

## THE IMPACT OF PROGRAMMED LEARNING STRATEGY USING EDUCATIONAL MEANS (AUDIO-VISUAL) IN LEARNING SOME VOLLEYBALL SKILLS FOR STUDENTS

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### ABSTRACT

The most prominent characteristic of our contemporary world is that change and development in all aspects of life and in all fields, especially the field of teaching, since the teaching profession is the main pillar for learning all sciences by following and using the teacher to everything new that serves the educational process. The search for modern strategies and methods that have a fundamental role in learning outcomes and simulate the capabilities and capabilities of students and make them search and think about how to perform what is required of them. For students, the current study aimed to identify the effect of the programmed learning strategy using educational means in learning the skill of defending the court and blocking the wall in volleyball for students and the importance of the study to identify the effect of the programmed learning strategy using educational audio-visual means to learn the skills of defense and blocking the wall in the volleyball game for students. It is represented by students of the second stage of the College of Physical Education and Sports Sciences / University of Al-Qadisiyah, whose number is (145). The study sample was (40), divided into two groups, with (20) students for each group. After applying the educational curriculum, which is in the educational frameworks for each skill, post-tests were conducted, and then the study results were extracted by conducting statistical transactions and discussing the results of the researcher's mechanism. To learn the skills of defending the court and blocking the volleyball wall.

**Keywords:** Programmed education strategy, teaching aids, volleyball skills

### INTRODUCTION

In order to keep pace with the rapid development in all sciences, especially physical education and sports sciences, and for the rapid developments in the learning and teaching process, wide horizons have been opened for teachers to search and investigate the use of what is new that serves the teaching process, namely, teaching strategies, their importance and need for them, and their positive role in educational outcomes, through choosing The teacher and the use of appropriate educational means to reach the goal while giving room for the student to mentally think using his senses, whether in audio or visual form, to be always ready to face emergency teaching situations because every step the teacher takes inside the classroom or every movement must be fully studied and the student must respond In the time specified by the teacher, so scholars in the field of sports seek to build a new base that teaches the basic skills of the game by providing auxiliary tools that facilitate the education process, so they are called educational aids, sometimes called teaching aids, or audio-visual aids.

There are many teaching strategies that the teacher can choose the best of them, which he deems appropriate for students, and among these strategies is the programmed learning strategy, which aims to reach information to the learner's mind, and the great role of teaching

strategies must be taken into account in developing the skillful performance of events and sports, and among these games is the ball game The volleyball that needs teaching strategies that are appropriate to the nature of its skills, and the importance of the study lies in identifying the impact of the programmed learning strategy with audio-visual educational means to learn some volleyball skills for students, and the problem of the current study, the researcher noticed that most teachers do not use educational methods that have a direct impact on student performance When learning any sports skill and the fact that the game of volleyball is one of the sports whose skills need accuracy and proficiency due to the importance of each skill and its interdependence with the other and to face the difficulty of learning among students, the researcher sought to use and identify the impact of the programmed learning strategy by means of instruction to learn the skill of defending the court and the blocking wall, and aimed The study is to identify the impact of the programmed learning strategy using educational means in learning the skill of defending the court and the blocking wall, and the hypothesis of the study is that the programmed learning strategy has a positive effect in learning the two skills studied for students.

## METHODOLOGY

The researcher used the experimental method in the manner of two equal groups, which is compatible with the nature of the research problem

### Study population and sample:

The research community included students of the second stage in the College of Physical Education and Sports Sciences / University of Al-Qadisiyah for the academic year 2022-2023 AD, whose number is (145) students. The experimental group used the programmed learning strategy using visual and audio teaching aids, while the control group studied according to the method used by the subject teacher.

### Tests used in the study:

- News of the skill of defending the field (1: 188):

The purpose of the test: to measure the ability of the player to perform the skill of defending the field.

Tools used: 3 balls, a legal volleyball court, as shown in Figure (1).

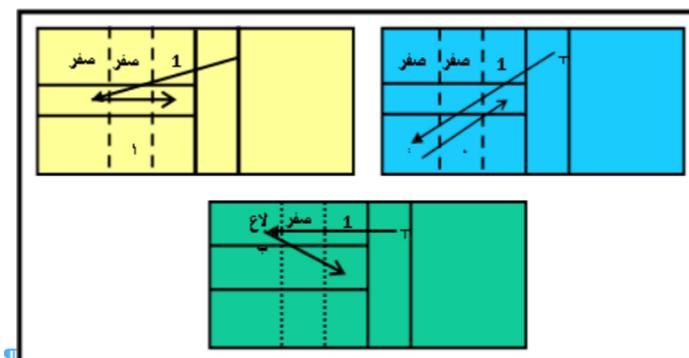


Figure (1) shows the field defense test

**Performance specifications:**

the coach stands on a table in order to give the normal position to perform the crushing blow, he hits and directs the ball to the player according to the area (1,6,5), the player defends the field and directs the ball to the center (2) and each player has 5 attempts from each center .

