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The effect of using the strategy of graded activities on logical thinking and learning some basic skills in football

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ABSTRACT

The researcher conducted his current research, tagged (the impact of using the strategy of graded activities in logical thinking and learning some basic skills in football), which aims to apply educational units that strategize graded activities and identify their impact with logical thinking and learn some basic skills in football, the researcher has used the experimental approach by designing the control and experimental groups, and the pre- and post-tests, and the research community has identified students of Al-Khair Mixed High School, Which was chosen from them the research sample in a random way through the lottery, and the number of the research sample was (45) students divided into an exploratory sample of (5) students, and two experimental groups and control number each (20) students and after conducting the main experiment, which is the application of educational units strategy activities graded, and after the tests the researcher processed the data obtained and came out with several conclusions, including:

1- The strategy of graded activities has shown a positive effect in enhancing logical thinking and improving the learning and performance of research skills (such as rolling, handling, and suppression) in students.

2- The diversity of exercises contributed to enhancing research skills, which led to their effective stabilization and development.

According to these conclusions, the researcher recommended several recommendations, including:

1. Focus on the implementation of the strategy of graded activities to promote logical thinking and teach basic skills in football to students.

2- Conducting studies that explore various modern educational and teaching methods and plans, including the strategy of graded activities, to teach basic skills in all sports to students.

1- Definition of the research:

1-1 Introduction to the research and its importance:

The world is witnessing a revolution in information and technology that affects all aspects of life, creating a new social, cultural, economic and scientific reality. This situation requires individuals to acquire a set of life skills and experiences that enable them to adapt to contemporary changes and challenges. To achieve this, education must conform to the requirements of the current era, and therefore curricula must be based on foundations aimed at enabling learners to understand themselves and the environment in which they live. It's no longer just about providing information, Rather, the focus has become on how learners acquire, understand and interact with this knowledge, by relying on their own abilities to achieve success, as education is in essence a focus for acquiring life skills that allow teachers and teachers to interact and adapt with others in their specialized fields, which contributes to the process of development and development of the individual athlete, and new ideas have emerged aimed at moving away from repetition and traditional methods, with a focus on the application of modern and diverse strategies and methods that take into account all aspects of education and process inputs educational, The strategy of graded activities is one of the modern teaching methods that contribute effectively to motivating learners, which leads to achieving satisfactory educational results for the teacher, both in terms of student achievement or smooth implementation of activities, in addition to its positive impact on the teacher's performance during the lesson. This strategy is used in situations where students with varying levels of knowledge or skill are present, where they study the same concepts. (Al-Obeisat: 120:2019).

The game of football is one of the popular and popular sports, as it is preferred to be practiced by most societies over the rest of the other sports, and the development of its players and their development receives great attention from researchers and specialists in the sports field, as this interest is reflected in improving the methods of teaching skills and providing modern technologies, through the use of the best and latest educational and training methods that contribute to achieving the desired goals. This game requires a high level of physical, health, psychological, emotional and intellectual integration among its practitioners, due to the diversity of technical and tactical skills and the rapid development of competition in it. Hence, the importance of the current research in determining the optimal educational method to enhance and develop the logical thinking of football players, which contributes to improving their skill performance.

1-2 Research problem:

After the researcher reviewed the literature and studies related to modern strategies in teaching physical education, in addition to the sources that dealt with the subject of logical thinking, and based on his experience as an athlete and follower of football, the researcher noted the methods and strategies used in teaching football in the faculties and departments of physical education and sports sciences, there is a noticeable weakness in the use of logical thinking and the search for various solutions to various situations during training or practice. Logical thinking plays an important role in improving the performance of players with regard to the basic skills of football, as well as the presence of a delay in the application of modern strategies that enhance the role of the learner as a thinker, interpreter, and observer, as these basic aspects are necessary to choose the best educational methods in the field of teaching physical education, moreover, some traditional methods do not suit the needs of developing the basic skills that learners need, This discrepancy is an obstacle that hinders the achievement of the desired educational goals, which makes the learning process more complex To meet this challenge, the researcher suggested the adoption of modern strategies that enhance student participation further, and transform them from mere recipients of information to thinkers, analysts and values. Among these strategies, the idea of multiple activities stands out, which aim to strengthen students' logical thinking and facilitate the acquisition of basic skills in the game of football. Through this strategy, the student's role turns from a receiver of information to an effective partner in the learning process, where he participates in the analysis of information, interacts with it, and evaluates it, which deepens his understanding and understanding of the subject better and deeper, as these factors led to push the researcher to dive into the study of this educational strategy in greater depth, in order to understand its impact on enhancing logical thinking and developing students' basic skills. Hence, a decision has been made to conduct research in this area to explore the possible results that can be reached.

1-3 Research Objectives:

1- Preparing educational units in line with the strategy of graded activities to teach some basic skills in football to students.

2- Studying the logical thinking of fourth grade secondary students, the research sample.

3- Explore the impact of using the graded activities strategy on logical thinking and learn some basic skills in football for students.

1-4 Hypothetically researched:

1- There are statistically significant differences between the pre- and post-tests of the control and experimental groups and in favor of the experimental group.

2- There are statistically significant differences between the post-tests of the control and experimental groups.

