



Faculty of Physical Education for men

The Effectiveness of instructional program by using Hypermedia to learning attaque skills in fencing sport

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Philosophy (Ph.D) in physical education**

By

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Research Introduction:

A human-centered development is one of the objectives of the educational process, and technology, it considered with its forms and multi channels one of the basic requirement of the demands of the third millennium to harness a powerful force in the processes of innovation and development, especially in the field of education and learning, and provide an educational environment that effectively and to explore new paths and complementary methods of teaching.

The education in the field of physical education undergoes a period of development imposed by the nature of the times, which requires them to change their curricula, objectives and methods of teaching, and physical education with its information, laws and skills which needs to be finely honed need to benefit from all means of scientific progress of techniques and modern methods in learning.

The term Hypermedia differs from the term multimedia While multimedia indicate diversity in the media used where the learner using all or more method of multimedia, taking into account the time and timing for each medium, but hypermedia is not only a compilation of media, but also established to enrich and deepen the information contained in the program and presented in an integrated framework and effectively using all senses of the learner and the learner control over the firm and its interaction with the system, and this interaction will enable learners to identify the paths and ways in which the amount of information retrieved and control the speed of education.

The hypermedia also have the ability to handle and process information relevant to the topic quickly through special techniques known as Links which are a way to link information that is the essence of hypermedia which facilitate the transition, jump and freedom of movement between the information in the forms of non-linear, while agree in the sense that each contains a set of educational media that will engage learners and provide their experience with lasting impact and provide them with the expertise necessary to achieve the objectives of education.

The problem Importance of the Research :

Despite the significant progress witnessed by the educational institutions in the educational process by using the methods and techniques of modern technology which achieve the desired goals, however, he notes the adoption of physical education on the traditional methods of education where the use of technology education is extremely limited.

As the of fencing is one of the prescribed methodological materials in physical education faculties, and through the work of the researcher in assisting in teaching this material applied to note that the method used in teaching is the traditional method based on the explanation of the teacher and provide a model of skill and correct some common errors which does not take into account the individual differences between learners as well as the inability of the traditional method of education to attract the attention of learners to participate effectively within the lecture, which could lead to deficiencies in the provision of material knowledge and unmarked progress of knowledgeable and skill approach that will make a change in the level of learners, and to make the student more effectively through the creation of positive attitudes that necessary to develop educational programs allow a student to be a major focus of the educational process.

This prompted the researcher to the need to benefit from possibilities offered by teaching technology and use in a systematic way in the design of different learning environments and effective technology designed Hypermedia.

So the researcher thought in conducting this study, which is in the design of educational software using Hypermedia determine its effects on some aspects of learning, which is in some of the skills of offensive (attack straight - attack unequivocal - the attack changing - the attack unlike invasive) in the weapon fencing, cognitive aspect of knowledge acquisition for sports for these skills offensive in the sport knowledge of fencing weapon to develop one of the building blocks for the use of technologies that modern educational techniques like Hypermedia in the field of motor learning which is supposed to help the teacher in the teaching process.

The Aims of the Research:

This study aims to design educational software using the method of Hypermedia and determine its impact on:

- ◆ The level of cognitive achievement of the information associated with some offensive skills of research sample in the sport of fencing weapon and historical development of the sport of fencing in the Arab Republic of Egypt and some articles of the law among the research sample.
- ◆ The level of performance for some offensive skills in the sport of fencing weapon, represented in the (straight attack - attack marauding - unequivocal attack - attack marauding reverse) of the research sample.

The Hypotheses of the Research:

In light of the objectives of the current research the researcher assumes the following:

- There are significant differences between the average pre and post test of the control group in the level of cognitive achievement for some offensive skills of research sample in the sport of weapon fencing, historical development in the Arab Republic of Egypt and some articles of the law for the benefit of dimensional measurement.
- There are significant differences between the average pre and post tests of the experimental group in the level of cognitive achievement for some offensive skills of the sample under study in the sport of fencing weapon f, historical development in the Arab Republic of Egypt and some articles of the law for the benefit of dimensional measurement.
- There are significant differences between the average of dimensional measurement of the two groups of research (experimental and control groups) in the level of cognitive achievement for some offensive skills in the sport of fencing weapon , historical development in the Arab Republic of Egypt and some articles of the law in favor of the experimental group.

- There are significant differences between the average dimensional measurement of the two groups of research (experimental and control groups) in the level of performance for some offensive skills of the sport of fencing weapon for the experimental group

The Approach of the research :

The researcher used the experimental design because it is adequate to the nature of this research which is using experimental designs for the two groups, one experimental and control group using the pre and post test for both groups.

