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EFFECT OF MULTIMEDIA USE ON LEARNING OF LOW START AND LONG JUMP FOR STUDENTS IN THE FIRST CYCLE OF BASIC EDUCATION IN NORTH SINAI

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Abstract: Background: The current study aimed to identify the effect of multimedia use on learning of low start and long jump for students in the first cycle of basic education in north Sinai. Sample of (30) students were divided into two equal groups, one control and the other experimental, each consisting of (15) students. In addition to the exploratory sample, from outside the basic sample, which consists of (15) students, to implement the exploratory experience of the educational program using multimedia, as well as finding scientific coefficients for the tests used to calculate the validity and reliability coefficient in the variables under research.

Under the conditions of our article, the researcher's conclusion that:

- The traditional method (command method) contributed in a positive way to improving the level of performance of the skills under research for members of the control group, and statistically significant differences appeared between the pre- and post-measurement for members of the control group in favor of the post-measurement.
- The educational computer program prepared using multimedia technology contributed in a positive way to improving the level of performance of the skills under study for members of the experimental group. The results indicated that there were statistically significant differences between the pre- and post-measurements of the experimental group in favor of the post-measurement.
- The students of the experimental group outperformed the students of the control group in the post-measurement in physical variables, which led to an increase and improvement in the physical aspect of the skills under study among the students of the experimental group, as statistically significant differences appeared in the post-measurement between the control and experimental groups and in favor of the experimental group.
- The students of the experimental group outperformed the students of the control group in the post-measurement in the level of skill performance in the skills under investigation among the students of the experimental group, as statistically significant differences appeared in the post-measurement between the control and experimental groups and in favor of the experimental group.

The educational program using multimedia had a positive impact on the level of performance of the athletics skills under study in the experimental group.

Keywords: *Multimedia, Low Start, Long Jump.*

Introduction

Track and field competitions are considered one of the sports education activities that represent the basis of the Olympic Games, as they are considered the gateway to all sports, with the different types of competition they contain. They also allow all ages to participate in them and are suitable for practice by both sexes. Track and field competitions are considered one of the sports education activities that represent the basis of the Olympic Games, as they are considered the gateway to all sports, with the different types of competition they contain. They also allow all ages to participate in them and are suitable for practice by both sexes.

Information and Communication Technologies (ICT) have been changing and updating over the years. Currently, they are used in various work environments due to the wide benefits they bring in terms of organization, performance, and support to work methodologies, making them more playful and motivating. From the educational field, there are digital devices and tools that Favor the teaching task and the learning of students.

Educational technology is one of the most important modern applications used to develop education in its various fields and stages. It aims to prepare the competent teacher and train him to use modern devices and machines correctly, in addition to providing him with comprehensive information for all elements of the educational process, including goals, content, methods, teaching strategies, educational means, and evaluation methods. It also allows the learner has the best methods of obtaining knowledge, as it depends on thinking and proceeds in organized stages that every learner lives during his quest to obtain knowledge and acquire new experiences that raise his status and develop himself.

Saad Zaghloul et al (2001) point out that the multimedia method is considered one of the forms of modern educational technology in the field of teaching skills in sports activities, as it is an educational system that interacts functionally through an educational program to achieve specific goals, and these methods are based on a tight sequential organization that allows every learner to proceed in the educational program according to its distinctive characteristics, and to be active and positive throughout it. The physical education lesson is considered one of the applied fields of education that is concerned with developing the physical, psychological, mental, and social aspects.

Muhammad Saeed (1996) points out that learning motor skills in a physical education lesson is one of the most beloved parts of the lesson for students and has its educational importance as it provides training on the learned skill.

Educational technology offers numerous advantages to both educators and learners. For educators, it provides access to a wide range of educational resources, digital content, and interactive platforms that can complement their teaching methods. For learners, educational technology opens new avenues for exploration, collaboration, and self-directed learning. It offers opportunities for interactive and immersive experiences, making education more engaging and accessible.

Multimedia and interactive tools leverage multimedia elements such as videos, images, and interactive simulations to make learning more engaging and interactive. They can include educational videos, interactive presentations, virtual reality (VR), augmented reality (AR), and gamified learning platforms that incorporate game elements to motivate learners and immerse them in educational content.

Multimedia Technologies can be incorporated into the educational field to improve the teaching-learning process; To do this, it is advisable to know how it works, advantages and contributions. Nowadays, teachers have training designed to make the most of Multimedia Technologies, thus developing digital competence, learning innovative methodologies, and getting to know new tools, devices and applications that enrich their classes. In addition, for teachers interested in the field of physical education, a specialization is offered through the online Physical Education Specialization, designed to provide specific knowledge and skills to integrate Multimedia Technologies in the teaching of physical education, thus improving the motivation and performance of students in this area.

The current study aimed to identify the effect of multimedia use on learning of low start and long jump for students in the first cycle of basic education in north Sinai.

Material and method

Methods.

