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# Methods and Techniques of Motor Learning Among Students During the Physical Education and Sports Learning Unit

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#### Abstract:

Through this study, we tried to research one of the most important topics in teaching physical education and sports at the level of different educational stages. It is related to how to achieve the goal of practicing school physical sports activity for students and how to transfer knowledge and scientific material from the teacher to the student learners and the methods and techniques that help in this. In this study, the goal is to achieve accurate and sound scientific motor learning using the best educational methods and techniques. Therefore, we divided this into chapters that we presented as a general introduction to the research, its problems, the desired goals and its importance. Then, in the first chapter, we identified the most important literature of the study, then we added a chapter on teaching and its most important features. Then, we moved on to a chapter that presented the most important teaching methods. Then, we moved on to presenting the teaching methods to reach a chapter that presented motor learning and its most important features and its various elements that contribute to this. We arrived at a general conclusion in which we explain and clarify what should be available for the correct and accurate selection of teaching methods and their methods. **Keywords:** Physical Education Teaching, Motor Learning, Educational Methods.

#### 1. Introduction

Physical sports activity is of great importance to individuals of different ages and categories, including the category of students. The student in his life needs excitement, adventure, belonging, and a field to vent his energies out of love for activity and vitality, and this is not achieved except through a purposeful and planned sports activity. This action is what the physical education and sports teacher provides to the students, because physical and sports activity is a very important part as it seeks to improve the individual from the emotional and sentimental aspect, the sensory-motor aspect, and the social aspect. In the absence of a highly qualified teacher with a purposeful vision, thoughtful planning, and modern scientific methods and approaches, he receives many obstacles, including aversion and lack of interest of students in physical sports activity (Ibrahim Muhammad Arman and Mahmoud Ahmed Al-Nawaj'a, 2011, p. 252), or from the rate of learning among students or even from their ability to receive messages that the teacher wants to convey to the students, known as inputs, and based on the fact that physical sports activity is an educational and pedagogical material within an educational environment in which the teacher and students interact directly due to the advantages of this activity, and from the problem of the study that It focused on the methods and techniques of motor learning among students during the learning unit of physical education and sports. We divided this research into an introductory part in which we presented the problem of our research, the objectives and the desired importance of it, in addition to identifying and explaining the most important keywords. Then we moved on to presenting some of the relevant study

literature. Then we moved on to listing the methods and techniques of teaching and their most important features. Then we touched on the most important elements related to motor learning and what is related to it. Finally, we presented a general conclusion of the research.

### 2. The Problematic:

Martin Luther says, "If I had the opportunity to leave the job of preaching and guidance, I would not choose the teaching profession." (Abdul Nasser Shamata, 2011, p. 62) Martin's statement takes us to talk about the value of education and teaching through preaching and guidance or through educational programs and curricula that are directed to the most influential group in the future of peoples and nations, which are the rising generations or the students in particular.

The future and destiny of nations are undoubtedly in the hands of the rising generations who receive training in various subjects programmed in the curricula across the various educational stages in order to reach the formation of a righteous individual from the scientific, social, emotional and sentimental aspects to be the building block that contributes to building society and the nation and preserving its components and sustainability in light of the fierce competition between countries in various political, economic, military and cultural fields, all of which are subject to scientific dependence. Countries that do not have scientific progress are at the back of the countries and are thus subject to dependence on advanced countries even in their food, politics and all aspects of their lives.

Among the subjects included in the curricula and in all educational stages, we find the subject of physical education and sports, which in turn seeks to form the individual from a psychological, emotional, social and sensory-motor perspective. The teacher teaches by following a set of methods and techniques that take into account the specificity of the subject, which differs from other subjects. He plans according to established strategies to achieve the desired goals, and he is the one who can provide the appropriate atmosphere to effectively deliver his educational messages to learners. This can only be done by choosing teaching methods and techniques that are compatible with the capabilities, aspirations, tendencies and needs of students across the various stages of education. To achieve these noble goals and objectives, we ask the question: What are the methods and techniques that enable us to do this? Or in other words, what are the methods and techniques of teaching for motor learning among students during the learning unit for physical education and sports? To further expand on this question, we ask the following sub-questions: What are the teaching methods that help students to learn motor skills during the learning unit of physical education and sports?

3. Research objectives: This research seeks to try to achieve the following objectives:

- Highlighting the most important teaching methods.
- Highlighting the most important teaching methods.
- Achieving the best results for motor learning
- Reducing randomness during the teaching process
- Clarifying the motor learning process during the learning unit of physical education and sports.
- Contributing to scientific research and understanding how teaching methods and means affect the process of motor learning for students.
- Reaching an awareness of the differences between teaching methods and teaching methods among themselves and between them.

# 4. The importance of the research:

The importance of this study lies in the fact that it is a study that examines the various teaching methods and teaching styles during the learning unit of physical education and sports. It is very important for the teacher as it sheds light on the nature of teaching methods, their characteristics and advantages, in addition to the various teaching methods and research into their advantages, disadvantages and most important specifications. This is to help the teacher to know the various learning theories in order to help him perform his tasks in a scientifically accurate manner.

This research also sheds light on the various aspects of motor learning at the same time. No matter how good the planned programs are, they will become useless without the availability of a teacher who is familiar with all teaching methods and styles, in addition to his knowledge of the specifics and conditions of motor learning.

5. Research concepts and terms: The most important terms that appeared in our research are the following:

#### 5.1. Teaching methods:

Methods in language: It is the plural of method and means the way, path, curriculum or path. (Ibn Manzur: 1410 AH, p. 221)

**5.2.** *Method technically*: The method is the procedures that the teacher follows to help his students achieve the goals. These procedures may be discussions, directing questions, or raising a problem for a specific situation that prompts students to question or try to discover or impose a hypothesis or other. (Mirvat Ali Khafaga, Mustafa Al-Sayeh Muhammad, p. 228)

Muhammad Saeed says that the method is the steps that the teacher uses through which students acquire the required results from the lesson. (Mohamed Saeed Azmi, 2004, p. 41)

**5.3.** *Teaching*: It is stated in the "Hachette" dictionary that teaching is the transfer and delivery of various theoretical and applied knowledge. (Dictionnaire Hachette, Encyclopédique, p. 638, 2001)

Teaching technically: It is an organized series of activities managed by the teacher, and in which the learner contributes practically and theoretically with the aim of achieving specific goals. (Abdel Rahman Al-Khatib, 1997, p. 17)

#### 5.4. The operational definition of teaching methods:

It is not easy to give a specific operational definition of teaching methods. It is agreed that the procedural teaching method is the special way to organize the relationship between the teacher and the learner during a specific pedagogical situation, unlike the teaching strategy, which means a set of coordinated educational behaviors and actions such as presentation, discussion, etc., with the aim of facilitating the learning of a specific skill. (www. Ulg. Ac. be/lem/stylesapprent. Htm/02/10/2009)

Motor learning: It is a change in performance related to positive practice, i.e. the athlete's performance activity creates needs that prompt him to perform such an activity. (Marwan Abdul Majeed Ibrahim, 2002, p. 80.)

#### 6. The scientific method followed:

The method is the way that the researcher follows in his study of the problem, and both (Al-Zawabi and Al-Ghannam 1974, p. 51) confirm

"Discovering the truth and answering the questions raised by the research topic and the nature and type of the problem presented for study, is to determine the type of method that is followed from among the methods followed, so we relied on the descriptive method that depends on studying reality or appearance as it exists in reality and is interested in describing it accurately and expressing it qualitatively or quantitatively, so the qualitative expression describes the phenomenon and explains its characteristics, while the quantitative expression gives it a numerical description that explains The amount or size of this phenomenon and the degrees of its connection with other different phenomena. (Ammar Bahoush 1999 p. 119)

#### 7. Study Literature:

Turki Rabeh says regarding the importance of previous studies: "It is necessary to link the basic sources of previous studies and theories so that we can classify and analyze data" (Turki Rabeh, 1984, p. 123).

The aim of the current study is to know the methods of motor learning styles for students during the learning unit of physical education and sports, and in order for this study to achieve its aim, it is important to review what has been done from similar studies in this field to know the results reached by those studies and to link them to and to the topic to be researched based on this principle, it becomes clear to us that it is logical to review the most important previous and similar studies related to the topic of our research.