1-5 Research Areas:

1-5-1 human field: students of Al-Khair Mixed High School.

1-5-2 Time Range: From 6/10/2024 to 28/12/2024

1-5-3 Spatial area: Sports arena in Al-Khair High School

1-6 **Definition of terms:**

1.6.1 **Multi-activity strategy** : It is one of the teaching aids that promote effective learning, where the learner is active. In this style, the learner strives to take the highest degree of responsibility, rather than being in a negative attitude limited to retrieving information only. Rather, it interacts through speech and writing, linking what it learns to its past experiences, and applying what it has acquired in its daily life. Learning also extends to sensory, emotional and physical participation in education processes (Al-Shammari: 2011: 14).

1.6.2 **Logical thinking:** It is one of the most complex types of thinking, as it combines the mental activity practiced by the individual when faced with a question that requires an answer, a problem that needs to be solved, or a decision that needs to be taken. This type of thinking is hypothetical deductive, where we formulate hypotheses and test their validity through experiments, with the aim of reaching conclusions that comply with the rules of logic (Costa: 17:1986:).

2- Research Methodology and Field Procedures:

2-1 Research Methodology:

The nature of the problem and the objectives of the study determine the most appropriate approach to use. Accordingly, the research problem necessitated the adoption of the experimental approach with the design of equivalent control groups, and experimental tests before and after to be in line with the characteristics of this study, "The experimental method is defined as the method through which controlled

and specific changes are made in certain circumstances for a particular case, with follow-up and analysis of changes resulting from this case." (Ibrahim: 2002: 138). Table (1) illustrates the experimental design of the research.

Table 1

Demonstrates the experimental design of the research

Step(5)	Step(4)	Step (3) Post-Test	Step (2) Independent variable	Step (1) Pre-test	The Collectio
Determine the differences in the post-test Between the two research groups	Identify the differences between the pre- and post-tests of the two research groups	Tests of logical thinking and basic skills in football	Educational units according to the strategy of graded activities	Tests of logical thinking and basic skills in football	Experimenta
			Method		Adjuster

2.2 Research community and sample:

Determining the research community and its sample is important in any scientific research, as the correct selection of the research sample is one of the pillars and important factors in the success of the researcher's work when he applies the steps or vocabulary of his research in practice. The research community represented the fourth grade secondary students, whose total number is (90) students, the sample of whom was selected by the researcher in a random way through the lottery, and the number reached (45) students divided into groups (5) students as an exploratory sample, and (20) students for each experimental and control groups.

2.3 Means of collecting information, devices and tools used in research:

To achieve field research procedures, the researcher used the means of collecting information through which he can collect data as follows:

2.3.1Means of gathering information:

Arab and foreign sources and references.

- Scale of logical thinking.
- Questionnaires for the opinions of experts and specialists.
- International Information Network (Internet).
- Personal interviews.
- Football skill tests (suppression, rolling, handling).

2.3.2 Devices and tools used in research:

The researcher used many devices and tools to help him implement the research experiment and measurements to reach the solution to the research problem, which are as follows:

- Metal tape measure for measuring length.
- Medical scale for weight measurement.
- 1 Japanese-made Casio electronic stopwatch.
- Legal footballs (8).
- Legal football field

2.4 Field research procedures:

2.4.1 Identification of tests:

First / Logical thinking test

In his current study, the researcher seeks to determine the effect of gradient on logical thinking among fourth-grade secondary students. To achieve this goal, a test measuring logical reasoning was necessary. The researcher has reviewed many studies and tests related to measuring logical thinking among middle school students and various academic stages. After consulting a number of professors with experience in this field, the researcher decided to adopt the test (Al-Furaiji, 2009) for its suitability for fourth grade secondary students who constitute the current research sample. The literature suggests that it is important to prefer and develop available tests and measures to benefit from them when comparing previous results (Farag, 1980: p. 134). The researcher followed the following steps in conducting the test:

- Clarification of test paragraphs and their alternatives:

The test consists of 51 items distributed over four areas, which are as follows:

1. Logic of issues: includes 10 paragraphs of the multiple choice type, where each paragraph contains 4 alternatives.

2. Mental trial: consists of 11 paragraphs of the multiple choice type, with 5 alternatives for each paragraph.

3. Deductive hypothetical thinking: It contains 10 paragraphs of multiple choice, including 4 alternatives for each paragraph.

4. The relationship between realism and probability: It consists of 20 paragraphs of the multiple choice type, where each paragraph contains 5 alternatives.

This type of test was chosen because of its many advantages, most notably its coverage of a wide range of concepts, its absence of bias in correction, in addition

to its high coefficient of validity and stability, and the low likelihood of resorting to guesswork in answering its questions. (Ali, 2011: p. 255).

- Verification of the authenticity of the test:

Honesty is one of the most important characteristics of a good test, as it is not possible to rely on the test or scale in its absence, the test, or the scale is honest when it can measure the trait or phenomenon for which it was prepared (Chalabi, 2005: p. 84).

