

EFFECT OF TEACHING PROGRAM BY USING GHON ZAHORIK METHOD FOR TEACHING OF TECHNICAL ACHIEVEMENT AND IMPROVING OF ACHIEVEMENT LEVEL IN LONG JUMP EVENT FOR THE STUDENTS

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Abstract

This research aims to prepare teaching program by using of Ghon Zahorik method for teaching of technical achievement and improving of achievement level in long jump event for the students and to know the effect of Ghon Zahorik method for teaching of technical achievement and improving of achievement level in long jump event for the students . The society of the research represented by (88) students in first grade in the college of sport education / university of Meesan (2023 -2024) distributed into two branches (theoretical sciences and practical sciences) . Every branch have two divisions . Every division contains (20-25) students . The researcher did his experiment on sample of (36) students represented the branch of practical sciences for two divisions (18) for every one divided into two groups (experiment group and control group) . The percentage of the sample was (41) . The program of teaching included the same number of the teaching units which use in the college for teaching of long jump event for three weeks by two lectures weekly . The researcher reached to make several conclusions . The most important is that the program realized positive effect in the levels of technical achievement for long jump event and the other conclusion represented by the keeping of the informations in the long term memory which led to suitable keeping in technical achievement for long jump event for the favor of the experimental group .

According to the conclusions the researcher reached to that there is necessity to adopt Zahorik method so that to improve the achievement of long jump event , furthermore the necessity of using of Zahorik method as one of the important methods for teaching in the college of physical education .

Introduction

Research definition

1-1 Introduction and the importance:

There are many educational and behavioral targets for the teaching working synchronously to develop scientific level. Therefore this should be accompanied with the changes and the developments in the scientific field. The specialists and the experts should focus their consideration on the continuous renewing and the experimentation through using various styles and methods in the teaching because this system is changeable according to the changes which could happen in the conditions of the teachers and their abilities . Some of these types of the methods and the styles of teaching considered the teacher is the focus of the

educational process and some of them considered the groups of the learners as a mean to realize the targets . Every learner needs to realize many impressions and desires should be agreed with his abilities then realize the targets of the teaching which in need to serial of behavioral targets lead to realize identified final targets which suitable with the abilities of the learners .

Long jump event is one of the events of track and field . It contains of several phases represents by taking off , flying , and landing . The methods and the styles which used in this event has effective role to develop the level of the achievement in addition to the modern strategies and the methods which suitable to the teaching process .

In order to realize the targets of the teaching process in the unit of the teaching the teachers should adopts planned styles and patterns of teaching should be compatible with the abilities and the qualifications of the learners so that to make united solutions to realize the targets and making positive physical demands and to increase the effective interaction among the learners . Method of Zahorik for teaching depends on structural theory which depends on the explanation of the learners for the phenomena . The last experience lead to support their abilities and to make them more effective through connect the theory with the practical training , so, the importance of the study clears through using method of teaching to improve long jump event which depends on several phases and several serial steps support the learner to understand the situations of the teaching .

1-2 research problem :

It is submitted that the teacher, the students and the curriculum are the principle basics for the process of teaching and we can not give up of any element of them . The student is the most important element because of his basic role to make the decisions which suitable to his abilities and that could be realized by choosing various methods of teaching could make the students more effective and lead the teacher to implement his tasks by adopting the strategies which compatible with the abilities of his learners and suitable with the their capabilities, subject ,nature of the skills and how to do it

There are many problems in the process of the teaching such as teaching styles and its compatibility to the abilities of learners because of their individual differences which considers the most important and effective element on the learners . This leads the specialists and the experts to take more of thinking, so that to make teaching programs depends on learner's effectiveness, so, the crucial need cleared through the necessity to releasing modern models of teaching ensure teaching of the students and improve their thoughts.

Through the noticing of the researcher for the modern strategies, models of teaching, the resources and the published researches lead the researcher to adopts Zahorik method after following the researches which studied long jump event. The researcher did not find any research used Zahorik method. This is what lead the researcher to use the method of Zahorik as anew pattern of teaching away of the classical methods in the teaching .

