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The Impact Of Visual Thinking On Teaching Students Some Basic Basketball Skills

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Abstract: The study aims to develop instructional units based on the visual thinking approach and to examine their effect on learning complex offensive skills in basketball among students. The researcher adopted an experimental method due to its suitability for the nature of the research problem. An equivalent groups design with pre- and post-tests was employed. The research population consisted of first-year students in the morning study program at the College of Physical Education and Sports Sciences, University of Misan, for the academic year 2025–2026. Two sections were randomly selected to represent the main research sample: Section (B) as the experimental group and Section (A) as the control group. The main sample included 40 students, with 20 students in each group, while 10 students from Section (B) were selected for the pilot sample. The main sample constituted 22.48% of the total population. Pre- and post-tests for the basketball skills under investigation were conducted, and the data were statistically analyzed using the SPSS package. The findings revealed the superiority of the experimental group, which was exposed to instructional units designed وفق the visual thinking approach, over the control group that was taught using the conventional method. This superiority was clearly reflected in the level of skill acquisition. The improvement is attributed to the role of the visual thinking strategy in actively engaging students in the learning process and in organizing and interpreting information visually, thereby enhancing motor understanding and linking the stages of skill performance within a coherent framework. The researcher concluded that adopting the visual thinking approach in teaching basketball skills contributes to improving the level of skill learning and enhances the student's role as the core of the educational process. The study recommends integrating this approach into basketball instructional units and conducting further research to compare its effectiveness with other teaching strategies in order to identify the most impactful methods for developing skill performance and promoting students' thinking through visual learning.

Keywords: Visual Thinking, Shooting after Dribbling, Jump Shot, Visual Models, Visual Senses

Introduction

Education is no longer limited to transferring information or acquiring physical skills, but is increasingly focused on developing intellectual abilities, critical thinking, and problem-solving skills, this goal is achieved through modern strategies and methods that take into account individual differences and are part of a modern educational approach based on activity, interaction, and active student participation.

Rapid scientific developments in recent decades have affected various areas of life around the world. Education in all its forms, especially in the fields of physical education and sports sciences, has made a significant contribution to this development.

In light of these changes, there is an urgent need to develop new educational methods and curricula, and strategies that enable students to actively participate in the educational process and abandon outdated traditional methods, it is essential to create stimulating learning environments based on the interaction between the senses, mind, and movement, especially in areas that combine thinking and motor skills, such as sports in general and team sports in particular, including basketball, it is clear that the success of the educational process no longer depends solely on the development of physical skills, but also includes the development of students' thinking and perception. This improves their ability to make informed decisions in various game situations, and contributes to improving their technical and motor performance, individually and collectively.

Basketball is one of the most complex and widespread team sports, and requires students to master many complex motor skills that combine physical, motor and intellectual aspects, basic basketball skills play a pivotal role in this process, being essential to athletic performance, these skills require high situational awareness, mental agility, precision decision making, and technical execution. Given the diversity and rapid development of field situations, it has become necessary to develop methods and curricula for teaching these skills, adapted to the game and its mental and motor requirements, therefore, there is a need for modern educational methods that integrate cognitive and visual skills, which helps students develop an accurate mental representation of how to use these skills effectively.

Visual thinking is a modern method that has proven effective in developing students' mental and motor skills, these rely on the use of visual resources, such as illustrations, films, videos, and mind maps, which helps students better understand the steps of applying skills before applying them practically.

This approach goes beyond a mere introduction or explanation; it engages students in the thinking process by stimulating their visual and mental senses, which helps develop their ability to link theory with practice and improve their performance.

For this reason, style is crucial. It aims to explore the impact of visual thinking on students' learning of basketball skills, as they are the target group for the stages of study in college, which represents a crucial step in acquiring the correct motor skills, which form the basis of subsequent performance, this work is based on a scientific perspective that assumes that developing students' cognitive and visual skills positively affects their performance, especially in skills that require strong coordination between thought and movement in complex situations, which is what basketball skills require.

