

“The Effect of using one of the Multimedia in Developing Teaching Skills for Practical Education Students in Faculty of Sport Education”

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Abstract : *The purpose of the present study is to identify the effect of using one of the multimedia means in the development of teaching skills among students of practical Education . Twenty males (mean age 20.5 ± 0.54 years), divided into two equal groups of 10 each. The program had been applied to the two groups for the period of eight weeks by two units per week. The educational program included teaching skills of the practical education through the use of a certain multimedia mean, such as a display screen. In order to analyze the results, standard deviations, skewness coefficient and the “T” test were used.*

The results of the study showed the use of a multimedia mean through the display screen led to the improvement of knowledge and teaching skills for individuals of the experimental group compared to the control group. Results also showed there are significant differences between the two post-tests in the collection of knowledge and teaching skills for the experimental group. The researchers recommend the use of multimedia (display screens) to improve the collection of knowledge and the teaching skills of the student teacher in faculties of sport education in Palestine.

Keywords: *Multimedia, practical education, teaching skills, sport education.*

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I. Introduction

The educational process is witnessing a tremendous development in the field of educational technologies that are an integral part of the overall educational system and one of its necessities. One of the attributes of this century is scientific progress and its accompanied technology applications that significantly contribute to the development of the areas of human life and solving the problems faced. This perception requires that educators need to review and develop methods and ways to provide information and to find appropriate ways and means to use modern technological applications that fit the educational process (Saleh, 2003). In addition, the challenges facing the world today and the rapid development that has taken place on all aspects of economic, social and cultural life made it necessary for the institutions to take these modern educational methods to achieve their goals and meet these challenges because scientific and technological development is currently happening in addition to a lot of new means by which we can take advantage of to create areas of expertise for students until they are prepared with a high degree of skill and competence, which enables them to meet the challenges of this era. This was confirmed by (Attia, 2011) that modern educational intelligence techniques help the teacher to perform his task with ease and make him more capable of achieving the objectives of school and communicate experiences to learners.

One of multimedia forms is computer use, whether in the field of education or in many other areas as multimedia's philosophy is to give the learner the ability to prepare and process the content of the modules using different modes (such as sound, image, educational films, music, maps and forms). All this can be made in a timely manner and orderly prepared in accordance with the standards appropriate to this media, without the need to study programming languages (Saleh, 2003).

Since the success of a teacher in teaching job depends on knowledge and awareness of the range of teaching skills of fundamental and important nature in the practice of the teaching profession, which is the basic form of the teaching process, it was necessary for us as specialists in teaching and educators to give him the means to practice these skills and behaviors that help him achieve the objectives of the teaching plan efficiently and effectively and objectives of education. Since teaching skills are the very foundation that helps the teacher to exercise his profession tasks, so many studies and research pointed to the importance of attention to the issue of teaching skills necessary for the student teachers, such as: (Azmi, 2006; Abdul Hakim, 2007; Iraqi Gil, 2012; Saleh, 2003; and Ibrahim et al., 2009). These studies pointed to the need to reconsider the programs of educational process and prepare them for the program in the Faculty of Sports Education and attention to

increase the effectiveness of the teaching skills of student teachers through the interest in modern technological programs, which give the student full capacity for preparation and processing of contents of modules using different media. Here lies the problem of the study in the need to define the effect of using one multimedia system for the development of teaching skills of practical education students in the Faculty of Sport Education at Al Najah National University.

II. Material and methods

Instrumentations

A number of (10) computers (Hp, Pentium 5) with high quality and modern specifications, Camera (Sony Cyber-shot DSC-RX10 III Digital), screen projector (Data Show LV-X300), television (LG Smart TV) and stop watch (Casio, HS-70W-1EF).

Participants and recruitment

Twenty male university students from the faculty of physical education at An-Najah National University in Nablus-Palestine volunteered and were randomly assigned into two different groups (10 participants each) to take part in the experiments using a non-randomized quasi-experimental uncontrolled before-and-after study design for each group.