Honesty has one concept, and what is known as types of honesty are indicators and means of collecting evidence related to it (Farag, 1980: p. 360), the more the measure or test contains multiple indicators of truthfulness, the greater the confidence in measuring what is to be measured. In this research, a type of honesty known as apparent honesty was relied upon, which refers to the suitability of a measure or test for the target property. This type of honesty is manifested by the clarity of the test or scale paragraphs and how they relate to the ability, trait, or dimension measured by the test. (Abdulrahman, 1998: p. 184).

To verify the apparent validity of the logical thinking test, the researcher presented the initial version of the test, which consists of 51 items, to a group of experts and specialists in the fields of measurement, tests and sports psychology. They were asked to express their opinions and observations on the validity and appropriateness of the instructions and test items according to the theoretical definition of each field. Based on the evaluation of the arbitrators, the paragraphs were accepted linguistically and scientifically, and all test items received unanimous approval, allowing them to be applied to the research sample.

- Test correction method:

The researcher identified the typical answer keys for the logical reasoning test paragraphs in order to correct the test. Where one score was given for the correct answer and zero for the wrong answer. A paragraph left or referenced with more than one answer was also considered incorrect, and therefore given a zero. Thus, the maximum score for the test is 51, while the minimum score is zero.

4- Stability of the logical thinking test:

The researcher verified the stability of the logical reasoning test using the Cauder-Richardson method (20), based on the total sample data. The stability coefficient of the test showed a value of (0.85).

Second / tests for basic skills in football:

The researcher prepared a questionnaire to determine the most appropriate test for each of the basic skills in football that are studied, as three tests were selected for each skill, the questionnaire was presented to nine experts and specialists in the fields of football, tests, measurement and motor learning, after analyzing the questionnaires and extracting percentages, the tests that obtained 75% or more were nominated

The first test: controlling the stopping of the ball from a distance of 6 meters inside a square (2 m)

Test objective: Evaluation of the technical performance of the suppression skill.
Tools needed: legal footballs, tape measure, burke.

Procedures:

1. The layout of the test area as shown in Figure 6.
2. The player stands behind the selected test area.
3. The teacher stands with the ball on the ball throwing line, which is 6 meters from the test area (square measuring 2x2 meters). After giving the start signal, the teacher throws the ball (high ball) towards the student, who advances from the starting line into the test area trying to stop the ball in any part of his body, except the arms, and then returns to the starting line to start again.
4. The ball must be stopped behind the line and within the area specified for the test, with one of the player's feet must be inside the test area.
5. If the teacher makes a mistake in throwing the ball, the attempt is repeated and not counted. (The ball is thrown with the movement of the hands from bottom to top.)

Sign up:

- Each laboratory is allowed two consecutive attempts, and the evaluator evaluates the best attempt.
- Calendar grade: 10 degrees.

- The student's score is calculated as an arithmetic average of the scores of the three evaluators in the test

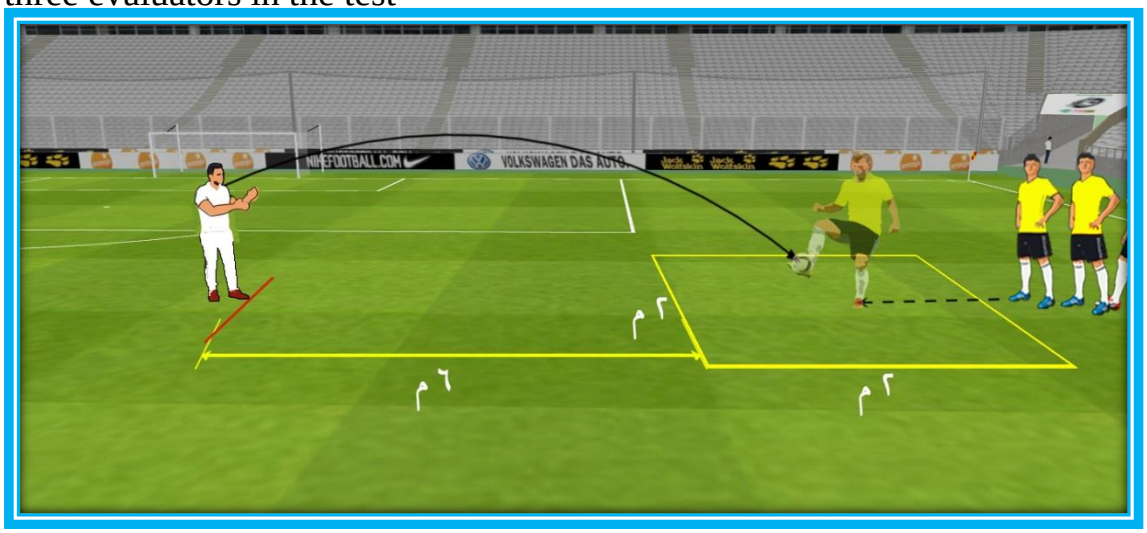


Figure (1)
The soccer suppression test shows .

Test II: Rolling the ball between five poles for a distance of 27 meters (Al-Khashab et al., 1999: 2013)

Test objective: Evaluation of the technical performance of the ball rolling skill.

Necessary tools: legal football, tape measure, five signals or seats of appropriate height.