The importance of this work lies in its commitment to using visual thinking as a modern approach that keeps pace with global trends in teaching methods, and integrating the senses into the learning process, this helps improve the effectiveness of learning basic basketball skills, skills that often pose significant challenges for students early in their education.

The importance of this work also lies in providing a modern scientific perspective that contributes to developing the process of physical education and sports sciences by introducing thinking methods in the field of motor skills, it represents a qualitative contribution to efforts to integrate modern physical education with teaching methods based on thought and perception, in conclusion, the researcher hopes that this study will enrich the Arab sports library with a scientific study that opens new horizons for researchers and trainers in the field of physical education, especially with regard to the use of visual thinking in teaching skills, which improves the quality of the educational process and contributes to the mathematical and mental development of students.

Research Problem

By informing the researcher of many studies and research related to the field of teaching, especially basketball, and the interviews he conducted with a group of specialists, in addition to his practical experience, closeness and interest in the field of basketball, the researcher noticed the weakness in relying on thinking processes in the practical and applied aspect in teaching basketball in the second stage, and the basis in teaching is on general information based on simple explanation, which reduces the student's role in active participation and limits the development of his thinking and visual perception skills, while the requirements of the current era and the knowledge society require the educational process to keep pace with modern methods that focus on developing mental and creative abilities, along with practical skills.

Here, the importance of modern methods emerged, such as the visual thinking method, which depends on understanding the relationships between shapes and situations, and motivating students to use their mental abilities to analyze situations and plan solutions, however, field studies and practical observations indicate that this method is rarely applied in the field of teaching basketball in educational institutions, which may prevent achieving the desired effectiveness in teaching skills, in this regard, the researcher used the visual thinking method, which can help students learn basic basketball skills, making the learning process a simplified and uncomplicated process, which the researcher seeks to achieve.

Research Objective

1. Preparing an educational curriculum using the visual thinking method to teach some basic skills in the first stage of basketball to students.
2. Identifying the impact of visual thinking style in teaching some basic skills in the first stage of basketball to students.
3. Identifying the superiority of differences between the experimental and control groups in the research variables in post-tests.

Research Hypothesis

1. Human field: First-year students at the University of Maysan, College of Physical Education and Sports Sciences.
2. Time field: 10/9/2025 to
3. Spatial field: The indoor hall of the Faculty of Physical Education and Sports Sciences at the University of Maysan.

Define terms

Visual thinking style: It is thinking through images and represents a powerful tool for drawing and planning maps. It is one of the flexible and practical means for diverse and advanced approaches to our way of thinking, it is represented by the individual's ability to use concrete, realistic meanings to illustrate abstract images, and there is mutual coordination between the drawings and shapes that the learner sees. (Tariq, 2016: 105)

Methodology

The experimental approach was adopted because it is the most appropriate approach to address the research problem and achieve its objectives, especially the one designed for two equal groups (control and experimental). As (Haider Abdul Razzaq Al-Abadi) (2015) believes, "Experimentation searches for the cause and how it occurs, and the researcher studies the variables of the phenomenon" **I**n some of them, an intentional change occurs, and some other related variables are controlled and controlled, so that the effect of this on one or more dependent variables is reached. In other words, causal relationships are reached between both the independent and dependent variables. That is why it became experimental design (Haider, 2015: 82).

Research Community and its Sample:

The research community of first-year students at the Faculty of Physical Education and Sports Sciences at the University of Maysan, male category, was identified as a student for the academic year 2025-2026.

The research sample was selected intentionally. They are two divisions of first-year students, represented by Division (A) and Division (B). The number of students in each division is (20) students, constituting a percentage of (6.84%) of the original community, he divided the sample into two groups (control and experimental) in a random manner, as Wajih Mahjoub (1993) believes, "The sample is the part that represents the original population on which the researcher conducts all of his work and its focus" (Wajih, 1993: 181) The research sample was homogenized with the research variables within each group using the coefficient of variation, which considers the sample homogeneous if its value does not exceed (30%), as for the equivalence between the two groups in the research variables, the (T) test was used for unrelated samples, which requires that its calculated value be less than the tabular value, as shown in Table (1).