**Scoring:**

The player takes a point for each area in which the ball is located in the other court, and calculates the total sum for each center, then the total sum of the three centers (15) attempts.

**Blocking wall skill test (2: 319):**

The purpose of the test:

Measuring the accuracy of the skill of the pair blocking wall from the center (4).

**Tools :**

A volleyball court divided as in Figure (2), a tape for planning goals, a measuring tape, (10) volleyballs.

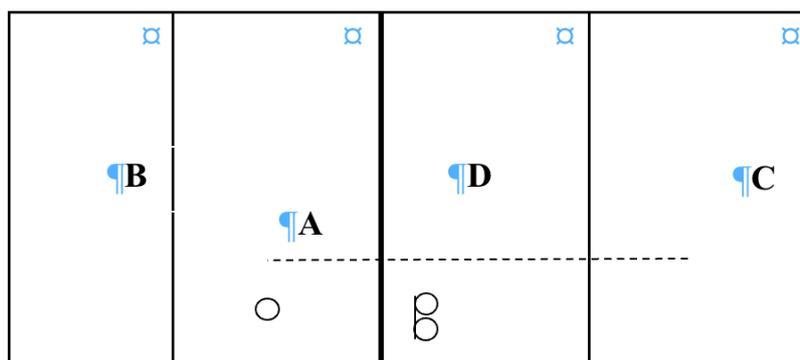


Figure (2) shows the news of the blocking wall

**Performance specifications:**

The coach does the smash and the tester performs the block.

Scoring conditions: (4) points for each attempt within Area (A), (3) points for each attempt within Area (B), (2) points for each attempt within Area C, (0) when the ball falls outside these areas, when The ball falls on a common line between two regions, and the score for the higher region is calculated. The attempt is canceled if the tester commits a legal foul.

**Pre-tests:**

The researcher, after giving an introductory unit to the students, the experimental and control groups, on how to apply the test, then conducted the field defense skill test and the blocking wall test at exactly ten thirty in the morning on 3/8/2023 in the sports hall of the College of Physical Education and Sports Sciences / Al-Qadisiyah University.

**The main experience:**

After conducting the pre-tests for the study sample, the researcher applied the educational curriculum for the two groups during the second semester from 3/12/2023 to 4/16/2023, as the work of the control group is according to the teacher's curriculum, while the experimental group works according to the programmed education strategy (linear method). ) and not the divergent, as the teacher analyzes the skill into frameworks that are in a straight horizontal pattern and presents to the students in the form of direct questions for the student to think about the answer, which starts from the initial behavior of the student to the final behavior, so each framework includes the correct answer to the previous framework in addition to the new information to enhance the responses students directly, and the student's transition from one frame to another depends on his correct response. The educational curriculum consists of (8) educational units, two units per week, and their time is (90). The difference between the two groups is only in the main part of the lesson, which represents the educational and applied side, and Table (1) It shows examples of educational frameworks for the programmed learning strategy in a linear manner with visual and audio educational means for the skill of defending the court and the skill of blocking the wall in volleyball, noting that the answer is hidden from the student with the presence of the teacher who is preparing a course for displaying images and films by means of the data show device inside the classroom and with the student A paper copy of the educational frameworks for each skill mentioned in a sequential manner according to the steps, as well as a conversation with the students in an audio form, whether by playing recordings of the performance for each skill or sending them to the students in advance on the phone to listen to them, and one of the duties of the teacher is to give feedback for each framework in order Statement of the correct answer after the student has been exposed to experimentation or smart guessing based on programmed learning and the information he possesses that qualifies him to move from one framework to another.

**Table (1)****Shows models of educational frameworks for programmed learning strategy**

Educational frameworks with visual and audio means for the skills of defending the court and blocking the volleyball ball		
The correct answer (hidden)	Student response	The skill of defending the court with volleyball
area designated for protection		Standing ready for the skill of defending the field, the preliminary stage before contact with the ball : The first frame: the player moves in the direction of the ball falling and within limits.
The moment the team is ready to receive a serve		The second frame: The opposing team performs a stand-by
stand deep		The third frame: the player stands with the feet apart and parallel, and the distance between them is the width of the pelvis

