

The Effect of Keeler's Strategy on Cognitive Achievement and Learning Offensive Skills in Volleyball

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Abstract

Excellence in the sports field has become one of the essential metrics on which the progress of nations and peoples is viewed. In order to draw up valid scientific policies represented in the use of modern strategies and methods to prepare the appropriate educational and training curricula in order to reach the learners to the highest levels, individual learning strategies must be used, which is self-learning as they take into account the individual differences between the learners and reduce the time and effort required for this process. Keller's strategy is for individual or personal learning. One of the strategies that achieve this goal.

The researchers believe that learning with the Keeler strategy is a personal process, as learning cannot be given or indoctrinated but must result from the educated person's experience and ability to retrieve his memory to perform better than what he witnessed. The field of physical education and education. The researchers identified the research community with students of the second stage in the College of Physical Education and Sports Sciences - the University of Kufa for the academic year 2017-2018, numbering 30 students, divided into two groups, each group consisting of (12) students, one of whom was chosen randomly to represent the experimental group to which the educational program will be applied. Under consideration is what will be applied to the other, which is the control group, the prescribed curriculum, and according to the method used, and the seven female students were chosen to represent the sample that will be conducted on the exploratory experiment.

Key words: cognitive achievement Keeler's strategy, skills , volleyball

Introduction

Excellence in the sports field has become one of the essential metrics on which the progress of nations and peoples is viewed ¹. And in order to draw up valid scientific policies represented in the use of modern strategies and methods to prepare appropriate educational and training curricula in order to reach the learners to the highest levels, individual learning strategies must be used, represented by self-learning, as they take into account the individual differences between learners and reduce the time and effort required for this process ². Keeler's strategy is for

individual or personal learning. One of the strategies that achieve this goal.

Here, the researchers believe that learning with the Keeler strategy is a personal process, as learning cannot be given or indoctrinated but must result from the educated person's experience and ability to retrieve his memory perform better than what he saw. In the field of physical education and education.

Research Problem

By informing researchers of many studies and research and through their experience that they have

been working in the educational field for quite some time, the teacher and the teacher alike must pay attention to modern education and move learners from education based on indoctrination often to positive education and the transfer of knowledge to The learner is an active medium that goes in line with recent developments and makes the learner more effective in the educational process by creating situations in which he is more upbeat and active.

Therefore, the researchers decided to use a new strategy in education using the Keeler strategy and identify its impact on cognitive achievement and learning offensive volleyball skills for students.

Research objectives

- Designing an educational curriculum according to Keeler's strategy in cognitive achievement and learning offensive skills in volleyball for students.
- Recognizing the effect of Keeler's strategy on cognitive achievement and learning offensive skills in volleyball for students.

practical part

Research Methodology:

Research Methodology: The researchers used the experimental method for its suitability and research requirements and the appropriate means to prove its hypothesis.

Research Community and Sample

The researchers identified the research community with students of the second stage in the College of Physical Education and Sports Sciences - the University of Kufa for the academic year 2017-2018, numbering 30 students, divided into two groups, each group consisting of (12) students, one of whom was chosen randomly to represent the experimental group to which the educational program will be applied Under consideration is what will be applied to the other, which is the control group, the prescribed curriculum, and according to the method used, and the

seven students were chosen to represent the sample that will be conducted on the pilot experiment.

Steps of conducting a search

achievement test:

To identify the effect of Keeler's strategy on cognitive achievement and in order to achieve the goal of the research, the researchers used the modified cognitive test by "Thaier Rashid (and others)" (), which measures its 31 paragraphs on the cognitive aspects of the offensive skills understudy with three alternatives for each paragraph that the laboratory chooses The correct answer is among them.

The pilot experiment:

To ensure obtaining reliable results, an exploratory experiment was conducted on (6) female students who did not enter the main experiment and from the same research community at exactly eight-thirty in the morning on Saturday 17/11/2017 in order to identify the most critical obstacles and errors that the researcher may face when Implementation of the main experiment as well as knowing the time taken to implement the skill tests and the extent of the research sample's interaction in its Implementation

Grades according to the skill performance appraisal forms.

Scientific basis for the tests:

In order to identify the scientific bases for the tests used, and after the researcher was informed of many sources, it became clear that they are codified on the Iraqi environment and were used in several studies as well as using them on similar samples. Constancy, objectivity).