#### 7.1. Studies that dealt with teaching methods

1. The study of Bandar Abdul Faqih (2012) entitled: The degree of use of some modern teaching methods in physical education from the point of view of physical education teachers in Tabuk city, prepared by the Department of Curricula and Teaching Methods, Umm Al-Qura University, Kingdom of Saudi Arabia 2012

Study objectives: The study aimed to determine the degree of use of some modern teaching methods in physical education and sports from the point of view of physical education teachers in Tabuk

- Identifying the statistically significant differences at the level of significance regarding the averages of the trends of physical education teachers in Tabuk city towards the modern teaching method attributed to the difference in the study variable (academic qualification - number of years of service in the work - number of training courses)

Study methodology: The descriptive method was used as it is more appropriate to his study and its objectives.

Study community: The study community consisted of all physical education teachers in the primary stage of government schools in Tabuk Educational City, numbering 119 teachers. The questionnaire was used in his study.

2. Kuo Kuo Chan's study (1999) entitled The effect of using the cooperative method in teaching badminton to learners in the secondary stage. The problem of the study: The extent of the effect of using modern teaching methods on acquiring some physical and skill qualities for learners in the secondary stage.

Research sample: The sample was selected in a deliberate manner, so that its number reached (68) learners in the intermediate education stage in one of the educational institutions. It was divided into two equal groups, with (34) learners as a control group and (34) learners as an experimental group.

The results showed that there was a statistical significance between the experimental and control groups in favor of the experimental group, in all the tests used. (Q. Q. Chan, 1999.)

**3.** *Magda Habashi (1990)* by identifying the teaching competencies required for a science teacher in the preparatory stage, and knowing the extent to which all science teachers are able to master these competencies and revealing the differences between educationally qualified and educationally unqualified teachers in teaching performance and the trend towards teaching science. The researcher used an observation card for teaching competencies and a scale for the trend towards teaching science. The study sample amounted to (60) male and female teachers, with (30) educationally qualified and (30) educationally unqualified. The study showed a low level of competencies among educationally unqualified teachers, as well as differences in the trend in favor of educationally qualified teachers (Habashi, Magda 1990).

#### 4. Ben Omar Murad's study (2003) entitled:

Teaching using the indirect pedagogical method and its impact on social relations among third-stage students 12 years old15.

The researcher may have reached a conclusion that students form social relationships by virtue of their playing together and participating in the application of the indirect pedagogical method. These relationships have a great impact on the interest of the adolescent student. If the process of interaction that he lives with his colleagues is positive, he will do his best to cooperate with him and impose his presence. The researcher adds, saying: The indirect pedagogical method enhances social relationships between students of the same stage. Then, teaching using the indirect pedagogical method achieves several factors, including will, the spirit of competition and friendship... etc. (Ben Omar Murad, 2003)

# 7.2. Studies that dealt with teaching methods:

#### 1. Study of Tariq Saker: (2001)

Under the title: The pedagogical method of physical education and sports teachers in the secondary education stage in Algeria.

The researcher tried through this study to address the issue of the effectiveness of physical education and sports teachers in secondary education in relation to the pedagogical method adopted. The researcher wanted through this study to identify the following:

- The pedagogical method most used by both experienced and beginner teachers.

- Does the training of teachers directly qualify them to perform their teaching work effectively?

Perhaps among the most important results that the researcher was able to reach is that through this study, he found that experienced teachers adopt a democratic method, unlike other teachers, who adopt an authoritarian method. (Tareq Saker, Style 2001)

2. Study: Iman Zaki Amin 2002 The researcher conducted a study entitled: The effect of introducing the microteaching method in the kindergarten preparation program on developing some teaching skills and teaching performance of the female teacher - a study using the verbal interaction analysis method. This study aimed to clarify the role of micro-teaching in developing the performance of female teacher students in practical education. The study sample included 64 female students from the kindergarten department at the Faculty of Teacher Preparation in Makkah Al-Mukarramah, where the experiment was applied to the third year, and the results of the study showed the following:

A There are differences between the experimental and control groups in interactive teaching performance in favor of the experimental group

B There are differences between the experimental and control groups in each type of teaching performance in favor of the experimental group. (Iman Zaki Muhammad Amin 2002 AD, p. 213)

**3.** Study by Idir Abdel Nour (2010) entitled: The effect of some teaching methods on the level of motor and skill learning and cognitive achievement during the education lesson Physical and sports, the study aimed to know the effect of some teaching methods on the level of motor and skill learning and cognitive achievement during the physical education and sports lesson. The research sample included (86) male learners in the secondary stage. As for the data collection tools, they were:

- Physical tests in track and field (sprint)

- Skill tests in basketball.

- Cognitive test in basketball designed by the researcher

The researcher concluded that:

• There are statistically significant differences between the pre- and post-measurements in favor of the post-measurements of the four groups.

• The superiority of the task-based teaching method group, the mutual assessment group, and the directed discovery group over the command method.

• There are percentages of improvement in the level of motor, skill, and cognitive learning under study among the three groups. (Edir Abdel Nour, 2010)

4. A study by Ataa Allah Ahmed (2005) entitled The effect of some teaching methods with immediate feedback on learning some basic skills in volleyball.

The researcher addressed a general problem: What is the effect of using teaching methods and the best of them in learning some basic skills in football.

The researcher used the experimental method using skill tests to measure the basic skills studied and the results reached: - The teaching methods studied with immediate feedback have a positive role in learning basic skills.

- The researcher concluded that there are statistically significant differences between the pre- and post-application of the three sending skills

- The methods differ in their effect according to gender and type of skill, difficulty and ease of the skill. The more difficult the skill is, the more we tend to the imperative method in learning it. (Ata Allah Ahmed, 2005)

**5.** *Al-Haik and Hamouri (2005)* conducted a study that aimed to identify the teaching methods preferred by students in learning motor skills for basketball and racket games, and also to identify students' attitudes towards the preferred teaching method. The researchers used the experimental method using two experimental groups for the pre- and posttest. The study sample included (41) male and female students. The program was applied for (10) weeks using five methods from the Mosca Mosten methods. The study concluded that there were no significant differences between basketball students and racket games students in the degree of their preference for the command method, the training method, and the reciprocal method. However, significant differences appeared between the students of the two groups on the directed discovery method in favor of racket games students and on the problem-solving method in favor of basketball students. The results also showed that there were no significant differences were due to the gender variable in the degree of their preferences students of the two groups in the imperative style only and in favor of females. The study also found that there were no statistically significant differences between the individuals of the two groups in their tendency toward the preferred styles, and there were no differences attributed to gender.

#### 8. Comment on previous studies:

After reviewing these studies and summaries of their results and comparing them with the current research, we find that they differ from them in many matters: in terms of time, place and objectivity.

- In terms of time, the current research was conducted from the beginning of 2024, while most of these studies were conducted before the date of issuing the current research.

- In terms of place, these previous studies were conducted in some Arab countries such as Jordan, Yemen, Qatar, Palestine, Saudi Arabia, Egypt and others, and some Western countries, while the current research was conducted in Algeria.

- In terms of objectivity, the current research focused on the stages of teaching in its phases, while previous studies focused on a specific stage of the teaching stages.

- Most of these studies relied on tests to collect data in addition to using observation cards to collect data related to the study problem.

- We also discussed teaching methods and techniques and motor learning, and thus the objectives of each study varied and the purposes and means of achieving them varied according to the different teaching stages and the place and time of conducting the study. Below we list the aspects and sides that the aforementioned studies benefited us with:

- Defining the research problem and controlling the variables.

- Highlighting the research objectives more accurately and clearly.

- Using the appropriate method for the nature of the study.

- Illuminating the way for the researcher in selecting and choosing the best books and references appropriate to the subject of the study.

#### 9. Teaching

Perhaps the scientific importance of teaching lies in the fact that it is the basic condition for learning, because without good teaching the learner cannot receive the scientific material in an appropriate manner, so we find that most of the developed countries of the world have worked to form teachers who are scientifically, academically and pedagogically qualified, through the establishment of universities, institutes and schools specialized in training teachers in various scientific disciplines.

#### 9.1. The concept of teaching:

Teaching has become a clear system with its inputs, processes and outputs, where the inputs are represented in the goals, curricula and educational means, and the processes are represented in the teaching methods and techniques followed, while the outputs are represented in what is achieved from the goals set by the teacher or in what is achieved from the general goals of physical education.