1-3 research aims:

- 1. To Prepare teaching program by using Zahorik method to teach and improve technical achievement for long jump event .**
- 2. To know the effect of Zahorik method for teaching and improving technical achievement for long jump event.**

1-4 research hypotheses:

1. There are differences have statistical significance between the pre and post tests for the two groups (experimental and control) in technical achievement teaching for long jump event.
2. There are differences have statistical significance between the post tests for the two groups (experimental and control) in technical achievement teaching for long jump event.

1-5 research fields:

1-5-1 Human Field: students in the first grade - college of physical education – university of Meesan.

1-5-2 Time field: 25/2/2024 -4/4/2024.

1-5-3 Location field: field of long jump in the college of physical education .

2. Approach and field procedures:

2-1 research Approach:

The researcher used the experimental approach which depends on accurate change for the circumstances of any matter and notice the resulted changes from the same

matter and try to explain it (74:1995:2) by using the experimental design. The two groups should be equalized in all the factors which effect on the followed variable except one variable which is independent variable (108:1981:5) .

2-2 Research society and sample:

The society of the research represented by (88) students in the first grade - college of physical education – university of Mesan distributed into two branches (theoretical and practical sciences). Every branch divided into two divisions (1 , 2) with (20-24) students , while the sample which is part of the original society and it is the most important element (225:1999:16) represented by (36) students represented the practical branch by two divisions (1 , 2) by (18) students for every division in two groups (experimental and control). The percentage was (41) from the original society by using randomly way. The researcher has chosen the division (1) as experimental group according to Zahodic method while the division (2) as control group according to the usual style of the teacher. The Researcher excluded the ill students and the students who were absent through the pre tests. The exploral experiment represented by (6) students from the theoretical branch. Table (1) clear number of the sample , its details and the percentage .

Table (1) clear number of the sample, its details and the percentage

Division	Group	The sample	Total	Percentage
1	experimental group	18	21	50%
2	Control group	18	23	50%

2-3 homogeneity and equalization

2-3-2 sample homogeneity

In order to make homogeneity for the sample the researcher used anthropometric measurements (length, age, and mass) by using torsion coefficient table (2). The results showed that the

sample has homogeneity since the torsion coefficient between (0.244) and (0.407). It is good index because the values are between (± 1).

If the value is zero or near it the distribution will be normal For the individuals of the sample (3: 2000, 246) , so, there is high homogeneity in the length .age and the mass .

Table (2) appear homogeneity of the sample (mean, median, s d and the torsion) for the variable of length, age, mass

Variables		Mean	S D	Median	units
Length	0.246	176.00	5.13	175.50	cm
age	0.244	20.00	0.76	19.86	Year
mass	0.407	70.00	3.79	70.17	kg

2-3-3 Equalization of the sample:

In order to avoid the factors which effect on the results of the experiment and in order to realize the equalization for the two groups the researcher equalized the two groups for the pre tests.

Table (3) equalization of the groups in the pre tests for technical achievement and the level for long jump event

Test	Control group		Experiment group		sig	)T(value	Reference
	SD	med	SD	med			
technical achievement	4.97	41.00	6.29	41.16	0.930	0.088	significant
achievement	0.23	4.14	0.11	4.05	0.322	1.006	significant

Table (3) appears that there is not statistical significance between the median of the two groups in the pre test and the students were on one line. T value was not significant compared with the degree of (34) and level of (0.05)

2-4 The means and the instruments:

2-4-1 means of information collection:

- ✓ Arabic and foreign resources
- ✓ Internet
- ✓ Observation
- ✓ Papers of data recording

2-4-2 used instruments:

- ✓ Long jump field
- ✓ camera

- ✓ medical balls (10)kg
- ✓ timing watch (2)
- ✓ two flags
- ✓ two whistles
- ✓ measuring tape
- ✓ laptop
- ✓ wooden box (30)cm
- ✓ wooden box (50)cm

2-5. The tests of the research:

2-5-1 achievement test: (10, 2018, 137)

Purpose of the test: index to measure achievement

- The tools: legal jumping field, measuring tape

The description: from the quick sprinting the athlete begins to taking off by one leg landing by two feet-

- **The achievement:** every jumper implements three tries according to it the researcher calculate the best try.