Equivalence of the two research groups:

"In order for the researcher to return the difference to the experimental factor, the experimental and control groups must be completely equal in all their conditions, except for the experimental variable that

affects the experimental group”, the researchers divided the sample into two groups at random, and in order to achieve this, the researcher performed the equivalence process Between the two research groups for the tests understudy, a t-test was used for independent samples, and the results showed that there were no significant differences between the two groups, which confirms the equivalence between them as shown in Table (1)

Table (1). It shows the equivalence between the experimental and control groups in cognitive achievement tests, serving skills, crushing hitting and blocking in volleyball, and the calculated and tabular (T) values and their statistical significance

the test	Measurement	Experimental groups		control groups		Value (T)	denotation statistic
		Mean	Std. deviation	Mean	Std. deviation		
Cognitive achievement	Degree	15.416	7.076	15.916	7.656	0.159	Not significant
Transmission	Degree	1.916	0.900	2	0.953	0.213	Not significant
Straight smash	Degree	1.416	0.999	1.333	0.984	0.197	Not significant
Straight Accelerator	Degree	1.583	1.083	1.916	0.900	0.785	Not significant

Pre-test:

The control and experimental groups were pre-tested to determine the students' skill level at 8:30 a.m. on Sunday and Monday, 22 and 23/11/2017, and the same assessors gave their scores to each student.

Curriculum

After preparing the requirements to implement the research experiment, work on the program (the experiment) began on the corresponding Tuesday, at a rate of two academic units per week for eight weeks at a rate of (16) sixteen academic units.

Below is an explanation of how to apply the tutorial:

The researchers distributed the educational material into independent academic units and placed it in the time frame as follows:

The educational material was divided into 16 educational units distributed over eight weeks, with two educational units per week, with a time of 90 minutes for each educational unit

According to Keeler's strategy, the researchers applied for the educational program to the first group (experimental). In contrast, the curriculum was applied to the second group (control) for students of the second stage in the Faculty of Physical Education, in which the following steps were followed:

- 1- The academic unit time for the experimental and control groups is (90) minutes.
- 2- Inform the students of the date of the academic unit and prepare before its start (at the break).
- 3- Read the instructions and explain how to use the Keeler strategy with an explanation of how to deal with the program

4- The beginning of the academic unit is in the classroom instead of the external arena in the college, starting with the educational section, during which the lecture is displayed on a 51-inch plasma screen (LCD) via a computer (laptop), starting with displaying the written and readable text and then displaying the images. Explanations that show what has been read in the text, noting that this is followed by a presentation of a video clip that also expresses the content of the text. At the end of this part, the evaluation questions are presented to the students, consisting of three Annex 2 questions, and the students must answer them with supervision by the observers, provided that they are informed of² The extent to which the answer is correct or not. This is called feedback, which is a characteristic of reinforcement, which means that notifying the student of the correctness of his answer reinforces him and increases the probability of repeating the correct response later.

5- After completing this part of the lesson and with the help of the assistant staff, we move to the outside arena to apply the rest of the educational unit parts.

6- The second part of the educational unit takes place in the external arena and according to the sequence of the educational unit as in the method followed, except for the educational section that was given in the classroom for the experimental group.

7- In this part, the student applies the skill to teach himself and according to what he understood, absorbed and learned from the educational part under the supervision of the assistant staff, through skill training according to three levels, and each student must start from the level he deems appropriate for his abilities and capabilities, and then move to the higher level. Then the higher only after he has mastered the performance of that skill³, provided that this is done under the direct supervision of the responsible professor and the staff who helps him in carrying out the lecture, as follows:

8- In performing the exercises for the skill of serving from the top, three circles were drawn, the first with a diameter of 7 m, the second with a diameter of 5 m, and the third with a diameter of 3 m. That this be done under the supervision of the observers present during the performance of the exercises.

9- As for the skill of crushing, three squares have been created in three levels, the first of which is 3 m long, the second 2.5 m, and the third 2 m. A space with full supervision of the observer present while performing the exercises.

10- As for the skill of the wall, three sites are created, each site contains a certain height of the network, the first height is 1.70 cm, the second is 1.90 cm, and the third is 2 m. Which he chose under the supervision of one of the observers present in the exercise ground. However, it was emphasized that the sample members need to constantly attend the educational units, not to be absent, and to cooperate with the assistant staff.

11- In the last section of the lecture, i.e. the concluding section, its duration is (3 minutes), which includes general relaxation and calming exercises, as well as a small game for the purpose of recreation and suspense, after which the tools and balls are collected and orderly withdrawal to the classroom.

Post-Tests

The post tests were conducted for the period from 25-1-2018 -27-1-2018 and included skill tests and cognitive achievement for the experimental and control groups.

Statistical means:

The researcher used the statistical bag (SPSS) to process the data.

