the teacher recorded it on the board, and there is no class interaction between the student and the teacher or between the students each other. Under these strategies, there is interaction between the teacher and his students, interaction between students and each other, and there is dialogue and discussion, so you find the classroom more like a beehive in vitality and activity.

The modern strategies in teaching gave the student the opportunity to debate, discuss and present his opinion, and gave him the space to explain, explain and conclude. In light of these strategies, he does not represent the role of the recipient, but rather the role of the active element in the classroom situation.

# FOURTH: THE ROLE OF THE TEACHER IN LIGHT OF TRADITIONAL AND MODERN STRATEGIES IN TEACHING: (AL-HAJJ ISSA AND AHARON, 2007)

The teacher, in light of the traditional strategies, represents the role of the tutor. He teaches his students the information based on the method of presentation and lecture. The teacher enters the classroom with his mind full of information. He unloads this information to the students and records some of it on the board. The students represent the role of the listener for this teacher. Hence, we see that traditional strategies in teaching depend entirely on the teacher in delivering information to the student, while in modern strategies the teacher plays the role of a mentor or guide for the student. Modern strategies in teaching are built on the basis that the student is able to obtain information by himself from various references and sources, and not by filling his mind with information from the teacher.

After we have clarified the most important points of comparison between traditional and modern methods of teaching, it becomes clear to us how important it is for the teacher to be familiar with modern methods of teaching. In order for the teacher to be familiar with these methods, it is necessary to keep abreast of developments in the educational arena and to employ these methods and methods in his classroom situations on a daily basis for the benefit of our sons and daughters, male and female students.

## **PREVIOUS STUDIES:**

- 1. A study conducted by Ashour (2005) aimed at knowing the degree of use of educational aids as a supportive method in teaching the Arabic language, as well as the obstacles that limit the provision of educational aids to students in an accessible manner. The various directorates of education and the results of the study indicated that there is a discrepancy in use, 22% of the sample use educational aids very widely, 19% very little.
- 2. Aziz (1999) conducted a study aimed at using e-learning in preparing, qualifying and training student teachers at the Faculty of Education, Yarmouk University, and in-service teachers in Egypt and the Sultanate of Oman. (4) In-service teachers in Egypt and a similar number from the Sultanate of Oman, so the sample became (40) students and teachers, and the results of the study were the need to use the computer and the Internet in preparing educational programs commensurate with school curricula, and the need to take advantage of e-learning in preparing, qualifying and training teachers before and during service.
- 3. Al-Enezi conducted (2019) a study aimed to identify the reality of secondary school teachers in the State of Kuwait using blended learning from the point of view of teachers and principals. Kuwait, and the researcher used the questionnaire as a tool for data collection, and the results showed that the reality of secondary school teachers in the State of Kuwait using blended learning from the point of view of teachers and principals came to a medium degree, and the study concluded that there are no statistically significant differences in the responses of the study sample to the reality of using secondary school teachers in the State of Kuwait. From the point of view of teachers and principals, it is attributed to the differences in gender, experience and job title.
- 4. Drunk and Hassan study (2019) with the aim of identifying the effect of the self-scheduling strategy I know, I want to know, what K.W.L learned on the achievement of students of the fourth preparatory class, the literary branch, in sociology. The researcher used the experimental design, and its sample consisted of (70) students. A female student from Al-Madinah Al-Munawwarah School in Wasit District, divided into two study groups; The experimental group consists of (35) students and studied according to the (K.W.L) strategy, and the control group consists of (35) students and studied in the usual way. The research tool was prepared, which consisted of an achievement test, and after verifying the validity and stability of the test, and after completing the experiment, the post-test was applied to the control and experimental groups." Ordinary achievement test." On the control group that studied according to the usual method in the achievement test.
- 5. Alzain (2015) conducted a study aimed at identifying the design model used in the application of the flipped learning strategy, and its impact on the academic achievement of female students of the College of Education at



