

# The Effectiveness of Teaching Method According to the Strategy (As the Motor Performance Level) of Cooperative Learning in Improving Middle-Distance Running (800-1500 Metres) among the Deaf-Mute Pupils

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## ABSTRACT

The significance of the present study lies at identifying the importance of the strategy (As the Motor Performance Level) of cooperative learning in track and field book, because this strategy helps pupils to achieve the cooperative learning, and so, we can cut the time and efforts for both the learner and the teacher.

This study aims at preparing a teaching method according to strategy (as the motor performance level) of cooperative learning in improving middle-distance running (800-1500 metres) among the deaf-mute pupils, identifying the effectiveness of a teaching method according to the strategy (as the motor performance level) of cooperative learning in improving middle-distance running (800-1500 metres) among the deaf-mute pupils and investigating the statistically significant differences between the pre- and post-results in improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.

So, it is concluded that the teaching method according to the strategy of (as the motor performance level) of cooperative learning has achieved objective aims within the lesson plan in learning and improving the middle-distance running (800-1500 metres) among the deaf-mute pupils and the cooperative learning (as the performance level) helps to compete in achieving achievement and this is the aim of the used strategy in order to create the best performance at the time of applying the track and field, especially running (100 and 200) meters.

It is recommended that

Depending on teaching method according to the strategy (as the motor performance level) of cooperative learning because this strategy has achieved objective aim within the lesson plan in learning and improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.

It thought that the emphasis should be placed on the cooperative learning in accordance with the performance level because it helped in achieving this implementation, which achieves the aims of this strategy such as doing the best performance at the time of track and field (running 100-200 m.).

## 1. Introduction

### 1.1 Introduction

The significance of the study is a part of the introduction. So, developed countries "more economically developed countries (MEDCs)" interest inhuman being in order to lives a good life. These countries and communities try to provide all the fundamental human needs of all members of society even if they were disabled people.

On the education side, specialized centers have been built to teach people with disabilities in order to raise their educational and sports levels.

Education has a major role in drawing the map of human building properly and is commensurate with its level until it reaches the level of being able to take responsibility for building his personality with the scientific and mathematical specialization on which he was raised.

Physical education and sports sciences are one of the educational institutions that provide the learner with the scientific and sports education in order to be of a physical level, skill, plans, high achievement and capable of performing different sports races and can be a sports champion according

to the sciences provided to the learner during his/her studies.

Therefore, teaching methods and motor learning are one of the important and fundamental sciences in building the base in learning and building any sports game properly.

The game or events of the arena and field of difficult sports events and achieving achievement in them needs appropriate and purposeful teaching methods to help to learn the parts of the movement and the right performance, and to do so only by building a strategy (depending on the level of motor performance) for cooperative learning, which depends on cooperation between individuals in learning performance and achievement.

The effectiveness of the middle distance running (800 m.) and (1500 m.) of difficult events require steam in learning and achievement and therefore a strategy (depending on the level of motor performance) for cooperative learning of the most important strategies that depend on competition in performance and this is the result of the cooperation of learners in the implementation of the motor duty.

Hence, the study significance is to show the role and importance of the strategy (depending on the level of motor performance) for cooperative learning in track and field because it is a programme that helps the pupil to learn cooperatively and to improve with achievement and thus limit the time and effort of the learner and the teacher.

### 1.2 Statement of the Problem

The effectiveness of running in track and field, including running (800 meters) and (1500 meters) is considered as one of difficult events that need to be endured in performance and ability in implementation and this comes through the use of teaching method that motivates the learner in learning and achieving the desired athletic achievement.

Through the researcher's experience in teaching methods and track and fields among the disabled people, the researcher found a fluctuation in the level of learning and improving the middle-distance running (800-1500 metres), which does not rise to the level of ambition and this is due to the lack of experimentation of modern methods of teaching, including a strategy (depending on the level of motor performance) of cooperative learning and this requires us to experiment and investigate the scientific facts of these types of teaching methods and their role in achieving attainment.