Teaching is an art and a science, so we can describe the successful teacher in his work as an artist teacher, as the successful teacher is the one who leads the students' ideas from one stage to another. (Mirvat Ali Khafaga, Mustafa Al-Sayeh Muhammad, p. 235)

The personality of the teacher has a great impact on teaching, and the interest and attention of the students may be due to the teacher, his ability and skill more than it is due to the subject of the lesson. Therefore, the teacher must use appropriate teaching methods to attract the attention of the students and control their souls, and thus activate the students to perform motor performance.

#### 9.2. Some basic terms in the field of teaching include the following:

*Teaching*: The art of conveying information and knowledge to students and the procedures that the teacher performs with students to accomplish certain tasks and achieve specific goals.

*Teaching Method:* An organized and coordinated procedure in using scientific materials and educational resources and applying them in a way that leads to students learning in the easiest ways.

*Teaching Strategy*: A general plan for teaching that includes all components of the teaching situation from objectives - teaching methods - learning tools - evaluation tools

*Teaching Style*: Procedures followed by the teacher to organize and direct the learning process and the teacher adopts different teaching methods as a means of teaching students.

*Teaching Aid*: The medium that the teacher uses in his style to convey ideas or skills to learners.

#### 9.3. Components of the teaching situation:

- The teacher. . The student, the objectives. The subject matter. The place of teaching and learning. Teaching media and techniques. Evaluation tools and methods.

#### 9.4. General strategies in teaching:

It is worth noting that the strategy in teaching is more comprehensive than the teaching method, as the strategy is the one that chooses the appropriate method for the various circumstances and variables affecting the teaching situation, while the method is broader than the method in teaching, as the method is nothing but a means used by the teacher to employ a teaching method effectively, and the method is more general than the method, as it is the determinant of the teaching method that the teacher follows primarily.

As a result of the great development that the world has witnessed and is witnessing in all economic, social, political and technological fields, the tremendous knowledge explosion, the information and communication revolution, knowledge has diversified, educational methods have developed, and the use of technology in the field of education has become more important. Educators have become interested in teaching methods and strategies and have worked to develop them to keep pace with these successive developments, with a focus on the psychological and educational aspects of the learner, in addition to providing him with knowledge and sciences, and developing and improving teaching methods in

a manner consistent with modern scientific and educational theories, considering that teaching methods and scientific educational theories are two essential elements in the success of the educational situation. (Raafat Omar Al-Hariri, 2010, p. 45)

# 9.5. Features of good teaching:

It is not easy for every physical education and sports teacher to succeed in presenting his scientific material in an easy way. It was mentioned in a book by its author (Rafat Mahmoud Bahjat) 1996 that good teaching according to Rayan is a humane position in which the teacher implements the following:

- Establishing good relationships between students and understanding the factors affecting their behavior.

- Planning the teaching process and organizing the work structure in it.

- Developing imagination among students and attracting their attention. (Rafat Mahmoud Bahjat, 1996, p. 09)

As for both Jacques Cathelineau and Christian Target, they believe that the features of successful teaching are manifested in the physical education and sports teacher's keenness to observe five 05 stages with great precision, which are: - Planning. - Implementation. - Intervention. - Evaluation. - Modification. (Christian Target, Jacques Cathelineau 1990, p. 06.)

### 10. Teaching Methods

#### 10.1. Meaning of Method:

Muhammad Saeed says: The method is the steps used by the teacher through which students acquire the required results from the lesson. (Muhammad Saeed Azmi, 2004, p. 41)

It is defined as: The approach followed by the mind to reach its goal, i.e. organizing thinking and research in a precise organizational manner. This precise organization helps to reveal the truth on the one hand or helps to convey it to others on the other hand. (Muhammad Khamis Abu Namra, Naif Saada, Education, 2009, p. 122)

The method means the behavior or approach that you follow to reach the goal or a group of means used to achieve specific educational goals.

#### 10.2. The basic rules on which teaching methods are built.

- Gradual progression from the known to the unknown. Gradual progression from the simple to the complex. Gradual progression from the tangible to the reasonable. Transition from the practical to the theoretical.

Bases for choosing teaching methods. The goal of teaching or the desired goals. The level of learners. The scientific content of the lesson. The motivations of students. The available material capabilities. Evaluation.

### 10.3. Explanation or division method (partial):

In this method, the teacher explains the required movement or exercise. To facilitate the explanation, the movement or exercise must be divided into several parts and small educational steps. Then, each part or step can be explained separately. Then, the first step is linked with the second and the second with the third... and so on. Then, all the parts are linked and given once, and the learner performs them all at once according to the sequence of parts. (Muhammad Khamis Abu Namra, Naif Saada, p. 123)

Using it:

When using this method, the teacher takes into account the following:

- Not to prolong the theoretical explanation because the student acquires the skill through practical practice
- Pay attention to the articulation of words, the way of pronunciation, the speed of speech, its intensity and its height.

- That the phrases used by the teacher for explanation are appropriate to the level of students' awareness and their linguistic output.

- Reduce the use of this method the younger the student is.

- Students should take an appropriate position during the teacher's explanation.

- Not to move from one part to another until they have understood and mastered the first part.

#### Advantages of this method:

1. The fragmentation method takes into account individual differences between students

2. Fractionating the exercise helps to understand the details of the exercises

3. Fractionating the exercise or movement helps the teacher and students to discover the areas of difficulty in the movement and the areas of weakness in the students.

4. Fractionating the exercise or movement provides the elements of security and safety for the students, especially when performing difficult skills or movements.

5. Fractionating the exercise or movement into simple learning parts or steps and mastering each part or step separately, which leads to the ease of linking these parts or steps.

6. There are some exercises or movements that can only be performed through fragmentation.

#### Disadvantages of the fragmentation method:

1. Fractionating the exercise or movement into parts or steps does not lead to clarifying the general purpose of the exercise or movement and taking it as an important point in each method and results in many educational errors.

2. This method is boring for the students and not interesting.

3. It takes a longer period than other methods.

4. This method requires a lot of nervous energy because each part needs mental neural connections and then needs to link each part to another part with other neural connections.

5. It does not match the students' tendencies as they often tend to perform difficult movements rather than simple and easy ones.



6. Dividing the exercise or movement makes it lose an important educational advantage in terms of its restriction to formal aspects and its lack of proximity to natural aspects and play.

**10.4.** The holistic method (model): The holistic method is one of the modern methods as it presents the movement as a whole and the students perceive it as an undivided unit and then they learn it as well without division. This method calls for the individual when he sees something, he perceives it as a whole and then it can be divided into its different parts. This method is used when teaching simple, uncomplicated movements and is also used when teaching some movements that are difficult to divide. (Mohammed Khamis Abu Namra, Naif Saada, p. 124)

This method allows students to learn how to move without wasting time or effort. Also, a good teacher is one who performs a good model in front of students. If he is unable to perform it, he chooses the best students to perform the required movement. This is an incentive for students to reach the level of an excellent student and implement the movement.

Its uses: When the teacher uses this method, he must take into account:

-The student's performance of the movement as a whole, then the gradual performance

- Slow timing can be used, which helps to improve the sense of the movement and its rhythm, taking into account that this does not lead to the movement losing its unity and harmony.

- During the movement, the student's attention and focus are directed to a specific part to master this part of the movement.

- The model performed by the teacher or student must meet several conditions, the most important of which are:

a) All students must see the model clearly and correctly.

b) The model's performance must be perfect.

c) The model must be performed according to the call for the exercise or movement.

d) It is preferable not to repeat the model performance and the teacher should seek the help of a good student to perform the model again.

#### Advantages of the comprehensive method:

1. The general goal of the movement should be clear to the students, and this is important from an educational point of view, because the clarity of the goal for the learners makes them positive in the learning process.

2. The comprehensive method is easy for the students and is in line with their tendencies and desires.

3. It does not take a long time like the partial method in teaching.

4. It is characterized by lack of formality.

5. This method is in line with the spirit of games and other movements.

### Disadvantages of the comprehensive method:

1. It does not take into account the individual differences between students.

2. It is difficult for students to know the details and details of the movements.

3. It does not provide an element of security and safety.

4. It is difficult to apply it in all movements as some movements must be divided, such as some gymnastic movements.

5. Difficulty in getting rid of incorrect performance that the student acquires while practicing the movement as a whole.

