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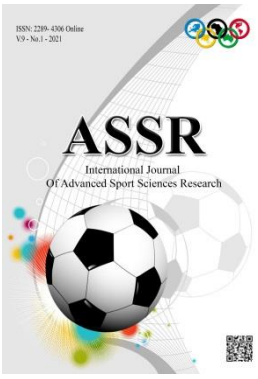

"The Impact Of The Generative Learning strategy On Students' Development Of Basic Football Skills"

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Introduction and significance of the research:

The reliance on modern strategies in which the center of activity in the educational process shifts from the teacher to the learner, as he is one of the axes of the educational process, and that everything is done according to regular, planned, and purposeful behavioral movements, according to which the teacher proceeds to achieve his goals, and this is what is known as a "strategy," and from these strategies a generative learning technique for achieving predefined objectives.

Research problem:

The research problem is that most teaching strategies stimulate and activate one side of the brain, whereas the generative learning strategy is one of the strategies that induces and activates both sides of the brain (the whole brain) by finding logical and saturated relationships around alternative perceptions in order to build knowledge in the brain structure, which increases the learner's experience of understanding and comprehension.

research aims:

- Recognizing the effect of the generative learning technique on certain basic football skills for students.

The following principles (teaching strategies, generative learning strategies, and basic football skills, including handling, rolling, and putting down) were all well-defined.

In terms of research methodology and field procedures, the researcher used the experimental method, with a research sample of 40 students from the first stage, divided into two groups of 20 students each. The experimental group is taught using the generative learning strategy, while the second group is taught using the teacher's strategy.

The researcher came up with the following conclusions, including:

- The generative learning group's superiority in improving football handling, rolling, and putting down skills.

Among the most important recommendations recommended by the researcher:

1 Using the generative learning strategy by teachers in developing basic football skills for first-year students.

2 The significance of focusing on theoretical concepts and connecting them to the practical aspects during implementation of physical education lessons.

Keywords: generative learning strategy, the basic football skills: handling, rolling, and putting down skills

Research methodology and procedures

2-1 Research Methodology.

The experimental method was used by the researcher by constructing two equal groups with a pre-and post-test for its suitability to the nature of the research .

Table (1) shows the experimental design of the research.

S	Group	Pretest	Experimental Processing	Post Test
1	Experimental Group	Rolling Put Out Pass	Generative Learning strategy	Rolling Put Out Pass
2	Control Group	Rolling Put Out Pass	Teacher's strategy	Rolling Put Out Pass

2-2 The research community and sample:

The research community was determined by students of the first stage in the College of Physical Education and Sports Sciences at the University of Babylon for the academic year 2016–2017, with a total of 156 students divided into three study groupings (b, c, and d), as the sample was chosen at random by lottery. The experimental group is represented by class (B), and the control group is represented by class (D), both of which have (20) students. The first group (experimental) is taught using the generative learning strategy, and the second group (control) is taught using the teacher's strategy.

2-3 The methods, devices and tools used in the research:.

2-3-1 Research methods.

The researcher used the following research methods:

1 Arab and foreign references and sources.

2 Observation.

3 Personal interviews.

4 Tests and measurement.

5 The questionnaire.

2-3-2 the equipment

1 a handheld scientific calculator (kenko).
2 Camera with digital imaging (sony).
3 DVD's (10).
4 A laptop computer (TOSHIBA).

