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# The Impact Of A Proposed Curriculum On The Development Of basic Handball Skills

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## Abstract

The goal of the research is to identify the impact of the proposed educational curriculum on learning some basic Handball skills by the members of the research sample. The researcher used the experimental method as it suits the nature of research and experimental design (designing equal groups). The randomly-selected sample included (30 students) from fourth grade preparatory students in Al-Quds Preparatory School for boys. They were divided into two equal groups in number. The proposed learning curriculum was applied to the training group for a period of (8 weeks) and at a rate of two units per week, and the duration of the educational unit (45 minutes). The researcher concluded that the proposed learning approach and the traditional approach had a statistically significant impact, which contributed to the sampled participants' improvement of learning the performance of the basic Handball skills. It was also concluded that the proposed learning curriculum had a greater impact than the traditional approach as demonstrated by the statistically significant differences between the two post-tests of the groups and in favor of the post-testing of the experimental group. The study recommended using the proposed learning curriculum to improve the learning of basic Handball skills by the students of the preparatory stages using appropriate tools and equipment and appropriate methods with educational positions in the learning curriculum. The study recommended conducting similar research using other types of learning curricula and identifying their effects to improve the learning of other basic Handball skills.

**Keywords:** Curriculum, Basic Handball Skills

## 1- Introducing Research:

### 1.1 Introduction to and importance of the research:

The process of learning basic Handball skills is one of the main objectives of preparatory school students and has its own basic skill, which serves as its backbone. The error in the basic skills of this game is no longer due to bad luck but is a breach of the basic requirements of the art of the game of Handball.

Given the importance of the basic Handball skills, it takes up a lot of space in the educational curriculum for the preparatory stages upon which is relied in the last two stages to learn about the defensive and offensive planning movements. The basic skills education stage is one of the most difficult stages in learning the performance of the game for students. This is due to the lack of competition element as well as lack of some interesting elements. (Gerges, 2004, p. 148). Therefore, attention should be paid to the methods of teaching these basic skills to develop an education curriculum based on scientific foundations and according to steps to learn skill. Also, various methods should be used in constructing the lesson from the methods of regular use of devices and tools within the applied exercises in the main section of the unit

to increase the excitement and to spread the spirit of competition among learners through the use of small games that serve the skill.

Hence, the importance of research stems from developing a proposed learning curriculum to assess its impact on learning basic Handball skills for preparatory school students.

### **1.2 Research problem:**

The basic Handball skills of the 4th grade preparatory school can only be achieved through the use of a structured learning curriculum with clear objectives, and in accordance with the steps of health education. Of note here is the need for a gradual system of difficulty when building the learning unit.

After determining the level of learners, and how to apply the curriculum of Handball by the teachers of sports education, the researcher noted a weakness in the students' performance of basic Handball skills despite the time allocated during these units. This can be ascribed to the poor interest in teaching the basic Handball skills in the preparatory stage using the steps of acquiring skill correctly, i.e. gaining experience under different educational conditions and attitudes that are mainly related to the art of performance. This can be done through the use of tools and devices and maintaining diversity in specific forms. This is particularly the case in the small games given its recreative importance and its technical quality and active role in the beginning and during the learning process. Therefore, the researcher decided to study the effect of a proposed learning curriculum on learning some basic Handball skills for preparatory school students.

### **1.3 Research goal:**

1. Determine the impact of the proposed learning approach on learning some basic Handball skills by the members of the research sample.

### **1.4 Research hypotheses:**

- i) There are significant statistical differences between pre-testing and post-testing and in favor of the latter of the control and experimental groups in some of the basic Handball skills.
- ii) There are significant statistical differences between the experimental group and the control group in the post-tests and in favor of the experimentation group in some of the basic Handball skills.

### **1.5 Areas of research:**

#### **1.5.1 Humandomain:**

Fourth graders in Al-Quds Preparatory school for boys.