10.5. The partial-holistic method (mixed): This method links the two previous methods, i.e. the model is coupled with the explanation when teaching or presenting a specific skill or a new exercise, and we can consider it as a mediator between the two previous methods, where the student learns the skill or exercise as a whole at the beginning and then learns some parts that need to be mastered, and this method is used to benefit from the advantages of both the partial and holistic methods and avoid their disadvantages. (Muhammad Khamis Abu Namra, Naif Saada, 2009, p. 125)

#### Advantages of the partial-holistic method:

1. It is in line with the students' motor abilities, as it gives each student the opportunity to advance in learning the skill according to his ability, i.e. it takes into account the individual differences between students, and the general goal is clear to the students to achieve the element of positivity in teaching.

2. It provides the elements of security and safety, and is one of the methods that are used effectively for both older and younger students.

# Disadvantages of the partial-holistic method:

1. It requires the teacher to be extremely precise in dividing the skill into educational steps or correct parts.

2. It requires prior and accurate preparation before the lesson and a longer time from the teacher.

3. It requires follow-up and linking the parts in the correct way.

10.6. The exploratory method: This method is one of the most modern methods in teaching motor skills as it gives the student the opportunity to practice scientific thinking and encourages it. This has been practiced as an effective method in teaching children.

The basic principle of this method is that students solve problems and accept any reasonable solution as correct. The teacher's questions and appropriate instructions aim to develop the child's performance level and encourage him to discover and find the correct solution. The teacher is not particularly concerned with whether all children perform the activities in the same way or with a high degree of accuracy, but he is concerned with giving all students the opportunity to achieve:

• Explore the motor potential of his body and develop basic motor abilities

• The degree of success within the limits of the child's ability, expressing himself creatively

After giving the students the opportunity to do the task, the teacher may ask some students to explain the solution to the problem. The steps of the exploratory method are summarized as follows:

1. The teacher establishes the problem and the question

2. Discover the students and their experiences in solving the task

3. Allow the class members to demonstrate solutions to the problem.

#### Advantages of the exploratory method:

1) The student in this method is the focus of the teaching and learning process

2) It takes into account individual differences among students by solving the problems presented to them in a way that suits each one of them.

3) There is no best way to perform, and each student performs the movement within his ability and meets a degree of success, and this is an important educational point because it helps the child develop his self-concept.

#### Disadvantages of the exploratory method:

1. It requires more time than other methods.

2. It requires professionally prepared teachers, because unprepared teachers find it difficult to construct problems in a purposeful way.

3. The teacher faces difficulty in organizing the class like traditional methods.

#### 11. Teaching methods of physical education and sports

#### 11.1 The command teaching method

11-1- 1 Description of the command teaching method: This method remains among the teaching methods that have been used for several decades by some teachers who want to have absolute control over their departments. (Maurice Piéron, 1992, p60.)

In a book by its author "Mohamed Saeed Azmi" 1996 under the title "Methods of developing and implementing the physical education lesson in the basic education stage between theory and application", there is a clear reference to the command teaching method, calling it the direct method where he says .. "In it, the activities are chosen and determined by the teacher at a rate of 100% and the student does not interfere in anything except implementation according to the teacher's instructions. This method is currently followed in schools where the physical education lesson is prepared by The teacher's method and the student implements what he asks of him and in the way that the teacher himself wants, meaning that it is a process of indoctrination, assignment and dictation instead of being a process of launching and expression, as it lacks providing opportunities for exploration and innovation on the part of the students. (Mohamed Azmi Saeed, 2004, p. 45)

11-1-2- The content of the instructional method by command: The use of this method in a specific teaching unit guarantees the following:

- The subject matter and also the standards for achieving mathematical skills are very specific in advance.

- The teacher's orders are the only ones that determine the model that the student must adhere to.

- The teacher's orders must be implemented accurately, as the student cannot discuss the teacher's orders no matter the circumstances.

11-1-3 The role of the teacher under the command teaching method: The basic role that the teacher plays in this type of teaching method includes the matters that we will try to summarize in the following points:

- Determining the objectives of the lesson and choosing the appropriate activities during the lesson.

- The teacher is the one who determines the rhythm or pace at which the sports skills are accomplished as well as the number of times a certain exercise is accomplished, and he is the one who provides all the information related to the sports exercises and movements as well as the indicators related to the beginning and end of the proposed sports activity.

- The teacher is the one who corrects, evaluates, etc., and these things are usually done in a self-directed manner. He is the only educational actor who has the authority to make decisions across all levels of educational action (Maurice Piéron, 1992, p63)

11-1-4 The role of the student under the command teaching method: The role of the student under this method is very limited, as it is summarized in the direct response (implementation) of the stimulus (various decisions and orders) presented by the teacher. The student must understand the activities presented to him and carry them out according to the teacher's orders. In this sense, it can be said that the role of the student is a negative educational actor, because he does not contribute to the production of educational relationships, whether with his peers or even with the teacher himself.

11-1-5 Disadvantages of the command teaching method: This method has been the subject of much criticism, as according to some, the use of such a teaching method (model) establishes a relationship of a type Authoritarian between the teacher and the student, so that there are those who see the disadvantages of this method, that immediate and direct relationship between the incentive provided by the teacher and the student's response, and the following is taken from this method:

- It does not take into account the individual differences between students.

- It does not give sufficient opportunity for students to participate in making the necessary decisions during the lesson, and does not help the learner in the process of creativity.

### 11-2 Task-based teaching style

11-2-1. Description of the task-based teaching style: This style of teaching that we are studying is characterized by giving students the freedom to choose sports activities according to their physical and mental abilities, and this method helps students to explore, experiment, develop initiative and give them self-confidence, especially when they use devices and tools and deal with them freely, as it gives them the opportunity to discover their inclinations, what they like and what they don't like, what they know and what they don't know.

This style requires students to make some decisions during the lesson, which allows for the emergence of a new relationship between the teacher and the learner on the one hand and between the teacher and the work he performs on the other hand. (Mosca Mosten, 1991, p. 50.)

In addition, we find that this method provides a great opportunity for the student to develop great independence in action, by giving the necessary importance to the individual differences between students, not only in relation to their physical characteristics but even their mental abilities (speed of learning). (Maurice Piéron, 1992, p. 63)

11-2-2 The role of the teacher under the task-based teaching method: The role of the teacher in this method is to make all planning and evaluation decisions, and transfer executive decisions to the learner related to the initial situation from which the performance begins, its place, its system, its start time, its end time, its timing, its movement rhythm, the time of rest and asking clarifying questions. (Mosca Mosten, 1991, p. 50.)

The teacher's duties also include:

- Discovering the organizational errors that students fall into.

- Discovering every source of danger that could It exposes the students' health to destruction.

- Discovering errors in the performance of mathematical skills for students.

- Correcting students' errors.

- Intervening at each task to explain the content of the lesson. (Maurice Piéron, 1992, P63)

#### 11.2.3. The role of the student under the task-based teaching method:

- The learner is more independent than the first teaching method in making decisions about his performance and because he practices without direct orders from the teacher, there is more possibility to develop physical fitness and skill qualities, and therefore his position on the social channel becomes better.

- This method contributes to developing new positive feelings for the learner, as a result of physical and social growth, which means that his position on the emotional channel moves from the minimum towards the maximum.

- The learner is committed to describing the performance provided by the teacher, thus giving him the opportunity for cognitive growth (Sari Hamdan, et al., 1993, p. 38)

#### 11-2-4 Disadvantages of the task-based teaching method:

- It requires large tools and devices. And it takes a long time from the teacher.

- Difficulty in controlling the movements of students accurately. (Maurice Piéron, 1992, P63)

- It cannot be used with all ages, because it requires learners to have a good background in the skills to be taught.

#### 11-2-5 Advantages of the task-based teaching method:

In this method, learners can practice independence at its first levels, because it provides them with sufficient time for application, and the goal of using this method is to teach skills in conditions that allow for maximum availability for their application.

- Using this method is possible with a large group of students.

- It helps to show individual skills and creativity, and gives enough time to practice different skills. (Abbas Ahmed Saleh Al-Samarrai, Abdul Karim Mahmoud Al-Samarrai, 1991 p. 87.)