Princess Nourabbint Abdul Rahman University. The study sample consisted of (77) female students from the College of Education in the specialization Special Education and Early Childhood, and to achieve the goal of the study, Al-Zain built a test that included most of the unit vocabulary aimed at determining the level of the experimental group students before and after applying the flipped learning strategy, as well as determining the level of the control group before and after teaching using normal learning, and the results showed the effectiveness of flipped learning in achievement. Academics for female students of the College of Education at Princess Nourabbint Abdul Rahman University, and to achieve higher results

- 6. Akl (2019) conducted a study aimed at designing an electronic learning environment that employs active learning strategies, and practices its effectiveness in developing future thinking skills in technology for seventh grade students. A group of Eilaboun Common Elementary School students, who numbered (70) students, had to be the field of study. The study tools included a selection of future thinking skills consisting of (20) items, a questionnaire consisting of (20) items to measure future thinking skills, and a personal interview consisting of a card of (4) Measurement items of future thinking skills, and the results of the study resulted in the presence of statistically significant differences.
- 7. The circumcision study (2020) sought to investigate the effect of applying two active learning strategies on the achievement of fifth grade students in the history course using the experimental method. The study sample consisted of (109) students of the fifth grade, using an achievement test and applying it to an experimental sample and calculating its credibility using which was (0.85). The results of the study revealed that fifth-grade male students who studied history using active discussion performed better than those who studied the same subject using the modified lecture or the traditional method. The study made several recommendations, including: Holding training courses for history teachers to use active learning strategies in their lesson plans.
- 8. The study of Du and others (Du, et al., 2020) investigated the active learning strategies that teachers want students and those that they actually received during teacher preparation programs. An explanatory study design using both qualitative and quantitative approaches was used, where 308 participants completed a questionnaire and 38 people participated in group interviews. Data were obtained from teachers of students with a university education in three countries: Qatar, Lebanon and China. The results revealed a high prevalence and desire for a negative teaching style among student teachers as an easy way to ensure good grades of assessment processes that favor memorization over activity and enhance the student's role. In addition, the significant discrepancies between quantitative and qualitative data highlighted the difficulties in bridging the gap between theory and practice, shifting perspectives toward alternative teacher roles, and reorganizing assessment procedures with new teaching approaches.

# **METHOD AND PROCEDURE:**

This part deals with a description of the study methodology and its personnel, as well as a description of the study's tools, procedures, and statistical treatment that were used in it.

#### STUDY APPROACH:

In its procedures, this study relied on the descriptive survey method, which depends on collecting data from the study sample from the first three grades teachers, using the questionnaire prepared for the purposes of this study, and studying and analyzing the responses of the teachers.

# STUDY COMMUNITY:

The study population consisted of (413) teachers of the first three grades in Jerash education.

#### THE STUDY SAMPLE:

The study sample consisted of the teachers of the first three grades in Jerash education, whose number is (315), and Table No. (1) shows the characteristics of the study sample.

TABLE NO. (1): DISTRIBUTION OF THE STUDY SAMPLE ACCORDING TO ITS INDEPENDENT VARIABLES

Variables	Variable levels	Frequency
Qualification	BA	212
	High studies	103
Years of service	Less than 5 years	57
	From 6-10 years	102
	More than 11 years	156
Total	-	315

#### **STUDY TOOL:**

To achieve the objectives of this study, the researcher built a questionnaire consisting of (30) paragraphs and it was directed to male and female teachers who study the first three grades. The questionnaire in its final form consisted of (30) paragraphs corresponding to a five-point scale (very large = 5, large = 4, medium = 3, few = 2, very few = 1)

# VALIDITY OF THE STUDY TOOL:

The questionnaire was presented in its initial form to a number of specialists, with experience and competence in



the field of scientific research and teaching, with the aim of arbitrating the paragraphs of the questionnaire, and knowing the extent of the clarity of its paragraphs and their comprehensiveness of all aspects of the subject for a study. On the linguistic reformulation of some paragraphs, and the researcher modified the questionnaire in the light of the opinions of the arbitrators.