### 1.3 Aims of the Study

This study aims at:

1. Preparing a teaching method according to strategy (as the motor performance level) of cooperative learning in improving middle-distance running (800-1500 metres) among the deaf-mute pupils.
2. Identifying the effectiveness of a teaching method according to the strategy (as the motor performance level) of cooperative learning in improving middle-distance running (800-1500 metres) among the deaf-mute pupils.
3. Investigating the statistically significant differences between the pre- and post-results in improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.
4. Investigating the statistically significant differences between the control and the experimental groups in the results of the pre- and post-tests in improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.

### 1.4 Hypotheses

It is hypothesized that:

1. There are statistically significant differences between the results of the pre- and post-tests in improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.
2. There are statistically significant differences between the control and the experimental groups in improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.

### 1.5 Limitations

**a. Human Limit:** The pupils in Al-Amal Institute for the deaf and mute in Basra.

**b. Place Limit:** Sports arenas in Al-Amal Institute for the deaf and mute in Basra.

**c. Time Limit:** that arranged between 17/10/2019 – 11/12/2019.

## 2. The Theoretical Background

### 2.1 Cooperative Learning

Cooperative learning has many different strategies that used to increase the educational level of any skill that depends on cooperative learning among the learners.

So, cooperative learning is “the method of learning within small groups of learners so that they are allowed to work together effectively and help each other to raise the level of each learner and achieve the common educational aims, and the performance of the learner compares it with a pre-prepared simulation to measure the progress of the individual group in the performance of the tasks assigned to them” (6).

## 2.2 Strategy to divide learners into teams according to the level of education of cooperative learning: (9)

This strategy is based on the principle of the cooperation of pupils with low and medium motor performance with their high-performing colleagues to achieve one aim or one task of motor learning, so that everyone reaches the level of close mastery, and this strategy proceeds according to the following steps:(10)

1. Dividing the learning into small groups, each group made up of (4 – 5) pupils with different performance levels.
2. Displaying the educational unit by the teacher every week in lectures.
3. Worksheets with skills are distributed to the pupils, and warns them that they will not finish learning the skill, unless everyone fully understands the task assigned to them.
4. Submitting tests and monitoring grades so that the learner obtains additional points according to the degree of his/her contribution to the group until he/she reaches the maximum point of ten points.

5. The results of the tests are announced weekly, and the best team gets the best promotion with the most points.

## 3. The Methodology and the Practical Procedures

### 3.1 The Study Methodology

The researcher has used the empirical approach with equivalent groups method (the experimental and control groups), because this approach is suitable for the statement of the problem and in order to achieve the study aims.

### 3.2 The Study Sample

The study sample has collected in a purposive way, the study sample made up of the pupils of al-Amal Institute for the deaf and mute who their ages arranged between (12-13) years at the fifth stage, this sample made up of (24) pupils.

The study sample has been collected from the study communication that made up of (20) pupils, who was representing (83.33%) of the main communication, which made up of control and experimental groups randomly, each group made up of (10) pupils, the study sample has homogenized and equalized as in table (1).

Table (1) displays the homogeneity and equivalence of the experimental and control groups

No.	The Study Variables	The Control Group			The Experimental Group			computed t-value
		Mean X	SD.	Cv.	Mean X	SD.	Cv.	
1	Weight/ k.gm.	55.745	1.847	3.313	55.847	1.965	3.518	0.113
2	Length/ cm.	160.785	2.658	1.653	160.845	2.698	1.677	0.047
3	Running 800 m/ minutes	3.589	0.247	6.882	3.598	0.231	6.42	0.08
4	Running 1500 m/ minutes	5.745	0.211	3.672	5.789	0.312	5.389	0.352

\* *Computed t-value at (18) freedom degree and at (0.05) = 1.724*

### 3.3 Information collection methods

#### 1. Ways to Collect Data

- a. Arabic and English References
- b. The Tests used
- c. The Scientific Observation

#### 2. Tools and Devices Used in this Study

- a. Stopwatch
- b. Running track
- c. A Beam balance
- d. Tape measure (2 meters)
- e. Whistle

### 3.4 The Practical Procedures of the Study

#### 3.4.1 The Study Variables

The vocabulary of the track and field book was relied upon in the fifth stage lessons at Al-Amal Institute for the deaf and mute, which included running (800 and 1500 meters).

