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THE EFFECT OF THE AQUARIUM STRATEGY IN LEARNING THE SKILLS OF PREPARING AND RECEIVING VOLLEYBALL FOR STUDENTS

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ABSTRACT: The research objectives to identify the effect of the aquarium strategy on learning the skills of preparing and receiving the volleyball transmitter for students, and the researcher used the experimental approach in achieving the goals of the research. The educational curriculum followed (the traditional) was applied by the subject teacher on the control group members, and after the completion of the research procedures, the data were processed statistically, as the results showed the superiority of the experimental group that applied the educational curriculum (the aquarium strategy) over the control group that applied the method used in all Searched skill tests.

KEYWORDS: Aquarium strategy, learning and skills.

I. INTRODUCTION

Difference between human beings is one of the Sunnahs of God Almighty that they are satisfied with. Human experience has proven that difference is a commendable matter, but rather required, because it is a source of enrichment and enrichment, and without this difference, people would have become duplicate copies that have no taste or smell. , Difference diversity is not contradictory, difference enrichment, not exclusion. The aquarium strategy is one of the active learning strategies based on group training, by observing and following up with the student discussing a topic among the members of the groups, which the student observes, and the extent to which this affects the behaviors and outcomes of group members, and helps to learn a variety of social skills among students. It is a strategy that highlights the use of social skills to expand on a specific topic or close discussion about it as students observe and practice these skills closely with each other .[1]

The importance of research lies in the use of a modern educational strategy that contributes to learning the skills of preparing and receiving volleyball for students, and it is a strategy in which the student is once a participant and another observed under the guidance and guidance of the teacher, in order to identify through it the possibility of the aquarium strategy contribution to accelerate the learning process and encourage students to respect Others' opinions deepen their self-confidence and stimulate their creative thinking during physical education lessons in middle schools in Babil Governorate. The strategies and methods of teaching used in educational and educational institutions are still relatively insufficient in developing sound thinking methods among students, as those strategies and methods are still dependent on teaching information and facts to students, and the role of the learner remains passive in the educational process, contenting himself with receiving what is presented to him in the textbooks. , And he must accept everything he receives.

The above matter calls for research into experimenting with alternative teaching strategies and methods that develop in these students the ability to creativity, such as active learning strategies in general and the aquarium strategy in particular, and therefore the need for active learning in the aquarium strategy emerged,[2] as a result of the state of confusion and confusion that the learner complains about after each A traditional educational position, and the research problem lies in the strategies used in learning the skills of preparation and receiving of the serve, where the researcher sees that the role of the student is in it as a recipient, and this gives results but not at the required level, and therefore the researcher suggested using the aquarium strategy as a method or method to reach the desired level in Learn the skills of preparing and receiving the serve in the cognitive side as well as the skills, and in light of the above, the researcher tries to answer the following question: Is there an effect of the aquarium strategy in learning the skills of preparing and receiving the serve with volleyball and getting students to the desired degree of learning.

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II. RESEARCH OBJECTIVE

- Understand the impact of the aquarium strategy on learning the skills of preparing and receiving volleyball for students.

Research hypotheses

- Teaching with an aquarium strategy has a positive effect on learning the skills of preparing and receiving volleyball for students.

III. RESEARCH METHODOLOGY

The researcher used the experimental method for its relevance to the nature of the research problem.

Research community and sample

The research community was represented by the middle school - fifth grade literary students in the General Directorate of Education in Babil Governorate for the academic year (2019-2020), in the public prep for boys.

For the necessities of work, the sample was divided into two groups, a control group (15) students, and an experimental group (15). The homogeneity and parity between the members of the research sample in the variables of age, height, mass and some students' volleyball skills were also confirmed on 11/12/2019, which is a pre-measurement for the two research groups (control and experimental) and as shown in Table (1).

Table 1. Shows the homogeneity and equivalence of the two research groups (control and experimental)

Variables	Units	Experimental group		Control group		(t) value	Type of significance
		Mean	SD	Mean	SD		
Age	Month	18.20	1.37	18.27	1.10	0.15	0.88
Length	Cm	172.73	4.69	172.13	2.66	0.43	0.67
Mass	Kg	67.53	7.03	67.93	10.07	0.13	0.90
Measure the accuracy of the preparation skill	Degree	13.20	1.21	13.47	0.99	0.66	0.51
Accurate measurement of receiving skill	Degree	8.13	1.30	8.20	1.15	0.15	0.88

Table (1) shows the homogeneity and parity of the two research groups (control and experimental) in age, length and mass and tests the skills of preparing and receiving the volleyball dispatch for students, through the previous table we note the values of (t) calculated for the research variables, we find that they are less than the tabular (t) adult value. (2.04) at a degree of freedom (28) and a level of significance (0.05), which indicates that there are no significant differences, and this means that the two samples are equivalent in the research variables.