#### STABILITY OF THE STUDY TOOL:

Cronbach's Alpha test was used to test the stability of the resolution, and the average of the stability of the resolution was (0.85), which is an acceptable value.

#### **STUDY VARIABLES:**

Independent variables:

The academic qualification has two levels: (Bachelor's, Postgraduate).

The years of service have three levels: (less than 5 years, from 6 to 10 years, and more than 11 years).

Dependent variable: It is the response of the study sample to the study tool (the questionnaire).

#### STATISTICAL ANALYSIS:

Data were collected using the study tool, a questionnaire, and then unloaded into an Excel file, organized and entered into the statistical program (SPSS) to analyze the study data after coding the answers. Where descriptive statistics were used to calculate the arithmetic averages and standard deviations

The five-level grading classes were also converted to three-tiered grading as follows:

(5-1)=4

4/3 = 1.33

This value is used to determine the length of the staging period as follows:

1-2.33 weak

2.34-3.67 medium

3.68-5.00 big

First: Presentation and discussion of the results related to the first question.

The first question: What is the degree of application of modern teaching strategies for first-grade teachers in Jerash education from their point of view? The researcher extracted the arithmetic averages and standard deviations of the questionnaire paragraphs.

TABLE NO. (2)

Rank	Paragraph	Arithmetic average	standard deviation	Degree
1	I would like there to be a financial return from the application of these strategies.	2.98	.32	Medium
2	He insisted on employing modern teaching strategies despite the opposition of parents to them.	2.97	.35	Medium
3	I think we care about teaching strategies because we only imitate others.	2.96	.37	Medium
4	I deal with strategies according to the enthusiasm and encouragement of my supervisor.	2.94	.39	Medium
5	I am satisfied with the improvement of my students' performance when implementing the strategies.	2.91	.41	Medium
6	I am encouraged to apply the strategies because the nature of the curriculum helps to do so.	2.89	.43	Medium
7	Achieve high student satisfaction scores without implementing teaching strategies.	2.87	.47	Medium
8	I want to implement teaching strategies because they are challenging for me and my students.	2.84	.49	Medium
9	I demand holding training courses for teachers on teaching strategies because it provides an opportunity to develop the concept of modern teaching strategies for them.	2.81	.51	Medium
10	I feel better about students when I repeat the application of modern teaching strategies to them.	2.79	.54	Medium
11	I like to employ strategies because they reduce the burden of responsibility.	2.75	.57	Medium
12	The attitude of the students' parents determines my attitude towards the implementation of teaching strategies.	2.73	.59	Medium
13	I do not like the application of these strategies because there is no point in applying them.	2.72	.62	Medium
14	I don't see a difference between teaching traditional students and learning by implementing these strategies.	2.71	.64	Medium



Rank	Paragraph	Arithmetic	standard	Degree
		average	deviation	
15	I don't consider students' interests when choosing a strategy over others.	2.70	.68	Medium
16	I do not skimp on conveying my experiences about applying modern teaching strategies to my colleagues.	2.69	.71	Medium
17	Seriously discuss how to implement the strategies as they come up.	2.68	.74	Medium
18	I consider adherence to the application of modern teaching strategies a kind of educational welfare.	2.64	.75	Medium
19	Create the appropriate classroom environment to implement any of the modern teaching strategies.	2.62	.78	Medium
20	I take into account colleagues' opinion when employing a strategy.	2.61	.79	Medium
21	I seek to choose the strategy in light of the students' interests and tendencies.	2.58	.80	Medium
22	I prefer to use more than one strategy in one session.	2.57	.83	Medium
23	I do not consider time an obstacle to the application of modern	2.56	.84	Medium
	teaching strategies.			
24	Enjoy using technology within modern teaching strategies.	2.53	.86	Medium
25	I don't see results when I use modern teaching strategies in the classroom.	2.51	.87	Medium
26	Dissent from the principal's insistence on using outdated teaching strategies.	2.48	.89	Medium
27	I work to convince my colleagues of the importance of using modern teaching strategies in the classroom.	2.46	.91	Medium
28	I am working on modifying curricular activities to match modern teaching strategies.	2.44	.93	Medium
29	I am keen to attend courses related to the development of modern teaching strategies.	2.42	.95	Medium
30	I discuss with my colleagues the effectiveness of modern teaching strategies proposed by the Ministry.	2.40	.96	Medium
	Total degree	2.58	.66	Medium