Procedures:

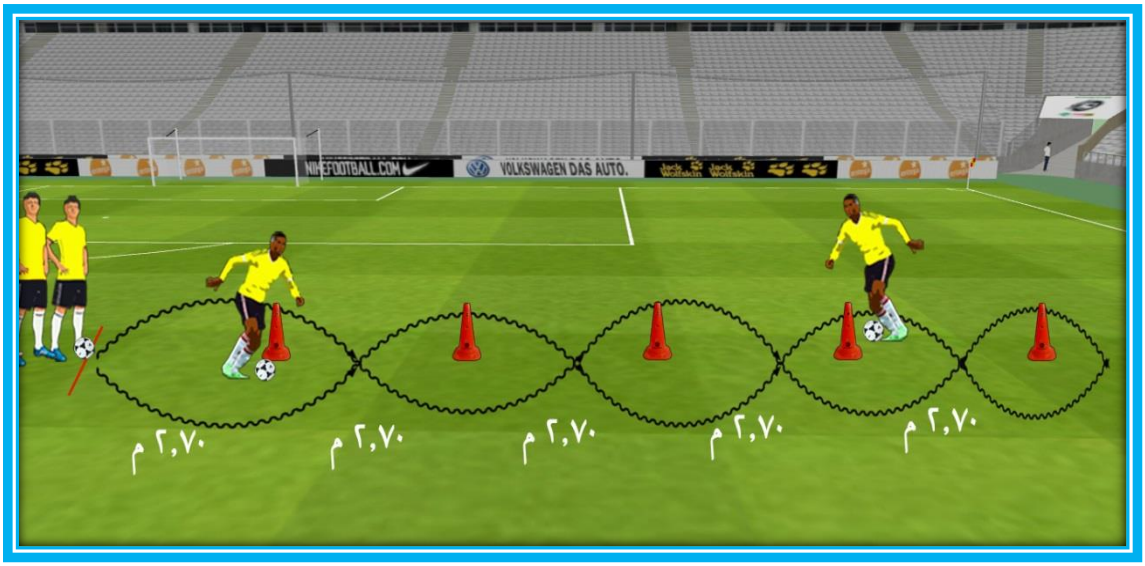
1. Test area setting.
2. The student stands with the ball behind the starting line, where the distance between each sign and the last is 2.70 meters, and the total distance is 27 meters round trip. When the start signal is given, the student runs the ball between the five signs back and forth as shown in Figure 2.

Sign up:

- Each laboratory is allowed two consecutive attempts, and the evaluator evaluates the best attempt.
- Calendar grade: 10 degrees.

- The student's score is calculated as an arithmetic average of the scores of the six evaluators in the testt

Figure (2)
The ball zigzag test shows



Test three: passing the ball towards a small goal at a distance of 10 meters**
Test name: Passing the ball towards a small target 10 meters away
Objective of the test: Measuring passing skill
Tools used: five footballs, small target dimensions of 1 m × 1 m, tape measure, duct tape.
Test Procedure:
The starting line is drawn 1 meter long, 10 meters from the small target. The five balls are placed on the starting line, and when the start signal is heard, the tester shoots the balls towards the small target, taking the correct position at the starting line as shown in Figure 5.
Sign up:
The score is calculated based on the total points obtained by the tester from passing the five balls, according to the following:
1. (2 marks) for each correct attempt enters the small target.
2. (1 degree) If the ball touches the post or crossbar and does not enter the goal.
3. (0 degrees) in case the ball goes out of the small goal.
Score range: 0 to 1

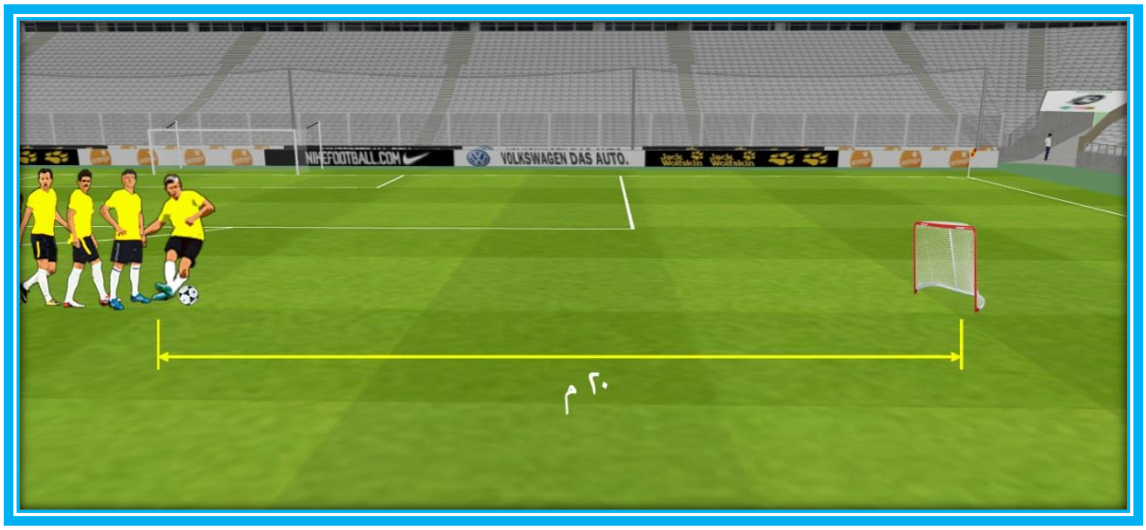


Figure 3
Test of handling towards a small goal demonstrates 1m×1m

2.4.2 Exploratory experiment:

First / exploratory experience for logical thinking

The researcher conducted an exploratory experiment to test logical thinking by distributing the questionnaire for logical thinking to a sample of (5) students from the research community, on Sunday, 3/11/2024, as this sample is a small preliminary experiment that is implemented before conducting the basic experiment, and aims to choose research methods and tools. (Language Academy: 1984:79) .