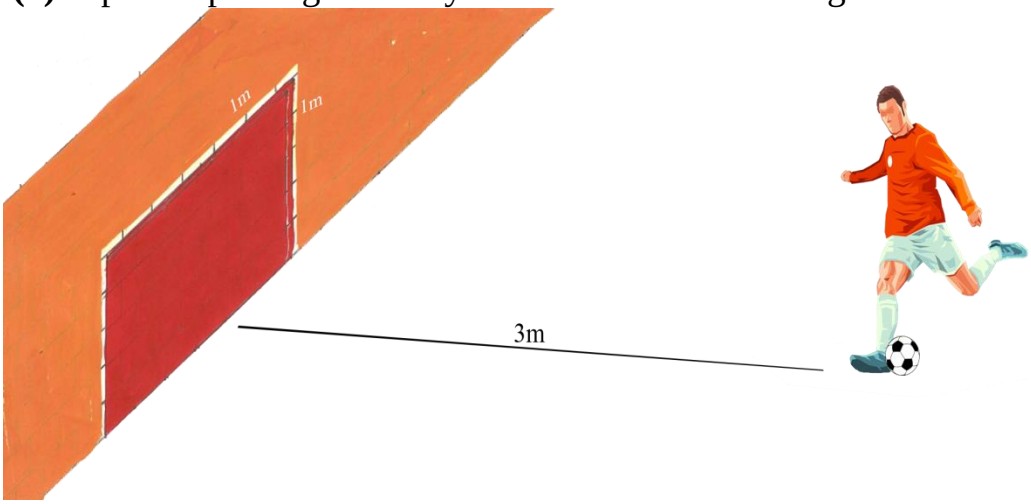
2-3-3 The tools

1 whistles (fox) (2).
2 high pillars (50 cm) numbered (10).
3 goals measuring (1 m x 1 m) numbered (5).
4 Office supplies (pencils, soft pens, paper, ruler and board).
5 White borax.

2-4 A description of the tests used in the research

2-4-1 Ball handling test on a target drawn on the wall.[1]

The objective of the test: To measure the accuracy of passing as quickly as possible.
Tools used: legal footballs numbered (5), an electronic stopwatch, borax and paint.
Performance specifications: The examinee stands in front of a wall and behind a line away from the wall (3 m), draws a target on the wall measuring (1 x 1 m), and when the whistle makes it sound, the examinee continuously kicks the ball towards the target drawn on the wall for a period of time (30 seconds).
Figure (1) depicts a passing accuracy test on a wall-drawn target.



Performance Terms:

- Each examinee has two consecutive attempts.
- The results of the first two attempts is taken.
- The rebounding ball cannot be kicked from the wall once it has passed the starting line.

Register:

- Counts the number of times the ball enters the goal during the 30 seconds.
- The balls that make contact with the lines are counted as successful.

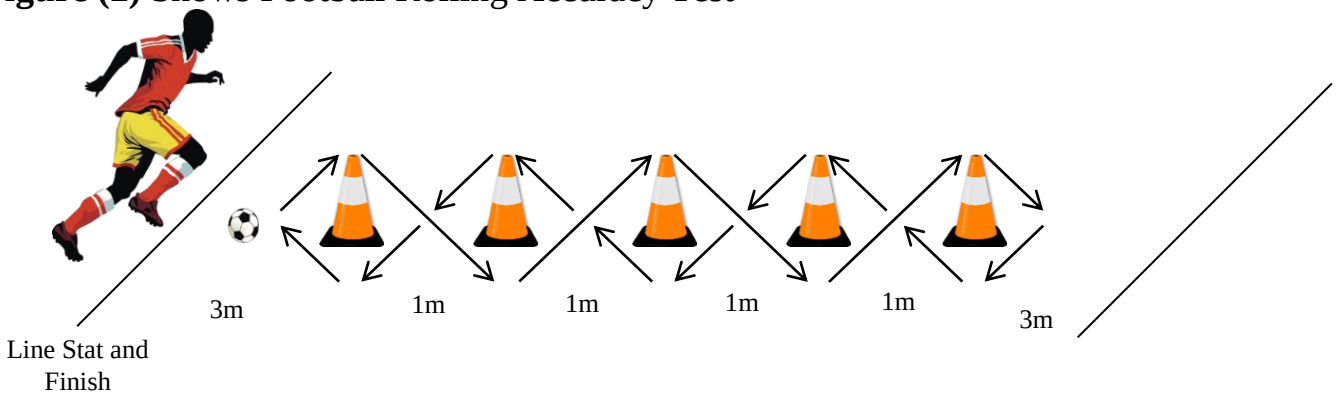
2-4-2 Zigzag passing test with the ball between (5) pillars[2]

- **Objective of the test:** The accuracy of a football player's rolling skill is measured.
- **Tools used :** legal footballs, pillars numbered (5), tape measure , an electronic stopwatch, and borax.
- **Performance specifications:** After preparing the test area as shown in the Figure, the examinee stands behind the starting line with the ball. When the starting whistle sounds, the examinee rolls the ball between the pillars and returns to the starting line.