It is evident from Table No. (2) that the questionnaire paragraphs ranged between (2.98 to 2.40) and to a medium degree, with a total score of (2.58). Where it occupied paragraph No. (1), which states: "I would prefer that there be a financial return from the application of these strategies." It ranked first in an arithmetic average of (2.98), and the researcher attributes the result to most teachers who lack material support to do any extra effort, as they consider that the application of these strategies requires them to secure more physical and mental effort. Paragraph No. (30), which states, "I discuss with my colleagues the effectiveness of modern teaching strategies proposed by the Ministry." The last rank in an arithmetic average of (2.58), and the researcher attributes the result to that what the ministry offers through its training courses to teachers about what is new in modern teaching strategies through courses may not meet the needs that teachers need in this field.

The second question: Are there any statistically significant differences at the significance level ( $\alpha=0.05$ ) between the responses of the sample members towards whether there are statistically significant differences at the significance level ( $\alpha=0.05$ ) in the degree of application of modern teaching strategies among first-grade teachers in Jerash education from the point of view of Their view is due to the educational qualification variable: (Bachelor's degree, postgraduate studies), and the experience variable: (less than 5 years, from 6-10 years, more than 11)?

Qualification variable (Bachelor, Postgraduate studies)

To answer this question, a t-test was used for two independent groups (Independent-Samples-T-Test) to indicate differences according to the variable (Educational Qualification), and the results of Table (3) show that.

# TABLE NO. (3)

The results of the (t) test for two groups of independent strategies to indicate the differences towards the degree of application of modern teaching among female teachers of the first grades in Jerash education from their point of view due to the educational qualification variable

Qualification	Number	Arithmetic average	Standard deviation	" T" value	Indication level
BA	212	2.44	.47	.024	.211
High studies	103	2.24	.36		

The results in Table (3) indicate that there are no statistically significant differences at the significance level ( $\alpha$ 



= 0.05) towards the degree of application of modern teaching among first-grade female teachers in Jerash education from their point of view due to the educational qualification variable. The researcher attributed the reason for the absence of significant differences that the teachers apply the same strategies and in the same way that they are within the scope of one directorate and receive a training in the event of any training session, and the educational supervisor when visiting them largely gives the same directions to them. Also, most teachers suffer from a lack of time and a large curriculum, which prevents the application of teaching strategies.

Variable years of experience (less than 5 years, 6 to 10 years, more than 11 years)

To find out whether there are differences due to the effect of years of experience variable, one way ANOVA was used.

TABLE NO. (4): RESULTS OF THE ONE WAY ANOVA TEST FOR INDEPENDENT SAMPLES FOR THE EFFECT OF YEARS OF EXPERIENCE VARIABLE

Years of Experience	Number	Arithmetic average	Standard deviation	F	<b>Indication level</b>
Less than 5 years	57	2.35	.47	.453	.210
6-10 years	102	2.67	.37		
More than 11 years	156	2.89	.26		
Total average	315	2.63	.36		

It is noticed from Table (4) that the results of the results of the (One Way ANOVA) test for independent samples of the effect of the years of experience variable, it is noted that there are no differences towards the degree of application of modern teaching among first-grade female teachers in Jerash education from their point of view due to the variable years of experience, and the researcher attributes the result to The curriculum and the teaching outcomes to be achieved through the implementation of the lessons are the same. It was also noted that the teacher applies the same teaching strategies inside the classroom on a regular basis, and he justifies this due to his preoccupation with the students' affairs due to their young age.