#### 3.4.2 The Tests Used in this Study

##### 3.4.2.1 Running Test (800 and 1500 m.) (8)

**The aim of the test:** is to measure the transitional speed and completion (800) and (1500) meters.

**Tools:** Track and field arena.

**The Performance Method:** the laboratory is in standby mode from high start behind the starting line and when the signal is given, the tester runs at full speed until it crosses the finish line.

**Registration:** the time of the laboratory is recorded by minutes.

### 3.4.3 The Pilot Study

The researcher has conducted a pilot experiment in 7/10/2019 on a sample of pupils to codify the exercises loading that have used as well as applying these exercises in order to know the difficult of these exercises among the sample members, the frequencies and time used to apply this programme.

### 3.5 The Field Experiment

**3.5.1 The Pre-Tests:** the pre-tests have conducted on the 14<sup>th</sup> October 2019.

### 3.5.2 The Teaching Methods Used in this Study

The researcher has prepared special exercises of running (800 and 1500 m.), and has used these exercises in educational units within the lessons of track and field book that have studied for the pupils according to the strategy of as the motor performance

## 4. Results and Discussion

**Table (2) Shows the value of pre- and post t-tests of the control group**

No.	The Valuation Used	Pre-Test		Post-Test		SE	Computed t-value	Level of Sig.
		Mean X	SD.	Mean X	SD.			
1	Running (800 m.)/ minutes	3.589	0.247	3.012	0.142	0.244	2.364	Sig.
2	Running (1500 m.)/ minutes	5.745	0.211	5.114	0.134	0.311	2.028	Sig.

\* *T-tabulated value at (9) freedom degree and at (0.05) =1.833*

**Table (3) Shows the value of pre- and post t-tests of the experimental group**

No.	The Valuation Used	Pre-Test		Post-Test		SE	Computed t-value	Level of Sig.
		Mean X	SD.	Mean X	SD.			
1	Running (800 m.)/ minutes	3.598	0.231	2.845	0.167	0.351	2.145	Sig.
2	Running (1500 m.)/ minutes	5.789	0.312	4.847	0.117	0.374	2.518	Sig.

\* *T-tabulated value at (9) freedom degree and at (0.05) =1.833*

**Table (4) shows the value of post t-tests of the experimental and control groups**

No.	The Valuation Used	Control group		Experimental group		Computed t-value	Level of Sig.
		Mean X	SD.	Mean X	SD.		
1	Running (800 m.)/ minutes	3.012	0.142	2.845	0.167	2.385	Sig.
2	Running (1500 m.)/ minutes	5.114	0.134	4.847	0.117	4.525	Sig.

\* *T-tabulated value at (18) freedom degree and at (0.05) =1.724*

Tables (2) and (3) have stated that there are statistically significant differences between the pre-

level of cooperative learning that used in teaching methods. The programme with three parts has applied in one lesson (C.f. App. 1) and for eight weeks with one educational unit. The programme has begun on the 15<sup>th</sup> October 2019 and ended on the 10<sup>th</sup> December 2019.

**3.5.3 The Post-Tests:** the post-tests have conducted on 11<sup>th</sup> December 2019.

**3.6 The Statistical Devices (SPSS program has used in order to find the following:**

1. Arithmetic Mean (*Mean X*)
2. Standard deviation (*SD.*)
3. The coefficient of variation (*CV*)
4. Paired Samples T-Test
5. Independent Samples T-Test
6. Percentage

and post-tests of the control and the experimental groups in the test used that were for the post test. This

refers to that the two groups have learnt and improved in achieving running (800 and 1500 m.), in this study, i.e. the two methods have achieved success both the traditional teaching method and the method of teaching according to the strategy (according to the level of motor performance) for cooperative learning, especially when the targeted exercises are selected in a scientific way and suitable for the method used and confirms (Saad Mohsen, 1996) "The educational programme inevitably leads to the development of achievement, if it is based on scientific basis in the organization and programming of the education process, the use of appropriate and progressive methods of difficulty, and the observation of individual differences as well as the use of effective educational methods". (1)