Table 1. Shows the arithmetic means, standard deviations, coefficient of variation, and values (T) for sample homogeneity within the two groups and group equivalence in the research variables

Measurements and tests	Unit of measurement	Control group			Experimental group			Calculated t value	Level of non-significance
		S	P	coefficient of variation	S	P	coefficient of variation		
Biologic age	year	19.24	0.748	3.887	19.35	0.874	4.516	0.418	non-significant
Length	cm	171.45	2.245	1.309	171.56	2.341	1.364	0.147	non-significant
Weight	KGM	70.46	0.985	1.397	70.57	0.886	1.255	0.363	non-significant
Peaceful correction after dialogue	Number	4.526	0.562	12.417	4.674	0.674	14.42	0.736	non-significant
The calculated correction is two points after delivery and receipt	Number	6.457	0.674	10.438	6,595	0.745	11.296	0.6	non-significant
Correction (three points) after performing the dialogue	Number	2,745	0.124	4.517	2.742	0.145	5.288	0.069	non-significant

Cognitive aspect	Degree	17.26	0.867	5.023	17.47	0.965	5.523	0.707	non-significant

Tabular value (T) at degree of freedom (38) and error probability (0.05) = 1.686

Means of collecting information, tools and devices used in research.
Data collection methods

- Arab and foreign sources.
- Tests used.

2-3-2 Devices and tools used

- Tape measure.
- Basketballs.
- Basketball court.
- CDs.
- Classroom.
- Display screen.
- Laptop.

Field research procedures

Determine the search variables:

Based on the first stage curriculum for teaching complex basic basketball skills, the skills under study were approved as they are approved.

Skills tests:

Test (peaceful aiming after performing the dialogue) (Ali, 2014: 74).

- Objective of the test: Measure peaceful aiming after performing the dialogue
- Tools:

1. Legal basketball court.
2. Basketball balls number (9).
3. Stopwatch.
4. Mikati.
5. Registrar

Performance method

It starts from the middle of the field where there are (9 balls) basketballs and the first ball is taken in the right of the middle of the field and the dialogue is performed between the three markers placed on the three sides where the peaceful shooting is performed from the right of the free throw line and quickly returns again to catch the second ball to repeat the same performance for three balls on this side and another three in front of the free throw line and the remaining three It is performed from the left side and then stopped until the test ends.

Test conditions:
- The tested player must shoot peacefully in succession. The tested player must shoot peacefully in succession, once to the right, once in front, and once to the left, that each side, three shots.
- Any legal violation of skill performance will result in points being cancelled.

Registration:
- The number of balls entering the basket is calculated for the skill test, and the highest score is (9).

Test (aiming by jumping two points after performing delivery and receipt with the wall) (Ali, 2014: 75).

Objective of the test: Measure the aiming from the jump (two points) after performing the delivery and receipt with the wall

Tools:
1. Legal basketball court.
2. Referee.
3. Mikati.
4. Stopwatch.
5. Moving wall measuring (140 ×160) m.
6. Basketballs number (9)

Performance method:

He begins to move to the other half of the field, where (9) balls are arranged as shown in Figure (3), and the laboratory performs shooting from jumping (two points) for all the balls (9) after performing the delivery and receiving skill with the moving wall that is placed in front of the player shot on the basket If (three balls from the left, three in front and three to the right) are placed against the wall, they are moved with each group of balls. Note that the distance of the balls arranged in the skill test is all from the center of the throat (5 meters) and the balls are from the wall (3 meters). The test ends with the last ball being aimed at the basket.

Test conditions:

Any legal violation of skill performance will result in points being cancelled.