The researcher benefited from this experience with the following:

- Evaluate the compatibility of tests with the level of students.
- Identify the most prominent problems that hinder the implementation of the experiment.
- Know the time required to apply each test.
- Evaluate the validity of the devices used in the research.
- Identify the necessary requirements for the assistant work team and their efficiency.
- Know the extent to which the survey sample represents the target population, and analyze their responses to the tests.
- Determine the scientific foundations of the tests: "truthfulness, consistency, and objectivity.

Second / Second Exploratory Experiment:

The researcher conducted the second exploratory experiment related to special tests for basic game skills (rolling, handling, suppression) on the same sample of the first exploratory experiment, which consists of (5) students, on Monday, 4/11/2024 AD, and the two exploratory experiments (the first and second) achieved their goals, as some negatives were monitored during the application of the tests, and they were overcome by developing appropriate solutions. The roles of the assistant team were also organized and the tasks of each member were determined, which greatly contributed to facilitating the application of tests and experiments in general. The researcher showed that the tests were suitable for the sample, and some exercises that faced difficulties were modified, in addition to modifying exercises that took a long or too short time.

2.4.3Pre-tests :

The pre-tests were conducted for the basic research sample as follows:

- **Variable of the pre-logical thinking test** : On Wednesday, 6/11/2024, with the help of the assistant work team, the researcher distributed the questionnaire for logical thinking to the sample members in the control and experimental groups for the purpose of answering them and identifying their logical thinking, and after completing the answer, the researcher collected the questionnaires, and then conducted the required statistical operations on the data obtained from those answers

- **Basic skills variable in football beforehand**: rolling, handling, and suppression

The pre-tests were held on Thursday, 7/11/2024. The researcher documented the conditions and the method of conducting the tests, in addition to the assistant team, to ensure that the same conditions are achieved as much as possible during the post-tests.

2.4.5 The main experience:

The main field experiment of the research sample was carried out by starting teaching according to the educational units with the strategy of graded activities on Sunday, 9/11/2024, and ended on Sunday, 25/12/2024. The curriculum of the educational units included (6) educational units, which lasted over a period of (6) weeks, where one educational unit was allocated for each week, with a time period of (90) minutes for each unit.

Preparing and implementing educational units according to the strategy of graded activities.

After the researcher conducted the research and investigation process by reviewing the scientific sources, and the literature available in the field of football, teaching methods and the field of motor learning, and after consulting a number of experts specialized in these fields, a set of skill exercises were selected for the skills chosen by these experts, and the researcher took into account matters related to learning skills at this stage, in addition to the time allocated for the lesson according to its divisions, as well as the skills and events specified in the teaching curriculum for the school stage. involved, as well as available devices and tools. After that, the researcher carried out the exercises prepared based on a constructive educational strategy (graded activities strategy), taking into account the following points when preparing and applying his educational units.

- Determine the time taken for the educational units as a whole and the duration of one educational unit (45 minutes) distributed over the sections of the educational unit as follows:

- **Preparatory section: The total time of** (10) minutes per unit was determined, which consisted of:

1- **Introduction:** It included standing with one line, recording absence, performing the lesson beginning shout, and determining its total time (2) minutes per educational unit.

2- **General warm-up:** This part included a set of physical exercises that help to warm and prepare the functional and physical organs of the body, and set the total time at a rate of (4 minutes) per educational unit.

3- **Special warm-up** : This part also included a set of exercises, which are directed to a group of special muscles and joints and working mainly for the group of skills studied, and the total time was (4) minutes per educational unit.

- **Main section:** This section of the educational unit has been allocated a total time of (30 minutes) per educational unit, and it was distributed into several parts as follows:

- **The educational part:** The time of this part of the main section is determined by a time of (10) minutes; in this part of the main section, questions are directed by the teacher to students about the skill allocated in the educational unit, and the answers are heard from them as well, as the teacher and students address all aspects of the skill and how to perform it, which requires the student to focus

on all the information provided about the skill and its performance, as well as pay attention to all questions and answers that are asked and discussed.

- **The applied part (practical):** Sufficient time has been allocated to this part of the main section in the educational unit and a time of (20) minutes, as this part included in accordance with the educational strategy in force in this study at three levels (first, second, and third), which express the levels of students varying in how and form of performance of basic skills in basketball, as the student can perform exercises for learning the skill correctly.

2 **Closing section:** The time of this section was determined by the researcher by (5 minutes), and included the recreational aspect, which contains preparation exercises for students or a small game, as well as evaluating the performance of students collectively and assigning students activities and duties for the next lecture, which was divided as follows: a mini-game with calming exercises with a time of (4) minutes and the process of leaving with a time of (1) minutes.

