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The Effect of the Aplton Model in Teaching Some Basic Skills on the Floor Exercise Mat

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Abstract

The aim of this research is to know the effect of the Ableton model in teaching some basic skills on the ground movements mat (straight forward roll, handstand, Arabic jump, front hands jump). We used the experimental design for two equal groups with pre- and post-tests. We chose from the College of Physical Education and Sports Sciences intentionally (the intentional method) to conduct the experiment. The control and experimental groups were chosen by simple random method (lottery). The control group (the model followed) was Section H (18) and the number of sample members was (15) students, the experimental group (Ableton model) was Section B (21) and its number was (15) students, the students excluded from the two sections were (9) students. The Appleton model has a positive effect on the excellence and raising the level of the experimental group students in learning the basic skills (the straight front step (dive), standing on the hands, the Arab jump, and the front hands jump) on the floor exercises mat for artistic gymnastics.

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1. **Research Definition**
    1. **Introduction and Importance of Research**

The present era is witnessing a revolution in technology, communication, and information, with numerous changes occurring in various aspects of life, particularly in the field of education. This necessitates the adoption of contemporary educational philosophies, including teaching methods, models, and strategies that emphasize the construction of knowledge through the active effort of the learner in acquiring knowledge to achieve meaningful active learning. In this regard, the responsibility of the teacher in this stage of contemporary scientific development is to supervise, facilitate, and guide the process (Al Diwan, 2009) by encouraging learners to acquire, retain, and utilize knowledge. Consequently, the role of the learner evolves into that of an inquisitive thinker who actively seeks, investigates, and constructs knowledge by connecting prior knowledge with new learning. This integration of prior and new knowledge fosters a meaningful learning experience that empowers individuals to face the challenges of life with a proactive attitude toward the future. To facilitate this transformation, it is essential to adopt modern teaching methods and models (Ghazi et al., 2024) that align with the educational environment and suit the nature of academic subjects, including theoretical and practical aspects of physical education. The Appleton model, a constructivist approach, is one such example that contributes to the development of knowledge during the teaching process, as supported by studies (Aldewan & Muhammad, 2014) (Abdul Hussein et al., 2023)

And the study (Jurani & Aldewan, 2014) in teaching some basic skills on the mat of floor movements. Also, the (Appletron) model is one of the appropriate models in teaching and depends on mental and skill processes that interact with experience, and seeks to discover new relationships and achieve goals by the influence of external and internal motives or both together (Musharraf & Al-Hadithi, 2022)

The importance of applying the Aptleton model in physical education and sports sciences / Basrah University for the subject of artistic gymnastics for students and providing a teaching model that may help in teaching some basic skills on the floor exercise mat in artistic gymnastics for students directs the attention of specialists in the field of teaching methods to the importance of the stages of the Aptleton model.

1-2 Problem of the Research

Physical education is part of the general education system and operates according to an educational curriculum. Therefore, those working in this field must keep up with the latest developments in teaching methods and approaches. There are two types of learning styles: the first type employs methods and strategies that involve the student and give them a leading and effective role, which serves as a great motivator for learning through diversity, flexibility, and greater participation, allowing them to showcase their innate abilities. The second type relies on the dominance of the teacher, rendering the student a passive recipient of information and depriving them of genuine learning opportunities.

Most of the changes that occur during the learning process are through the information provided to the learner through his learning, and this information takes several forms (theoretical and practical side). It must be substantive with the optimal investment of teaching methods, its methods, strategies and field experience in conveying information (Nahida, 2008)

Through this, we conducted a study using the Aplton model to teach some basic skills in artistic gymnastics to students of the College of Physical Education and Sports Sciences, University of

Basra. Due to the multiplicity of these skills, their degree of difficulty, and their interconnection, and based on the fact that there may be a specific model that is better than another, and whether relying on one model can achieve all the lesson goals, therefore, it is necessary to diversify the models and know the most appropriate ones. This will lead the teacher to be more flexible, accurate and influential in the teaching process. Based on this, the research problem can be formulated in a question: Does the Aplton model help in learning some artistic gymnastics skills on a floor exercise mat by involving students positively in achieving the educational unit objectives with a positive attitude that interacts with the teachers instructions in the skills that can be presented to him?