#### **1.5.2 Temporal Domain:** 29/10/2017 to 27/12/2017.

1-5-3 Spatialdomain: The arena for the study of sports education in Al-Quds Preparatory school for boys.

### **1.6 The curriculum:**

"All the experiences whether they are activities or planned practices provided by the educational institution to help students achieve the desired scientific outcomes to the best of their ability, have been taken into question" (2).

Therefore, based on these two directions, the learning approach is characterized by the following:

1. It includes the experiences that help to develop the learner in all aspects (physical, psychological and rational).
2. It takes into account individual differences between learners.
3. It takes into account the needs, orientations, preparations and abilities of learners.
4. There should be a relationship between the elements of the curriculum to be distinct and comprehensive (Farhan, 2008, p. 14).

## 2. Research methodology and field procedures:

### 2.1 Research methodology:

The researcher used the experimental method and the experimental design called (the design of the two equal groups with pre-test and post-test).

### 2.2 Research community and research sample:

The research community consists of 45 students. The research was intended for 30 students of the fourth grade preparatory students in Al-Quds Preparatory for Boys. The students were randomly assigned to two groups: the experimental group (15 students) and the control group (15 students).

### 2.3 Equal research sample (control and experimental groups):

In order to identify the equality of the two research groups in all the basic Handball skills variables, the researcher used (T-test) for independent groups. We can note from Table (1) that all calculated t-values are smaller than the tabulated t-value which was (2.08) with a degree of freedom (28) for a two-tail test. That is, there are no statistically significant differences in all variables. The research indicates that the two groups are equivalent.

Table (1) :The equality of the two groups with basic Handball skills tests.

Test name	Control Group		Experimental Group		Calculated value	Tabular value	Significance
	Q	on	Q	on			
Pass&receive for a period of (30 seconds)	15,66	1,63	15,31	1,72	0,39	2,08	Non-significant
Pass & receive on Wall	12,4	2,16	12,46	1,55	0,92		Non-significant
Dribbling 30 m in zig-zag line	16,96	1,69	17,44	1,72	0,44		Non-significant
Dribbling with different directions (zigzag)	42,86	4,22	42,63	4,92	0,88		Non-significant

### 2.4 Normal distribution of the research sample:

In order to determine the extent to which the research is distributed, the researcher used the law Pearson's coefficient of skewness). We can note from Table 2 that all research purposes are

limited to (+3 and -3). This indicates that the research sample (control and experimental groups) is distributed in a normal way.

Table (2) : the normal distribution of the two groups in all the research requirements

The variable Group	Age	Pass & receive For 30 sec	Pass & receive On the wall.	Dribbling 30 m in a zigzag line	Dribbling with its directions Different (zigzag)
Control	0,59	0,62	-0,25	-0,93	-1,04
Experimental	0,39	-0,51	-0,54	-1,15	-0,73

\* Free score for independent samples =  $N_1 + N_2 - 2 = 15 + 15 - 2 = 28$

## 2.5 Field Research procedures:

### 2.5.1 Identifying basic handball skills:

After reading the vocabulary of the Handball curriculum in the first stage (1<sup>st</sup> semester) in the educational institutes in the Kurdistan region, the following skills were identified:

- 1- Receiving the balls (high and low) - stopping the ball - picking up the ball.
- 2- Passing (head level, above head level - counter-attack pass).
- 3- Dribbling.

### 2.5.2 Determining basic Handball skills tests:

1- Pass & receive on the wall for (30 sec.) (Ghanem, 2010, p. 418).

- ❖ The purpose of the test is to maintain coordination and the speed of passing on the wall.
- ❖ Tools used: a hand ball, flat wall, time-watch.
- ❖ Description of performance: The learner stands 4 meters away from the wall and passes the ball to the wall and continues to pass as many as possible within the specified timeframe (30 sec.).
- ❖ Recording: The number of passes is calculated for the specified timeframe (the number of times the ball is received is calculated).

