The Effect of Different Teaching Styles on Learning some Volleyball Skills for Female Physical Education Students

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This study aimed to identify the effect of different Teaching Styles on learning some volleyball skills for female Physical Education students (Overhead Pass (Set), Forearm Pass by hands, the underhand Serve) for the students of first year, faculty of Physical Education for girls, Helwan University. The research sample included (100) Student, (6) physical tests and (3) skill tests, in addition to the design of educational program for computer. The implementation of this program will be done by a specialist in Computer Science using the Visual Basic language through the symbolic educational code for all purposes. Implementing this study took (12) weeks. This study was executed by using Criterion Sheet (for the cooperative learning group), the educational program (for multimedia group), and presentation style (for commands group or the traditional method). The results pointed out that the method of multimedia has more effective and positive effect on learning the skills compared to the method of cooperative learning or explanation and show.

Key words: multimedia, cooperative learning, teaching method.

Introduction

The current era characterized by multiple changes in various fields like education. This forces many educators to seek various ways to develop the systems and methods of teaching and learning. They also use new educational Styles and strategies, which is considered as series of steps and practices to be followed by the teacher, they help on the interaction of learner in the educational process, and developing his behaviors, values and attitudes.

Modern trends in teaching methods claim to be away from the traditional methods like explanation and show, and to adopt new methods in which the student relies on himself to gain the knowledge, experiences and information needed. This development includes the search for new teaching methods to advance the process of learning in order to reach the best levels. (Ahmed & Aly 2000) (Gabr, 2006)

Accordingly, working to provide alternatives for methods, techniques, strategies and content are very important means to find alternative paths for learners, so the efficient teacher is the more flexible one to move between different strategies and Teaching Styles with what suit its objectives and the teachers' responses towards the skills that they must perform. In addition, the teacher is the designer of the educational environment. (Mohamed & Moustafa, 2004) (Moustafa, 2003).

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Cooperative learning is one of teaching methods in the field of Physical Education, which aims to achieve educational goals. It is an educational pattern in which students perform the learn skills with each other. In addition, they participate in understanding, dialogue and information about skills. (Mohamed, 2003) (Moustafa, 2001).

One of learning methods that require working in small groups where each group consists of (3-6) persons working with each other in order to achieve the common goal of the group, so that each individual in the group is individually responsible for part of the result which cannot be fulfilled unless the members of the group works in cooperation, in the members of the group agree to achieve goals. (Colin & Mick, 2009)(Dawn, Gill, Mandy, & Gary, 2010)

Computer is one of the latest technologies that could contribute positively in developing curricula to cope with developments in the modern time. Many results of studies and research carried out in the field of education show that the students who received education by using computers are more qualified than those who use methods like "explanation and show " in the educational process. This means that using computer in education saves time and contributes in forming positive attitudes for students (Mohamed, 2001).

In addition, computer is the most powerful system in the field of education, as it made strong change in the field of education and training. Computer is like a successful educational revolution used with large and small groups through the academic programs specialized for this purpose that allows the learner to achieve the mentioned-above goals (Henry, 2000).

Due to the above explanation, the researchers identified the subject of study as an attempt to identify the effect of different Teaching Styles on learning some volleyball Skills for Female P.E Students in addition to computer usage (multimedia), it includes: video, audio, images and graphics that clarify the stages of the kinetic performance for volleyball skills. This study is also to give more attention to modern methods of learning volleyball skills.

Accordingly, researchers will using the educational styles that based on different Teaching Styles between multimedia, cooperative learning and explanation and show (the traditional method), in order to increase the effectiveness and creativity during educational process. Consequently, the skill levels for learners will be raised through this styles.

The purpose of this study is to identify the effect of different Teaching Styles on learning some volleyball skills for female Physical Education students (Overhead Pass (Set), Forearm Pass by hands, the underhand Serve).

Method

Participants

Participants in the study were 100 students, first year Students in Faculty of Physical Education for women, Helwan University for the academic year 2014/2015. The sample that will conduct the basic experiment was chosen intentionally and

randomly. The sample included 100 students, while researchers excluded 27 students for many reasons.

After excluding the previous number of students, the actual sample in the basic research contains (73) students with a mean age of 17.15. They were randomly divided into three groups by (24) students for each of the first and second groups, (25) students of third group as follows: first group uses computer (multimedia; 24 students), the second group uses the cooperative learning; 24 students), the third group uses the traditional method (the explanation and show; 25 students).