Devices, tools and means used in the research

- Arab and foreign sources and references.
- Observation.
- The interview.
- The questionnaire.
- A form for measuring ages, height and weights for students.
- An accuracy test evaluation form for the skills of preparing and receiving the volleyball dispatch.
- A legal volleyball court.
- 10 legal volleyballs.
- Length measuring tape and adhesive tapes.
- A balance to measure weight (of Korean origin).
- Stopwatch and whistle.
- A tool for testing the accuracy of numbers, and a tool for testing the accuracy of the transmitter with a flying ball.
- A laptop computer (HP) type.
- A Japanese-made Sony imaging device, CD-ROM.

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IV. FIELD RESEARCH PROCEDURES

First: Skills in question in volleyball

The success of any team in volleyball depends on the ability of its players to perform basic skills of all kinds, with the least amount of errors possible, and that mastering these skills leads to achieving success, progress and victory .[3] The skills surveyed in volleyball were approved according to the vocabulary of the curriculum assigned to the preparatory school stage, and after the skills were identified, the tests were determined where the researcher presented them to a group of experts and specialists in volleyball according to the (Chi square) test law, where the calculated value of (t) appeared greater than The tabular value (t) is (3.84) at the degree of freedom (28) and the level of significance (0.05), after which the validity and reliability of the tests were checked.

1. Test the accuracy of the performance of the preparation skill in volleyball[4]

- Objective of the test: to measure the accuracy of the preparation skill.
- The tools used: The test instrument is installed, the legal plane balls number (5), the accuracy evaluation form and prepared in advance.
- Method of performance: The student stands in the place of the equipment, center No. (3), and the instrument is in the center No. (4), at a distance of (60) cm from the side line and (120) cm from the center line, and the student is (180 cm) from the test instrument, then he hands The teacher has the ball to the student that he tries to pass into the square frame that is at the top, each student is given (5) attempts.
- Scoring: The ball that does not reach the tool and frame gives a zero.
  - The ball is close to the top frame (2) two points.
  - The ball that touches the upper frame (3) points.
  - The ball entering the upper frame (5) points.
  - The total of the maximum score obtained by the laboratory is (25) points.

2. Accuracy test for the skill of receiving serve from below in volleyball[5]

- Objective of the test: to measure the accuracy of volleyball receiving skill.
- The tools used: a legal volleyball court, 10 legal volleyballs, a metal tape measure, Tartan colored dyes to divide the playing field, a square iron table, as shown in figure (2) below.
- Method of performance: Center No. (2) will be the specified area on the field. The laboratory student performs (3) attempts from Area (A) represented by Center No. (1) to Center (2), and also performs (3) attempts from Area (B) represented by Center No. (6) to the center (2), as well as performing (3) attempts from Area (C) represented by Center No. (5) to Center (2). The tested student must be committed to receiving from the designated area and directing the ball to the desired center.
- Scoring: The correct ball aimed at the goal 4 points.
  - The correct ball that touches the ends of the target is 3 points.
  - The correct ball away from the goal and inside the attack zone is 1 point.
  - The wrong ball is zero.
  - The total score obtained by the laboratory is (36) points.

The researchers relied on scientific references in preparing the educational curriculum according to the (Aquarium Strategy) and then presented it to the specialists referred to previously in the field of volleyball, kinetic learning and teaching methods in order to ensure its validity and to express their opinions and observations on the curriculum in terms of ensuring the validity of applying the curriculum and division The timetable for conducting the educational unit and the exercises that were developed in order to achieve the objectives of the curriculum. The validity of the educational program has been agreed upon by all specialists after all the scientific observations that they made have been taken into account.

The educational curriculum took (6) weeks for (24) educational units distributed over the two research groups, and for (12) units for each group, and the time for the educational unit was (40) minutes, which was decided by the Ministry of Education for elementary, middle and middle schools.

The researchers based the following methodology and application of the Aquarium Strategy .[6]

Presenting a topic, idea, or position for students to discuss.

- Ranking of participating students according to the strategy of the Fishbowl .Strategy Aquarium, Allowing students to start discussions in the first circle called the Aquarium on a topic, while the observers sit in the second circle outside the Aquarium listening and recording their notes silently, and it is preferable for the discussion period to be about (5 minutes).