#### **RECOMMENDATIONS:**

Based on these results of the questionnaire and in view of the attached tables, we recommend the following:

#### FOR MINISTRY OF EDUCATION:

- 1. The necessity of developing a comprehensive and complete plan by the Ministry of Education to use modern educational strategies in education so that the plan includes the provision of human and material capabilities
- 2. Holding training courses for teachers in the use of modern educational strategies, setting up incentives (such as a letter of thanks or photographing model classes and circulating them in the field) after preparing competitions at the level of each directorate for creators in the application of modern educational strategies
- 3. The necessity of producing educational programs under the supervision of educational specialists that activate the appropriate modern educational strategies for each educational stage

# FOR RESEARCHERS:

- 1. Conducting studies on teachers' attitudes towards the use of modern educational strategies in education.
- 2. Doing research on the difficulties that hinder the use of modern educational strategies in education.

#### FOR TEACHERS:

- 1. Attending class sessions when fellow teachers give lessons based on modern strategies.
- 2. Making publications on some modern strategies and distributing them to female teachers at the level of the Kingdom by educational supervisors.
- 3. Visiting some teachers who won the Queen Rania Award for the Distinguished Teacher and attending some class sessions.

#### REFERENCES

- Abu Asaad, Ahmed Abdel Latif. (2011 AD). **Modifying human behavior theory and practice**. Amman: Dar Al Masira for publishing, distribution and printing.
- -Akl, Magdy Saeed, (2019). The effectiveness of an electronic learning environment that employs active learning strategies in developing future thinking skills in technology for seventh grade female students, *Journal of the Islamic University of Educational and Psychological Studies*, 6, 1-3
- Al Hela, Muhammad Mahmoud, (2000), **Educational technology between theory and practice,** 1st edition, Dar Al Masirah for Publishing and Distribution, Amman.
- -Al Khatatneh, Dekriat(2020). The effect of applying two strategies for active learning on the academic achievement of fifth grade female students in history in Jordan, *Journal of Educational and Psychological Sciences*, 4 (29), 69-8
- -Al-Adwan, Zaid Suleiman and Daoud, Ahmed Issa (2016). **Modern Teaching Strategies, 1st Edition**. Dubai: Debono Center for Teaching Thinking.
- -Al-Anazi, Abdullah ShatitAyed. (2019) The reality of secondary school teachers in Kuwait using blended learning from the point of view of teachers and principals. **Master Thesis**. Al al-Bayt University. Jordan
- Alghamdi, A., (2012). The effectiveness of some active learning strategies for teaching mathematics in



