

The effect of Stylistic Discovery Directed and Programmed Education on teaching some football skills and understand the benefits of physical education and health

Ahmed Zuhair Kattan ¹, Ahmed Hussein Abd ²

¹ Assistant lecturer, ² Assistant lecturer, General Directorate for Education of Dhi Qar

ABSTRACT

The guided discovery method is one of the teaching methods that work to engage the student in the discovery process, and the essence of this method is the special relationship that arises between the teacher and the student through which leads the successive questions that the teacher directs to reach the answers that the student performs that correspond to these questions, if every question the teacher directs leads to one correct response that the student will discover, and if the accumulation of this process occurs. the researchers used the statistical bag (SPSS) through which the statistical methods were used, the most important of which were: (t) test for the interlinked samples and the L.S .D test and through the results reached the researchers concluded a set of conclusions, the most important of which : The use of the two methods of directed discovery and programmed education and the method followed by the teacher have a positive effect in teaching some basic skills in football, as well as the method of directed discovery over the style of programmed education and the method followed by the teacher in teaching some of the skills under discussion.

Keywords: *Stylistic Discovery Directed, Programmed Education, skills*

Introduction

Physical education is a science like the rest of the sciences that use the methods and methods reached by scientists and researchers ¹ in a way that is appropriate for the nature and conditions of each society and this has contributed to raising the level of this science and developing ² it through the use of various methods and methods in teaching physical education material that is consistent with students' inclinations and desires It reaches a level of mastery and a high level of efficiency and effectiveness, and it takes the work of the team as an input "for progress within the framework of society's values, traditions and customs with the aim of preparing and raising the emerging generation of good citizenship." In order for the physical education lesson to go in the right way, teaching methods must be used that take into account the individual differences between students and discover the student's cognitive level so that he can achieve his maximum to better accommodate the education requirements, and among these methods is my method (directed discovery and programmed education),

and is considered a method ³ Directed discovery is one of the teaching methods that engage the student in the process of discovery. The essence of this method is the special relationship that arises between the teacher and the student through which leads the successive questions that the teacher directs to reach the answers that the student performs that correspond to these questions.

Methodology

The research community consisted of fifth preparatory students (Nahr Al Furat Secondary School - Dhi Qar Governorate) for the academic year (2019-2020), and the number is (102) students, distributed among 4 groups (A, B, C, D), whose ages range from (16-17 years). As for the research sample, three groups were chosen from among four groups depending on the random method (lottery), as the number of the sample reached (36) students with a percentage of (35,29), where they were divided into three groups for each group It is made up of (12) students who are students who are not practicing the game, knowing that the sample is homogeneous because all members of the

sample are male and have one age group, as students who have failed and practitioners of the game of football are excluded, and the research sample was represented by three groups. The basic football is under discussion using the method followed by the teacher of the subject and the number (12) students from Division (C). The first experimental group: where students learn the skills using the targeted discovery method and the number (12) students from the Division (A). As students learn

skills using the programmed teaching method, which is (12) students The groups of (D). As for Division (B), the researcher conducted the exploratory experiment, and they numbered (12) students. In order for the sample to be equivalent, the researcher used the analysis of variance (F) to find the significance of the differences between the groups in the skill (handling, suppression and rolling) in football.

Table 1. Equivalence of the three groups shows age, length, mass and some basic skills under consideration

Statistical treatments Variables	measuring unit	Source variance	Sum of squares	Degree of freedom	Average squares	Values (F) Calculated	level indication *	Statistical significance
Age	Month	Between groups Within groups	3.475 507.300	2 32	1.158 14.092	0.082	0.969	Not significant
Length	Cm	Between groups Within groups	55.275 1772.5	2 32	18.425 49.236	0.374	0.772	Not significant
Mass	Kg	Between groups Within groups	96.600 1509	2 32	32.200 41.917	0.768	0.519	Not significant
Handling	Degree	Between groups Within groups	4.200 298.200	2 32	1.400 8.283	0.169	0.917	Not significant
Quenching	Degree	Between groups Within groups	1.100 130.000	2 32	0.367 3.611	0.959	0.102	Not significant
Rolling	a second	Between groups Within groups	2.053 231.630	2 32	0.684 6.434	0.956	0.106	Not significant

Morale at the level of significance $<(0,05)$ and in front of two degrees of freedom (2-32).

It is clear from Table (1) that the calculated value of (F) for all research variables is at a level of significance greater than (0.05), which indicates that there are no significant differences and this indicates the equivalence of the three research groups in all search variables.

Registration: The player is given (5) successive attempts.

Calculates the number of scores the player has earned from the five attempts.

The highest score a player receives is 30 points.

General directions:

- The attempt is a failure if the ball falls outside the circles.

- In the event the ball falls on the circle line, the next degree is given according to the sequence of circles (5,3,1) degrees.