Shoulder width		The fourth frame: The distance between the feet is not exaggerated so that the individual knees do not cause it
Thighs level and slightly tilted forward		Fifth Frame: The torso is perpendicular to the center of body mass, midway between the feet
And look in the direction of the ball		The sixth frame: the head is vertical at the level of the shoulder..... ..
They are intertwined		The seventh frame: The arms are ..... and straightened forward, and the angle between the torso is (45°).
Hands interlocking		The main section of the skill of defending the field during contact with the ball: (Method of receiving the ball by defending the court with two hands from standing) The eighth frame: The arms are joined quickly with ..... after the player moves to the place where the ball falls
to keep the ball in his court		The ninth frame: the arms are straight and parallel to the ground ..... after touching the forearms
Stretching all flexed parts of the body		The tenth frame: When the ball touches the forearms of the hands, the player moves the arms from the shoulder joints ..... until the push reaches the ground with the phalanges of the fingers
on the inner surface		The eleventh frame: You must play the ball..... for the forearms
Bend the knee of the leg closest to the ball		(Method of receiving the ball by defending the field with one hand from standing) The twelfth frame: The player extends the near arm of the ball with ..... to deepen its center of mass downward
Flex the fingers		The thirteenth frame: touching or releasing the ball either with the fist of the hand or with the back of the striking hand or with firmness with ..... so as not to fall into a legal error from its stability on the hand,
Behind side down high		Fourteenth Frame: Swinging the striking arm ..... with a slight twist in the torso as a follow-up movement.
parallel to the square		(Method of receiving the ball by way of defending the court to fall forward or to the side) Fifteenth Frame: It is done with a strong straightening of the knees and pushing the arena with the two insteps until the player reaches the end of the push.

By scrolling with two hands or with one hand		The sixteenth frame: the movement is carried out either ..... and after the end of passing to the colleague on the field.
Chest, abdomen, thighs, hands simultaneously		The seventeenth frame: the player falls to the ground so that all parts of his body touch the arena on ..... and he slides forward to absorb the shock
The moment of flight during the fall		The eighteenth frame: It is necessary to take into account the performance of the defense of the serve in this way with the hands in ..... or lead with the back of the hand close to the ball or with the single hand with the fingers clenched so that the player does not fall into a legal error
The player stands		Concluding section: The nineteenth frame: I must .....immediately after executing the defense
Stand up at full speed		The twentieth frame: If the defense is from falling or from rolling, it must be ..... in preparation for receiving rebounds from the opposing team.
A little depth is not exaggerated		Frame twenty-one: The defender with experience in different situations deals with these possibilities with a defensive stance.....
Wall skill		
move to the other player		Pause for the blocking wall skill: The first frame: The player participating in the blocking process ..... in the position taken from the attack takes side steps until the two players arrive simultaneously in front of the attacker
The attacker performs the attack		The second frame: the process of jumping up is performed by doing the blocking wall at the same time as the player.....
widening of the pelvis		The third frame: the feet are far apart..... and the arms are weighted and the jump is up.
the movement of the other player		Fourth Frame: The arms are close to the body so as not to hinder
Jump up with arms moving up		Main section: The fifth frame: When the attacking player attacks, the players participating in the blocking wall.....
spreading and elongated		The sixth frame: The arms are stretched upwards, the fingers.....and the palms are in the shape of the surface of the ball

not spaced		The seventh frame: Their jump should be together in a way..... so as not to leave a gap through which the attacker can direct the ball to their court.
the background		The eighth frame: It begins with the feet apart, so it starts from ..... then the legs (the knee joint, followed by the thigh joint and the upper part of the body forward and upward).
Fingertips		The ninth frame: the player continues in the case of spreading all parts of the body until the push reaches.....
balance		Concluding section: The tenth frame: Upon completion of the blocking process with two players, the players will fall while maintaining.....
Not to fall into any legal error		The eleventh frame: focus on pulling the arms to the body ..... in preparation for the defense process The case of the ball falling inside their court.

**3-4-9 Post-tests:**

After completing the implementation of the main experiment of the programmed education strategy using visual and audio means, the researcher conducted the post-tests for the skills of defending the court and the blocking wall in volleyball for the control and experimental groups on 4/19/2023 under the same conditions in which he conducted the pre-tests.

**Statistical means:**

The SPSS statistical bag was used to extract the results of the study.

**Results :**

**Table (2)**

It shows the arithmetic mean, standard deviations, and the value (t) of the pre and post test for the skills of defending the court and blocking the volleyball wall for the control and experimental groups.