1. **Research Objectives**
2. Prepare educational units according to the Aptton model to teach some basic skills on the floor gymnastics movements in artistic gymnastics for students.
3. Identify the impact of the Aptton model in teaching some basic skills in artistic gymnastics for students.
4. Identify the differences in the level of teaching performance of some basic skills on the floor gymnastics movements in artistic gymnastics for students in the pre and post tests for the two groups (experimental and control).
5. Identify the differences in the level of teaching some basic skills (front straight roll, handstand, Arabian vault, and front handspring) on the floor gymnastics movements in artistic gymnastics for students between the two post-tests for the two groups (experimental and control).
    1. **Research Hypotheses**
6. There are significant differences between the pre and post-tests of the two groups (experimental and control) in teaching some basic skills on the floor gymnastics movements in artistic gymnastics for students in performance, in favor of the post-tests.
7. There are significant differences between the two post-tests of the two groups (experimental and control) in performance, in favor of the experimental group.
8. The proposed educational units using the Aptton model have a positive impact on the level of teaching performance of some basic skills on the floor gymnastics movements for the research sample.

1. **Research Fields**

1-5-1 Human field: Third stage students - College of Physical Education and Sports Science - University of Basra for the academic year (2023-2024)

1-5-2 Spatial Domain: Gymnastics Hall at the College of Physical Education and Sports Sciences, Basra University

1-5-3 Temporal Domain: 11/13/2023 until 2/29/2024.

1-6 Term Definition

1. Appletons Model: Appleton is a model that is characterized by four constructivist features: sorting ideas for the learner, processing information, searching for it, and social racing.
2. Appletons Procedural Model: It is a set of teaching procedures in which teaching is given to the third stage students (the experimental research group) in the College of Physical Education and Sports Sciences according to four stages: 1- Invitation 2. Exploration 3. Finding interpretations and solutions 4. Decision-making.

3- Research Methodology and Field Procedures

3-1 Research Methodology: The experimental methodology was used for its appropriateness to the nature of the problem to be solved.

3-2 Society and research sample: To achieve the goals, the research community was chosen in a deliberate manner, namely the third stage students at the College of Physical Education and Sports Sciences - University of Basra, with a total of (120) students, in (8) divisions. The **research sample** was chosen in a simple random manner (lottery), the control group (the followed model) Division (E) and the total of individuals (15) students. As for the experimental group (the Ableton model), they are the students of Division (B) and their number is (15) students. The exploratory experiment reached (6) students who are outside the sample, so that the sample is (30) students distributed equally among the two groups and by (25%) of the original community.

3-3 Homogeneity of the research sample : Homogeneity was performed in terms of variables (length - mass - age) using the coefficient of variation for the two groups (experimental and control). The values of the coefficient of variation ranged between (1-30). The closer the values of the coefficient of variation are to (1), the higher the homogeneity among the individuals of the sample. And the higher the values are above (30), the more the sample is heterogeneous (Wadih & Hassan, 1999)

Shows the arithmetic means, standard deviations and coefficient of variation values for the two groups (experimental and control) in the variables (height - mass - age)

No.	Variables	Groups	Unit of Measurement	Means	Standard Deviations	Coefficient of Variation
1	Height	Experimental	cm	174.3	4.48	0.025
		Control		176.18	5.12	0.029
2	Mass	Experimental	kg	68.32	1.93	0.028
		Control		69.21	1.83	0.026
3	Age	Experimental	Years	19.85	0.62	0.031
		Control		19.61	0.65	0.033

Research Sample Equivalence:

To avoid factors that may affect the results of the main experiment and to verify the equality of the two groups, we analyzed the data related to the results of the pre-test for the sample on Monday and Thursday, 11/16-13/2023. The research sample received information and instructions before applying the tests. Then, the pre-tests were applied with the help of the assistant work team. Afterwards, the (arithmetic mean and standard deviation) for the two groups in the pre-tests were found, and the calculated (T) value for the research variables was extracted. It turned out that the significance level values are greater than (0.05), indicating no significant differences between the two groups in the research variables.