- It teaches how to make the right decisions for students

#### 11-3 The teaching method by mutual evaluation

Style d'enseignement par Evaluation réciproque:

11-3 -1. Description of the teaching method by mutual evaluation: If the teaching method by tasks aims to develop the student's independence from the teacher in completing some sports exercises, the teaching method by mutual evaluation aims primarily to activate the evaluation process for the student, by giving him very specific criteria that make him discover on his own the mistakes made by his colleagues while performing different skills, by using some educational means such as various drawings, pictures and audio-visual means. This method deserves all appreciation because it is an important tool In the good formation of learners, it also establishes a new pedagogical relationship between learners themselves, between them and the teacher, as the learner acquires new knowledge, information and skills that allow him to carry out the process of self-analysis "Auto-analyse" This method leads to the development of the path of the communication process between students because the teacher's role is limited to establishing mutual trust between students and also in clarifying some of the tasks assigned to the observed students, in order to reach interventions at the required level. (Maurice Piéron, 1992, p68-69.)

11-3-2. The role of the teacher under the method of teaching by mutual evaluation: As previously indicated, the method of teaching by mutual evaluation is a new method compared to other methods, which changes some of the normal tasks of the physical education and sports teacher so that his role is generally summarized in the following points:

- Accepts the social process between the observer and the implementer as a required goal in education.

- Teaches learners how to give objective feedback.

- Attempts to give feedback to the learner especially during the time allotted for the verbal paragraph.
- Practices a new behavior that requires not communicating directly to the student who is doing the assignment.

- Allocates the time required for learners to learn these new roles for making additional decisions and trusts learners to perform this role.

- The teacher accepts a new reality, which is essentially that he is not the only source of guidance, evaluation and feedback (Mosca-Mosten, 1991, p. 108).

**11.3.3.** *The role of the student in the teaching method by mutual evaluation:* Always referring to the degree of independence, the position of the learner on the developmental channels here is as follows:

- The individual (the student) is more independent than he is in the teaching method by command and the teaching method by tasks, in using social skills with appropriate independence and therefore his direction in this channel is towards the maximum.

- Feedback from the colleague requires honesty, selecting appropriate verbal behavior, patience and empathy, and all of these behaviors come as a result of choices made by the learner in the emotional field, and the individual must learn to practice independence in order to make appropriate decisions in this field, and accordingly it can be said that the position of the learner in this channel is towards the maximum.

- Physical development during the role of the performer in the teaching method by mutual evaluation is similar to the teaching method by tasks, except that the feedback is provided by the observing colleague.

- There is A slight change in the development of the cognitive domain, where the individual (student) moves away from the lowest performance in the horizontal level, because the observer is busy with many intellectual processes such as: comparison, inference, judging the performing colleague, all of this is done based on the evaluation simulation card.

11-3-4 Advantages of the teaching method by mutual evaluation: This method is characterized by a set of advantages, which we mention from other teaching methods that we have seen previously:

- This method allows each student to take on the tasks of application.

- It allows learning about how to give feedback at the appropriate time.

- It gives room for each student to exercise leadership. (Abbas Ahmed Saleh Al-Samarrai, Abdul Karim Mahmoud Al-Samarrai, 1991 p. 87.)

11-3-5 Disadvantages of the teaching method by mutual evaluation: Considering that there is no method free from shortcomings and criticism, what is wrong with this method is summarized as follows:

- Difficulty in controlling the implementation of the accuracy of mathematical skills, which requires large devices and tools.

- Discussions abound among students about implementing various mathematical skills and - There is a lot of reliance on the teacher to solve problems and implement skills.

- The abundance of work pressures on the teacher. (Abbas Ahmed Saleh Al-Samarrai, Abdul Karim Mahmoud Al-Samarrai, 1991, p. 87.)

#### 11-4 The teaching method with an individual

# 11-4-1. Description of the teaching method with an individual plan:

The teaching method with an individual plan, or as Muhammad Saeed Azmi 1996 calls it, "individual programs," is used in sports programs to provide a full opportunity for self-learning that gives the student independence in work. In mutual learning (the previous method), evaluation is used from the colleague and immediate measurement is provided in it, as well as in individual programs, then it is converted to self-measurement, so the student carries out the implementation and evaluation processes, i.e. he becomes close to the self-learning that he is trying to reach, and the teacher's role is to guide and mentor. (Muhammad Azmi Saeed, 1996, p. 51.)

#### 11-4-2. The role of the teacher in the shadow of Individual plan teaching method:

- The teacher appreciates the learner's self-reliance.

- The teacher values the learner's ability to develop self-direction.
- The teacher trusts and believes the learner when adopting the individual plan teaching method.
- The learner is patient, tolerant and tolerates the learner's troubles.

- The teacher's questions are directed towards self-verification using the evaluation simulation sheet. (Sari Hamdan and others 1993, p. (28, 29))

#### 11.4-3- The role of the student under the individual plan teaching method:

- The student works alone and is busy in the process of review and self-examination.

- The learner knows the limits of his abilities and the cases of success and failure.

- The learner uses self-direction as feedback to improve his performance. (Mosca Mosten, 1991, p. 163)

11-4-4. Disadvantages of the individual plan teaching method: They can be summarized in the following points: (Abbas Ahmed Saleh Al-Samarrai, Abdul Karim Mahmoud Al-Samarrai, 1991, p. 100.)

- The inaccuracy of the student's self-assessment, which results in the possibility of making mistakes while performing various motor skills.

- The student works according to the way he wants, even if it is wrong.

- The teacher has a confused image of the students' achievement of various sports skills.

- This method cannot be used with beginner students

11-4-5. Advantages of the individual plan teaching method: This type of method suits skills and activities related to the results of movement more than the movement itself, and it also adds many positives to the educational process, as it

allows students to rely on themselves to make the necessary decisions at the appropriate time and place during the lesson, in addition to developing a spirit of responsibility in them, and then the learner understands how to use the evaluation and saves the effort and time needed for the teacher while doing his work. (Abbas Ahmed Saleh Al-Samarrai, Abdul Karim Mahmoud Al-Samarrai, 1991, p. 100.)

11.5. How to choose a teaching method: Studies on the effectiveness of teaching methods remain very limited. At first glance, it seems that all methods are on the same footing, but is this true?

There are criteria that must be taken into account when choosing a specific teaching method from among all teaching methods.

The nature of the objectives to be achieved: all methods work to achieve cognitive objectives, but the choice is made through the various circumstances surrounding the educational process, funds, hourly volume, sports structures and facilities, the personality of the teacher ... etc.

High-level psychosocial goals such as critical thinking, teamwork ability, etc. can be easily achieved through motivational teaching methods, such as demonstration and practical work.

Students' Capacities: Few experimental studies have focused on the subject of teaching methods, but both "Davies 1982" and "Dupont 1971" have been interested in this aspect, as they found that students who are less capable of performing some tasks initially prefer direct methods (the command teaching method), while more capable students prefer more free and independent methods.

Students' Learning Style: Research by "Pasck" and "Scot1976" Failure to respect students' learning style inevitably leads to their failure. In this sense, we find that the correct diagnosis of students' learning styles allows for the establishment of a successful and effective pedagogy in the field of teaching in general and teaching physical education and sports in particular.

#### 12. Learning and Education

### 1- Learning and motor learning:

12.1-1- Learning: Learning includes everything that an individual acquires of knowledge, meanings, ideas, trends, emotions, tendencies, abilities, habits, motor and non-motor skills, whether this acquisition is intentional or unintentional. Learning is the useful behavior based on experiences.