Measures

Measurement tools. Electronic balance to measure weight in Kilograms, Ristamitr to measure length in centimeters, computers to view models, technical aspects and special trainings for each skill that students of First Year in volleyball will perform. These skills are: (Overhead Pass (Set), Forearm pass by hands, the underhand Serve. The used tests are:

Physical tests. Physical fitness tests' elements were selected after reviewing the references (Ahmed, 2013), (David, 1994), (Elham, 1988), (Ellen, 1990), (Farid, 2012), (Habib, 1983), (Mohamed & Hamdy, 2000), (Zaki, 2012) and interview volleyball experts, in order to determine the physical condition of each student, because we shall not count the improvement in the level of performing skills to the physical condition. Researchers realized physical tests related to skills under research, namely:

- Measuring of grip strength using a dynamometer.
- Measuring of muscular power for legs using the vertical jump test.
- Measuring of muscular power for arms using the pushing medicine ball with weight 3 kg for the longest distance.
- Measuring transition speed by running 20 meters.
- Measuring Fitness using Shuttle Run test with various dimensions.
- Measuring the front flexibility by using the test of Sit & Reach.

Skills testing. The researchers selected the following tests to measure the skillfulness level: the test of (Overhead Pass (Set) on wall (to measure the level of Overhead Pass (Set), the test of Forearm Pass on wall (to measure the level of Forearm Pass by hands), the test of , The underhand Serve (to measure the level of The underhand Serve).

Procedure

The following steps were followed while preparing this study:

Basis of preparing to program some foundations were followed while preparing for the teaching styles program as follows:

- Defining the aim of the program that suits its content.
- Expert opinion about program content and its appropriateness for the sample.
- The relevance of program content to the sample, taking into consideration the factor of grading and suspense. One of the units of the program was

experienced on the survey sample and it resulted in the clarity of all the contents of the teaching styles program for the survey's students.

Program aim. Designing different teaching styles (the cooperative learning, multimedia , explanation and show) to learn the volleyball skills (Overhead Pass (Set), Forearm Pass by hands, The Underhand Serve) for the students of Faculty of Physical Education.

Periodization program. The following table shows the Periodization program:

Table (1). Periodization for Teaching Styles Program

NO	Content	Periodization		
1	Period for applying program	3 month		
2	No. of weeks	12 week		
3	No. of units per week	1 unit per week		
4	Total no. for program units	12 unit		
5	Time per unit	90 min :	Introductory part 20 mins	Main part 60 mins	Final part 10 mins

Learning units of the program. The researchers prepared (12) learning unit by using Visual Basic language to have the opinion of experts about the appropriateness of these units. The experts approved the distribution of educational content (learning units) by 100% as shown in the following table:

Table (2). Distributing Educational Content on Total Unit of the Program

Unit No.	Educational content
First	
Second	Overhead Pass (Set) (1)
Third	
Fourth	
Fifth	Forearm Pass (2)
Sixth	
Seventh	Connecting the skills (1,2)
Eighth	
Ninth	The underhand Serve (3)
Tenth	
Eleventh	Connecting the skills (1,3)
Twelfth	Connecting the skills (2.3)

Applying Educational Program. Educational program of teaching styles was applied in the period from 12 October 2014 to 28 December 2014 by one unit per week, for a period of (12) week, total of (12) units and it took (90 min) per unit.

Post measurements. After implementing the proposed educational program, post measurements are performed for the three research groups on Tuesday 30 December 2014 for the skills under research.

Results

Table (3). Significance of Differences between Pre and Post Measurements.

Groups	Pre measurements in sum skills under reseach		Post measurements in sum skills under reseach		Differences	Calculated "T"	Sig.
	M	SD	M	SD			
First group (Multimedia group)	8.03	1.01	10.43	1.22	2.40	* 9.59	Statistically sig.
Second group (Cooperative learning group)	8.04	1.04	10.01	1.15	1.97	* 7.14	Statistically sig.
Third group (Traditional group)	8.02	1.02	9.98	1.13	1.96	* 6.47	Statistically sig.

The value of "t" spreadsheet at the level of significance $0.05 = 2.07$

Table (3) show the results of the multimedia group (first group), cooperative learning group (second group) and the traditional group (third group).