Registration:
- The tester is awarded (3) points in the skill test if the ball enters the net directly.
- The tester is awarded (2) points if the ball hits the throat or board and enters the basket.
- The tester awards (1) point if the ball touches the throat and does not enter.
- The laboratory grants (zero) if it does not touch the throat at all.
- Total test points (27) points.

2-4-2-2-3 Test (shooting by jumping three points after performing the dialogue) (Ali, 2014: 76).

- Objective of the test: Measure the aiming (three points) after performing the dialogue

Tools:
1. Legal basketball court.
2. Basketballs (8).
3. Mikati.
4. Stopwatch.
5. Registrar

Performance Method:

The middle of the other field, in which there are (10) markers and (8) balls, begins the distance between one marker and another (1 meter), arranged inside the three-point arc, and the distance between the marker and the three-point arc from the inside is (1.75 meters) as shown in Figure (4), where the tested player takes the ball that was placed on the right side line, performs the dialogue, turns around the person, and goes back Quickly with the dialogue and then performing his three-point shot, he repeats this performance with the four balls on the right side and repeats the performance without stopping on the four balls that are on the left side, so the test ends on the eighth ball.

Test conditions

The tester must shoot from the counted jump of "3 points" in succession for all eight balls, each according to his position.

Any legal violation will result in points being cancelled.

Registration

Count the number of successful balls.

- Total laboratory score in the skill test (8 marks) for each successful correction

2-4-3-3 Exploratory experiment:

The researcher conducted an exploratory experiment related to educational video photography with strategic procedures and a visual thinking method on (5) students on the day of 12/10/2025 in the college's inner hall, and its goal was:
1. Identify the readiness of devices, tools and display screen.
2. Identify the time it takes to photograph and perform the skill.
3. Identify the extent of the photography staff's capabilities and the students' performance capabilities.
4. Knowing the suitability of the educational curriculum vocabulary to the double-coding procedures and the level of the sample members.
5. Identify the negatives and positives facing the researcher.

Pre-tests and measurements:

Special pre-tests were conducted on the sample on Sunday, December 15th2024 in the classrooms of the Faculty of Physical Education and Sports Sciences – University of Maysan through the application of the researched skills, the results of which are extracted through video recording of the artistic performance of each student and are evaluated by experts. The researcher and the assistant work team confirmed that all the procedures that

were applied to the experimental research sample are the same as those applied during the testing of the control research sample.

Result and Discussion

Formulating educational units according to visual thinking style

After the researcher reviewed many scientific sources and conducted personal interviews with professors specialized in teaching methods, basketball, measurement and evaluation, and reviewed the completed research and studies that adopted the visual thinking method, the researcher prepared a set of exercises that will be used in the educational units for the visual thinking method according to the steps he presented, which are (presenting the model, seeing the relationships in the model or shape, linking existing relationships through the shape and deducing new relationships in skill performance through the shape, thinking visually, imagining the solution through the displayed shape) (Tariq, 1987: 322) (Raisan, 1989: 107) for basketball skills that are under study.

Steps of Visual Thinking Style

The first five steps that the researcher will apply are represented in the main section of the educational part:

1. Show the model or form to learners by introducing the concept and asking questions about basketball skills.
2. Seeing relationships in a model or form is done by showing video clips and pictures about the desired skills and asking questions that stimulate thinking among students.
3. Linking existing relationships through form and deducing new relationships through explanation by the professor through diagrams about the form and performance at hand.
4. Recognizing ambiguities or gaps through form. Finding solutions to questions raised about performance and thinking to provide the correct scientific understanding.
5. Think visually by having the teacher correctly explain the compound skill.