2.4.6 Post-tests:

After completing the implementation of the educational units on the students of the experimental group, and teaching the control group in the traditional way, the post-tests were conducted in the same way as the pre-tests, as follows:

- **Variable Logical Thinking Dimensional**:

On Monday, 26/12/2024, the same questionnaire for logical thinking was distributed to the same sample of the two groups and under the same surrounding conditions for the purpose of answering it as a post-test after the implementation of the educational units based on the strategy of graded activities and after answering them by students, the questionnaires were collected for the purpose of conducting statistical transactions.

- **The variable of basic skills in post-football** : rolling, handling, and suppression, the post-tests were applied on Tuesday, 27/12/2024.

2.5 Statistical means:

The researcher will use the program of the statistical package for social sciences version 26 (SPSS-26), as he will use the following statistical means:

4- Arithmetic mean.
5- Broker.
6- Torsion coefficient.
7- Standard deviation.

8- Simple correlation coefficient (Pearson).
9- Percentage.
10- T-test for independent samples.
11- T-test of correlated samples.

3- Presentation, analysis and discussion of results:

3-1 Presentation, analysis and discussion of the results of the differences between the pre- and post-tests of the research variables of the experimental group:

Table (2)

Shows the values of the arithmetic means and standard deviations of the pre- and post-tests and the difference of the arithmetic means of the logical thinking variable and the basic skills of football (rolling, handling, and suppression) for the experimental group

Moral significance	Test significance level	Calculated T-value	Standard deviation of difference	Arithmetic mean of the difference	Post 20 students		Tribal 20 students		Unit of measurement	auditions
					on	Going to-	on	Going to-		
Statistically significant	0.000	5.345	0.066	8,161	1,541	34,328	2,752	26,286	degree	Logical thinking
Statistically significant	0.002	3.031	6.002	5.015	5.410	12.541	2.042	19.142	second	Rolling
Statistically significant	0.000	6.514	0.892	1.988	0.937	7.100	0.953	4.311	degree	Handling
Statistically significant	0.000	9.805	0.961	2.301	0.276	6.799	1.644	3.460	degree	Suppression

At a degree of freedom (19) and a level of significance for the test in the statistical program (0.001)

After the data were collected related to the pre- and post-tests of the experimental group members and through the statistical treatments of these tests, the results appeared in Table (2), which shows us the arithmetic media, standard deviations of the pre- and post-tests, the difference in arithmetic means, standard deviations, the percentage of standard error and the value of (T).) calculated for the pre- and post-tests of the experimental group in the following variables; logical thinking showed the value of the arithmetic mean in the pre-test (26,286) and standard deviation (2,752), as for the post-test of the same group was the arithmetic mean (34,328) and standard deviation (1,541) and the difference of the medians amounted to (8,161) deviation difference amounted to (0.066) and the

standard error value (5,345) and to find the significance of the differences between the pre- and post-tests of the experimental group was the value of (T) calculated (5,323), which indicates that the calculated value of (T) is greater than the tabular value of (T), which proves a significant difference between the pre- and post-tests and in favor of the post-test.

As for the rolling test in football, the value of the arithmetic mean appeared in the pre-test (19,142) and a standard deviation (2,042), and in the post-test the arithmetic mean reached (12,541) and a standard deviation (5,410) and the difference in the means amounted to (5,015) and the difference in deviations amounted to (6,002) and to find the significance of the differences between the pre- and post-tests of the experimental group, the calculated value of (T) was (3,031), which indicates that the calculated value of (T) is greater than the value of (T).) tabular which proves the existence of a significant difference between the tests before and after and in favor of the post-test, as well as that the test skill handling football has appeared the value of the arithmetic mean in the pre-test (4,311) and standard deviation (0.953), and in the post-test reached the arithmetic mean (7,100) and standard deviation (0.937) and that the difference of the medians amounted to (1,988) and the difference deviations amounted to (0.892), and to find the significant differences between the pre- and post-tests of the experimental group was the value of (T) calculated (6,514), which indicates that the value of (T) calculated greater than the value of (T) tabular which proves the existence of a significant difference between the tests before and after and in favor of the post-test, as well as that the skill test suppression the value of the arithmetic mean of the pre-test (3,460) and standard deviation (1,644), and in the post-test reached the arithmetic mean (6,799) and standard deviation (1,276) and the difference of the medians amounted to (2,301) and the difference deviations amounted to (0.961), and to find the significance of the differences between the pre- and post-tests of the experimental group was the value of (T) calculated (9,805), which indicates that the calculated value of (T) is greater than the tabular value of (T), which proves a significant difference between the pre- and post-tests and in favor of the post-test.

It is shown through Table (2) that the results of the differences for the pre- and post-tests of the research variables of the experimental group that the calculated value of (T) is greater than the value of (T) tabular (2,372) with a degree of freedom (19) and the percentage of error (05.0), and this indicates that there are differences between the pre- and post-tests and in favor of the post-tests.

The researcher attributed the noticeable differences to the fact that the strategy of gradual activities followed by the experimental group in learning basic football skills contributed significantly to improving their learning and performance of these skills. The development it achieved was the result of the training organization and the quality of the exercises used in this strategy, which relied on the principle of gradualism in education and performance. The guidance provided during the implementation of this strategy and the correction of errors has contributed to enhancing learning and increasing sound performance.