2- Pass and receive test on two walls (Al-khayyat & Mohammed, 2001, p. 494).

- ❖ The goal of the test: measuring the coordination and the speed of passing and its accuracy on two walls.

The tools used: i) a legal hand ball (2), ii) two perpendicular walls with two circles of a diameter of (75 cm) and rising from the ground for (165 cm), iii) a circle of diameter drawn on the ground and its center (3m) away from the walls as shown in Figure (1), and iv) a time-watch and a whistle.

- ❖ Performance specifications: - The learner stands (3m) from the walls inside the circle drawn on the ground and passes the ball to the walls and within the two circles drawn on the walls in succession and continues to pass as many as possible for 30 seconds.
- ❖ Recording: The learner records the number of passing times and receiving the ball from within the specified circle.

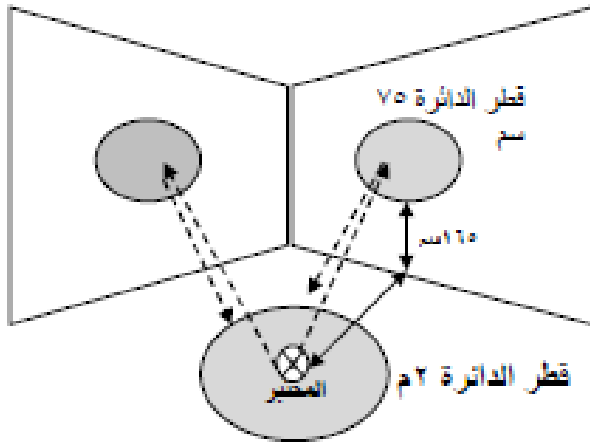


Figure (1)

3- Dribbling for 30 m in a zigzag line ( Darweshet al. , 2002, p. 118).

- ❖ The goal of the test is to reduce the speed of dribbling, coordination and agility.
- ❖ Tools used: 5 poles - a hand ball & a time-watch.
- ❖ Performance specifications: The learner stands behind the line, 3 m. from the first pole. The distance between each pole is (3m) so that the distance between the starting line and the fifth pole is (15m) as shown in Figure (2). Upon hearing the start signal, the learner will dribble around the poles back and forth.

Recording: One correct attempt is given, and is repeated in case of any legal fault. Time is calculated for the nearest (0.1 sec.).



Figure (2)

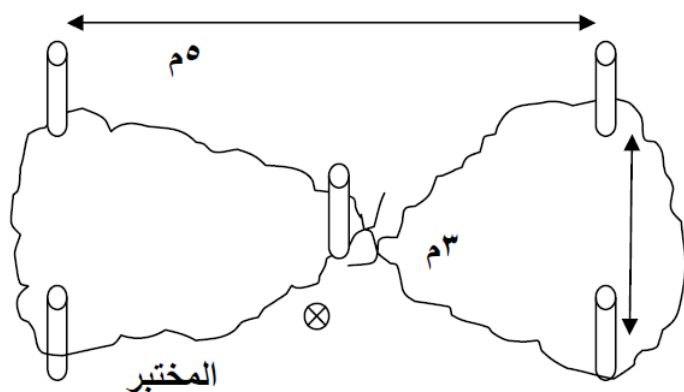
4- Dribbling in different directions (zigzag running) (Mohammed & Radhi, 2011, p. 269).

The goal of the test: the level of dribbling skill.

Tools: - A legal hand ball, five poles, a rectangle on the ground (5 m×3m) as in Figure (2), a time-watch and a whistle.

Performance specifications: Four poles installed on the ground in the corners of the rectangle, and the fifth pole is fixed in the middle of the rectangle from the starting line. The learner runs in the form of two complementary circles and the task is performed in three consecutive circles as in Figure (3).

The learner records the time it takes to the nearest (0.1 sec.) of the three successive circles.