The researchers also conducted homogenization process between the study sample in some variables (such as the ability of visual perception (intelligence), the collection of knowledge and it was (0.41, 0.52), respectively, and the skills of teaching, which included all stages of (conditioning and warm-up, physical conditioning, education and development, use of teaching aids and tools, adjust the system in the classroom and the playground, the closing of class) and the levels homogeneity were (0.17, 0.11, 0.22, 0.18, 0.12), respectively. It is clear from the results that there were no statistically significant differences at the level of ($p \leq 0.05$) between the exploratory sample in the ability of visual perception variables (intelligence) and the collection of knowledge and skills of teaching. This shows equivalency of the two groups in those variables.

To find validity coefficient of the evaluation questionnaire for the teaching skills of student teachers, the researcher shows the content of the questionnaire on (9) of the staff members at the Faculty of Sport Education who are specialists in teaching methods, practical education and who supervise the courses of practical education in order to identify the appropriate formulation of phrases that contain all part of the questionnaire and how they relate to the purpose and suitability to be measured as the arbitrators agreed on validity and suitability of the questionnaire to evaluate the teaching skills of student teachers.

The researchers presented three model lessons illustrated and recorded on a (9) teachers of physical education for the purpose of arbitration of those lessons as well as train them on using the lessons on teaching skills of student teachers in order to listen to their views and agree on this lessons, where the arbitrators agreed on validity of the model lesson related to evaluation.

III. Methodology

The researchers took into account, before the implementation of the educational program, to hold a preliminary introductory session for teacher students of the experimental group to know the way of operating these multimedia, how to enter the prepared program and how to implement it in the gymnasium.

The researchers develop the multimedia under study in the private hall area of 6×12 m then asked the members of the experimental group of students teachers entering the hall to use a multimedia to watch the video lessons of sport Education. After watching those typically pictured lessons carefully and with knowledge, they were directly asked to get out of the hall and perform what they watched.

The role of the teacher was guidance, counseling and give some instructions in teaching skills as well as knowledge aspects of the (16) model lessons studied by two lessons a week for eight consecutive weeks, knowing that the time scheduled for physical education lesson is (50 minutes). The same procedures were used with the traditional method for members of the control group only, without the use of multimedia.

The Study Tests:

1. Test of the ability of visual perception test (Intelligence Test) prepared by (Moawad, 1998).
2. Cognitive achievement test, that is designed to assess the student teacher's level of information, knowledge and concepts on how to conduct and implement physical education lesson consisting of (50) paragraph and in front of every paragraph there are four answers from which the teacher student chooses one by putting a circle around the correct answer and this test was prepared by (Moawad, 1998).

Statistical Analysis:

Data were statistically treated using the following statistical methods:

1. Arithmetic mean and Standard Deviation SD.

2. Skewness Coefficient.
3. The “T” Test for independent groups.

IV. Results

First: Presenting and Discussing the hypothesis: “There are statistically significant differences between the two pre and post tests at individuals of the empirical group and in favor of the post-test for the effective use of multimedia system in developing training skills for practical education students at the Faculty of Sport Education”

Table (5): Significance of differences between means for pre- and post-tests for members of the experimental group using multimedia of teaching skills for students

Variables	Pre-test		Post-test		“T” Value	Significance
	Mean	SD	Mean	SD		
Knowledge Achievement	32.7	5.81	54.1	4.17	10.1	Significant
Teaching Skills						
Conditioning and warm-up	3.93	1.65	8.10	1.56	6.31	Significant
Physical conditioning	4.40	1.73	8.11	1.55	5.84	Significant
Education & Development	5.25	2.29	10.25	1.73	6.35	Significant
Using Teaching Methods & Tools	3.11	1.36	5.94	1.34	5.34	Significant
Adjusting Order in Class & Pitch	3.13	1.41	5.68	1.35	4.9	Significant
Closing the class	1.45	1.11	2.85	1.14	3.32	Significant

The tabulated “T” value at level 0.05 = 2.145

Table (5) shows that there are statistically significant differences at level (0.05) between pre- and post-tests for the empirical group in knowledge achievement in favor of the post-test. In addition, there are statistically significant differences at level ($p \leq 0.05$) between pre- and post- tests for the empirical group teaching skills (conditioning and warm-up, physical conditioning, education and development, use of teaching aids and tools, adjust the system in the classroom and the playground, the closing of class) in favor of the post-test.