Register :

- Each examinee is given two attempts in a row.
- The findings of the two best attempts are considered.
- The time must be calculated to the nearest tenth of a second.

Figure (2) Shows Football Rolling Accuracy Test



2-4-3 The football halt test[3]

The objective of the test: To measure the accuracy of putting out skill.

Tools used: legal footballs numbered (5), tape measure , borax.

Performance specifications: The thrower stands with the ball on the line facing the examinee, who is 6m away from the test area (2x2m). When the start whistle is heard, the person throws the ball (a high ball) towards the examinee who is standing behind the test area, instructing him to move towards the ball and place it inside the putting out area on any part of his body except (the arms), and then return behind the putting out area.

Performance terms: The ball is thrown by moving the arms from bottom to top. If the person throws it incorrectly, the attempt is repeated but does not count.

Register:

- Each correct attempt is given two points.
- Each examinee has five attempts in a row.

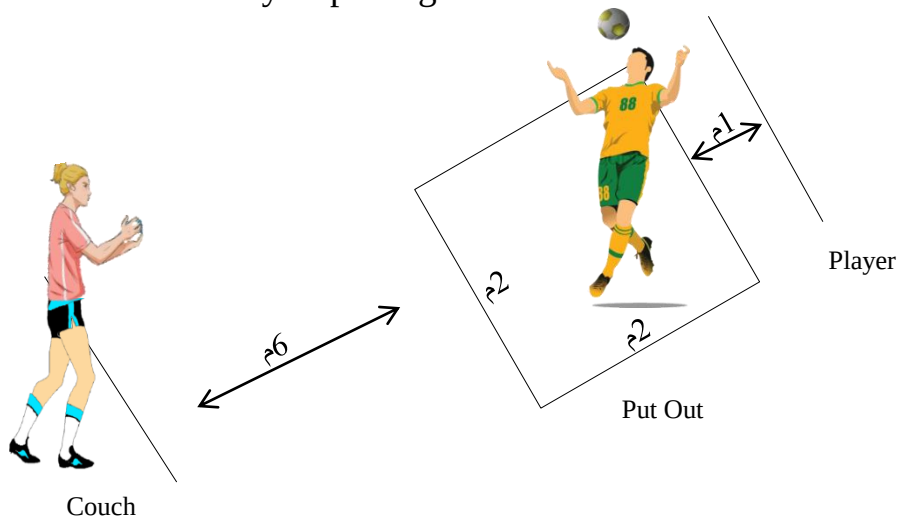
In the following cases, an attempt is not considered valid:

A. When the examinee does not successfully stop the ball.

B. When hecrosses any line of the putting down area lines by more than a foot.

C. When the ball is stopped illegally.

Figure (3) shows the accuracy of putting down test



3- Presentation, analysis and discussion of results

3-1 presentation and analysis of pre and post-test results for the control group in the variables studied.

Table (2) It shows the arithmetic means, standard deviations, calculated and tabular (t) values, as well as the statistical significance of the control group's pre and post - test findings.

S	Variables	Unit of measurement	Pre- test		Post-test		(t) value		Significance differences
			m.	std.	m.	std.	calculated	tabular	
1	passing	degree	5.98	2.27	8.34	2.11	3.32	2.09	Significant
2	rolling	second	24.91	2.28	22.93	1.99	3.10		Significant
3	Putting out	degree	3.12	2.25	6.15	1.86	4.57		Significant
4	Cognitive acquisition	degree	23.34	2.31	28.62	2.01	9.96		Significant
5	Creative thinking	degree	17.23	2.09	20.61	2.03	3.17		Significant

*** At the significance level (0.05), and at the level of flexibility (19).**

The values of the arithmetic means and standard deviations, as well as the extent of their differences before and after the implementation of the curriculum, are shown in Table (2), indicating that the differences occurred in the post test, and to determine the truth of these differences and their statistical significance, the researcher used the (t) test for the interconnected samples, as the arithmetic mean value of the pre-test of the handling skill (5.98) with a standard deviation of (2.27) , while the arithmetic mean in the post-test was (8.34), with a standard deviation of (2.11), the calculated (t) value was (3.32), which was greater than the tabular value of (2.09) at the significance level (0.05) and degree of flexibility (19), indicating the existence of significant differences between the pre-test and post-test in favor of the post-test.