Pre-test equality of the results of the experimental and control groups in some motor skills of artistic gymnastics on the carpet of ground movements

Statistical treatments Test name	Unit of measurement	Experimental group		Control group		Calculated (T) value	Sig	Statistical significance
		X	±SD	X	±SD			
Forward straight leg (dive)	Degree	4.37	0.29	4.33	0.29	0.52	0.264	Significant
Handstand	Degree	2.88	0.37	3.32	0.45	2.87	0.308	Significant

Arabian salto	Degree	3.00	0.30	3.14	0.28	1.28	0.910	Significant
Front handspring vault	Degree	2.71	0.34	2.92	0.15	2.20	0.002	Significant

* p value below the level of significance (0.05) at the degree of freedom (N-2) (30-2=28)

3-5 Information gathering tools : Arabic and foreign sources. Technical performance evaluation form for motor skills. The Internet. Testing and measurement. Medical scale to measure weight. Tape to measure height. Laptop type (Dell). Video recording machine type (Sony Digital). Sponge mattresses. Gymnastics mat with an area of 12×12. Flash type (GM). Laser discs (CD).

3-6 Motor Skills Assessment

We have adopted the third-stage curriculum and the sequence of movements in it so that the research sample can keep up with the rest of the students in the prescribed school curriculum. As for the skills test in artistic gymnastics, it included the nature of performing the skill (straight front somersault (dive) - handstand - Arabian vault - front handspring vault). Each skill is evaluated by (5) referees accredited by the Iraqi Gymnastics Federation to evaluate the basic skills of the two groups (control and experimental) by watching (CDs) distributed to them. The evaluation form for gymnastics championships, which includes the judges score (5) in addition to the referee, was used to determine the consistency of the judges scores. Then, the referee cancels the highest and lowest scores and adds the middle three scores and divides them by (3) to get the players final score, as shown below:

$$\frac{\text{Sum of the three middle grades}}{3} = \text{Final score of the player}$$

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3-7 Exploratory Experiments

To reach the best way to complete the field research procedures and because of their importance, the exploratory experiments were conducted as follows:

3-8 For the first pilot experience (skill test)**

The researcher conducted the first pilot study on Thursday, 11/23/2023, with (9) students from outside the sample. The purpose of the first pilot study was to ensure the efficiency of the devices and tools, to know the efficiency of the assisting team, to identify the difficulties that the researcher may face when conducting the tests and to address them, to know the time required to conduct the tests, and to extract the scientific coefficients for the tests of the prepared curriculum.

3 -9 Second Exploratory Experience**

The experiment was conducted on Thursday, 11/30/2023, using the Appleton model on the excluded sample of (9) individuals in the gymnastics hall at the college. The aim of this experiment was to determine the suitability of the presentation content for the research sample and to understand the method of work by giving a clear picture of how the curriculum is implemented, as well as the ability of the sample individuals to absorb and apply motor skills and observations that may be encountered in the main experiment.

3-10 The Basic Experiment (Curriculum): We reviewed Arabic sources, the opinions of specialists and experts in the field of teaching methods, motor learning, testing, measurement, and gymnastics in the curriculum that was developed, and then implemented these steps as follows:

- **Introduction stage (invitation):** This is the stage of sorting out the learners ideas, and it is the starting point of constructivist learning based on the principle that: **(new learning should build on old learning)**. This stage involves diagnosing and sorting out learners ideas before presenting the content. Various teaching methods are used in this stage, such as concept maps, interviews, or question-and-answer sessions, to uncover the learners prior knowledge and concepts. This allows the learner to interpret the events and experiences presented to them and gain a comprehensive understanding of their perspective and behavior.
- **Exploration stage:** After introducing the material theoretically in the invitation stage, the teacher explains or describes the skill and introduces students to the concept maps and their importance. This prepares both the student and the teacher to execute the skill as a model.
- **Interpretation and solution-finding stage:** In this stage, students start applying the skill through performance (e.g., diving) and practicing related exercises and activities. This process helps them find solutions through exploration and performance. The teachers role is to support, assist, and facilitate their students research and understanding using multiple means, including practical demonstrations, educational materials available in the environment, peers ideas, and in accordance with the social context and collaborative teaching advocated by constructivist theory.
- **Decision-making stage:** Students learning expands and deepens as they are provided with technical steps and knowledge through related activities or the transfer of teaching effects to new educational situations. Students repeat skill training for reinforcement.

3-11 Educational Curriculum Units: Two educational curriculum units were given to the experimental group to introduce the learners to the steps of the Ableton model. This unit is considered one of the basic and necessary educational units at the beginning of learning. It was applied one week before the main experiment. The research sample was briefly introduced to the Ableton model through its implementation in the gymnastics hall for students at the college.