Second: Presenting and Discussing the hypothesis: “There are statistically significant differences between the two pre and post tests at individuals of the control group and in favor of the post-test for the effective use of multimedia system in developing teaching skills for practical education students at the Faculty of Sport Education”

Table (6): Significance of differences between means for pre- and post-tests for members of the control group using multimedia of teaching skills for students

Variables	Pre-test		Post-test		“T” Value	Significance
	Mean	SD	Mean	SD		
Knowledge Achievement	31.5	6.25	42.4	6.01	4.07	Significant
Teaching Skills						
Conditioning and warm-up	3.81	1.85	5.51	1.64	2.71	Significant
Physical conditioning	4.31	1.79	5.81	1.44	2.58	Significant
Education & Development	5.25	2.27	8.29	1.71	4.01	Significant
Using Teaching Methods & Tools	3.23	1.46	4.35	1.29	2.24	Significant
Adjusting Order in Class & Pitch	3.10	1.35	4.25	1.31	2.36	Significant
Closing the class	1.47	1.05	1.68	1.11	1.31	Insignificant

The tabulated “T” value at level 0.05 = 2.145

Table (6) shows that there are statistically significant differences at level ($p \leq 0.05$) between pre- and post- tests for the control group in knowledge achievement in favor of the post-test. In addition, there are statistically significant differences at level ($p \leq 0.05$) between pre- and post- tests for the empirical group teaching skills (conditioning and warm-up, physical conditioning, education and development, use of teaching aids and tools, adjust the system in the classroom and the playground) in favor of the post-test, whereas there are no statistically significant differences in closing of class skill.

Third: Presenting & Discussing the Hypothesis: “There are statistically significant differences between the two post-tests for the empirical and control groups using multimedia of teaching skills of students for practical education at the Faculty of Sport Education”

Table (7): Significance of differences between post-tests for members of the empirical and control groups using multimedia of teaching skills for students

Variables	Post-tests of Empirical Group		Post-tests of Control Group		“T” Value	Significance
	Mean	SD	Mean	SD		
Knowledge Achievement	54.1	4.17	42.4	6.01	4.63	Significant
Teaching Skills						
Conditioning and warm-up	8.10	1.56	5.51	1.64	3.58	Significant
Physical conditioning	8.11	1.55	5.81	1.44	4.01	Significant
Education & Development	10.25	1.73	8.29	1.71	3.12	Significant
Using Teaching Methods & Tools	5.94	1.34	4.35	1.29	2.99	Significant
Adjusting Order in Class & Pitch	5.68	1.35	4.25	1.31	2.77	Significant
Closing the class	2.85	1.14	1.68	1.11	2.90	Significant

The tabulated “T” value at level 0.05 = 2.145

Table (7) shows that there are statistically significant differences at level ($p \leq 0.05$) between post- tests for the empirical and control groups in knowledge achievement and teaching skills (conditioning and warm-up, physical conditioning, education and development, use of teaching aids and tools, adjust the system in the classroom and the playground, the closing of class) in favor of the empirical group.