The pre-test arithmetic mean of rolling skill was (24.91) with a standard deviation of (2.28), and the post-test arithmetic mean was (22.93) with a standard deviation of (1.99), and the calculated (t) value was (3.10), which is greater than the

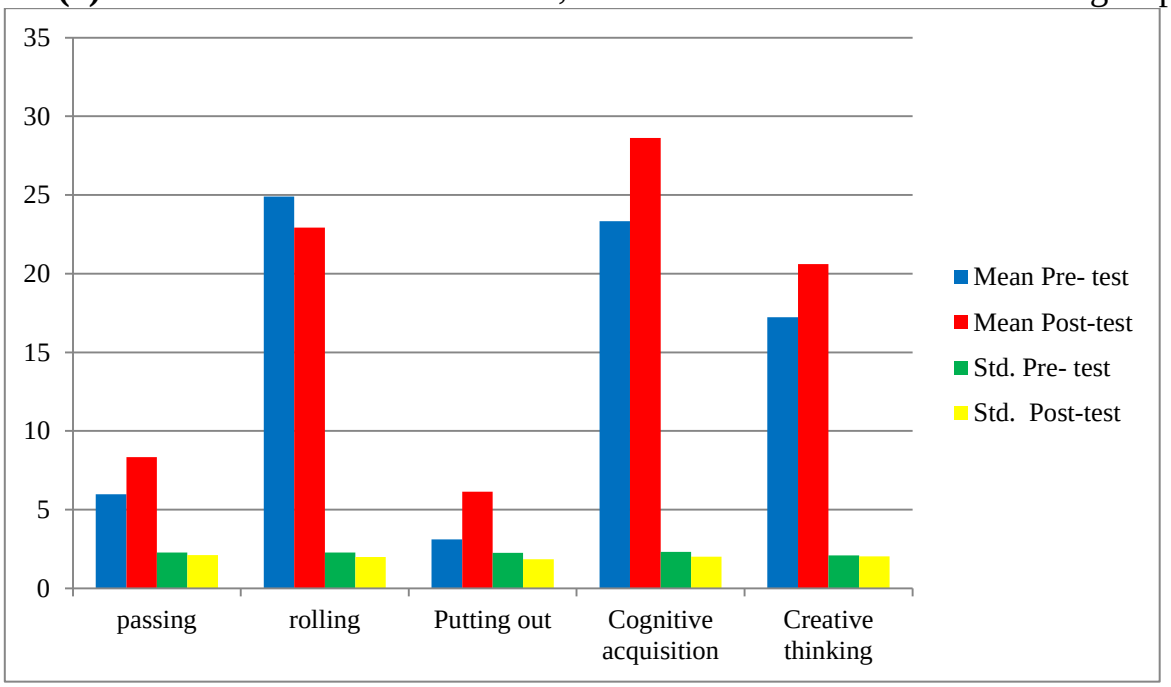
tabular value of (2.09) at the significance level (0.05) and at the level of flexibility (19), indicating that there are significant differences in favor of the post-test.

The pre-test arithmetic mean of putting down skill was (3.12) with a standard deviation of (2.25), and the post-test arithmetic mean was (6.15) with a standard deviation of (1.86), and the calculated (t) value was (4.57), which is greater than the tabular value was (2.09) at the significance level (0.05) and at the level of flexibility (19), indicating that there are significant differences between the pre- and post-test.