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- The students are rearranged, where the members of the two circles exchange their places, the discussion is repeated with the new group, and they are allowed to exchange ideas, and it is preferable that the discussion period is about (5 minutes).
- Gather all students together, to discuss the topic collectively, and it is preferable that the discussion period be about (5 minutes).Coming up with the main ideas that are agreed upon or voted upon. There are two types of aquarium strategy (closed aquarium and open aquarium). Accordingly, the researcher used one type of Strategy Fishbowl:
- Closed Aquarium :[7] All seats are filled, the participants who start the discussion speak for some time, and when the time ends, they leave the tank and a new group begins to enter the aquarium, and at the end the teacher summarizes the discussions suggested by the student. The researcher has adopted the effective and successful use of Strategy Fishbowl's Aquarium Strategy, Knowing the participating members of the aquarium of the topic to be discussed. Knowing all students how to interact with the elements of the teaching position according to this strategy, and their acceptance of it.
- The presence of a psychological climate by the teacher to prepare the students to fulfill their roles.
- The teacher will not participate in the discussion, and the discussion continues among the members of the pelvis while the rest of the class observes, and records their observations, and the observations of the class members can be collected, and scores are given based on the level of participation, and these notes are then presented to the pelvic members as feedback, and this is from It would put the audience at the center of the discussion. It is recommended that the comments and contributions of each speaker be evaluated.
- Whenever discussion is interrupted by the members of the pelvis, they are directed to another point for the discussion as a whole, and this provides an opportunity to discuss other aspects of the study topic from different angles, which works to understand it in depth. As for the members of the control group, the teacher's method was adopted in drawing out the lesson.

Pilot study

The researcher conducted an exploratory experiment on a sample of (10) students from the research community, who were chosen by a simple random method, and the experiment was conducted on Wednesday (12/25/2019) in the outdoor squares and the private playing field for volleyball in the public high school for educating Babel.

Pre-tests

The pre-measurements and tests for the two research groups (control and experimental) were conducted on Tuesday (1/7/2020), and appropriate conditions were created for these tests, such as location, time and method of implementation, in order to achieve conditions similar or close as possible to the conditions of the post-test.

Implementation of the educational curriculum

The implementation of the educational curriculum on the research sample was started on Wednesday (1/8/2020) until Thursday (2/13/2020), with (2) units per week on (Wednesday and Thursday).

Post tests

The post tests were conducted on the two research groups on Tuesday (2/18/2020) in the same manner as the pre-tests.

Statistical means

The researchers used the statistical bag (SPSS) to extract the results using the following statistical methods (mean, standard deviation, (t) test for two linked samples, and (t) test for two unrelated samples).

Table 2. Shows the means, standard deviations, and (t) values calculated between the pre and post tests to measure the accuracy of the numbers and receiving skills of the volleyball for the control group

Variables	Pretest		Posttest		(t) value*	Type of significance
	Mean	SD	Mean	SD		
Preparation accuracy	8.27	1.16	19.20	1.57	21.38	0.00
Receiving accuracy	13.40	0.91	26.40	0.99	42.12	0.00

*At a level of significance (0.05) and below a degree of freedom (14).

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Table (2) shows the mean, standard deviations, and the value (t) calculated between the pre and posttests to test the accuracy of the skills in question and the control group, and the results showed that the mean of the pre-test for the accuracy of preparation (passing) in volleyball is (8.72) with a standard deviation of (1.16)), While the mean in the post-test was (19.20) with a standard deviation of (1.57), while the value of (t) computed (21.38), and this indicates that there is a significant difference between the pre and posttests and in favor of the post test. At a level of significance (0.05) and below a degree of freedom (14).

Whereas the mean of the pre-test for the accuracy of the volleyball serve received was (13.40) with a standard deviation of (0.91), while the mean in the post test was (26.40) with a standard deviation of (0.99), and the calculated value of (t) was (42.12) This indicates that there is a significant difference between the pre and post exams and in favor of the post test. At a level of significance (0.05) and below a degree of freedom (14).

Table 3. Shows the mean, standard deviations, and (t) values calculated between the pre and post tests to measure the accuracy of the numbers and receiving skills of the volleyball for the experimental group

Variables	Pretest		Posttest		(t) value*	Type of significance
	Mean	SD	Mean	SD		
Preparation accuracy	8.07	1.39	20.53	0.83	25.62	0.00
Receiving accuracy	13.20	1.21	27.93	0.88	35.13	0.00

*At a level of significance (0.05) and below a degree of freedom (14).