The last step will be applied by the researcher in the main section, the applied part:

1. Imagine the solution through the displayed figure. It is done through a set of diverse exercises that contain everything that supports sensory-cognitive processes and the employment of the method in educational units that have been prepared in a way that suits the ability of the students in the group, in addition to adapting the preparation of the units to complex skills, as well as dividing the time of the educational unit and the times allocated to each exercise and all the activities and questions that the unit includes, the researcher will also use many educational methods and activities that helped students achieve the goal of the educational unit, and make it interesting and diverse. Illustrative diagrams, photo posters, and some video clips will be displayed, in addition to assigning students to analyze the skill performance as a homework assignment and discuss it in order to clarify the complex offensive skills, also, prepare a set of exercises that helped in the learning process, for the purpose of applying them in the main section to develop the skill aspect and the ability to know correct performance. The first three steps will be applied in the main section in the learning part.

The main experience consists of several axes, which are:

The first axis: Visual thinking style procedures:

The texts read and written were identified for the technical and skill aspects of each skill, and the researcher did the following:

- By photographing the skill performance of all skills and dividing it according to the skill performance of the sample members and the performance of the ideal model using multiple cameras.
- Video viewing by sample members through each student's laptop.
- Interpreting performance through students' vision and giving feedback according to the steps of the visual thinking method.

The third axis: The role of the teacher in the dual coding strategy:

1. Presenting the written and audio text about the skill performance of each skill to students clearly and in different forms.
2. Displaying images of skills according to their divisions and stages of style.
3. Show a video that includes the ideal technical performance according to each skill.
4. Explanation of the parts of each skill in conjunction with the displayed video.
5. Asking students questions about all parts of the skill.
6. Giving feedback on performance.
7. Discuss each student's performance while showing the video that includes the student's skill performance.

The Fourth Axis: The student's role in the dual coding strategy

1. Viewing the scientific material according to the strategy by the researcher via means of communication and according to each skill of the learners.
2. Interpreting performance and comparing it to ideal performance.
3. Discussing performance with the teacher and learners during the implementation of the visual thinking unit and expressing an opinion on it through inquiries, questions, and developing solutions
4. After the discussion, feedback is given by the teacher for the purpose of correcting errors and modifying performance.

The Fifth Axis: Educational Curriculum:

A special educational curriculum for complex basketball skills was prepared according to the approved curriculum and using the explicit thinking method of the experimental group.

The curriculum included (8) weeks, and contained (16) educational units, with (2) educational units) for each week, and a time of (90) minutes per educational unit, according to the time of the educational lessons for the subject of basketball for the first stage at the College of Physical Education and Sports Sciences at the University of Maysan

The curriculum includes administrative and organizational activities, general and special preparation, then ball feeling exercises, then doing the main section. It contains the

educational activity (explaining and presenting the skill), then the applied activity (applying the skill according to the exercises), and finally the concluding section.

The method of application for each complex skill was (6) educational weeks, with one educational unit, and in the seventh week an educational unit was given the visual thinking method. Therefore, the number of educational units for complex skills became (18) educational units, and the number of educational units for the visual thinking method became (4) if a comprehensive unit was placed for all the skills used, and it was given at the end of the educational units for complex skills.

The following is the time distribution of the proposed curriculum:

The number of educational units is (18) educational units for complex skills and (4) units for style, bringing the number to (22) units.

Educational unit time (90) minutes.

Each educational unit contains the following:

a. The preparatory section is (15) minutes and includes the organizational aspect, general issues, and ((special issues).
b. The main section is (60) minutes, including (20) minutes for the educational part, which includes explaining the skill and presenting the model, and (40) minutes for the applied part.
c. The final section is (15) minutes and includes a recreational game and calming and relaxation exercises, along with collecting tools and leaving.

After the educational (practical) units for each complex skill are taught by the teacher and according to their number in the curriculum, there will be an educational unit according to the visual thinking method and it will be in the computer lab, meaning the implementation of practical units according to the duration of their teaching by the teacher, followed by an educational unit according to visual thinking.

The student was given details and procedures of the method for all complex skills and according to the educational progression of skill performance, and they were done through modern means of communication.