Learning indicates a change or modification in an individual's behavior, such as acquiring new knowledge or information or acquiring the ability to perform certain skills as a result of performing a type of activity. (Marwan Abdel Majeed Ibrahim, 2002, p. 80)

Gates defines the concept of learning, quoting the symbolism of the stranger, as follows:

Learning can be viewed as the process of acquiring the means to help satisfy needs and motives and achieve goals. It often takes the form of problem solving. Through this definition, we understand that learning is a process through which means are acquired that help the individual performing it reach his goals and satisfy his desires. (Ramziyyah Al-Azib, Learning, 1967, p. 11)

As for Guilford, quoting Ramziyyah Al-Gharib, he defines learning as follows:

Learning is nothing but a change in behavior resulting from stimulation. This change in behavior may be the result of the effect of simple stimuli or may be the result of complex situations (Marwan Abdul Majeed Ibrahim, 2002, p. 80)

*Learning*: Guilford defined it as a change in an individual's behavior as a result of stimulation and experience, i.e. it is a result or outcome of the learning process. It may be learning abilities or skills and may occur intentionally or unintentionally with the aim of causing a change in the learner's behavior, whether behavioral, cognitive or skill-based. (Ramziyya Al-Azib, Learning, 1967, p. 11)

*Teaching:* means that the teacher seeks to bring about changes in the learner, i.e. it is not an end in itself, but rather a means to achieve learning and bring about behavioral, cognitive, physical, skill, and psychological changes. It is a project that includes a set of activities and decisions taken by the teacher with the aim of the learner's growth (Zainab Ali Omar, p. 50)

#### 11.1-2- Motor learning:

Motor learning in its general concept is a change in performance related to positive practice, i.e. the athlete's performance activity creates needs that prompt him to carry out such an activity (Osama Kamel Rateb, p. 21)

Motor learning means a change in performance or motor behavior as a result of sports training and not as a result of maturity or the influence of some stimulant and non-stimulant drugs and other factors that affect performance or motor behavior with a specific temporary effect.

We should take into account that the change in the performance or motor behavior of an athlete, which we mean by motor learning, depends on the athlete himself doing an activity, i.e. performing sports training. In this regard, Saleh Qadous, Sami Abdel Qawi, Fathi Al-Zayat, Imam Hamida, and others depend on the fact that learning is a process that begins with an intellectual motive or with the innate or acquired needs of the soul, whether material or emotional, during which there is a permanent relative change and modification in the individual's ability, potential, behavior, madness, or ability to learn cognitively, emotionally, as a result of practicing, experiencing, or training a group of activities based on reinforcement, which is an internal process that occurs as a result of the individual's presence in a specific educational situation (Hamzat Wasl, 1973). The concept of learning is also defined as: Learning is a process of acquisition and gain that leads to modifying the individual's behavior, and its effects appear in the following areas: - Mental domain: acquiring information, ideas, and concepts. - Emotional domain: forming emotions and attitudes. -

Tendency domain: acquiring habits, methods, and skills in work and performance (Marwan Abdel Majeed Ibrahim, p. 82)

## 11.1.3. Learning Theories:

Many theories have emerged in the field of "learning psychology" which are called new behaviors, meaning that they follow the basic lines of "Watson" and thus the theories of learning that have attracted the attention of scientists and thinkers throughout the ages can be divided into the following

*First: The theory of mental storage*: This theory considers the mind a "store and container" in which information is stored through inputs, as storing information is considered a primary goal of education and the mind is capable of storing a lot of diverse and varied information through the senses, whether during the event itself or after it and for a short period.

**Second:** The theory of mental training: Learning is considered an effective tool for training the functions of the mind such as ... etc. of those abilities which specialize in judgment, memory, thinking, and imagination ... etc. of those abilities which specialize in the mind.

Accordingly, the various subjects that the student studies in school help to strengthen him and advance the various mental functions. Learning arithmetic, algebra and geometry trains and strengthens the ability to think, law trains and strengthens the ability to judge, drawing and handicrafts trains and strengthens the ability to imagine...etc. These are subjects that are decided and taught to pupils and students in schools and universities with the aim of advancing the capabilities of the human mind. In the sports field, these abilities can be strengthened, trained and advanced through the sports skills of games, events and various competitions and training them as follows: The tactical skills in the field of games such as football, basketball, volleyball and handball, learning and training them strengthens and flexes the "ability to think" based on the fact that they are skills that require a great deal in drawing up and implementing game plans. (Stephen B. Klein, 2003, p. 82)

*Third - Edwin Guthrie's theory:* Guthrie believes that the learning process can occur in conjunction, and thus indicates that the occurrence of the stimulus and response together in one attempt represents the basic and healthy conditions for learning to occur. Guthrie also adds that reinforcement is of great importance in his theory, as reinforcers work to change the environment of the stimulus and enjoy the association of any other responses with the stimulus. (Bastawisi Ahmed, 1996, p. 62)

*Fourth - The theory of learning through experience:* In order for the learning process to occur, the change in the individual's behavior must be the result of experience and practice. The change that is temporary or resulting from a temporary stimulus or a specific immediate situation or an illness or drug, etc. is not considered learning, it is performance. Thus, learning is defined as: "any fixed relative change in the behavioral outcome based on experience." (Stephen B. Klein, 2003, p. 84)

#### Fifth - Other theories:

**The theory of Edward Tolman (1886-1959)** Tolman was convinced of the rationality between the stimulus and the response in order for the learning process to occur, but he was not convinced that this is considered all the aspects that affect learning. "He emphasized in particular the idea of the association between the stimulus, meaning that Tolman paid special attention to the way in which living organisms belong in their understanding of environmental events that lead to what follows. Such a relationship may include "reinforcement", but it can also grow in non-reinforcement situations.

The theory of B. F. Skinner All of Skinner's interest, born in (1904), was his attempts to reach the possibility of modifying behavior through

Dealing with the conditions of reinforcement, and thus Skinner built his theories in learning.

*Physiological theories:* The owner of this theory is 'Ronald Hebb, born in 1904', and this theory is called the theory of physiological learning, as 'Hebb' explained that learning can be accompanied by electrochemical changes in One of the neural connections, and these connections are gaps between the cell axis and the next connection, thus facilitating the transmission of the signal sequence through the synapses again. (Jaber Abdel Hamid, 1976, p. 213)

*Cognitive theory:* Cognitive learning theories are concerned with higher mental processes such as attitudes, beliefs and perceptions, and thus the owners of these theories study the methods of developing the individual using the laws of the starting point and solving problems.

**Developmental theories**: Jean Piguet, born in 1896, created the theory of the four stages of development, which shows how each stage can be linked to the other, and the summary of the developmental theory emphasizes the interaction between physical maturity and mental growth.

There are also many other theories that have tried to explain the learning process, and below we present them briefly, which can be used in learning motor skills, training on them and mastering them.

The following table shows a comparative study between the different learning theories mentioned above.

Theory	Basic Determinants	ween the different learning the Applications	Situation/Activity
Conditioned learning	- Focuses on the nature of the educational environment	Using motivations, barriers, or other supports	Stimulus/Response
Insight learning	- Relationship between stimulus and response	- The importance of the parts that make up the whole	- Insight/Performance or Perception
Self-control	- Conditioned response	- Taking into account individual differences Forming educational experiences to solve problems	- Input/Output
Information processing	- Focuses on personal perception of the environment and the dynamic interaction between the individual and the environment	- Giving importance to the whole before paying attention to the parts	Information/Stake
Social learning	- Linked to the processes of perception, thinking and problem solving	- Taking into account the learner's use of his ability to control and self-control	- Model/Behavior

### table n 01: shows a comparative study between the different learning theories mentioned above.

### **11.2.The learning process:**

Given the importance of learning in the learning process, experts and educators have stressed the need to pay attention to educational work as an activity that aims to bring about a change in the knowledge, information, skills, tendencies and attitudes of individuals. The educational process refers to the experience that brings together the teacher and the learner in the educational situation, so that this experience results in the interaction that leaves its impact on the learner, as he acquires new knowledge, information and experiences every time. It can be said that there are two aspects of the learning process:

• The learning process, which is related to the activities and events that the learner performs for the purpose of learning.

• The teaching process, which is related to the events, activities and programs that the teacher performs.

#### 11.3. Definitions of learning:

Scientists and experts have differed in giving a single definition of learning due to different points of view. Accordingly, we review some of the most important of these definitions:

Woodworth defined it as an activity issued by the individual that leads to modifying his behavior. Herbert Clausmier defined it as a change in behavior resulting from experience, training, or the like. As for what results from pathological conditions or taking strange substances such as drugs, it is not called learning. Witting defines it as any fixed relative change in the behavioral outcome of the living organism resulting from experience. Gates defines it as the steady change in behavior that is linked to the sequence of the situation on the one hand and the repeated efforts to achieve the goal and satisfy the motives on the other hand. (Sayed Muhammad Khair Allah, Mamdouh Al-Kanani, 1983, p. 40)

#### 11.4. Characteristics of the learning process:

The learning process, as Al-Kanani indicates, has certain characteristics, the most important of which are: (Marwan Abdul Majeed Ibrahim, 2002, p. 80)

1. Learning is formation Hypothetically, the learner is a hypothetical formation that we infer from its effects and results, which are represented in changing and modifying behavior.