3-12 Implementation of the curriculum according to the steps of the Aptton model: The curriculum was prepared by following well-studied steps and according to the sequence of practical stages. There were stages that were performed in the closed hall for the gymnastics lesson, which included the stages ((invitation stage (introduction), exploration stage, interpretation and solution finding stage, and decision-making stage)).

Unit 3-13: Educational units of the Ableton model steps: The researcher prepared an educational curriculum in the steps of the Ableton model, which consists of (12) educational units. It lasted for (12) weeks, with one educational unit per week. The time allocated for each unit was (90) minutes, according to the private curriculum plan for the physical education lesson. The curriculum included content that would enable the student to acquire a level of practical performance by receiving knowledge and skills that would be useful during the practical application period. The educational curriculum for the (Ableton Model Steps) group was applied on Sunday, 7/12/2024, and continued until Thursday, 2/22/2024.

3-14 Control group program: The researchers did not interfere with the program adopted by the Department of Physical Education and Sports Sciences at Basra University for the third stage of the academic year (2023-2024). The program consists of practical units only, with one teaching unit per week, distributed from the beginning of the academic year and under the supervision of the gymnastics teacher.

3-15 Post-tests: The post-test for evaluating the performance of gymnastics skills was conducted on Thursday, 2/29/2024, in the gymnastics hall at the College of Physical Education and Sports Sciences - University of Basrah. In the pre-tests, the researcher adopted the results of the equivalence tests as pre-tests.

3-16 Statistical Means: Arithmetic averages, standard deviations, and the T-test were used through the SPSS statistical program. (Ayed, 2009)

4- Presentation, Analysis and Discussion of Results

4-1 Presentation and Analysis of the Pre and Post Test Results of the Two Research Groups and Discussion.

4-1-1 Presentation, analysis and discussion of the pre- and post-test results of the control group in the variables under study.

Means, standard deviations, and (T) values of the pre- and post-tests for Group A

Statistical treatments Test Name	Unit of Measurement	Pre-test		Post-test		Calculated T-Value	Significance Level	Significance
		X	±SD	X	±SD			
Forward Stride (Dive)	Degree	4.37	0.29	6.12	0.34	14.9	0.315	Significant
Handstand	Degree	2.88	0.37	5.52	0.27	22.1	0.391	Significant
Arabian Jump	Degree	3.00	0.30	5.30	0.19	24.4	0.275	Significant
Front Handspring	Degree	2.71	0.34	5.54	0.19	27.6	0.013	Significant

By reviewing Table (3), which shows the results of the pre and post-tests for the control group of the tests

) Front straight roll test (diving), handstand test, Arab jump test, and front double-arm jump test. We note that the arithmetic mean and standard deviation of the post-test have increased compared to the pre-test. The calculated value of T for correlated samples was greater than the tabular value at a significance level of (0.05) and a degree of freedom (14). This indicates a significant difference between the pre- and post-tests, in favor of the post-test for the control group in the variables under investigation (for the method followed by the teacher).

We attribute this development to the mechanism of the teaching method followed by the person in charge of the educational process in learning the basic skills of artistic gymnastics (Mushref, 2024). This is through the theoretical information, explanations, illustrations, and practical applications he provided for the educational material. He also applied special exercises to develop the variables under study and used the tools and means available to him during the educational

units. This is in line with what was mentioned by (Aldewan et al., 2013) and (Abdulrasool et al., 2024) that "structured, scientific, and practical exercises have a significant impact on improving performance and executing all the required tasks during the units. Repetition and practice also contribute to achieving a significant level of development. This helped improve the performance of the control group students, but to a lesser extent than the experimental group in the post-measurement. This is logical because the method followed by the teacher certainly plays a positive role in improving the students level, even if the style depends more on the teacher than the student. The teacher provides complete and ready-made ideas and topics for the students to apply without having to interpret and analyze them. (Hamad et al., 2024)

4-1-2 Presentation of the results of the pre- and post-tests for the experimental group in the variables under study, their analysis and discussion.

Shows the mean, standard deviations, and (T) value for the pre- and post-tests.