The main experiment began to be implemented on (12/22/2025) and continued until (4/28/2026)

Post-tests:

Post-tests were conducted for the experimental and control groups after the completion of the implementation of the educational units. The students' performance of the researched skills was filmed under the same conditions. This was on April 29, 2026, in the hall of the Faculty of Physical Education and Sports Sciences – University of Maysan.

Shows the pre- and post-test for the control group

Statistical Methods:

It was done using the statistical bag (SPSS) to extract statistical methods.

3- Presenting, analyzing and discussing the results

3-1 Presenting and discussing the results of pre-tests

Table 2. Shows the pre- and post-test for the control group

Tests	Unit of measurement	pre-test		post-test		Standard error	Calculated t value	significance level
		s	p	s	p			
Peaceful correction after dialogue	Number	4.526	0.562	5.965	0.745	0.578	2.489	Significant
The calculated goal is two points after delivery and receipt	Number	6.457	0.674	7.045	0.856	0.274	2.145	Significant
Correction (three points) after performing the dialogue	Number	2,745	0.124	3,896	0.552	0.674	2.629	Significant

Tabular value (T) at degree of freedom (19) and error probability (0.05) = 1.729

Through the results shown in the table above, we notice that there is a tangible superiority in the student's performance during the educational unit. The researcher attributes the reason for this to adherence to the instructions of the subject teacher and benefiting from the teacher's directives, continuous follow-up and participation in performing practical duties, benefiting from feedback from the teacher, as well as benefiting from student observation, and through what the student has learned from the contents of the college curriculum that pertain to complex skills in basketball in the practical and theoretical aspects, the researcher confirms that the way in which the student learns is a specific way and the student has no choice in that, as he is presented with one teaching method or one method with a few special activities that he is allowed to perform, and his reliance is on this source in education, so a wide range of educational sources must be used Providing the educational material through one person, the teacher, who in turn transfers knowledge and develops the educational material, and the material is fixed and without change or development for many years, therefore, the results shown by the group of the adopted method came with these results for the student's performance in teaching complex skills in basketball. This is confirmed by (Ahmed Al-Khatib) (Ahmed, 2008: 14): "The teacher must expand his role in specialized practical skills, and it is important that what is required by the scientific and necessary changes in the role of the teacher and that the teaching profession becomes able to adapt according to those changes" This is also confirmed by (Majid Al-Sayed Obaid) when he says, "We are in a time when we are most in need of education at the level of application instead of education at the level of remembering and memorizing. Perhaps the educator ((John Dewey)) who called for linking educational theories and educational positions is the one who said: Education can only be achieved through work and experience, as teaching in its form is limited to the applied aspect, it

focuses on the theoretical aspect only, as the need has become urgent and pressing for education that aims to develop the student physically, psychologically, mentally, emotionally and socially, and prepare him for practical life after graduation, then place him in a profession that matches his practical competence, abilities, aptitudes and inclinations" (Majid, 2000: 140).

Presentation of the results of the pre- and post-tests of the experimental group

Table 3. Shows the pre- and post-test for the experimental group

Tests	Unit of measurement	pre-test		post-test		Standard error	Calculated t value	significance level
		s	p	s	p			
Peaceful correction after dialogue	Number	4.674	0.674	7.124	0.895	0.885	2,768	Significant
The calculated goal is two points after delivery and receipt	Number	6,595	0.745	9.474	0.745	0.991	2.905	Significant
Correction (three points) after performing the dialogue	Number	2.742	0.145	5.121	0.356	0.867	2.743	Significant