2. Learning is a process of change. In the early stages of learning a certain skill, the individual's responses are scattered and irregular, lacking consistency and regularity. Through proper training, unnecessary responses are reduced and irregular responses are deleted until the individual performs the skill with ease and simplicity.

3. The change caused by learning must be characterized by relative continuity.

4. The change caused by learning is in performance (what is apparent) or in the possibility of performance (latent learning)

11.5. Learning goals: Many scientists believe that learning has specific goals that lead to the development and expansion of the individual's perceptions and increase his information and experiences in order for him to act properly in the circumstances and situations he is exposed to, which are:

Learning to gain experience, develop attitudes, develop skills, mental skills.

### 11.6. Learning conditions:

*Motivation*: It means the latent energies of the living organism that drive it to perform meaningful behavior to achieve internal balance so that it can then adapt to the external environment, through which it achieves its goals

*Practice*: Practicing different types of behavior is an important basis in the learning process because learning does not occur without practice

*Maturity:* It is a certain level of growth in the internal factors of the living organism, and thus it is due to the internal growth of the individual, and not due to the factors of learning and acquisition, and it means reaching the physical and mental characteristics that appear at different times to the degree of maturity

*Learning obstacles*: Ahmed Sweidy believes that learning has a set of obstacles that prevent learning in the correct, sound and effective way, and he mentions among them: (Musa Ahmed Sweidy, 2013, p. 33)

Short class time. Crowding and large number of students in the classes.

Lack of tools and devices

Fear of students and their lack of participation in learning activities.

Lack of teachers' skills sometimes.

Learning and education and the difference between them:

### A) The meaning of education:

Stephen Corey defines it as a process of intentionally shaping the individual's environment in a way that enables him to learn to perform a good behavior, or to participate in a certain behavior, under specific conditions.

Abdullah Al-Rashdan and Naim Jaanini (1994) define it as: a process of stimulating and exciting the learner's mental powers and his self-activity in addition to providing the process of stimulating and exciting the learner's mental powers and his self-activity in addition to providing the appropriate atmosphere and capabilities that help the learner to make a change in his behavior resulting from internal and external stimuli, which confirms the occurrence of learning. (Rafida Omar Al-Hariri, 2010, p. 23)

# B) The meaning of learning:

The concept of learning includes all types of human learning, so that there is no human activity that is not devoid of learning, and the individual acquires the behavioral patterns in which he lives through learning. Learning is an activity that a person performs to acquire experience and knowledge. The student learns to read, write, and calculate, and the student of physical education and sports learns sports skills and movements, and the medical student learns the anatomy of the human body... etc. All of this is part of the learning process.

The learning process is the second aspect of the educational process, and it comes after the first aspect, which is called the education process. Teaching is a social process during which the process of education is transferred, whether this is information, value, movement, or experience, from a sender, whom we usually call the teacher, to a recipient, who is the learner. As for learning, it is a psychological process that occurs from the interaction of the student's idea with the learning material. (Najjah Mahdi Shalash and Akram Muhammad Subhin, 2000, p. 18)

Based on the above, we conclude that the educational process is an interactive activity between learning and teaching that leads to a change or modification in the individual's behavior. In this regard, Al-Ajili Sarkaz and Naji Khalil (1993) mention that there are points of convergence and difference between them, which are as follows:

1. Learning is a self-process related to changes in behavior as a result of the individual's activity, while teaching is an interactive activity between the learner and the mediator in a situation that results in behavioral changes. Accordingly, it can be said that teaching results in learning, but not all learning results from teaching. Learning can occur without any intentional external teaching.

2. Teaching may occur by the individual organizing the elements of the situation or through the mediator (teacher) who organizes the parts of the situation, while the second case applies in most cases to teaching.

3. Previous experiences are an essential part of the teaching and learning processes. In learning, one employs his previous experiences to confront a new problem, while in education, learners' previous experiences are the basis for building subsequent experiences. The relationship between education and upbringing: Some may confuse the concept of upbringing with the concept of education as a result of the overlap between the two processes of upbringing and education and their relationship to the learning process. Upbringing is more general and comprehensive than education and is derived from the verb rabba and yarbi, and the meaning of rabba so-and-so is to nourish and raise him, and rabba means to develop his physical, mental, moral and ideological powers. Education means developing and advancing the human being to reach the perfection of what is possible in an integrated manner. Education is part of the educational

process, and it is the process of providing the material and psychological conditions that help the student to interact actively with the elements of the environment in a specific situation. The teacher carries out this process using the simplest possible methods. Education is an intended learning situation. Education linguistically is derived from the verb "to teach" and its present tense is "to teach." It is an organized series of activities that the teacher manages and in which students contribute theoretically and scientifically. Successful education is that education that results in effective learning. The teaching method is a means of obtaining a result. The results are the criterion for success in education. Education is part of the educational process. (Rafid Omar Al-Hariri, 2010, p. 19)

#### 11.7. The relationship between learning and performance:

We have talked about learning as a phenomenon that is difficult to describe... and measure directly, which requires accuracy when observing it to evaluate it objectively to infer whether the learning process has occurred or not. Learning has been defined as: "A fixed relative change in the behavioral outcome of the individual based on experience and expertise." As for performance, it is considered a clear image of behavior. Any change in the behavior of the individual is considered performance and can be observed. And its measurement is direct, and accordingly performance can be defined as follows:

**11.8. Definition of performance:** "A temporary change in behavior and achievement that can be measured directly and can occur through learning or without it." Thus, any change in behavior is considered performance... and not every change in behavior is considered learning, and thus different responses... are not necessarily considered an indicator of the occurrence of the learning process, as there are other experimental and defensive variables... etc. that may affect performance and may hide the actual level of learning. (Bastosi Ahmed, 1996, p. 50)

#### 11.9. The relationship between the type of learning and the method of practice

The method of practice varies according to the type of education used in the educational situation. In receptive learning, the learner receives the learning material in the form of a set of principles or some relationships, then practices learning this material and attempts to recall it later, either literally or by recalling parts of it.

The results of early research conducted to study the relationship between the type of learning and the method of practice have shown that increasing the recitation of the learned material helps in learning somewhat meaningless materials and remembering them more, but the effect of recitation is weak in meaning-based learning, where the learned material is recalled after repeating its recitation. (Anwar Muhammad Al-Sharqawi, p. 264)

#### 11.10. Definitions of movement:

(Gancey and Solter) define it as: the movement or rotation of the body or one of its parts in a certain direction and at a certain speed, using a tool or without it, and it occurs as a result of muscle contraction, which results in movement of the whole body or one of its parts.

And it is defined by (Muhammad Abdul Rahman and Talha Hussein): It is an inevitable result of the complex activity of a large group of muscles that work according to a specific system with no interference from it, and the nerve signals to and from the central nervous system, as it is responsible for voluntary movements, play the main role in dominating this complex system of work, so the muscles and joints are nothing but human tools that are harnessed to the orders of this system for the purpose of accomplishing the various tasks with which they are assigned. Movement systems: The body's movement has three main systems that work in an interconnected manner and cannot be separated, as follows: The muscular system, the joint system, and the skeletal system

How movement occurs: Movement occurs physiologically through communication between the sensory organs and the motor organs. The basic working unit that produces movement consists of a nerve that extends from the spinal cord and connects to a number of muscle fibers in the limbs or trunk of the body. The nerve and muscle fibers form what is called the movement unit. The motor unit is the functional unit in the neuromuscular system, which consists of a single motor neuron with all the muscle fibers fed by a single nerve cell. Due to the nerve current of an electrical nature, it is transmitted from one nerve cell to another, and the electrical impulses that pass through the nerve cause muscle contraction, meaning that the movement that a person performs comes through electrical signals that pass through the nerves and reach the muscles, joints, and tendons, ordering them to perform the required movement. Factors affecting movement:

- Functional foundations of the body: The integrity of the functional systems of the human body directly affects the performance of movement, the healthier the body's systems are, the better the performance of movement.

- Psychological factors: The psychological state of a person has a great impact on the performance of movement, as preparing the athlete well psychologically is one of the good characteristics in the process of learning and training motor skills.

- Social and environmental factors: There is a great impact of the social environment surrounding the individual, as well as the environment in which he lives, as performing motor duties requires the individual to deal with other individuals and that his performance be consistent and compatible with the members of his group.