2-5-2 test of evaluating of technical achievement for long jump event:

- **Address of the test and the purpose:** evaluating of technical achievement for long jump event.

The tools: Long jump field, camera, flags, measuring tape, whistles, cd

Procedure: the student implements the try of long jump while the researcher taking the photos for three ties for every student.

The recording: the researcher showed the achievement of the students to the experts, then the experts evaluates the best try for every student.

Notice: the researcher printed the photos on cd disk .the experts depended on the best try after show it in order to evaluate it . The degree for every try is (100).

In order to ensure the accuracy the researcher divided the degrees into four divisions for the steps of the event. (25) Degree for every step, then sum the four degrees to contain the final degree.

2-5-2-1 Exposal experiment for long jump achievement:

Exposal experiment is a mini experiment of the principle experiment. It should has the same conditions and circumstances for the principle experiment so that to implement it (8, 1987, 95).

The researcher implemented the exposal experiment on Monday (26-2-2024) by participating of (6) students chosen by randomly style. The most important targets represented by discovering the difficulties of the research and to know the compatibility of the tests for the sample.

2-5-2-2 scientific basics for technical achievement test for long jump event:

Validity: Validity could be defined as test measures accurately the phenomena which designed to measure it. There are many types of the validity use to sum the evident. Whenever the researcher presents many evident for validity of his scale the confidence of the scale will be increased because the scale measure the same situation which the scale prepared to measured it , so, the researcher used the intrinsic validity , table (4).

Reliability: in order to calculate the Reliability of the test the researcher depended on test and retest method by using exposal experiment on a sample of (6) students on Monday 26-2-2024,

then re test after (7) days on Sunday 3-3-2024. The data treated statistically for the two tests by using Pearson coefficient between the degrees of the two tests. The results of correlation appeared that there is high correlation among most of the tests.

Objectivity: Objectivity is the free and to be away of the effect of the personal factors and neutral. The test which has Objectivity lead to make one result even there are differences among the referees because of its specific questions (11, 2002, 119). The researcher depended on two referees after the exposal experiment by using sample of (6) students, then he treated the results statistically, then extracting Objectivity value by using Pearson coefficient table (4).

Table (4) scientific basics for technical achievement for long jump event

Test	Reliability		Objectivity		intrinsic validity
	)Sig(	)person(	)Sig(	)person(	
Technical achievement for long jump event	0.000	0.844	0.000	0.952	0.918

2-6 Teaching program by using Zahoric method:

After specification of demands of principle experiment and implementation of the exposal experiment. The researcher implemented experimental unit for the two groups so that to make pre teaching for the student about the event and to realize the requested targets. The researcher began to implement principle experiment on Wednesday (6-3-2024), then he qualified the demands of the unit in the college of sport education / university of Mesan, then he finished teaching approach on Thursday 21-3-2024. The researcher sent the units to the experts in order appear the method according to Zahoric method. Teaching program implied the same number of teaching approach units in the college which use to teach long jump event (6) units for three weeks. Also the program implied how the group implements work according to Zahoric method five steps. In the principle part (effect information event, gaining information, understanding, using the information, thinking about information). Teaching division which its time is (20) minute contains two phases represented by effectiveness of the information and clearing the target of the unit. In the phase of gaining the information, the teacher explains the event and the movements of the parts of the body. In the practical division which its time is (45) minute contains three phases represents by understanding the information , the phase of using of the information and the final phase which represents by the thinking with the new information of the event in order to use it practically in the event . The table show distribution of phases of Zahoric method by using of the usual style by the teacher which contains of (6) units (90) minute for every unit.

2-7 Definitional units:

The purpose of definitional unit is to clear the technical phases for long jump event. The researcher implemented teaching unit for experiment and control groups for the first once in order to discover the technical phases of the event. This unit is one of the basic units in the beginning of the teaching. The unit employed on Monday 4-3-2024.

