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The Effectiveness of the Usage of the Cooperative Learning in the Development of Certain Basic Competencies in Volleyball for 15-16 Years Old Pupils

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Abstract

This study's aim was to identify the effectiveness of the cooperative learning in the development of some competencies related in volleyball (normal transmission, the reception of transmission, done until the zone of the opponent), where an experimental method with its two types (pre-test and after-test) has used for the pupils of middle school in Ain Safeaa (wilaya of Naama -Algeria). The 24 pupils (15-16 years), were divided into two groups, a control group of 12 pupils and an experimental group of 12 also. The second group was divided in two groups of six and each one has three categories: the weak, the average and the good ones. In order to collect information, researchers have used competencies tests and the formation program suggested in order selecting a referee from the teachers. The results have shown that the cooperative learning helped in the progress of competencies mentioned in the study. Therefore, researchers recommend giving a higher importance in the new methods of teaching related to skills.

Keywords: cooperative learning, basic competencies, volleyball

Introduction

Learning is considered as the most important way to develop populations due to its positive role in preparing the new generation for the future by providing a new, solid, scientific base. Many ways, tools and teaching theories have been suggested and presented in order to help these populations to progress and fulfill their aims (Mauston and Ashworth, 1994:9).

As for the teacher's role in this study, they must push the pupils to learn by using many different ways and methods which require his full attention to their effectiveness in the learning process of each pupil (Abdelkarim, 1994:3).

It is known that the learner is the main part in the learning process and it is very important to develop his capacities which require the teacher's full attention in order to give him the opportunity to progress his sports abilities and performance.

Singer (1995) and Abdelkarim (1994) have indicated that the teacher should deal with many learning methods and strategies in order not to be suckled with one method which has a negative impact on his outcome.

Cooperative learning is considered as a modern way of learning because it helps the learners to work in pairs and groups. During his process, pupils learn to work with their classmates by exchanging roles and taking the full responsibility of their learning in order to process and succeed. Learners influence each other's behavior by exchanging roles (Salvin, 1995:13).

Volleyball is one of the collective games that dealt with the modern way of learning which develops the team's skills. These skills have become dynamic and exciting especially with the defense and the offense skills. It is viewed as a very rich game known for its artistic skill such as passing on, hitting, receiving and taking the ball in which feet play a big role.

The goals of learning are set of the strategies of education in which the nature of humans and the changes that happen in the society are taken into consideration. The influence of the pressure of technology and the scientific progress in the educational field also takes a major role in preparing the future generation to be functional members in the modern life (Buschner, 1994:4).

Volleyball takes part in the learning takes based on the body movements which goes from the easy to the difficult and from the simple to the complex. These skills rely on each other in volleyball in which each skill outcome depends on the other. The teaching strategy helps to make the learning process successful due to the positive way of dealing with those movement skills needed to teach and develop (Hamdan, 2011:2).

During our observation inside middle schools, we found that there is a weakness concerning pupil's competencies, and there is no application of certain pedagogical aims of the program in relation to the program which use to teach volley ball competencies. This weakness has a relation to time limitation and the short period of the semester or the learnt itself, in addition, the huge number of pupils has an effect on the teacher who is obliged to control pupil's practices and correct their mistakes, that is why he needs much time to do all these (Smith, and Karl, 1991:14).

Some researches viewed that the use of cooperative learning strategy is more important in teaching as an act of facing certain circumstances related to learning according to physical competencies in general.

The use of this strategy will help to rich the learning operation and help pupils in mastering certain basic competencies in volleyball in order to have an excellent level of practice to face the practical part of society.

Methodology

The method of the study:

This study, based on the experimental method as a strategy by using two groups. One is basic and the other is experimental.

Sample:

In the study, there is a selection of 24 pupils from the population of fourth year middle school in Ain Safra (Wilaya of Naama - Algeria). This sample is chosen at random.

Instruments of the study:

In order to have an accurate result, the study based on test and the use of certain competencies in the field. Then, it used some materials as Plyometric exercises and pedagogical tools to practice the educational units which proposed. In addition, some Arabic, French and English references are used in this study.

Statistic instruments:

*Student Equation - Person Coefficient of simple connection - Normative Aberrance - Arithmetic Medial

Test: this study used three different tests concerning volleyball

Normal Transmission – The Reception of Transmission - Done until the Zone of the Opponent.

The experiment:

During the lectures, all the materials and tools are used except the program of learning certain volley ball competencies (which is our aim) by following cooperative learning strategy for the experimental group and shed the light on the age of this group members unlike the control group under the supervision of a teacher.