- Genetic factors: Some scientists and experts believe that the role of the educational process and movement performance is determined by the possibility of improving the individual's level. For example, determining mental abilities before the child's birth, which leaves the leadership to the individual's internal systems in the field of movement and learning.

- Illness: The performance of sports movements and skills is characterized by a strong and healthy body, and movement is directly affected by that, as the sick person cannot perform movements or motor skills at the required level. **12. Motor learning:** 

#### 12.1. The concept of motor learning:

Motor learning is the field of study that specializes in describing how individuals learn motor skills. The individual begins motor learning from birth when he learns to breastfeed, then he tries to get things, hold them and try to play with them, which indicates that the child begins to collect his new motor experiences through his interaction with the environment in which he lives, then learns to walk after his legs grow and have the ability to bear the weight of his body, then run, and thus he works to collect motor experiences and the more his motor experiences and experiences increase, the more his motor stock of information and knowledge increases, and this works to improve and develop his motor performance, as motor learning is that aspect of learning in which movement plays the main role. It is summarized in learning a new movement, refining it, purifying it and working to stabilize it, and thus motor learning is one of the important branches in the general educational process that distinguishes the entire life of a living being from birth to death. Definitions of motor learning:

(Herman Redar) defines it as: the process of improving motor coordination by specific internal and external factors, aiming to acquire motor skills and physical abilities, and the ability to act motorically in different situations, and (Schnabel) defines it as: the acquisition, development, consolidation and retention of motor skills that are linked to the general development of the human personality, and occurs in particular in connection with the acquisition of knowledge and the development of coordination and physical abilities and the acquisition of motor characteristics, as for (Grossing): he defines it as the process of changing the individual's motor behavior, which results mainly through actual practice of performance, and is not the result of temporary processes such as fatigue, maturity or the use of stimulants, and other factors that temporarily affect motor behavior. (Marwan Abdel Majeed Ibrahim, p. 81)

#### 12.2. Initial principles of motor learning:

- Clarity: The main goal of the educational process is to achieve the set goals, as each educational stage has a clear goal, which requires good selection of educational methods and means. Which makes it easier for the learner to understand the essential and basic aspects related to implementing the sports movement.

- Ease: Practicing sports movements and skills with ease and simplicity helps in speeding up learning, the easier and simpler the movement or skill is presented at the beginning, the more the learner can understand and comprehend it, which helps in developing skillful movements and planning and mental abilities.

- Gradual: Gradual progression of the difficulty of movements and sports skills from easy to difficult, and from simple to complex, helps to understand, perceive and comprehend the movement or skill, and thus will gradually implement the required vocabulary in the performance according to the learner's limits in his capabilities and functional abilities. 4-Suspense and excitement: One of the important methods to increase the learner's motivation towards the educational process is suspense and excitement, and the need for them increases when teaching sports movements and skills, and it is important to prepare the learner an atmosphere filled with suspense and excitement to practice the game in order to reduce the severity of the physical and psychological burden on the learner's shoulders as a result of his learning process and so that his desire to learn increases.

#### 13. General conclusion:

To get students to a correct, accurate and scientific motor learning process during the learning unit of physical education and sports, a set of conditions and standards must be available in choosing the appropriate method and style for motor learning, which we mention below:

#### First. The suitability of the method and style for the specific goal:

The choice of the teaching method and the means used to deliver the content must be made in light of the specific goal of the lesson. If the goals are vague and unspecified, we find that the teacher is prone to distraction and confusion in choosing the methods and means he chooses. When one of the goals of the lesson is a goal such as developing a team spirit among students, for example, such goals make the teacher confused and does not know how to reach his decision regarding choosing a method and means for teaching. Is it suitable for teaching? Is it suitable to achieve that goal to make all the students in the class work as a group or to divide the students into groups? Is it better to use an indirect method in which all students participate in finding solutions to a problem raised by the teacher? The same applies to the means. Is it better to show recorded tapes or use a worksheet in learning or any means that become more useful to achieve the previous goal. (Mirvat Ali Khafaga, Mustafa Al-Sayeh Muhammad, p. 241)

Such an atmosphere of confusion can be greatly reduced or the goal has been formulated in a specific and precise manner, i.e. in a procedural behavioral manner.

#### Secondly. The suitability of the method and style to the content:

If the suitability of the method and means to the specific goal is a basic condition that must be available in them, then it becomes logical to suit them to the content that the teacher is planning to teach, since the content after translating the goals. Also after the content of the daily lesson is a tool to achieve the goals specified for it, and therefore the method and means are two auxiliary tools to achieve the specific goals for it, and therefore identifying the content, its structure and its relationships is a necessary matter, as this matter puts the teacher in a better position in which he can choose the appropriate and exclude the inappropriate.

For example, one skill may suit the learning by receiving method using the direct method in teaching, but it may not suit another skill, or the teacher may see that it is better to give a question that arouses the learner's curiosity to search for the appropriate motor answer to this question and pushes him to search for the required performance, or he may mix the two methods in teaching the content, and the same applies to the means, as he may see that it is appropriate to show a tape recorded on this skill, or he may see that this should be postponed until after reaching the form of the performance,

then this is followed by showing a tape of the movement or a model of the movement or skill.. (Mirvat Ali Khafaga, Mustafa Al-Sayeh Muhammad, p. 241)

# Thirdly. The suitability of the method and style to the levels of the students:

In this regard, the teacher does not choose any method or means to teach his lesson, but rather this choice is subject to the extent of his awareness of his students in terms of their previous experiences, and this choice is also subject to the extent of his awareness of the cognitive processes that the student can practice during teaching.

## Fourth: The suitability of the method and style to the level of maturity of the students:

The method followed by the teacher in teaching the subject must be suitable for the students' work and interests at that age and for their level of mental and physical maturity. If the method is above the level of maturity of the students, it will be difficult for the teacher to motivate young students who are not good at reading and using the performance card. The teacher must take into account the individual differences between the students and be aware of the academic level that the students have reached or be fully aware of their level of academic achievement and previous experiences.

### *Fifth: The suitability of the method and style for the teacher:*

Each teacher is unique in his personality and has advantages that may not be available in others. Some teachers find the method of indoctrination, while others are more successful in teaching small groups. Some teachers are also skilled at presenting the skill in a way that attracts the attention of students. There are teachers who have sufficient background in the content they teach, while other teachers do not have such background. Thus, the abilities of teachers and the characteristics of their personalities vary. A good teacher is one who is aware of his abilities and the limits of his capabilities, so he chooses the method that suits those qualifications so as not to expose himself to failure or frustration. *Sixth: The suitability of the method and style for the available time:* 

The teaching method usually includes the teacher explaining, lecturing, linking, applying, reviewing, and asking questions that require thinking. This depends to a large extent on the nature of the subject and the relative time available to teach it. In our schools, we find that the curriculum is divided into study units distributed over weeks, and each activity has a number of lessons allocated to it. This activity must be completed within the specified time, regardless of giving some details or explanation. The skill is adequate, which results in a difference in the knowledge of the skill and its comprehension by students who vary in their abilities and readiness. Under these circumstances, there are no restrictions on the lesson to adapt teaching to the time available to it until it is trained in an organized and effective manner. (Mirvat Ali Khafaga, Mustafa Al-Sayeh Muhammad, p. 242)

**Seventh - The suitability of the method and style to the material capabilities:** When the teacher chooses one of the teaching methods, he must take into account the material capabilities available to him and his students. It is not permissible to adopt a teaching method that uses a method that requires a large area for the playground while the school lacks this large area. The teacher must also take into account when choosing the method that it is compatible with what is available or can be provided by the school or students with financial burdens. (Mirvat Ali Khafaga, Mustafa Al-Sayeh Muhammad, p. 243)

# Eighth - The extent of learner participation:

What is meant by this is that the method must include opportunities in which the learner plays certain roles. Perhaps the usual method in teaching physical education and sports is based on the teacher presenting and explaining the skills while the learner's role is limited to practicing what the teacher asks of him, and the same thing applies to the method chosen by the teacher and does not involve the student in that. Thus, the direct method using the reception method becomes the method that is suitable for learning everything, and then the learner does not have sufficient opportunity to participate in educational situations, and thus the opportunities for interaction between him and the teacher on the one hand and the material contained in the lessons on the other hand decrease. Therefore, one of the conditions that must be met in choosing the method is to provide opportunities for students to participate more.

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