The researcher believes that the noticeable differences are due to the use of the strategy of graded activities, which provided students with a new learning environment that meets their needs and desires according to their abilities. This strategy prepares the learner to practice real performance in controlled conditions, giving students the opportunity to experiment with new kinetic forms without fear of making mistakes. Furthermore, the use of exercises by the experimental group that effectively influence the development of abilities associated with the performance of skills, such as logical thinking (the subject under consideration), is crucial. Thinking, as a mental ability, plays a vital role in the performance of basic skills in football, so it must be taken care of and developed due to its importance in improving skills performance. Thus, the significant differences that appeared in logical thinking reflected positively on the performance of the skills under consideration.

3-2 Presentation, analysis and discussion of the results of the differences between the pre- and post-tests of the skills under research for the control group: -

Table (3)

Shows the values of the arithmetic means and standard deviations of the pre- and post-tests and the difference of the arithmetic means of the logical thinking variable and the basic skills of football (rolling, handling, and suppression) of the control group.

Moral significance	Test significance level	Calculated T-value	Standard deviation of difference	Arithmetic mean of the difference	Post 20 students		Tribal 20 students		Unit of measurement	auditions
					on	Going to-	on	Going to-		
Statistically significant	0.001	4.610	0.043	0.219	0.192	30.431	1.286	25,581	degree	Logical thinking
Statistically significant	0.000	3.190	4.028	3.192	5.660	14.101	1.822	19.162	second	Rolling
Statistically significant	0.009	5.412	1.840	1.217	1.002	6.830	1.330	4.050	degree	Handling
Statistically significant	0.035	6.827	1.116	0.554	0.619	5.121	1.418	3.235	degree	Suppression

Degree of freedom (19) and tabular (2.045) error ratio (0.05)

The data on the pre- and post-tests of the members of the control group and through the statistical treatments of these tests the results appeared in Table (3), which shows us the arithmetic media, standard deviations of the pre- and post-tests, the difference in arithmetic means, standard deviations, the percentage of standard error and the value of (T) calculated for the pre- and post-tests of the control group in the variables under research, the logical thinking showed the value of the arithmetic mean of the pre-test (25,581) and the deviation of Standard (1,286), as for the post-test of the same group, the arithmetic mean was (30,431) and a standard deviation of (0.19) and the difference in the medians amounted to (0.219) and the difference of deviations amounted to (0.430) and to find the significance of the differences between the pre- and post-tests of the control group, the calculated value of (T) was (4,610), which indicates that the calculated value of (T) is greater than the tabular value of (T), which proves a significant difference between the pre- and post-tests and in favor of the post-test.

As for the football rolling test, the value of the arithmetic mean appeared in the pre-test (19,162) and a standard deviation (1,822), and in the post-test the arithmetic mean reached (14,101) and a standard deviation (5,660) and that the difference in the averages amounted to (3,192) and the difference of deviations amounted to (4,028), and to find the significance of the differences between the pre- and post-tests of the experimental group, the calculated value of (T) was (3,190), which indicates that the calculated value of (T) is greater than the value of (T).) tabular which proves the existence of a significant difference between the pre- and post-tests and in favor of the post-test.

As well as the results of the test skill handling football has appeared the value of the arithmetic mean in the pre-test (4,050) and standard deviation (1,330), and in the post-test reached the arithmetic mean (6,830) and standard deviation (1,002) and that the difference of the medians amounted to (1,217) and the difference deviations amounted to (1,840), and to find the significance of the differences between the pre- and post-tests of the control group was the value of (T) calculated (5,412), which indicates that it is greater than the value of (T) tabular which proves the existence of a significant difference between the pre- and post-tests and in favor of the post-test.

As well as that the skill test suppression in football, the value of the arithmetic mean of the pre-test (3,235) and standard deviation (1,418), and in the post-test reached the arithmetic mean (5,121) and standard deviation (0.619) and that the difference in the media amounted to (0.554) and the difference of deviations amounted to (1,116), and to find the significance of the differences between the pre- and post-tests of the control group, the calculated value of (T) was (6,827), which indicates that the value of (T) calculated is greater than the value of (T).) tabular which proves the existence of a significant difference between the pre- and post-tests and in favor of the post-test.

It is shown through Table (3) that the results of the differences for the pre- and post-tests of the research variables of the experimental group that the calculated value of (T) is less than the value of (T) tabular (2,372) with a degree of freedom (19) and the percentage of error (05.0), and this indicates that there are differences between the pre- and post-tests and in favor of the post-test.

The researcher indicates that the differences achieved by the control group between the pre- and post-tests in the research variables are a natural result, as the method followed by the teacher has a clear positive impact on students' learning and the development of their skills in football, although this method depends more on the teacher compared to the student. The researcher also explains that the development witnessed by the control group is due to the general exercises included in the educational units provided by the subject teacher. He stresses that continuity in learning by students, as well as guidance and correction by the teacher, can contribute to enhancing football-related skill abilities.