Statistical treatments Test Name	Unit of measurement	Pre-test		Post-test		Calculated T-value	Significance Level	Significance
		X	±SD	X	±SD			
Forward Dive (Dive)	Degree	4.33	0.29	7.31	0.38	-23.81	0.210	Significant
Handstand	Degree	3.32	0.45	7.03	0.44	-22.33	0.924	Significant
Arabian Flip	Degree	3.14	0.28	7.37	0.28	-40.173	0.979	Significant
Front Handspring	Degree	2.92	0.15	6.63	0.20	-55.170	0.088	Significant

The results in Table (4) showed significant differences between the pre-test and post-test results in favor of the post-test. This group was studied according to the Appleton model, investigating some basic skills of artistic gymnastics such as forward roll, handstand, cartwheel, and handstand forward roll. It is noted that the mean and standard deviation of the post-test compared to the pre-test have increased. When conducting a paired samples t-test, the calculated t-value was greater than the tabulated value at a significance level of (0.05) and degrees of freedom (14), indicating a significant difference between the pre-test and post-test in favor of the post-test for the control group in the variables under study (according to the method followed by the teacher).

These moral differences are attributed to the positive impact of the Appleton model on individuals in the experimental group sample, by organizing the educational material in a structured and sequential manner according to the four stages of the model. Each stage included a set of procedures and steps performed by the student or teacher to achieve its specific goals. Teaching according to this model involved using visual presentation tools such as educational posters for each unit, and presenting educational films as a means of presenting this information and ideas, making the lesson more exciting and engaging, and keeping students away from boredom. This gives students enough space for individual and group thinking and problem-solving. This is in line with what was affirmed by (Kadhim, 2020) that the modern educational methods and diverse possibilities provided by modern educational materials can increase the effectiveness of the teaching method used, as well as increase the students positivity towards the

lesson, excitement, and stimulation among learners, encouraging them to acquire experiences and knowledge more effectively, making the lesson more dynamic and thus impacting learners with different and cumulative experiences. (Mohan et al., 2024)

And teaching the experimental group according to the Appleton model made the students the main focus around which the educational process revolved, and they were active participants in it. The application of exercises in the four stages of the model (Information retrieval, then processing new information and experiences presented in the lesson, then digging into information previously learned in the previous stages, then the social context) constitutes an independent factor that encourages students enthusiasm towards performance and freedom in the practical application of activities, making them feel independent, which leads to enhancing self-confidence and improving their self-perception as learners. This increases their motivation, making the student more prepared to face the requirements of skill performance and then provide a better performance level, which is consistent with what was confirmed by (Aldewan et al., 2015)) that focusing on the learner and making them the focus of the educational process and the center of activity, respecting their opinions and abilities, immersing them in affection, acceptance, and encouragement is a fundamental factor that helps in learning" (Al-Diwan et al., 2007)

Therefore, through the above, we conclude that all of these factors and procedures have led to the development of the level of the experimental group students in the post-tests, confirming that Appletons model has a positive impact on interactive thinking and learning skills (front roll, handstand, arabian jump, handstand jump) of the students, thus achieving the studys goal.

Displaying and analyzing the results of the post-tests for the experimental and control groups in the variables under investigation, and discussing them.

The arithmetic means, standard deviations, calculated value (T), and statistical significance are shown

Statistical tests Test name	Unit of measurement	Control dimension		Experimental dimension		Computed (T) value	Significance level	Significance
		Mean	±SD	Mean	±SD			
Forward straight grade (Diving)	Degree	6.12	3.43	7.31	0.38	-8.915	0.867	Significant
Handstand	Degree	5.52	0.27	7.03	0.44	-11.129	0.059	Significant
Arabic jump	Degree	5.30	0.19	7.37	0.28	-22.970	0.321	Significant
Forward hand jump	Degree	5.54	0.19	6.63	0.20	-14.654	0.458	Significant

Through examining Table (5) which shows the means and standard deviations in the post-tests of skills for the studied variables among the experimental group students who used the Appleton model and the control group who used the mechanism followed by the teacher, we notice that the