The arithmetic mean in the pre-test for cognitive achievement was (23.34) with a standard deviation of (2.31), and the arithmetic mean in the post-test was (28.62) with a standard deviation of (2.01), and the calculated t-value was (9.96), which is greater than the tabular value amount of (2.09), the significance level was (0.05) and at the level of flexibility (19), indicating that there are significant differences between the pre-test and post-test in favor of the post-test.

The pre-test for creative thinking had an arithmetic mean of (17.23) and a standard deviation of (2.09). In the post-test, the arithmetic mean was (20.61), with a standard deviation of (2.03). The calculated t-value was (3.17), which is higher than the tabular value amount (2.09) at the significance level (0.05) and at the degree of flexibility of (19), indicating that there are significant differences between the pre- and post-test in favor of the post-test .As shown in Figure 4.

Figure (4) It shows the arithmetic means, standard deviations of the control group



3-2 presentation and analysis of pre and post-test results for the experimental group in the variables studied.

Table (3) It shows the arithmetic means, standard deviations, calculated and tabular (t) values, as well as the statistical significance of the experimental group's pre and post -test findings.

s	Variables	Unit of measurement	Pre- test		Post-test		(t) value		Significance differences
			m.	std.	m.	std.	calculated	tabular	
1	passing	degree	6.23	2.39	10.18	1.93	5.64	2.09	Significant
2	rolling	second	24.63	2.25	21.85	1.87	4.21		Significant
3	Putting out	degree	3.41	2.19	7.84	1.73	6.92		Significant

***At the significance level (0.05) and at the level of flexibility (19)**

The significance of the differences in the (t) test for two independent samples between the two research groups in the variables investigated is shown in Table (18), where the arithmetic mean value of the handling skill of the control group was (8.34) with a standard deviation of (2.11), while the arithmetic mean of the experimental group was (10.18) with a standard deviation of (1.93), and the calculated t value between the two groups was (2.88), which is greater than the tabular value that is amounted (2.02) . level of flexibility was (38) and at significant level of (0.05), indicating that there are significant differences between them in favor of the experimental group .

The arithmetic mean value of the rolling skill for the control group was (22.93) with a standard deviation of (1.99), while the arithmetic mean for the experimental group was (21.85) with a standard deviation of (1.87), and the value of (t) calculated between the two groups reached (2.72), which is the largest from its tabular value of (2.02) at the level of flexibility (38) and below the level of significance (0.05), indicating the existence of significant differences between them in favor of the experimental group .

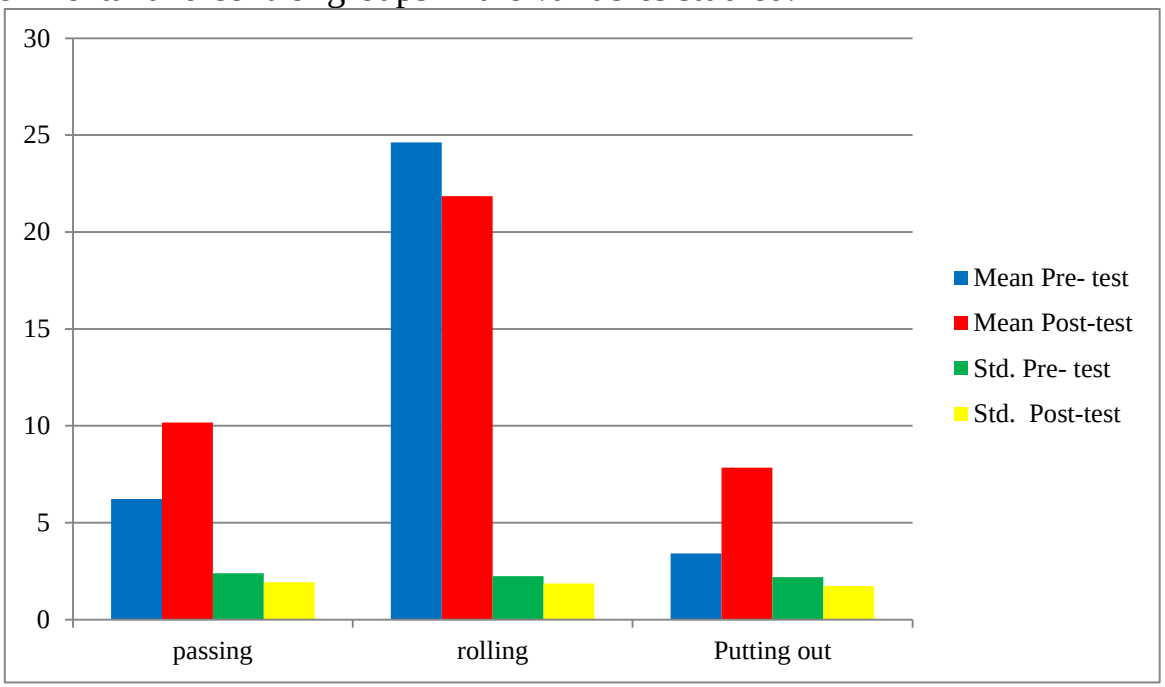
The arithmetic mean value of the putting down skill for the control group was (6.15) with a standard deviation of (1.86), while the arithmetic mean for the experimental group was (7.84) with a standard deviation of (1.73), and the calculated value of (t) between the two groups was (2.90), which is the largest from its tabular value of (2.02) at the level of flexibility (38) and at the level of significance (0.05), indicating the existence of significant differences between them in favor of the experimental group .