The second test: the rolling test of the ball between five characters. The distance between one person and another 2 m back and forth (Hussam Saeed Al-Momen: 2000): -

Purpose of the test: To measure the rolling skill test.

The tools used: legal football, tape measure, spinners, and funnel (5).

Performance description: The laboratory stands with the ball behind the starting line, and upon hearing the beep, the laboratory rolls the ball between the cones placed and returns to the starting line.

Conditions of performance:

1- The laboratory can start by passing the first funnel from left or right side.

2- The movement of the laboratory should not be stopped during the test.

3-If the ball is out of the control of the laboratory, an attempt is not counted.

Registration method:

The laboratory is given two consecutive attempts, and the result of the best attempt is taken.

The third test: The test of stopping (suppressing) the movement of the ball from a distance of (6) m within a square (2) m (Bath Abdul-Muttalib: 2011):

The goal of the test: to measure the accuracy of stopping the ball the coach is throwing.

The tools used: (5) footballs, a specific area for the test (2 x 2 m) .

Method of performance: The tester stands behind the line of the specified test area and the trainer stands

with the ball on the opposite side and a distance of (6 m) from the specified test area, and after giving the starting signal the trainer throws the ball (a high ball) for the tester advancing from the starting line into the test area trying to stop the ball is in any part of the body, except for the arms, and then back to the starting and starting lines again and so the laboratory repeats the five attempts in a row.

The main experience:

Time and sections of the educational unit:

The educational units were divided into (9) weeks and by two educational units per week for each unit (45) minutes, as the number of educational units for each group reached (18) educational units for each method, (6) units to teach each of the skills under discussion (handling, damping, rolling) .These methods are applied to the main section only, and its duration (22 minutes), and includes the educational aspect and its duration (10 minutes) in which the skill is explained to students, and questions are asked in the method of directed discovery and the programmed learning style on the applied side, and in this section from the lesson, students start applying the skill performance according to their answers to the questions of the method, and the teacher participates in giving the students feedback during the performance and after the performance, the errors are corrected, and thus the time of the educational units reached (810) minutes for each method.

Main experiment procedures:

Before starting applying the main experiment, the researchers conducted two educational units for students in football for each method on (16/17/18/10/2019), the purpose of which is to give prior learning to the research sample, as well as to the subject teacher to clarify the method of applying the educational program to teach some basic skills of football under research By the method of directed discovery and programmed education, the control group used the method followed by the teacher, where the research groups were given the educational subject to be learned within the curriculum decided by the Ministry of Education. The two researchers prepared a set of questions using the method of discovery directed in each skill. These questions include a question about the skill to be learned; This means that the set of questions

with their answers will be the correct technique for the skill, as well as the researcher with the programmed learning method prepared a programmed booklet and CD-ROMs detailing the skills of (handling, quenching and rolling). The first experimental group learned the guided discovery method, and it was implemented in the main section, as the teacher begins explaining the skill in the educational aspect and displaying it from the teacher, and after that a set of exercises is applied that help students to learn the skill in the applied side, as the teacher poses questions intended for students in the discovery method. The instructor and the students answer the questions individually, and everyone participates in answering and discussing the answer, and the teacher participates in giving feedback to students while answering the questions. After completing the questions, the students apply the exercises designed for the skill according to their answers to the questions, while the second experimental group learned in a manner Programmed learning is implemented on the main section after reviewing the programmed booklet and CD-ROMs distributed by the teacher to learners, as well as videos sent to students on social networking sites (Messenger and What Sapp), by making groups on these sites, and the teacher participates in giving nutrition reviewer. As for the control group (the teacher's method), this group learned the traditional method used in their learning of skill, and was implemented on the main section, as the teacher explains the skill in the educational aspect, and displays it to students, while in the applied part, the teacher gives the same exercises to the two experimental groups, but in the followed method that helps students on learning the skill.

Applying the main experiment:

The first experimental unit was applied to the first experimental group in the direction of discovery directed on (Tuesday) (22/10/2019). As for the second experimental group in the programmed teaching method, the first educational unit was applied on (Wednesday) on (23/10/2019) and on the square Secondary of Nahr Al-Furat, and the researcher supervised the main section of the units for the research sample. As for the application

of the methods, the subject teacher did this and the last educational unit was on (Wednesday) 18/12/2019 for the first experimental group with a targeted discovery method, while the second experimental group With the programmed learning method, it was the last unit of education on (Thursday) (19/12/2019).

Post-test:

The two researchers conducted the dimensional tests of the research sample on (Tuesday) on (24/12/2019) for the first experimental group in the direction of the targeted discovery, and at exactly (9 am), the second experimental group with a method of programmed education was on (Wednesday) on (25 / 12 /2019) at exactly (9 am), and the total set in the style of the teacher was on (Thursday) (26/12/2019) on the playground for the high school of the Naher Alforat, and the researcher followed the conditions and method of the tribal tests themselves.