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Figure (3)

## 2.6 Curriculum design:

The researcher designed an education curriculum according to the curriculum of the learning units and was applied by the specialization teacher of the institute. The curriculum consists of (16) educational units at a rate of two educational units per week and for a period of (8 weeks). The duration of the learning unit is (45 minutes) The learning unit has been established as follows:

First: The preparatory section (15 minutes) includes:

- ❖ Introduction (2 min.).
- ❖ General warm-up (5 min.).  
General preparation for all parts of the body.
- ❖ Special warm-up (7 min.).  
Special preparation for the muscles and joints of the hands that serve the main section and focus on the upper body (arms, shoulders and wrists) with some exercises with the ball are given in order to feel it.

Second: Main Section: - (20 min.) and it includes:

A- The learning section (5 min.).

Explaining Handball passing and dribbling skills.

B- Execution section (20 min.)

Performing Handball passing and dribbling skills.

A range of equipment and tools were used when the learning units were implemented to help improve the level of learners. Also, some models were performed with different sizes (Hand balls n. 1,2,3), and sufficient time was assigned for all the drills and games in order to give the learners sufficient opportunity for execution.

Third: Final section: (5 min.).

## 2.7 pre-tests:

The pre-tests were conducted in two days. The control group tests were conducted on October 29, 2017, and the experimental group tests were conducted on October 30, 2017

on the pitch designated for the physical education lesson at Al-Quds Preparatory School for Boys.

### 2.8 Applying the basic experience (curriculum):

The learning approach was applied by the assistant team and supervised by the researcher, and lasted eight weeks, two learning units per week (16 education units in total). The duration of each learning unit is (45 minutes) for the period from 31/10/2017 to 27/12/2017.

### 3.9 Post- tests:

The post-tests were conducted in almost the same conditions and in two days. The tests of the control group were conducted on 28/12/2017 on the pitch designated for the physical education lesson in Al-Quds Preparatory School for Boys.

### 2.10 Statistical treatment:

The data were processed using (SPSS. v. 19) .

## 3- Presentation, analysis and discussion of the results:

### 3.1 Presentation and analysis of results:

#### 3.1.1 Presentation and analysis of the results of pre- and post-tests of the control group:

Table (3): The differences between the results of the pre- and post tests of the control group

Test name	Pre- test		Post- test		Calculated value	Tabular value	Significance
	Q	on	Q	on			
Pass and receive for a period of (30 sec.)	15,66	1,63	23,6	1,54	4,27	2,14	Significant
Pass and receive on The Wall	2,14	2,16	18,26	1,03	7,13		Significant
Dribbling 30 m in zigzag line	16,96	1,69	12,8	1,52	2,96		Significant
Dribbling with different directions zig-zag.	42,86	4,22	35,6	3,35	5,62		Significant

Table (3) shows the differences between the pre- and post-tests of the control group in the basic Handball skills tests after they were statistically processed using the (T-test) for the interconnected samples. We note that all the calculated t-values were greater than the tabulated t-values, which were (2,14), with a degree of freedom (14) and at a significance level of (0.05). This indicates that there are statistically significant differences between the pre-test and the post-test in favour of the post test for the control group.

#### 3.1.2 Presentation and analysis of the results of pre- and post-tests of the experimental group:

Table(4): The differences between the results of the pre- and post-tests of the experiment group

Test name	Pre- test		Post-test		Calculated value	Tabular value	Significance
	Q	on	Q	on			
Pass and receive for a period of (30 sec.)	15,66	1,63	27	2	74,9	2,14	Significant
Pass and receive on The Wall	2,14	2.16	22,2	2,73	2,71		Significant
Dribbling 30 m in zigzag line	16,96	1,69	45,10	0,85	2,98		Significant
Dribbling with different directions zig-zag.	42,86	4,22	76,30	1,11	93,8		Significant

\*Freedom score for interconnected samples =  $N-1 = 15-1 = 14$

The differences between pre- and post-tests of the experimental group in the basic Handball skills tests are presented in Table(4) after they were statistically processed using T-test for interrelated samples. It can be noted that the calculated T-values were greater than the tabular value, which was (2.14) at a degree of freedom of (14) at the significance level of (0.05). This indicates that there are statistically significant differences in the pre- testing and post-testing of the experimental group and in favour of post-testing.