Results

Presenting and analyzing the results of the pre and post tests of the experimental group in cognitive achievement, serving skills, hitting the smasher and

individual blocking in volleyball:

Table (2). It shows the arithmetic means, standard deviations, the calculated and tabular (T) values and their statistical significance for the tests under study, before and after the experimental group.

the test	Measurement	Experimental groups		control groups		value (t) calculated	indication statistic
		Mean	Std. deviation	Mean	Std. deviation		
Cognitive achievement	xdegree	15.416	7.076	60.166	5.859	20,891	Significant
Transmission	degree	1.916	0.900	7.083	0.792	14,192	Significant
Straight smash	degree	1.416	0.999	6.333	0.651	12,572	Significant
Straight Accelerator	degree	1.583	1.083	6.333	0.651	13,571	Significant

Presenting and analyzing the results of the pre and post tests of the control group in cognitive achievement, serving skills, hitting the smasher and individual blocking in volleyball:

Table (3). It shows the arithmetic means, standard deviations, the calculated and tabular (T) values and their statistical significance for the tests under study, before and after the control group

the test	Measurement	Experimental groups		control groups		value (t) calculated	indication statistic
		Mean	Std. deviation	Mean	Std. deviation		
Cognitive achievement	degree	15.916	7.656	39,833	5.670	7,680	Significant
Transmission	degree	2	0.953	5.166	0.717	11.725	Significant
Straight smash	degree	1.333	0.984	5	0.603	11,902	Significant
Straight Accelerator	degree	1.916	0.900	4.916	0.668	12.295	Significant

(*) Tabular value (T) under the degree of freedom (11) and the probability of error (0.05) = (2.20).

Presenting and analyzing the results of the post-tests of the two experimental and control groups in cognitive achievement, sending skills, hitting the smasher and the blocking wall:

Table (4). the arithmetic means, standard deviations, the calculated and tabular (T) values and their statistical significance.**For the post-tests of the experimental and control groups**

the test	Measurement	Measurement		control groups		value (t) calculated	indication statistic
		Mean	Std. deviation	Mean	Std. deviation		
Cognitive achievement	degree	60,166	5.859	39,833	5.670	8.272	Significant
Transmission	degree	7.083	0.792	5.166	0.717	5.990	Significant
Straight smash	degree	6.333	0.651	5	0.603	5.011	Significant
Straight Accelerator	degree	6.333	0.651	4.916	0.668	5.042	Significant

(*) Below the significance level (0.05) and the degree of freedom (22)

Discussing and analyzing the results of the post-tests of the experimental and control groups in cognitive achievement, transmission skills, smash hits, and individual blocking:

It is evident from the results of Table (4), after processing the results of the post-tests for the experimental and control groups, that the calculated T-value in the cognitive achievement test amounted to (8.272), as for the skill tests in question (sending, crushing and individual blocking) for the control and experimental groups and after Statistically processed, the value of (T) calculated in the transmission skill test reached (5.990), in the crushing beating skill test, it amounted to (5.011), and in the individual blocking wall skill test, it reached a value of (5.042), and it is clear from the above that the calculated (T) values for the variables under research are It is greater than the tabular value of (2.20) at a degree of freedom (22) and a probability of error (0.05), and the researcher attributes that the superiority of the experimental group is due to the use of the Keeler strategy, including the principles it contains, including self-learning,

since this strategy is the best credible for this type of learning. Which has outperformed many well-known teaching strategies as it provides sufficient opportunity for the learner ³ through freedom in the time he takes to learn and gives the student the opportunity to start learning from the level he considers appropriate for his mental abilities and physical capabilities.

Through the foregoing presentation, analysis and discussion of the results of the tribal, follow-up and posterior tests for the experimental and control groups, and the superiority of the experimental group over the control group by using Keeler's strategy in cognitive achievement and teaching offensive skills in volleyball through the clear impact of using Keeler's strategy on cognitive achievement and teaching offensive skills in volleyball Through the superiority of the experimental group that learned according to this strategy ⁴, whether in the cognitive achievement of the educational material included in the educational program, or in teaching offensive skills in volleyball, which are the skills of (serving from the top, crushing beating, and individual blocking).

The researcher would also like to confirm that the good application of this strategy with all its components and the emphasis on the cognitive aspect contributed to the achievement of the research objectives.

Based on the foregoing, we find that the skill performance has a close and direct relationship with the cognitive aspect of the individual, as the educational process for any skillful performance in volleyball must be at the beginning of the ⁵ early stages of learning to focus on the cognitive aspect of these skills in order to help in gaining performance faster and better than Learn it.

Thus, the objectives of the research have been achieved in the impact of Keeler's strategy on cognitive achievement and learning offensive skills in volleyball, and to identify the priority of the two research groups, which was represented by the superiority of the experimental group over the control group.

Conclusions

In light of the results of the tests, their analysis and discussion, the researcher reached the following conclusions:

1. There are significant differences between the results of the pre and post tests for the experimental and control groups in all research variables in favor of the two groups.

2. The advantage of learning using Keeler's strategy over the adopted strategy.

3. The use of Keeler's strategy has a clear and significant effect in increasing the cognitive achievement, the learning process and the speed of learning the skills of serving, smashing and blocking in volleyball.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: "All experimental protocols were approved under the Faculty of Education for Girls and carried out in accordance with approved guidelines".

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