As seen from table that there are statistically significant differences between the two measurements pre and post for the multimedia group in skills under reseach in favor of the post measurement (9.59), Also, seen from table that there are statistically significant differences between the two measurements pre and post for the cooperative learning group in skills under reseach in favor of the post measurement (7.14), and seen from table that there are statistically significant differences between the two measurements pre and post for the traditional group in skills under reseach in favor of the post measurement (6.47).

The method of multimedia has more effective and positive effect on learning the skills compared to the method of cooperative learning or explanation and show.

Discussion

Table 3 shows the presence of significant statistical differences between the average initial and final measurement for the first group (multimedia group) in the determined skills under research, and improve in average final measurement.

Researchers say that these differences exist only because of the experimental variable only, which appears in the style of learning through by using multimedia though computer. Using multimedia and the variety of text, image, audio and video showed a positive effect on research's variables because of the attractiveness and effectiveness of multimedia in computer. Where, students control the material, like controlling the show, time, replay, stopping it and slowing motion to focus on certain technical aspects. Therefore, the style of multimedia helped the students to learn according to its own speed. This proves that multimedia has had a positive effect on the skills under research because of the attractiveness and effectiveness of multimedia in computer.

This is consistent with what (Hayword & Dennis, 2001) that using of multimedia technologies; text, sound, image and movement helps to provide the learned material in a better way if compared to the scientific material presented in any other form.

The purpose of the present study was to Realizing the effect of proposed styles on learning some basic skills in volleyball (Overhead Pass "Set", Forearm pass by hands, the underhand serve). The results showed that there are significant differences between the average pre and post measurements for second group (cooperative learning group) in learning some basic skills under research in volleyball for the post measurement. Where, Table 3 shows the presence of significant statistical differences between the average initial and final measurement for the first experimental group (research group) in the determined skills under research, and improve in average final measurement.

Researchers say that this progress happened because of the positive and proactive role of cooperative learning in the educational process, where each student must have a role towards the process of learning through performing different roles in one group (Leader - Performer – second Performer - observer) or (Leader - Performer – observer – second observer). This gives the chance to retrieve and visualize the skill and increase kinetic results, as each student explain and clarify the skill during playing the role of observer. In addition, she detects and corrects errors during playing the role of leader. Leader and observer help the (performer) in visualizing and understanding the proper performing and thus the proper performing for the skill.

Also, Using of Criterion Sheet in this Style allows the visualization of proper functioning with no errors. It also allows the student to remember the proper performance of the technical aspects to reach the best performance. This style provides the opportunity for learning according to individual capabilities which led to increase in participation within the group to achieve a common goal, and give a greater opportunity for the weak student to learn and get motivation to make achievement.

This is consistent with the results of both (Ahmed, 2012), (Ben, 2008), (Dawn, Gill, Mandy, & Gary, 2010), (Elham, 2000), (Ghada, 2006), (Ismail, 2013), (Leila, 2000), (Sidentep, 2002) that working in cooperative groups have a positive effect on the level of skill performance; and raising level and learning outcomes.

Also, Table 3 shows the presence of significant statistical differences between the average initial and final measurement for the third group (explanation and show or the traditional group) in the determined skills under research, and improve in average final measurement.

Through the previous results, it is clear that explanation and show group (the traditional method) showed a positive influence in the differences in three skills

under research (Overhead Pass (Set), Forearm Pass by hands, The Underhand Serve) for the students.

These results suggest that using proposed teaching styles (multimedia, the cooperative learninge, explanation and show) showed a positive influence in the differences in three skills under research, in comparison with the two groups of cooperative learning and presentation style (the traditional method). Therefore, the multimedia led to the improvement of teaching and learning processes to reach the best performance. It is also more effective and influential at the level of skills; Overhead Pass, Forearm Pass by hands, the underhand Serve.

Conclusions

- The presence of significant statistical differences between the average initial and final measurement for the first group (multimedia group) in the determined skills under research, and improve in average final measurement.
- There are significant differences between the average pre and post measurements for second group (cooperative learning group) in learning some basic skills under research in volleyball for the post measurement.
- The presence of significant statistical differences between the average initial and final measurement for the third group (explanation and show or the traditional group) in the determined skills under research, and improve in average final measurement.

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