Groups		measuring unit	Pre-test		Post-test		T value	Sig
			S	E	S	E		
Control	preparation	Degree	4.213	0.345	6.411	0.912	2.96	0.0
	Receiving serves	Degree	4.245	0.95	15.83	1.29	4.23	0.0
Experimental	Preparation	Degree	4.318	0.337	7.564	0.563	3.23	0.0
	Receiving serves	Degree	4.151	0.98	18.06	1.43	4.75	0.0

Through the results of Table (2), it shows us the values of the arithmetic mean, standard deviation, and the value of (t) and the extent of their difference before and after the implementation of the main experiment of the programmed learning strategy, which indicates that the difference is significant in favor of the posttests for the two groups.

### DISCUSSION

The results of the tests of the skills of defending the court and blocking wall, pre and post, shown in Table (2), indicate that there are statistically significant differences in favor of the post tests. The control, which relied in the learning process for skills on the method or strategy used by the teacher of the subject. The researcher attributes this development to the teacher's experience in his field of specialization and his use of many tools that contribute to the output of the learning process of skills in the required manner, in addition to the ability and capabilities of students to learn and its continuity. By using feedback to them throughout the learning period, all of these things contributed to the events of the learning process, as Mustafa Abdel-Samee indicates that repeated viewing at different speeds and the diversity of learning sources give vitality and a new dimension to the learning process and move the learner from the atmosphere of traditional learning to a state of suspense and attraction towards learning (3 :131)

The researcher attributes the reason for the superiority of the experimental group that applied the educational curriculum with the programmed learning strategy in a linear manner, because this strategy is characterized by being a method of explaining, presenting and applying the skill after it is divided according to the educational curriculum and according to the educational steps for each skill. The parts are sequentially presented to the student in the form of frames printed on A paper is handed over to each student to be read, so that each frame includes presenting the skill in the form of audiovisual teaching aids, whether they are words, words, or pictures that are presented to the student in a sequential and logical manner. Muhammad Al-Haila confirms that the teaching aids of pictures and illustrations save time and effort for the teacher in explaining concepts and facts (4:27), and after the introduction and presentation, a question is directed to the student asking him to answer it. If the answer is correct, he will have understood the answer to the first frame, which qualifies him to move to the second frame, and so on until the educational program is completed, according to the number of frames for each skill, as Omar indicates Muhammad pointed out that "the learner is always eager to see each of the new movements that the teacher presents to him for the purpose of learning them, so no matter how accurate the verbal description or explanation is, it cannot in any way compensate the learner for seeing the movement model, as the learning process is closely related to the real visual image." (5:15), and the advantage of linear programmed learning is that it gives enough time for the rest of the students to learn and then ensures that they all reach the achievement of the goals by taking into account the individual differences between them, as Abdul Jabbar Saeed indicates that this type of linear learning program is based on analyzing the study material into parts Each of them is called a frame and follows in a straight line and presents the questions so that the learner remembers and writes the answer and then moves to another frame where he finds the correct answer and then continues and so on until the study material

is finished (6:67) and this is what has been done during the application of the educational curriculum with the programmed learning strategy.

The researcher also attributes the development to the nature of the educational units with the programmed learning strategy, which clearly differed from the regular educational units with clear objectives, which prompted the students to learn by stimulating their thinking while attracting attention and focusing on how to deal with the educational frameworks provided to them, which contribute to moving them from the stage To another, taking into account their remaining in the same framework in the event of not learning the aforementioned part of the skill, and the subject teacher must continue to give feedback to ensure that all students move smoothly while ensuring their learning and correct responses. Mahmoud Daoud and Saeed Saleh indicate that the feedback used in the learning process has the function of organizing the inputs of information and clarifying it in the required manner and continuously during the learning process, and this leads to making the outputs, i.e. the different responses of the learner, more accurate (7: 303), and the researcher attributes the students' learning to the skills of defending the court and the blocking wall to what has been learned according to the educational curriculum prepared with the educational frameworks for each skill Which proceeds in an organized manner and is linked to the visual and audio teaching aids, which undoubtedly contributed significantly to their learning of skills, stimulating their senses, and increasing their ability to focus and distribute their attention, as Iqbal Abdul Hussein and Nabil Kazim indicate that the use of educational aids and involving students with them refines their skills, achieves themselves, and satisfies their inclinations and desires (8 : 141).

### CONCLUSIONS

- 1- The students of the experimental group excelled as a result of using the programmed learning strategy with visual and audio teaching aids to learn the skills of defending the court and blocking the volleyball wall.
- 2- The educational program using teaching aids has a positive effect in encouraging students to learn due to the existence of educational frameworks that have not been used before.

### RECOMMENDATIONS

- 1- Encouraging teachers to use modern strategies that give the student room to participate and express his ideas during the learning period.
- 2- Benefiting from the programmed learning strategy in its linear and divergent styles in the educational process within the teachers' curriculum for the subject of theoretical and practical teaching methods.
- 3- Conducting a similar study with the programmed learning strategy in other educational stages.

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