2-7-1 The pre test:

The test is a mean to evaluate the programs, plans and approaches for diver's levels and divers age stages. It refers to the extent of the success and the proceeding to realize the targets (9,

1997, 267). After explanation of the phases of the achievement for long jump event the researcher implemented the pre test on Thursday (5-3-2024) in the college of physical education–university of mesan. The researcher used photo tool (sony), (134) photos for every second pinned on triangle stand.

2-7-2 The post test:

After implementation of the program the researcher implemented the post tests for the two groups (experimental and control) on Wednesday (27-3-2024) by using three tries and took many photos under same circumstances for the pre tests.

2-8 statistical means:

After collection of the data and the information by using statistical bag program .

3- Results discussion:

3-1 results of the pre and post tests for technical achievement for the two groups and analyses and the discussion.

Table (5) results of the pre and post tests for technical achievement for the two groups (control and experiment)

Variables	Groups	Post test		Pre test		t value	Sig	Significance
		S D	med	S D	med			
technical achievement	experiment	2.78	69.88	6.29	41.16	17.69	0.000	Positive
	control	3.27	56.83	4.97	41.00	11.28	0.000	Positive

Table (5) appears that the median for the experiment group in the pre test is (41.16) and standardized deviation (sd) is (6.29), while the median for the post test is (69.88) and standardized deviation is (2.78). T value to know the differences of the two test is (17.69) under freedom degree (17) significance level (0.05) which refers that there are significant differences between the tests for the favor of post test.

The median of the pre test for the control group is (41) and the standardized deviation is (4.97), while the median for the post test is (56.83) and standardized deviation is (3.27). T value to know the differences significance between the two tests is (11.28) under freedom degree of (17) significance level (0.05) this refers that there are significant between the tests for the favor of the post test. The researcher attributed the differences to the effectiveness of the program which used for the experimental group by using Zahoric method. This method of teaching as a new pattern differs of the classical patterns because of its importance to get the last information and connect it with the new information (feed back) through stimulating the experiments by the discussions and the questioning about the skill which lead to increase student's interest with new subject (Balkees ahmed) who confirmed that the learner should re organizing the concepts and the information's to the contain of the teaching and connect it with the pre information's so that to make new form lead to increase the activities which lead to stabilize the concept for the learner (1.1982,339). The researcher also attributes the differences in the post test to the prepared teaching units according to Zahorik method by using serial phases which presented good chance for the learners through the practical employment, which

confirmed by (Weatly) who said that nature of the structural teaching helps the learners to understand the informations and improve the confidence to solve their problems, furthermore they feel that the teaching is to create the meaning not only keeping the information and a way to success (9,21,1991).

The researcher says that the factors which contributed in gaining the teaching for control group individuals is result to the followed method of teaching which has positive effect on the teaching process. Mostin and Sara ashort said that" every style of teaching styles when use correctly in the suitable time lead to reaching the requested targets (1, 1982, 340). The style in the teaching considers unique form to implement the lesson. The teacher adopts this form as a connection mean between the teacher and his students to get the information. Every style of teaching has specific philosophy (6, 1990, 33). The researcher attributes the improvement in the results of technical achievement for the control group in the post tests to the using style by the teacher and its effect on the achievement.

3-2 results of posttests for technical achievement for two groups (control and experiment

Table (6) results of posttests for technical achievement for two groups (control and experiment

Variables	control		experiment		t value	Sig	Statistical significance
	SD	median	SD	median			
technical achievement	3.27	56.83	2.78	69.88	12.88	0.000	positive

Table (6) appears that the median of post tests for technical achievement for two groups (control and experiment is (69.88) and SD is (2.78), while the median of the control group is ((56.83) and SD is (3.27). T value to know the differences between the two tests is (12.8 8) under freedom degree of (34), significance level is (0.05) refers that there are significant differences for post-test for the favor of experiment group. The researcher attributes the differences in the post test are related to the teaching unit which prepared by the teacher by using Zahorik method with all its serial phases which created suitable chance to learn long jump event. The researcher also noticed that the improvement in the motor achievement in the post test for the experiment group is clear evident for improvement of the achievement which confirmed by using Zahorik's method and through teaching units. The researcher. Implemented the event with all its phases and emphasized on body position which lead to make the evaluation and reinforcement so that to discover the benefits of teaching program and its effect.