V. Discussion

The researchers attribute the improvement in the empirical group in the knowledge achievement and skills of teaching to the use of a multimedia (display screens) to display the medical viewing of physical education classes and its program including the display of information and different lesson Parts, quality tools and available teaching aids used within the school. In addition, the use by members of the experimental group of multimedia systems encouraged the mental analysis of the parts of the lesson in terms of preparation, implementation, and evaluation. They also helped the studentteachers to remember some of the formations and how to use the tools and teaching aids during the implementation of the lesson by having the student teacher’s visible feedback through watching sample lessons of Sports Education, which the researchers prepared with a group of specialists. This was confirmed by Van Vuuren&Lamprianou., (2006) in the need to use the video in order to get best results to learn the technique and tactics and the collection of high mark in the exam. It also contributed to increase motivations of student teachers about students' motivation to learn, which made learning process easier, faster, and helped to establish the educational experiences of student teachers. The results of the current study agreed with the study of both (Antoniou, Panagiotis, et al., 2003) contributing to the use of video in learning basketball of the Physical Education students. It also agreed with (Vernadakis study, N., et al., 2006) indicating that the use of multimedia contributed in teaching volleyball skills better than using the traditional method alone, and this confirms the importance of the use of multimedia in raising aspect of knowledge to the student teacher faculties of Physical Education also stressed by each of Antoniou, (Panagiotis, et al., 2003. Vernadakis, N., et al., 2006). While the improvement in the control group members was believed by the researchers to be caused by the interest of those who teach the practical education course within the faculty in student teachers by providing knowledge, information and teaching methods and how to set up and implement physical education lesson. Also, educating and guiding the student teachers to the importance of physical education lesson and how to set up its parts, implementation and evaluation of pupils to perform teaching skills required, all this led to the student teacher success of the performance of his duties in his career as a sound and distinct manner. The researchers also attribute lack of improvement in the concluding part of the share when the members of the control group due to the attention of and the concentration of student teachers consistently on conditioning and warm up, learning the skills and the use of teaching aids and adjust the system during the implementation of the lesson because it is considered in the student's teacher the most important lesson parts and misses the final part with the knowledge that it must focus on all the lesson parts because they are an integrated unit, so the results were that there were no statistically significant differences signify in the closing part of lessons.

Because of the use by members of the empirical group of multimedia and information sources (the display) contributed to the acquisition of teaching skills of the student teacher either the control group that did not allow them exposure to multi-media and information sources that help teaching skills development they have relied on guidance and information only teacher, which hit in the level of teaching skills they have, compared to members of the experimental group. This study agreed with the study Najah and Ibrahim (2009), Abdul Hakim (2007), Eltahawy (2012), Al Fawwal and Al Safetla (2010), Iraqi Gil (2012), Yinka&Talabi (2004)., Padfield, Glenna Pennington, Todd R & Wilkinson (2000) and Azmi (2006), which emphasized the importance of the use of multimedia (computer, display tapes, video recorder, video tapes) in upgrading aspect of knowledge to the student teacher faculties of Physical Education, and the multimedia if carefully chosen and

accuracy on the part of the teacher in various educational positions they offer multiple opportunities for the development arouse the interest of the inclinations of learners toward academic achievement as it provides an optimal mathematical model for various motor skills.

VI. Conclusions:

In light of results of the study, the researcher reached the following findings:

1. The use of a multimedia through (the display screen) led to improved knowledge side and teaching skills of members of the empirical group.
2. It was observed that there is an improvement in the collection of knowledge and teaching skills for the two empirical and control groups in favor of the empirical group.
3. It was noted that there is a lack of improvement in the closing part of class for members of the control group, while there was improvement in the empirical group.⁷⁷

VII. Recommendations:

In light of the results indicated, the researcher recommends the following:

1. The use of a multi-media (display screens) to develop and improve the collection of knowledge and teaching skills of the student teacher faculties of Sport Education in Palestine.
2. To create equipped scientific laboratories with technological means of learning to upgrade and improve the student teachers' level within the Faculty of Sport Education to take advantage of it before going for field application in schools.
3. Working on the preparation of similar educational programs using various multimedia and exploitation in the programming devoted to teacher training curricula.

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