- developing some thinking skills among first-grade intermediate students in the Kingdom of Saudi Arabia. Master's thesis. Malaysia
- -Al-Hajj Issa and others, Misbah, 2007, Educational techniques between theory and practice, Al-Falah Library, Kuwait.
- -Al-Jahouri, N. (2012) The effectiveness of the self-scheduling strategy (K.W.H.L) in developing a deep understanding of physical concepts, skills and knowledge perception among eighth graders in the Sultanate of Oman. *Journal of Arab Studies in Education and Psychology*, Issue: 32, Part, 2.
- -Al-Shennawi, Muhammad Mahrous and Abdul Rahman, Muhammad Sayed .0 (1998 AD). **Modern behavioral therapy applied foundations**. Egypt: Quba House.
- Alzain, H. (2015). Influence of Using Reversed Learning Strategy on Academic Achievements of Students
  of Education Faculty in Princess Noura Bent Abdel Rahman. International Education Specialized
  Magazine.
- -Aziz, Kamal Club, 1999, Internet and Mathematics Teaching and Learning, Al Falah Library, Al Ain, UAE.
- -Bahloul, A. (2004) Recent trends in metacognitive strategies in teaching reading. Reading and Knowledge Magazine, Faculty of Education, Ain Shams University, Issue (30), p.: 183.
- -BaniDoumi, Hussein and Al-Omari, 2005, **Basics in the design and production of educational aids**, Hanin House for Publishing and Distribution.
- -Daoud, Samira Said Abdel Ghani (2012). Teaching dictation based on blended learning among middle school students with learning difficulties" *Journal of Educational and Human Studies*. 4 (2) 323 346.
- -Dr. Arkan Saeed Khattab (2012), Educational innovations in the educational process, p. 121.
- Dr. Mary Dowd (2018-7-20), "Importance of Becoming a Teacher" work.chron.com, Retrieved 2021-5-7.
- Du, X., Chaaban, Y., Sabah, S., Al-Thani, A. & Wang, L. (2020). Active learning engagement in teacher preparation programmes- A comparative study from Qatar, Lebanon and China. **Asia Pacific Journal of Education**, 40(3), pp.283-298.
- Elayyan, A., (2016). The Impact of Direct Teaching and Independent Teaching Strategies on Mathematics Achievement of Basic Stage Students in Jordan. Master's thesis, Middle East University. Jordan.
- -El-Feki, Abd Allah Ibrahim (2011). **Blended Learning, Instructional Design Multimedia, Innovative Thinking**, Amman: House of Culture for Publishing and Distribution.
- -El-Sayed, Muhammad, 1999, Educational Aids and Instructional Technology, Dar El-Shorouk.
- -Fath Al-Bab, Abdel Halim Sayed, 1993, **Employment of Educational Technology**, Egyptian Association for Educational Technology.
- -Hamdan, Muhammad Ziyad, 2005, Contemporary Teaching, House of Modern Education, Amman, Jordan.
- Jamie Goodwin (11/4/2018), "Top 10 Teaching Strategies to Use in Your Classroom", Magoosh, Retrieved 17/1/2022.
- Janelle Cox (17-3-2017), "Teaching Strategies to Promote Student Equity and Engagement" www.thoughtco.com.
- Kopp, K. (2013), Everyday Content-Area Writing: Write-to-Learn Strategies for Grades 3-5. First edition. Gainesville: Maupin House. P.10.
- Mark K Smith (01-01-2015), "What is education? A definition and discussion" http://infed.org, Retrieved 26-06-2018.
- Milheim, W. D. (November- December (2006). Strategies for the design and delivery of blended learning courses. Educational Techno-ology, 46(6).
- -Muhammad, Mahmoud Mandouh. (2011 AD). Learning theories. Riyadh: Al-Rushd Library.
- -Nasreddin Sheikh Bohni (2014), the educational process and the interaction of its components according to the competency approach, p. 366-365, 358-357
- Sakran, N. and Hussein, A. (2019) The effect of the self-scheduling strategy I know, I want to know, what did you learn (K.W.L) on the achievement of students of the fourth year of middle school the literary branch in the subject of sociology. The Arab Journal of Educational and Psychological Sciences, issue (8).
- Sharman, Atef Abu Hamid. (2015). **Blended learning and flipped learning**. Dar Al Masirah for Publishing and Distribution: Amman
- -Sheikh, Taj Al-Sir, and Akhras, Nael Muhammad Abdul Rahman. (2011 AD). **Educational psychology between concept and theory**, Riyadh: Al-Rushd Library, 2nd floor
- -The Arab Staff for Education Development and Modernization, 3rd Edition, 2007, the National Library at the Department of Press and Publications.
- Tucker, B. (2012). The flipped classroom, online instruction at home frees class time for learning. *Education Next Journal*, 12(1), 82-83
- Zaghloul, Imad Abdel Rahim. (2014 AD). Principles of educational psychology. Amman: Dar Al-Shorouk for Publishing and Distribution, 5th edition.
- "-Educational strategy", Law Insider, Retrieved 9/1/2022