Researchers have divided the experimental group into two groups; each group is composed of three pupils with different roles for each member as follows:

- 1-The leader of the group: is the responsible who guides his classmates to realize their aims.
- 2-An exemplar (the model): who practices the competence model for the others.
- 3-An encouraged: who control and correct his classmate's mistakes

Findings

We note from the table 1, the presence of significant differences between the pre and post measurement in favor of telemetric in the normal transmission test with the experimental and control samples where the estimated calculated T is respectively 3.26 and 2.82. It is the largest of the estimated tabular by 2.201 at the level of 0.05 and the degree of freedom 11.

Table 1. Descriptive table statistical comparisons between the pre-test and post-test results in the normal transmission

Statistical measurements	Post-test		Pre-test		T Tabular	T Calculated	Statistical significance	Percentage of progress
	X1	Y1	X1	Y1				
Sample								
Experimental	18	0.04	25.9	0.47	3.26	2.201	Significant	37.17%
Control	16.5	0.05	17.3	0.06	2.82		Significant	11.42%

We note from the table 2, the presence of significant differences between the pre and post measurement in favor of telemetric in the done until the zone of component test with the experimental and control samples where the estimated calculated T is respectively 4.74 and 3.53. It is the largest of the estimated tabular by 2.201 at the level of 0.05 and the degree of freedom 11.

Table 2. Descriptive table statistical comparisons between the pre-test and post-test results in the done until the zone of component

Statistical measurements	Post-test		Pre-test		T Tabular	T Calculated	Statistical significance	Percentage of progress
	X1	Y1	X1	Y1				
Sample								
Experimental	12.3	0.06	16.8	0.04	4.74*	2.201	Significant	35.71%
Control	12	0.05	13.2	0.06	3.53*		Significant	10%

We note from the table 3, the presence of significant differences between the pre and post measurement in favor of telemetric in the reception of transmission test with the experimental and control samples where the estimated calculated T is respectively 5.71 and 3.72. It is the largest of the estimated tabular by 2.201 at the level of 0.05 and the degree of freedom 11.

Table 3. Descriptive table statistical comparisons between the pre-test and post-test results in the reception of transmission

Statistical measurements	Post-test		Pre-test		T Tabular	T Calculated	Statistical significance	Percentage of progress
	X1	Y1	X1	Y1				
Sample								
Experimental	26.16	2.42	59.7	2.74	5.71*	2.201	Significant	48.82%
Control	25.7	2.42	32.7	2.67	3.72*		Significant	12.5%

It is observed from the table 4 after the use of test T student that ranges between 3.82 and 4.63, the largest values of tabular T are estimated at 2.07 at a degree of freedom 22 and the significance level is 0.05. It confirms the existence of significant differences between the averages of any developments, which means that the differences between the averages have statistical significance.

Table 4. Differences between the menstruations the remoteness of control and experimental samples

Statistical measurements	Experimental sample		A control sample		T Tabular	T Calculated	Statistical significance
	X1	Y1	X2	Y2			
Normal Transmission	25.9	0.74	17.3	0.06	3.95	2.07	Significant
Done until the Zone of the Opponent	16.8	0.04	13.2	0.06	4.63		Significant
The Reception of Transmission	59.7	2.74	32.7	2.67	3.82		Significant

Discussion and Conclusion

This study's aim was to identify the effectiveness of the cooperative learning in the development of some competencies related in volleyball (normal transmission, the reception of transmissions, done by the zone of the opponent).

The use of this new strategy for learning helped in motivating pupils to learn and to have an idea about how to form groups based on their competencies and background in this field. In this sense, pupils learn more when they exchange the learning roles with each other.

Researches view that the cooperative learning strategy based on the practice with the help of the more competence learners to the less competence ones in order to have a good level of learning. They also view that the uses of new strategies in learning help learners to understand, to apply their competencies freely, being creative and the most important thing to develop the collective work.

To sum up, Slavin (1995), Majed Abid (2006) and Smith Karl (1991), the cooperative learning strategy has a positive effect on the relation between pupils of high competency' level.

In the light to tools and instruments which have been used in this study and from the results and findings, which have been found, we conclude that the method of cooperative learning program had a good effect on the sample group. There are differences between both tests for the experimental group rather than the control group. There are differences between both groups in after the test for the experimental group. The method of cooperative learning is the best method in the development of certain basic competencies in volleyball.

Conflict of Interest

The author has not declared any conflicts of interest.

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