results of the skills tests under study, the mean and standard deviation for the experimental group students were higher than those of the control group. When testing the significance of the differences between the means using an independent samples t-test, it was found that the calculated t-value is greater than the tabulated value at a significance level of (0.05) and degrees of freedom (28), indicating a significant difference between the post-tests in favor of the experimental group. Researchers attribute the superiority of the experimental group in the post-tests to the fact that when teaching with the Appleton model, there is a significant investment in the process of organizing thinking, searching for solutions, and ideas. This has contributed to progress in the post-tests, in addition to practice, repetition, and the use of diverse educational methods that have helped make performance sound and continuous. In this regard, this model has contributed to students learning in a more interactive way for the students of the experimental group who distinguished themselves by allowing students to interact with each other and find solutions for the skills under study and freely present their ideas. This was done in a scientific, thoughtful manner aware of the different educational situations, as the student at this stage of study needs the opportunity to practice intellectual learning situations through educational units prepared to reach executable ideas independently. This led to the development of confidence and a sense of responsibility through the enthusiasm that appeared in them during the application of exercises related to basic skills on the gymnastics floor, which is in line with what was mentioned by (Lamyaa & ruaa, 2015) that providing students with the opportunity to learn and express their opinions and reveal their abilities gives them the chance to develop themselves and increase their experiences in delving into the subject, idea, or skill, and understanding the relationships between its parts." We also attribute the reason for the superiority of the experimental group in the test of the skills under study to the four stages of the model that call for thinking about the solutions and answers issued by the students, as confirmed by (Alsaeed et al., 2023) that understanding movement and its performance is very necessary in learning and developing skills, especially if this concept is linked to the intellectual aspect resulting from the explanation and clarification of motor skills" (Othman et al., 2024)

Where we see that the reason for the superiority of the experimental group students over the control group students at this level is that the instructional units prepared were more positive than the instructional units of the control group, allowing the teacher to explain the material in a more detailed and accurate manner and link it to students previous knowledge and experiences. The role of these units became guiding and leading in the educational process, as well as the positive environment provided by these units for students through the four stages of the model, making the lesson enjoyable and more dynamic. In addition to practicing exercises practically and in a variety of ways, this led to learning skill performance through gymnastics for students, as well as the inclusion of the instructional units prepared optimal use of feedback and continuous and periodic error correction through the four stages of the model, as (Rasoul et al., 2024) sees it as one of the means used to ensure the achievement of the best possible goals and objectives that the educational process seeks to achieve continuously to help the learner consolidate performance if it is moving in the right direction or adjust it if it needs adjustment, which has a positive return in refining and improving performance. (Karim & Al-Diwan, 2024)

As there is a positive point that led to the superiority of the experimental group, which is the positive environment created by the teacher through applying the four stages of the model in the educational units for their comprehensiveness in terms of following a logical sequence in

presenting topics and the activities and events that depend on it, the material of gymnastics, the level of students perception, organizing the content of that material, selecting teaching methods and techniques, as well as diversifying educational exercises for skills, which made these units more exciting and enjoyable for the students, leading to their interaction and enthusiasm for applying their contents with great care and desire, and this was confirmed by (Saad, 2017) that "diversity and innovation in using exercises, methods, and techniques when teaching sports skills are the most suitable in creating an atmosphere characterized by excitement, thrill, and enjoyment for the student, contributing to rapid learning and acquisition of sports movements and activities" (Israa Hussein Ali et al., 2019)

5-1 Conclusions

1. The positive impact of the Appleton model on the performance and improvement of the experimental group students in learning basic skills (straight front dive, handstand, arabesque jump, and front handspring) on the gymnastics floor mat.
2. The experimental group has an advantage over the control group due to the impact of the Appleton model on learning basic skills (straight front dive, handstand, arabesque jump, and front handspring) on the gymnastics floor mat.

5-2 Recommendations.

1. Relying on teaching models that make the student the main focus in order to achieve the best results, including the Appleton Constructivist model in learning the basic skills of artistic gymnastics for third-stage students in the College of Physical Education and Sports Sciences - University of Basra.
2. Conducting other studies to compare the Appleton model with other teaching models to determine the level of development of skill performance on the floor mat in artistic gymnastics.
3. Emphasizing the importance of conducting similar studies using the Appleton model in other sports and different samples due to its good features and characteristics in the educational process.
4. The necessity of introducing various visual presentation methods in physical education lessons in order to observe movement parts in detail and also for their importance in connecting the senses of hearing and sight, which in turn leads to speeding up the learning of motor skills.
5. Conducting developmental courses and seminars in the field of physical education and sports sciences through the use of modern teaching models and their application in the sports field

Translation: Appreciation and gratitude

We express our thanks to the research sample represented by the third stage students - College of Physical Education and Sports Sciences - University of Basra for the academic year (2023-2024)