3.3 Presentation, analysis and discussion of the results of the post-tests of the experimental and control groups:

Table 4

It shows the values of arithmetic means, standard deviations, calculated T-value, test significance, the two research groups dimensionally, the logical thinking variable and the basic skills of football (rolling, handling, and suppression).

Significance of differences	Test significance level	Calculated T-value	Adjuster 20 students		Experimental 20 students		Unit of measurement	Variables
			on	Going to-	on	Going to-		
Statistically significant	0.005	3.648	0.192	30.431	1.541	34,328	degree	Logical thinking
Statistically significant	0.002	4.612	5.660	14.101	5.410	12.541	second	Rolling
Statistically significant	0.000	4.566	1.002	6.830	0.837	7.100	degree	Handling

Statistically significant	0.000	6.420	0.619	5.121	0.276	6.799	degree	Suppression

degree of freedom (38) and tabular (2.02) with error ratio (05.0).

Through Table (4) we note that the values of the arithmetic media, standard deviations, calculated (T) value and error rate for the post-test of the experimental and control groups for logical thinking and football skills under research, have reached the value of the arithmetic mean of logical thinking, in the post-test of the experimental group (34,328) and standard deviation (1,541) The control group has reached the arithmetic mean of logical thinking (30,431) and standard deviation (0.192) and the value of (T) calculated (3,648) The value of the standard error reached (0.005) and since the value of (T) calculated is greater than the tabular at the level of significance (0.05), which indicates that there are significant differences in the post-test between the experimental and control groups and in favor of the experimental group.

The value of the arithmetic mean of the rolling skill, which is a unit measured in time (1/100s), in the post-test of the experimental group (12,541) and a standard deviation of (5,410) The control group has reached the arithmetic mean of the rolling skill (14,101) and a standard deviation (5,660) and the value of (T) calculated (4,612) The value of the standard error reached (0.002) and since the value of (T) calculated greater than the tabular at the level of significance (0.05), which indicates the existence of significant differences in the post-test between the experimental and control groups and in favor of the experimental group.

As for the skill of handling football, which was measured in degree, the results of the post-test of the experimental group were with an arithmetic mean of (7,100) and a standard deviation of (0.837), while the control group reached the arithmetic mean (6,830) and a standard deviation of (1,002) and the calculated value of (T) was (4,566), while the standard error ratio reached (0,000) and since the value of (T) calculated greater than the tabular at the level of significance (0.05), which indicates the existence of significant differences in the post-test between the experimental and control groups and in favor of the experimental group.

Also, the value of the arithmetic mean of the skill of suppression in football, which is the unit of measurement is the degree, in the post-test of the experimental group (6,799) and a standard deviation (0.276) The control group has reached the arithmetic mean (5,121) and a standard deviation (0.619) and the calculated value of (T) (6,420) The standard error rate reached (0.000) and since the value of (T) calculated greater than the tabular at the level of significance (0.05), which indicates that there are significant differences in the post-test between the experimental and control groups and in favor of the experimental group.

It is clear from the above that exercises tailored to students' abilities and abilities, organized at different levels, are key elements of the strategy of graded activities within the educational units. It had a clear impact on improving the level of learning basic skills in the research sample from the experimental group. It contributed to enhancing students' logical thinking in analyzing and synthesizing information, which was recognized in the educational aspect and applied in the practical aspect. These exercises are the basis of the learning style used in that module, and have been variously designed to suit all students, under the supervision and guidance of the subject teacher to correct errors and promote correct performance. "Exercises are of great importance in developing skills, both for juniors and for advanced." (Mahjoub: 65: 1999), It can be said that the continuous stages in teaching according to the strategy of gradual activities enhance the empowerment of all students in performance, which contributes to creating a positive interaction between the teacher and his students. This strategy attracts students to lessons and increases their enthusiasm, which helps them focus and interact more, and makes it easier for them to understand information. On the other hand, the educational units based on the strategy of graded activities have transformed learners from the traditional style of teaching, which relies on receiving information from the teacher, to a new, more influential and modern style, making it easier for them to acquire knowledge quickly and easily.

- **Conclusions and recommendations:**

4.1 Conclusions:

According to the findings of the research, the researcher concluded the following:

1- The strategy of graded activities has shown a positive effect in enhancing logical thinking and improving the learning and performance of research skills (such as rolling, handling, and suppression) in students.

3 The variety of exercises contributed to the enhancement of research skills, which led to their effective stabilization and development.

4 The choice of the type of exercises had a significant impact on improving students' logical thinking.

5 The use of modern tools in teaching basic skills has had a positive effect in enhancing logical thinking and students' progress in learning and mastering research skills in football.

4.2 **Recommendations:**

Through the conclusions that appeared in the research, the researcher recommends the following:

1- Focus on the implementation of the strategy of graded activities to promote logical thinking and teach basic skills in football to students.

2- Conducting studies that explore various modern educational and teaching methods and plans, including the strategy of graded activities, to teach basic skills in all sports to students.
3- Adopting a scientific approach supported by reliable and modern sources when designing educational curricula, taking into account the nature and characteristics of students and focusing on individual differences between them.
4- Conducting similar studies on other sports, whether individual or collective.
5- Organizing development courses for teachers in order to provide them with the latest teaching methods and the contents of these methods and how to apply them during the lesson period.

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