This strategy also helps to reduce fatigue through cooperation in competition and performance as (Adel Abdul Basir 1999) stated that the ability to resist fatigue when working at a high degree of speed means the development of the efficiency of the body to produce energy by anaerobic road and maintain the high rates for the largest possible period of time. (3)

In addition, the interest in the teaching lesson in the right and successful way is the basis for achieving education and attainment as a sporting event, as pointed out by Anaiat Muhammad Ahmed (1998) who has stated that "The good organization of the lesson contributed to the ability of students to experience and understand the lesson and modify their behavior so that they acquire desirable behavioral criteria in the desired performance". (4)

This strategy has the probable to produce the right and appropriate teaching method and give accurate results in learning, especially when it applied according to its method and steps, and for this reason DhahirHashim said that: "It is a natural phenomenon of the learning process that there must be a development in learning as long as the teacher follows the basic steps of learning, teaching and practicing the right performance and focusing on attempts and repetition in order to stabilize the performance". (2)

In addition, students' education needs to be within the educational method as a successful activity in raising achievement, as stated by Muhammad Mahmoud al-Hilaa that "the students' education should be a scientific activity organized on the basis of logical and psychological well-thought-out foundations based on challenge, excitement and pleasure based on the needs of the students and in line

with their readiness, abilities and designed in a way that alleviates anxiety and frustration". (5)

The method of teaching according to the strategy (depending on the level of motor performance) helps to feed the cooperative feedback between the pupils, which results in repeated work practice supposing several times, which helps to gain experiences from each other and stabilize the correct performance and try to reach it, which has led to increased cooperation and interaction between pupils to help each other and in this regard Nahed Mahmoud (1998) has stated that "When you make each pupil a special role played by one of the movement and the other as an observer and the teacher deals only with the observed student who converts the decisions of the teacher to the pupil, and then corrects and gives his/her observations to the pupil who performs, then the roles are changed, thereby developing cooperative behavior among the pupils and providing a teacher for each pupil". (7)

## 5. Conclusions and Recommendations

### 5.1 Conclusions

It is concluded that:

1. The teaching method according to the strategy of (as the motor performance level) of cooperative learning has achieved objective aims within the lesson plan in learning and improving the middle-distance running (800-1500 metres) among the deaf-mute pupils
2. The cooperative learning (as the performance level) helps to compete in achieving achievement and this is the aim of the used strategy in order to create the best performance at the time of applying the track and field, especially running (100 and 200) meters.

### 5.2 Recommendations

It is recommended that

1. Depending on teaching method according to the strategy (as the motor performance level) of cooperative learning because this strategy has achieved objective aim within the lesson plan in learning and improving the middle-distance running (800-1500 metres) among the deaf-mute pupils.
2. It thought that the emphasis should be placed on the cooperative learning in accordance with the performance level because it helped in achieving this implementation, which achieves the aims of this strategy such as doing the best performance at the time of track and field (running 100-200 m.).
3. Conducting another studies like this study on track and field according to the strategy of (as the motor



performance level) of cooperative learning, because this strategy has achieved the aim of this study.

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## Appendix (1)

### An Example of Educational Units

#### The Aims of the Educational Unit: Improving and Learning Running (800 and 1500m.)

##### The first weekUnit One

Unit Parts	Time	Details and Exercises	Freq.	Notes
Preface	15 minutes			
Main Part: 2. Practical	20 minutes	- Distributing the pupils into groups (each group made up of two pupils), who are equal in achievement and possibilities in order to do running (800 m.) - Distributing the pupils into groups (each group made up of four pupils), who are equal in achievement and possibilities in order to do running (1500 m.)	1 × 2 - 1 × 2	The distribution of pupils is according to the physical abilities and achievement for the purpose of competition
Conclusion part	10 minutes			