Tabular value (T) at degree of freedom (19) and error probability (0.05) = 1.729

Through the results shown in Table (3), which indicate the superiority of students in the post-tests in the technical skills studied, we notice that there is superiority in the student's performance, and the researcher explains this significance in the results due to the characteristics and features of the visual thinking style in terms of diversity in presenting activities, the student benefited from feedback or inquiry about his performance of the skill, which led to achieving an advantage in learning and mastering the material more, and the student benefited from advantages through diversity in presenting the material according to sound, image, text, and video presentation, as well as the effects between these elements, whether it was a performance movement or a performance form, this facilitated the creation and provision of a suitable atmosphere and good communication between students, which led to its success and the mission that contributed positively to their learning process in a better way, and this is what (Fahim Mustafa) pointed out, he said ((In order for good communication to take place between the teacher and the learner, the teacher must be able to possess skills that stimulate interaction within the classroom by speaking tactfully and clearly, as well as mastering his scientific material and his ability to observe. He must also be able to make some appropriate changes that are necessary in his acumen, whether in the form of information that enriches the material he is performing, or in the teaching method and in presenting the skills that he expects Among them was acquiring it by displaying a specific movement or skill or by involving them in other activities related to the scientific material within the lesson (Fahim, 2005: 194). We notice that there is an "achieving"

development in the level of students' performance, and the researcher attributes this by arousing their interest and motivating them to exert effort and not feel bored by presenting the educational material, good design of the material content, and dividing and segmenting the material through small steps and in an organized and sequential manner interspersed with several effects such as sound and image, as well as the way the text is presented, its movement, and the presence of other effects that helped focus attention and understanding on each part of the basketball complex skill, which led to quality teaching and the student's success in the process of teaching basketball complex skills, this is consistent with what (Mustafa Badran) pointed out, "Using multiple procedures during teaching enables the teacher to meet individual differences between learners and give each of them experiences"

The researcher points out that the visual thinking method has influenced and contributed to the development of the research sample through its ability to communicate scientific material by displaying audio and visual material through showing videos, discussing and interacting with them, and then the ability to respond through its comprehension of the scientific material, this is confirmed by (Dugan Laird): "Many of the problems of conveying information can be solved at the present time by the wider use of audio-visual technologies. Many studies have been conducted to discover the ability to learn, and they have resulted in the conclusion that we remember 10% of what we read, 20% of what we hear, 50% of what we see and hear, and 90% of what we say and do all at once" (Dugan Laird, 1982: 150) This is confirmed by (Muhammad Zaghloul) and agrees with what (Atif Al-Sayed) pointed out: "Diversity and enrichment of the material work to stimulate all the learner's senses while influencing the learner's ability to control the program and how he interacts with it" (Muhammad, 2001: 20) (Atif, 2000: 211).

Presentation of the results of the post-tests of the experimental and control research groups

Table 4. The post-test shows between the control and experimental groups

Tests	Unit of measurement	Control group		experimental group		Calculated t value	significance level
		Post s	P	Post s	P		
Peaceful correction after dialogue	Number	5.965	0.745	7.124	0.895	3.902	Significant
The calculated goal is two points after delivery and receipt	Number	7.045	0.856	9.474	0.745	9.342	Significant
Correction (three points) after	Number	3,896	0.552	5.121	0.356	8.166	Significant