Conflict of interests

Authors declare that there is no conflict of interests

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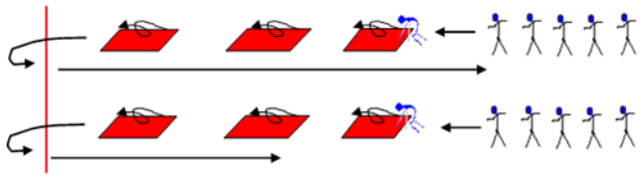
Educational unit sections	Activities and motor skills	Notes
First: Preparation Section (20 minutes) Introduction General Warm-up The private warming	Standing in a straight line, recording attendance, and performing the salute - Standing begins with walking in the usual way in the form of parallel lines - Running while touching the ground with the left and right hand alternately - Running to the side with raising the arms up and down - Running and jumping up then rotating half a turn - Walking then standing in a circle. • (Sitting on all fours) Jumping up with raising the arms high. • (Standing with legs apart - bending) Stretching the arms to the sides with twisting to both sides alternately (4 counts). • (Standing with legs apart - narrowing) Twisting the torso to the sides alternately (4 counts).	• Emphasize the importance of adopting the appropriate formation that enhances the system. • Emphasize the performance of the lesson greeting, which demonstrates the students activity in the learning process. • Emphasize the students commitment to the system during the general and specific warm-up process.
Secondly: The main section (55 minutes)	(1) Stage of Invitation (7.5 minutes) It is the stage of sorting out the ideas in the learners possession, and it is considered the starting point in constructive learning based on the principle that: (new learning should be built on old learning), by diagnosing and sorting out the learners ideas before presenting the content. Multiple teaching methods are used in this stage such as (interviews or questions and answers) to identify the cognitive store that the learner possesses about the concepts he has, and can refer to them when interpreting the events and experiences presented to them, and then he will have a comprehensive idea of the learners vision and how to interpret events and behaviors that he practices. (2) Exploration Stage (7.5 minutes) After explaining the material theoretically in the Invitation	- (1) Re-teaching the steps of the forward roll movement as a basic rule for a group of movements, including the diving movement. - Asking questions about the forward roll movement to students as it was previously learned in the second stage, while presenting the educational steps of the diving movement through the points of similarity and difference between the two movements. - Explaining the learning process among students through the method or style used in the learning process that enhances students' behavior. - (2) After asking questions in the invitation stage, the subject teacher explains the educational steps of the diving movement.

	stage, the teacher begins to explain or describe the skill and familiarize the students with it. On concept maps and the need to know them, this makes the student and teacher implement the skill as a model.	- (Mastering the forward roll well from a standing position with the knees bent halfway from an approximate run). - (Performing the same previous exercise from above a barrier such as a wooden box or from above a colleague taking the parallel knee position or from above a rope raised off the ground). - (Performing the same previous exercise but from a small approximate run). - (Performing the diving from the approximate run) - Presenting the new idea in learning the diving movement through the new learning method to understand and comprehend the students learning the diving movement. - Presenting the movement through video clips in addition to posters, which facilitates the students' learning process.
A - Educational Activity (15 minutes)		
b- Applied Activity (40 minutes	3) Finding interpretations and solutions stage (20 minutes) In this stage, students begin to apply the skill and perform skill exercises, and activities to help them find solutions through research and exploration. The role of the teacher in this step is to support students by assisting them in research, inquiry, providing assistance, understanding, and comprehension through various means, including presentations of available educational materials in the environment and ideas of colleagues according to the social context and collective teaching that the constructivist theory sees. (4) Decision-making stage (20 minutes)	- (3) Students begin to apply the learning exercises for the diving movement under the principle of gradual learning of the diving movement from easy to difficult with the use of understandable and easy speech by showing video clips of the diving movement learning process. - Applying the new idea in learning the diving movement through the new learning method for students to understand and comprehend the diving movement learning. - (4) Applying the diving movement learning exercises with practicing the steps of learning

	This stage expands and deepens students learning and is enriched with the technical steps for performance and the knowledge they acquire through giving them activities related to the skill they are studying or transferring the impact of teaching to new educational situations, and the student repeats practicing the skill.	the diving skill - repeating the diving movement exercises on the new educational method.
Third: Final section (15 minutes)	Roller Skating Race Game :- • The chapter is divided into four trains, and in front of each train there are three separate gymnastics benches, after the whistle, the first from each train runs to roller skate on the benches until the end of the race and then return to the train, and the winner is the one who finishes first. •  •	• Emphasizing the importance of performing relaxation exercises correctly, which helps students return to the normal state of the body. • Providing some educational guidance that enhances student behavior. Emphasize leaving properly after finishing the lesson