Statistical Methods: Using the Statistical Program (SPSS) :

- 1-Percentage.
- 2- Arithmetic mean.
- 3-Standard deviation.
- 4- T-Test Law for Linked Samples.
- 5- F-Test Contrast Analysis Act.
- 6- L.S.D. test.

3- Presenting, analyzing and discussing the results.

3-1 Present and analyze the results of the basic skills tests under discussion in the tribal and post football with the three research groups.

In order for the two researchers to be able to identify the difference in the results of the pre and posttests of the individuals of the three groups in skills (rolling - handling - suppression) the researcher used the test (t) for the interlinked samples as shown in the tables below.

Table 2. Shows the significance of the differences between the pre and post measurement in basic skills tests football for the first experimental group (directed discovery method)

Statistical treatments Variables	measuring unit	Tribal tests		Post-test		Value (t) Calculated	Significance level	Statistical significance
		s	(± p)	S	(± p)			
Handling	Degree	10.7	2.907	6.24	3.062	20.619	0.000	Moral
Quenching	Degree	3.6	2.065	7.8	1.751	6.034	0.000	Moral
Rolling	a second	16.894	2.102	12.670	1.033	5.805	0.000	Moral

* Morale at the level of significance <(0,05) and in front of the degree of freedom (11).

Table (2) shows the arithmetic mean, standard deviations, and the calculated value (t) between the results of pre and posttests in some basic football skills (handling, suppression, rolling) for the first experimental group (directed discovery method), as the results shown in the table showed that the value of a level The calculated significance in all skill tests was (0,000)

Table 3. Shows the significance of the differences between pre and post measurement in basic skills tests football for the second experimental group (programmed teaching method)

Statistical treatments Variables	measuring unit	Tribal tests		Post-test		Value (t) Calculated	Significance level	Statistical significance
		s	(± p)	S	(± p)			
Handling	Degree	11.1	2.643	18.8	2.44	11.258	0.000	Moral
Quenching	Degree	3.2	1.398	5.2	1.932	2.739	0.023	Moral
Rolling	a second	17.512	2.593	15.51	1.389	3.025	0.014	Moral

* Moral at the level of significance <(0,05) and in front of the degree of freedom (11).

Table (3) shows the arithmetic mean, standard deviations, and the calculated value (t) between the results of pre and posttests in some basic football skills (handling, suppression, rolling) for the second experimental group (programmed learning style), as the results presented in the table showed that the value of a level The calculated significance for all skill tests was between (0,000 - 0.024).

Table 4. Shows the significance of the differences between pre and post measurement in basic skills football tests for the control group (teacher style)

Statistical treatments Variables	measuring unit	Tribal tests		Post-test		Value (t) Calculated	Significance level	Statistical significance
		s	(± p)	S	(± p)			
Handling	Degree	10.8	2.820	19.6	2.716	7.223	0.000	Moral
Quenching	Degree	3.4	1.646	5.4	1.349	3	0.015	Moral
Rolling	a second	17.069	2.334	14.94	1.614	2.709	0.024	Moral

* Moral at the level of significance <(0,05) and in front of the degree of freedom (11).

Table (4) shows the arithmetic mean, standard deviations, and the calculated value (t) between the results of pre and posttests in some basic football skills (handling, suppression, rolling) of the control group (teacher style), as the results shown in the table showed that the value of the calculated significance level In all skill tests, it ranged between (0,000 - 0.023), which is less than the value of the significance level (0.05), which indicates the presence of statistically significant differences between the pre and posttests in favor of the post test.

Discussing the results of the basic skills tests under discussion in the tribal and dimensional football of the three research groups.

Through the presentation and analysis of the results of the pre and post tests for basic skills tests in football under discussion in tables (2, 3, 4) and for the three groups, it became clear that there are significant differences between the pre and posttests in favor of the post tests and for all basic skills in football under research for all the methods used (discovery oriented and programmed learning and teacher’s style), and the researchers attribute that to the effect of the educational curriculum that the researcher used. “The goal that all

educational curricula seek by applying their educational units is to improve and improve the level of performance and provide the student with a set of skill capabilities that enables him to achieve a good level of skill performance.” What you want to learn “(Hussein Hadi Attia: 2004). As the wave discovery method is one of the most important methods that work to enhance the relationship between the student and the teacher, as well as taking into account the individual differences between students, which creates an atmosphere of enthusiasm and impulsivity towards learning, “where it is important that individuals are motivated to learn the motor tasks in order to obtain the maximum learning⁶⁻¹⁰, giving the student a role in decision-making as well as giving the student the freedom to arrive at discovering the skilled performance by himself and that by applying what he himself discovered practically in thinking about performance, as well as the quality of questions posed to the student by the teacher has an effective role in the excitement The student and extracting his stock of capabilities and directing them in a correct way. In addition to the large amount of feedback that the student gets by this method even if it is a self-feedback or provided by the teacher, it is sufficient to correct the student’s motor responses and adjust them “and that the feedback appears as the