### 3.1.3 Presentation and analysis of the results of the post-tests of the control and experimental groups:

Table (5): The differences between the results of the post-tests of the control and experimental groups

Test name	Control Group		Experimental Group		Calculated value	Tabular value	Significance
	Q	on	Q	on			
Pass and receive for a period of (30 sec.)	15,66	1,63	27	2	7,91	2,05	Significant
Pass and receive on The Wall	2,14	2,16	22,2	2,73	7,64		Significant
Dribbling 30 m in zigzag line	16,96	1,69	10,45	0,85	8,31		Significant
Dribbling with different directions zig-zag.	42,86	4,22	30,76	1,11	6,13		Significant

\* Degree of freedom for independent samples =  $N_1+N_2-1 = 15+15-2=28$



It can be seen from Table (5) that there are differences between the pre-tests of the control and experimental groups in the basic Handball skills tests after statistical treatment using t-test for independent samples. It can be noted that all values (calculated) were greater than the tabular value (1,05) (1) and at a degree of freedom of (28) and at the significance level of (0.05). This means that there are significant differences between the post-test of the control group and that of the experimental group and in favour of the latter.

### **3.2 Discussion of the results:**

Through the presentation of the results, we can see from Table (3) and Table (4) that there are statistically significant differences between pre- and post-tests and in favour of the post-test of the two groups: control and experimental. The researcher attributes this to the proposed educational approach and traditional approach as they had a positive impact on learning the basic Handball skills in question given the well-thought-of planning and scientific foundations that take into account the abilities of learners and individual differences and are carried out with the supervision of specialists in the field. Generally, we can see from Table (5) that the proposed learning approach was better, which led to the emergence of statistically significant differences and in favour of the experimental group in the post-test. The researcher attributes this to the design of activities as the learner finds an opportunity to achieve success in the performance. This is consistent with (Khafaja and Al-Sayeh, 2008) that "the use of different systems and formats appropriate to the type of activity contributes to the increase of the motivation of learners and helps them to form positive trends towards learning and improving performance." <sup>1</sup> Also, the use of appropriate equipment, tools and different learning positions in the proposed learning curriculum has contributed to improving the learning of the educational group in the basic Handball skills examined in this study. This is consistent with previous studies such as (Sinan, 2005) and (Mohammed, 2011) that the use of equipment, tools and means to help learn and achieve flexibility in the application of the educational curriculum contributed to the increase of the motivation of learners and increase their urge for learning.

## **4. Conclusions and recommendations:**

### **4.1 Conclusions**

1. The proposed learning approach and the traditional approach had a statistically significant impact on the learners, which contributed to the improvement of learning the performance of the basic Handball skills.
2. The proposed learning approach had a greater impact than the traditional approach and this was manifested through the statistically significant differences in both of the post-tests of the two groups and in favour of the post-testing of the experimental group.

### **4.2 Recommendations:**

Recommendations

1. Adopting the proposed learning curriculum to improve the learning of basic Handball skills for preparatory school students.
2. Using the appropriate tools and equipment and appropriate methods with educational positions in the learning curriculum.

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<sup>(1)</sup>Mervt Ali Khafaja and Mustafa Al-Sayeh : The entrance to the methods of education 11, Al-Wafa Al-Dina Printing and Publishing House, Alexandria, Egypt, 2008 · P, 110.

3. Conducting similar research using other types of learning curricula and identifying their impact to improve learning other basic skills in Handball.

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