The program also contributed with increasing of the motivation of the learners. Mahjoob confirmed that" the exercise leads to improve the skill and reach it to the correct technique, to discover mistakes, and moving of teaching trace towards another similar skills"(5, 2001, 167) .

3-3 Results of the pre and post tests for technical achievement for two groups (control and experiment)

Table (7) results of the pre and post tests for technical achievement for two groups (control and experiment

Variable	group	Post test		Pre test		t value	Sig	Statistical significance
		SD	Median	SD	Median			
Achievement level	Experiment	0.19	5.92	0.11	4.05	34.93	0.000	Positive
	control	0.18	5.53	0.23	4.14	19.84	0.000	positive

Table (7) appears that the median for the pre tests for technical achievement for experiment group is (4.05) and SD is (0.11), while the median of the group experiment for the post test is ((5.92) and SD is (0.19). t value to know the differences between the two tests is (34.93) under freedom degree of (17), significance level is (0.05) this refers that there are significant differences for the two test for the favor of the post test.

The median of the pre test for the control group is (4.14) and SD is (0.23), while the median of the post test for the control group is (5.53) and SD is (0.18). T value to discover the differences between the two tests is (19.84) under freedom degree of (17), significance level is (0.05) refers that there are significant differences for the two test for the favor of the post test. According to remembered data above we noticed that there are significant differences for the two tests for the favor of the post test. the researcher attributes the cause of this result is related to the exercises which used by the individuals of the sample and related to the improvements in the achievement which served the motor target to get farthest distance which refers to increasing in the efficiency and the harmony of the achievement among body joints and its muscles, and reaching to high speed to realize the requested distance in long jump event.

The improvement in any event could be realized by continues practicing and correcting the mistakes through the practical performance for the learners under supervision of the teacher. This is what confirmed by Thafir hashim who said that it should be taught as a normal phenomena since the teacher follows the basic steps for teaching and practicing and focus on the frequent tries continuously (4,2002.102).

3-4 Results of the post tests for technical achievement for the level of achievement for two groups (control and experiment and analyses and discussion >

Table (8) results of the post tests for technical achievement for the level of achievement for two groups (control and experiment and analyses and discussion

Variable		control	Experiment		T value	Sig	Statistical significance
Achievement level	SD	Median	SD	Median			
	0.18	5.53	0.19	5.92	6.09	0.000	positive

Table (8) appears that the median for the post tests for technical achievement for the experiment group is (5.92) and SD is (0.19), while the median of the control group for the post test is ((5.53) and SD is (0.18) . T value to discover the differences between the two tests is (6.09) under freedom degree of (34), significance level is (0.05). This refers that there are

significant differences in the post test for the favor of experiment group. The researcher attributes this result to the effective exercises which used in teaching program and using Zahorik method which prepared accurately and its positive effect on the level of achievement. Teaching program which prepared by the researcher and its various exercises created positive role on the function of muscular groups and its accurate way which led to invest the effort and the movement then led to improve the final performance . This is what gave experiment group individuals the superiority in the digital performance for long jump event "the trait to appear the level of performance through the learner improves some motor responses into new motor form and in need to organize the muscular groups toward one direction (7,1995,92).

4- Conclusions and recommendations

4-1 conclusions

1. Teaching program effected positively on the level of performance by using Zahorik teaching program for experiment group students.
2. Teaching program by using Zahorik teaching program contributed to confirming the information in the long term memory.
3. There was suitable time in the teaching by using zahorik teaching program.
4. The exercises which prepared by the researcher were more better for experiment group students.

4-2 Recommendations:

1. The necessity of using Zahorek's teaching program in teaching long jump students.
2. Using the Zahorek method as a teaching method in colleges of physical education.
3. Conducting similar studies using the Zahorek method on different age groups.
4. Conducting similar studies using the Zahorek method on different sports categories.

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