variable The strongest and controlling the learner's performance ², and it has become clear that there will be no performance improvement without feedback, and that feedback increases the performance improvement in the initial learning stages Yarp Khyon (2002) Since the application of the targeted discovery method enhances the student's performance by giving the student the freedom to move according to his desire, because the

technical performance is discovered by him through his answers to the questions posed about the skill to be learned, from the above ⁴, the targeted discovery method has a positive and effective role in Learning the basic skills of football under research. The same table also shows that there are differences between the results of the pre- and post-test for the basic skills of football under research for the programmatic education and for the benefit of the post-test.

Table 5. It shows the results of the analysis of variance analysis (F) in the dimensional tests among the four research groups in the basic skills of football under study

Statistical treatments Variables	measuring unit	Source variance	Sum of squares	Degree of freedom	Average squares	Value (F) Calculated	Level indication	Type indication
Handling	Degree	Between groups Within groups	210.27 266.5	2 32	70.092 7.403	9.468	0.000	moral
Quenching	Degree	Between groups Within groups	47.5 95.6	2 32	15.833 2.656	5.962	0.002	moral
Rolling	a second	Between groups Within groups	48.059 55.339	2 32	16.020 1.537	10.421	0.000	moral

* Morale at the level of significance <(0,05) and in front of two degrees of freedom (2 - 33).

Table (5) shows the results of the analysis of variance analysis (F) between and within the groups in the basic skills of football under discussion, and there was a significant difference between the three groups in the basic skills tests under discussion, all because the level of significance in them is less than (0,05), The researcher used the (L.S.D) law to determine the three best groups.

Conclusions

1- The use of the guided discovery method, the programmed teaching method, and the method followed by the teacher, was important in teaching some basic football skills.

2- The guided discovery method was superior to the programmed teaching method and the method used by the teacher in teaching some basic skills of football.

3-The excitement and excitement of using these methods increased the motivation of students to learn, which facilitated the performance process.

4-Although there was education in some basic skills in football using the programmed teaching method, it was less effective than other methods.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the General Directorate for Education of Dhi Qar and all experiments were carried out in accordance with approved guidelines.

References

1. Abdul-Muttalib's Bath: Design and legalization of

- two (physical-skill) test batteries for selecting five-year-old football in Baghdad, ages (14-16) years, Master Thesis, University of Baghdad, College of Physical Education, 2011, p. 218.
2. Hossam Saeed Al-Momen: A suggested approach to develop some basic capabilities and skills for the five-a-side football players, Master Thesis, University of Baghdad, College of Physical Education, 2000, pp. 71-76
 3. Hassan Hadi Attia: The effect of using the targeted discovery method on learning some basic football skills, Master Thesis, College of Physical Education, University of Baghdad, 2004, p. 63.
 4. Haider Abdul-Razzaq Kazem Al-Abadi: The Basics of Writing Scientific Research in Physical Education and Sports Science, 1st Floor, Iraq, Basra, Al-Ghadeer Printing and Publishing Company, 2015, p. 82.
 5. Zuhair Qasim Al-Khashab and others: Football, 2nd edition, Mosul, Dar Al-Kutub for Printing and Publishing, 1999, p. 312.
 6. Dhafer Hashem: Lectures he gave to PhD students in the academic year 2006-2007.
 7. Dhafer Hashem Ismail: Scientific applications for writing educational and psychological messages and thesis, Baghdad, House of Books and Documents for Publishing, 2012, p. 103.
 8. Magda Ibrahim Ali Al-Bawi: The effect of using two methods of individual learning in the achievement of students of physical information and its derivation, PhD thesis, University of Baghdad, College of Education, Ibn Al-Haytham 1995, p. 19.
 9. Muhammad Al-Arabi: Mental Training in the Sports Field, Egypt, Dar Al-Fikr Al-Arabi, 2001, p. 322.
 10. Nour Zia Abdul Hamid Al-Bayati: The effect of an educational program using two methods of wave and branched discovery in some methods of thinking and correction by hand, Master Thesis, University of Baghdad, College of Physical Education, 2012, p. 104.
 11. Wajih Mahjoub: Learning, Teaching, and Kinetic Programs, I, Amman, Dar Al Fikr for printing, publishing and distribution, 2000, p. 144.
 12. Yarb Khayyun: A kinetic learning between principle and application, Baghdad, The Rock Printing and Publishing Office, 2002, p. 91.