The control group's arithmetic mean value of cognitive achievement was (28.62) with a standard deviation of (2.01), while the experimental group's arithmetic mean was (31.72) with a standard deviation of (1.93), and the calculated value of (t) between the two groups was (4.85), which is the highest from its tabular value of (2.02) at the level of flexibility (38) and at the level of significance (0.05), indicating the existence of a significant difference between them in favor of the experimental group .

The control group's arithmetic mean value of putting down skill was (20.61) with a standard deviation of (2.03), while the experimental group's arithmetic mean was (24.66) with a standard deviation of (1.84), and the calculated value of (t) between the two groups was (3.76), which is the highest from its tabular value of

(2.02) at the level of flexibility (38) and at the level of significance (0.05), indicating the existence of a significant difference between them in favor of the experimental group .

Figure (5) It shows the post-test arithmetic means and standard deviations for the two experimental and control groups in the variables studied.



3-3 Discussing the findings of the post-tests in the examined variables for the two experimental and control groups.

Table (3) and Chart (5) show that the experimental group that used the generative learning method in the abilities of handling, rolling, and putting down skills for students differed from the control group that used the teacher's strategy.

The researcher highlights the experimental group's superiority over the control group due to the use of the generative learning strategy, as this strategy helped students develop and master the basic skills needed to complete the course. Good application of skills helps to increase accuracy in performance while avoiding injury, and this comes from repetition of the skill and enough time to master it.

The researcher attributes the experimental group's development to the fact that the students were unfamiliar with the generative learning strategy, which removed boredom and spread the spirit of active participation in them, increasing their enthusiasm and motivation, which was reflected in the development of the skills under study, as "commitment, encouragement, and diversification in performance help to learn skills or enhance them."[(4)]

The researcher believes that the generative learning strategy aids the student's ability to generate ideas and self-learn, and that this has been demonstrated in the development of creative thinking by linking the relationships between concepts and what he has achieved, which helps to broaden his concepts, and that this confirms the importance of the strategy assisting with the mastery of the required skills.

According to the researcher, the use of the generative learning strategy has a positive impact on students' development because students participate in a way that goes beyond being recipients only, but rather they generate a large number of ideas

that contribute to the generation of new concepts and knowledge, as well as their effective participation in activities, as (Kubamust Afaoglu) that the use of practices based on students is important to the achievement of the learning process, as opposed to the lessons taught at college, which are entirely based on the teacher.

4- conclusion and recommendation

Conclusions

The researcher came to the following conclusions based on the research findings and scientific evidence:

1 The generative learning technique aids in the development of football skills such as (handling, rolling, and putting down).

2 The teacher's strategy had a positive impact on the development of football skills (handling, rolling, and putting down).

Recommendation

In light of the researcher's findings, the following are the recommendations:

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