Table (3) shows the mean and standard deviations and the value (t) calculated between the pre and posttests for the accuracy test of the skills in question and the experimental research group, and the results showed that the mean of the pre-test for the accuracy of preparation (passing) in the volleyball is (8.07) with a standard deviation of (1.39)), While the mean in the post-test was (20.53) with a standard deviation of (0.83), and the value of (t) computed (25.62), and this indicates that there is a significant difference between the pre and posttests and in favor of the post test. At a level of significance (0.05) and below a degree of freedom (14).

Whereas, the mean of the pre-test for the accuracy of the volleyball serve received was (13.20) with a standard deviation of (1.21), while the mean in the post test was (27.93) with a standard deviation of (0.88), and the value of (t) calculated (35.13) This indicates that there is a significant difference between the pre and post exams and in favor of the post test. At a level of significance (0.05) and below a degree of freedom (14).

Table 4. Shows the means, standard deviations, and (t) values calculated in the post tests to measure the accuracy of the numbers and receiving skills in volleyball between the control and experimental groups

Variables	Control group		Experimental group		(t) value*	Type of significance
	Mean	SD	Mean	SD		
Preparation accuracy	19.20	1.57	20.53	0.83	2.91	0.00
Receiving accuracy	26.40	0.99	27.93	0.88	4.49	0.00

*At a level of significance (0.05) and below a degree of freedom (28).

Table (4) shows the mean and standard deviations and the value (t) computed between the post tests, for testing the accuracy of the skills of preparation and receiving of the volleyball serve between the control and experimental groups, and the results showed that the mean of the post test to measure the accuracy of numbers in the volleyball for the control group is (19.20) With a standard deviation of (1.57), while the mean in the post test of the experimental group was (20.53) with a standard deviation of (0.83), and the value of (t) calculated (2.91), and this indicates that there is a significant difference between the two post-tests in favor of the test. The dimension of the experimental group, at a level of significance (0.05) and below a degree of freedom (28).

Whereas the mean of the post test to measure the accuracy of receiving the volleyball serve for the control group appeared (26.40) with a standard deviation of (0.99), while the mean in the post test of the experimental group was (27.93) with a standard deviation of (0.88), while the value of (t) calculated (4.49), and this indicates the existence of a significant difference between the two post-tests in favor of the post-test of the experimental group, at a level of significance (0.05) and under a degree of freedom (28).

It is evident from the results of tables (3,2) that there are significant differences between the pre and posttests of the experimental and control groups in the accuracy of learning the skills of preparing and receiving the volleyball serve as well as the technical performance in the two skills studied, and for the benefit of the post

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test. The researcher attributes this to the effectiveness of using a strategy Aquarium and the method used, as the teaching methods and methods are of great importance in the educational process, and they affect the speed of learning and the degree of saturation in learning,[8] thus "achieving a very important principle of the principles of training is the principle of gradual learning from acquisition to retention to stability and this is The natural development of motor learning ".[9]

The researcher attributes the reason for the development of the experimental group to the fact that the use of the aquarium strategy was new to the students, which led to the removal of the factor of boredom from them and spreading the spirit of actual participation in them, which increased their enthusiasm and motivation, which was reflected in the development of the skills under discussion, as "commitment, encouragement and diversification in performance It helps to learn or acquire skills ".[10]

It is evident from the results of Table (4) that there are significant differences in the post-test of the experimental and control groups and in favor of the experimental group in the two skills discussed, and the researcher attributes this to the use of the aquarium strategy in terms of planning and implementing the educational units, which facilitated the process of understanding and absorbing the skills researched.[11] In addition to the accuracy in performance, and thus the new educational situations that the students were exposed to, which are characterized by the clarity of the goal and what is required of them to achieve it,[12] and it was not known in the regular educational units, which led to a clear improvement in their performance and this is what is referred to by several methods of raising motives The learner is about the activity or the game to learn and practice its skills,[13] and among these methods is to facilitate kinetic learning opportunities and clarity of the appropriate goal to learn the skill and develop it, as well as the balance in satisfying the needs of the learner .[14]

V. CONCLUSIONS

1. Increased interaction, discussion, repetition and practice with students when using the aquarium strategy has given preference to this strategy.
2. The experimental group that applied the approach by using the aquarium strategy outperformed the control group that applied the method used in all the researched skill tests.

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