performing the dialogue							

The researcher believes that the development and growth of basketball skills occurred through the use of visual thinking with the members of the experimental sample, the researcher gave the learner the freedom to act and make decisions during performance and to find quick solutions during some performance situations in the main section of the educational unit through the use of method steps, and this is what Khaled Muhammad and et., al points out, "in which the impact of the student's behavior is clear" These methods are organized in light of who makes the lesson decisions during performance) (Khaled, 2012: 273), the researcher believes that using a new method with students by giving them responsibility in choosing performance and making decisions without referring to the teacher or coach gives these students or players a great opportunity to feel responsible for the task placed on their shoulders, so they try to prove their existence through diligence and trying to prove themselves to the teacher and others, so they perform what is required of them through self-thinking with performance and distinction with unprecedented self-creativity and releasing their latent energies that the student may not use Or the player while performing in the manner followed or ordered, because he may consider the matter a specific duty that he performs in any way without paying attention to the type and level of performance, this is supported by Salah, 2014, who states that "the student individually assumes responsibility for initiating the performance and expresses his or her willingness to perform or manage a series of events or teaching units" (Salah, 214: 313). Here, the researcher confirms that the process of selecting exercises and applying them to the experimental group came in a way that works to develop basketball skills through the arrangement, sequence and interconnection between skill exercises and some individual and group situations that have a positive impact on developing some basketball skills. This is supported by (Ghazi Mahmoud 2010) that to develop motor skills, the correct sequence and arrangement of each of these different elements must be taken into account in order to reach the best achievement. As for (Khaled Muhammad Al-Hashhoush 2012), he points out that exercises "are of great importance in preparing learners skillfully and mentally in various sports and in a manner that suits the category." He points out that the process of linking skills leads the player to be good at performing more than one skill, and this process leads to skill and planning sentences for the benefit of the team or group Thus, a state of harmony, adaptation and development is generated among the group members, especially if the player repeats the performance. This was confirmed by (Mufti Ibrahim 1994) as "it is necessary for the player to perform the skill automatically through constant repetition of the performance and the use of various exercises that are characterized by changes in the conditions and external factors during the exercise, such as the presence of one or more competitors." The researcher attributes that the development process among the sample members came through the researcher's use of a group of diverse exercises and the use of a new method, as the researcher used feedback and gave information before performance and

found that there was a great influence and response during performance by the experimental sample members. Salah El-Din Awad (2014) also points out that knowledge (is the basis for choosing scientific methods, and it is the processing of information or a force as the key to solving problems, or it is a process of interaction of more than one element, and knowledge refers to science and is defined as a clear and certain perception of things and behavior), this is what the researcher sees, that the development of knowledge through visual thinking leads to the development of performance, and that the student who possesses theoretical information about the game and skills has easy and distinctive performance and is able to achieve goals easily, and vice versa, as the player who possesses high technique and performance mechanism has better understanding and application than others, the researcher confirms through the steps of the method during performance and giving him the opportunity to work and act and develop solutions for what he deems appropriate and giving confidence to the student, all of this gave positive results during the period of work in the main section of the curriculum (The researcher gave the opportunity to all members of the group, not just one or two students, and to perform according to what the student sees as appropriate and capable of being performed and developed by his other colleagues. It requires the individual to rely on himself in performance and also depends on the learner reaching a stage of learning and the mechanism in performance. It also requires the process of making the appropriate and surprising decision to act quickly to find solutions, this was confirmed by Hussein Sabhan, "There are many factors that affect the speed of decision-making, starting from the nature of the information about the stimulus to the type of movement to be performed, and the accuracy of decision-making depends on the precise identification of the stimulus, diagnostic information, and information stored in memory" (Hussein, 2010: 41). The researcher confirms that all of this leads to the student bearing responsibility for making the decision during the performance on his own without referring to the teacher.

Conclusion

1. The educational curriculum using the visual thinking method had an effective impact in teaching some basketball skills to the students in the experimental group.
2. The educational video, in the practical aspect according to the questions, had a clear impact in improving the level of performance of basketball skills for students.
3. The experimental group that used the visual thinking method to teach some basketball skills to students outperformed the group that used the method followed by the teacher.

Recommendations

1. Emphasis on using the visual thinking method in the educational curriculum for basketball for the first stage in the College of Physical Education and Sports Sciences.
2. Emphasis on using the practical aspect accompanying the educational video through practical questions in educational units.
3. Emphasis on teaching artistic performance of all skills, linking them to a video presentation of an ideal performance and watching it by learners

4. Taking advantage of the evaluation aspect, interpreting the performance by (the teacher and the student), and giving feedback during the daily units according to the curriculum used.
5. Providing the student with electronic material with all the details of the skill performance, along with video presentation through social media devices, so that it becomes an educational resource at any time and place.
6. Generalizing the (visual thinking) method to other activities and other stages in the educational curriculum.

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