A sample of (30) students was divided into two equal groups, one control and the other experimental, each consisting of (15) students. In addition to the exploratory sample, from outside the basic sample, which consists of (15) students, to implement the exploratory experience of the educational program using multimedia, as well as finding scientific coefficients for the tests used to calculate the validity and reliability coefficient in the variables under research. table (1) shows the description of the research sample.

Tools and devices used in study.

- A medical scale to measure weight to the nearest 1/2 kg.
- Stadiometer to measure length to the nearest 1/2 cm.
- Skill performance measurement form.
- Plastic cones. - Measuring tape. - Hoses. - football stadium. - Whistles.
- Multimedia lab. – computers.
- Divider boxes and medicine balls.
- A set of tools necessary to implement tests.
- DVD on which multimedia software is stored.

Statistical Treatment.

The researcher used the SPSS Ver 25 program to perform the statistical treatment of the study.

Findings

Table 1. Characteristics of groups (Mean ± SD)

Group	N	Age [years]	Weight [kg]	Height [cm]
Experimental	15	11.13 ± 0.32	34 ± 5.09	138.20 ± 3.76
Control	15	11.02 ± 0.23	37.33 ± 3.62	139.67 ± 2.67

Table 1 shows characteristics of groups. There were no significant differences were observed in the variables between the two groups.

Table 2. Differences significant between the post-tests for the two Groups (experimental and control)

Variables	Experimental group		Control group		Sign.
	Before	After	Before	After	
Performance level of Low start	6.67 ±1.23	15.87 ±0.99	6.00 ±1.07	12.40 ±1.24	S
Performance level of long jump	5.53 ±1.19	15.33 ±1.18	5.27 ±1.16	11.07 ±1.17	S

Table 2 shows that:

- Significant Difference between the experimental group and control group in Performance level of low start and long jump for post-test to the experimental group.

Discussions.

This study assessed the effects of multimedia use on learning of low start and long jump for students in the first cycle of basic education in north Sinai. the experimental results indicated that all variables were significantly changing to the experimental group.

The researcher attributes the reason for this superiority to the effect of using the educational program using multimedia on the level of technical performance of the skills under study for the members of the experimental group. The researcher believes that the progress in skill performance is due to the fact that the educational program using multimedia has helped the students to have a good understanding of the skills under study. It

was better understood and led to the development of its cognitive aspects, which contributed to improving the students' skill performance.

The researcher attributes the high level of skill performance among the members of the experimental group to the fact that the educational program using multimedia is characterized by presenting information and knowledge in an organized, organized, and scientific manner that works to arrange the learner's motor processes. When presenting it, the researcher considered organization and the ease of circulation of information and knowledge by the learner during the educational process.

The results of the study are consistent with the studies of Ibrahim Abdo (2009), Khaled Farid Ezzat (2002), Osama Abdel Aziz (2001), and Ahmed Abdel Fattah (2005), which reached the superiority of the experimental group in the level of motor and cognitive performance and motivation, and also the proposed educational program was It has a greater impact on skill variables and the level of performance than the usual method, and educational programs using multimedia also contribute to both cognitive achievement and skill level.

The researcher attributes the reason for the progress and superiority of the members of the experimental group over the members of the control group in the score of the assessment card for the level of technical performance of the skills under study to the use and implementation of the educational program using multimedia, which is characterized by good, almost integrated educational content in terms of planning the skills content in a scientific and codified manner through the use of several media. Such as (text - image - video - movement - sound - music) and grouping these media together in an integrated manner, which leads to enriching and deepening the information included in the program and presenting it in an integrated and effective framework, using the learner's senses and emphasizing the learner's control and interaction with the system, and this interaction It has enabled the learner to determine the paths and methods he follows, the amount of information he retrieves, and control the speed of his learning, which takes into account the level, abilities, inclinations and needs of the students and the individual differences among them.

This confirms what was stated by Muhammad Zaghloul et al. (2001) that the use of computers in teaching physical education curricula helps to analyze the movements and skills contained in the curriculum and allows the learner to interact according to his own learning rate and his abilities, in addition to saving time and effort. It provides immediate feedback to each learner individually and develops the innovative capabilities of the teacher and learner in physical education.

Conclusions

Under the conditions of our article, the researcher conclusion that:

- The traditional method (command method) contributed in a positive way to improving the level of performance of the skills under research for members of the control group, and statistically significant differences appeared between the pre- and post-measurement for members of the control group in favor of the post-measurement.
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- The students of the experimental group outperformed the students of the control group in the post-measurement in physical variables, which led to an increase and improvement in the physical aspect of the skills under study among the students of the experimental group, as statistically significant differences appeared in the post-measurement between the control and experimental groups and in favor of the experimental group.
- The students of the experimental group outperformed the students of the control group in the post-measurement in the level of skill performance in the skills under investigation among the students of the experimental group, as statistically significant differences appeared in the post-measurement between the control and experimental groups and in favor of the experimental group.

The educational program using multimedia had a positive impact on the level of performance of the athletics skills under study in the experimental group.

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