The research sample:

Research sample was selected randomly from students of the Second years, Faculty of Physical Education for Boys - Benha University for the academic year 2009/2010 which are 143 students, and the research sample consists of 60 students by 42% of the original community were divided into two groups, one experimental group formed of 20 students and follow the code with the proposed method using Hypermedia and the other control group formed of 20 students and follow with the traditional teaching method (explanation and performance of the model), 20 students are used for the exploratory studies

Adjusting some variables:

The researcher has a coherence and equivalence between the experimental group and control group in these variables (chronological age - height - weight - intelligence).

The Tools of the Research:

- Tools for significant growth rates: (chronological age - height - weight)
- Tools for indication of the mental abilities: (high intelligence test) preparation (Mr. Mohamed Khairi).
- Form to assess the level of performance of the sample under consideration by the arbitrators.
- Cognitive achievement test.

The Main experiment:

The researcher applied the proposed educational hypermedia with the experimental group, and he used the traditional teaching method of "verbal explanation and performance of business model" to the control group, and that in the period from Thursday 03/04/2010 to Thursday, 20 / 5 / 2010 M. The application of the experiment took 12 weeks by one lecture per week and time of the lecture "module" (45 minutes) for both sets of research.

The Past Measure :

The researcher after the completion of the period specified for the implementation of the experience of basic research conducted telemetric of the two groups [the experimental and control] in the level of cognitive achievement of the two groups on a test of knowledge, and the level of performance through performance evaluation form skill by the arbitrators, in the period from Monday, 24 / 5 / 2010 m to Thursday, 27/05/2010.

The Statistical Processing:

The data processing using the following statistical methods:

- The arithmetic mean.
- The normal deviation.
- The (T) test.
- The coiling coefficient.
- The coefficient correlation.
- The easiness and difficulty coefficient.
- The Factor discrimination.
- The difference between two means.
- The relative importance.

Conclusions and recommendations

Conclusions:

In the light of research objectives and hypotheses and the limits of the sample characteristics and methodology used and through the statistical treatments and present and discuss the results could be reached the following conclusions: -

- The prepared educational technology method Hypermedia contributed in a positive way to teach some offensive skills in the sport of fencing weapon fencing, the specific question of the experimental group.

- The traditional method (verbal explanation and performance of the model) contributed in a positive way to teach some offensive skills in the sport of fencing weapon fencing, the specific question of the control group members.

-The prepared educational technology method Hypermedia had a positive impact in the attainment of knowledge related to the skills of fencing weapon in question and the historical development and some of the rules and laws to the experimental group.

- The traditional method (verbal explanation and performance of the model) had a positive impact in the attainment of knowledge related to the skills of fencing weapon in question and the historical development and some of the rules and laws for the sample of the control group.

- The prepared educational technology method Hypermedia was more influential on the education of some offensive skills in fencing weapon in question from the traditional (verbal explanation and performance of the model), which indicates the effectiveness and impact.

- The prepared educational technology method Hypermedia was more influential on the level of cognitive achievement of the traditional method (verbal explanation and performance of the model), which indicates the effectiveness and impact.

Recommendations:

In the light of the findings of the research findings and conclusions within the limits of its scope and objectives of the research, the researcher recommends the following:

- The use of educational software developed technology Hypermedia in the teaching of skills for students and young novices.
- The use of educational software designed in a manner Hypermedia in education for some offensive skills in fencing weapon under study for students.
- The need to provide infrastructure and necessary equipment and computer labs for the production and use of educational programs designed technology Hypermedia within universities, clubs and schools.
- Cooperation of experts and specialists in physical education and technology education in the production and design of many computer programs developed technology Hypermedia in sports activities in general and in particular fencing.
- Interest in IT departments of education in the faculties of physical education in order to be responsible for the preparation of educational programs using the latest teaching methods.
- Benefit from the expertise of specialists in Hypermedia by providing seminars and lectures to faculty members and their assistants to make them aware of the importance of this method in the process of education.
- Further research using experimental methods of teaching and other comparable manner Hypermedia to reach to achieve the highest possible level in the teaching and learning various sports activities.
- Conducting a similar study on the other skills that are not contained in this research.
- To carry out similar studies in other Fencing (Epèe - Saber).
- The need to train college students of physical education on how to set up computer programs in the field of sports and how to deal with the techniques of modern technology.