The effect of the analogy strategy in enhancing the skill performance of some basic basketball skills

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Abstract: The objective of this study is to see how using the analogy method might help middle school students master some basic basketball abilities. The researchers designed two equal groups with pre and post observations using the experimental technique because of its relevance and the nature of the study. The research community included students of the second grade average in the middle school of Sons of Iraq / Kirkuk governorate. As for the research sample, it consisted of (40) students, The divided into two groups equally with (20) students for each group. After conducting the homogeneity and equivalence of the experimental and control groups, the researchers proceeded to invest this strategy in building (12) educational units of the Ministry of Education curriculum for the physical education lesson for the intermediate stage. The analogy strategy is a strategy based on comparing and simulating the concepts to be learned by students with those familiar and available in their previous knowledge structure. The researchers conducted the pre and post tests and in between the main research experiment. For data processing, a statistical program (SPSS) was used. After analyzing and discussing the results, the researchers concluded that the analogy strategy has a significant impact on learning some basic basketball skills for middle school students. The two research groups were superior in the post tests compared to the post-tests in the skill performance test for some basic skills (passing, dribbling, and shooting) in basketball, as well as the experimental group outperforming the control group in the results of the post test of the skill performance of some basic skills (passing, dribbling, and shooting) in basketball. The researchers recommended the necessity of urging physical education teachers to use the analogy strategy in teaching and teaching basketball skills.

Keywords: Teaching methods, Teaching strategies, Basketball, Education, Teaching.

Introduction:

Many researchers and those who are interested in the educational process in particular and the educational process in general have become preoccupied in recent years with significant development and progress in the field of education, where the educational process in all of its components (teacher, student, material, and the method in which it is implemented) has become the preoccupation of many researchers and those who are interested in the educational process in general. The bodies concerned with education in the world have always sought to develop their educational systems in accordance with the nature of the learner, his inclinations, trends and the capabilities available to him. Since the instructor of physical education is the pivot in the educational process, he has an active and significant role in communicating information to the student through his continuous access to information, sources, strategies and modern techniques in teaching. These modern strategies and techniques have an effective contribution to the student's access to the highest levels and the use of modern teaching methods that use educational means to deliver information in the least time and effort. Constructivist theory is considered by many educators, especially teachers, as a reference and a framework that they refer to and use in order to improve teaching methods and approaches. It gives a wider range of movement instead of teaching methods that are difficult for them to implement due to multiple factors such as the curriculum, the school environment and the external environment. The analogy strategy is one of the modern strategies for teaching science and is based on facilitating the understanding of uncommon abstract concepts by focusing on analogy with the "similar" namely the real world experienced by the individual and knowing the common features "analogies" outside the topic "differences". The researchers believe that the use of this strategy in the field of sports in general and in the physical education lesson in particular, will work to develop the skill level of students by making use of previous experiences and linking them to new experiences. The analogy strategy is one of the modern strategies applied in Iraq, as it is based on random excitement and the generation of new ideas. It is one of the critical and innovative thinking strategies that are also based on the investment of old information in the knowledge structures of learners in new learning through the discovery of relationships between previous knowledge and new experience (Attia, 2009).

The researchers believe that the teacher should make analogies and several comparisons between the analogous and the resembled to provoke mental processes and retrieve what is stored in the student's memory about the required skill of visualization, imagination, and etc. After that, the teacher asks the students to discover the similarities and differences between the analogous and the resembled, so that the students get mental operations in search of similarities and differences between the two topics presented. This means investing previous knowledge in acquiring new knowledge about the required skill or new concept. (Attia, 2009)

Therefore, this strategy requires the student to integrate with the idea or thing to be studied and examined. Thus, he feels that he is integrated with the problem or idea as one thing, or he feels that he is part of the problem. The analogy may be a person, a living thing, or an inanimate object. (Afana & Al-Jaish, 2009)

It is clear that the analogy strategy is an essential method of teaching that is based on clarifying unfamiliar concepts for students by comparing them with situations, skills, or experiences they are familiar with. It is an effective way of learning because it makes the abstract information more tangible and can be imagined, and this is called (the perceptual function). It also helps to build new information that is called the (structural function), which helps students to absorb new experiences and their connection and integration with the experiences and skills learned in their previous knowledge structure. For this reason, it is called (active representative function). This strategy is of great importance because it stimulates the students' interest and increases their motivation towards learning the subject of analogy. It aims to develop the learner's ability to meditate and reflect on all the similes presented to him, through which he can distinguish between the subject of analogy and the resembled by identifying the differences between them. This strategy is of great importance in the development of skills learning processes (Zaytoon, 2002).

The importance of research using the analogy strategy in learning some basic skills in basketball has been demonstrated. Thus, it helps physical education teachers in schools to improve their work to achieve the goals of the educational process. Also, this strategy is based on the ideas of the constructivist theory which has proven its effectiveness and success in the teaching process.

Materials and Methods

Participants

Students in the early stages suffer from poor performance of basic skills. Given the researchers' experience that are teachers specializing in teaching methods and basketball, they found it necessary to focus on the use of new techniques in the field of basketball that work to develop the current reality of students' levels. Because the analogy strategy is one of the contemporary teaching methods, the researchers used it on middle school students based on several justifications. What the researchers noticed through the classroom activities practiced by teachers with their students is a decline in the students' ability to practice the learning processes, which shows a weakness in the students' skills performance. The researchers attributed the reason for this to the lack of use of various modern methods and strategies in teaching physical education by teachers, the lack of interest in individual differences, and the lack of interest in learning basketball skills. Therefore, the researchers decided to use a new teaching strategy that improves the skill performance of some basic basketball skills. Hence, the research problem was to answer the following question:

What is the effect of the analogy strategy on improving the skill performance of some basic skills in basketball?

Research Objectives:

The research aims at:

- Preparing educational units according to the analogy strategy to improve the skill performance of some basic skills in basketball.
- Identifying the effect of the analogy strategy to improve the skill performance of some basic skills in basketball.
- Identifying the significance of the differences between the control and experimental groups in the analogy strategy to improve the skill performance of some basic skills in basketball for the pre and post-tests.
- Identifying the significance of the differences between the control and experimental groups, the analogy strategy to improve the skill performance of some basic skills in basketball for the posttest.

The researchers hypothesized the following:

- There are statistically significant differences between the results of the pre and post tests for the students of the experimental group in improving the skill performance of some basic skills in basketball and in favor of the post-test.
- There are statistically significant differences between the results of the pre and post tests for the students of the control group in improving the skill performance of some basic skills in basketball and in favor of the post-test.
- There are statistically significant differences between the results of the post-test for students of the experimental and control groups in improving the skill performance of some basic basketball skills and in favor of the experimental group.

Research Methodology

The researchers used the empirical method for its suitability to the nature and problem of the research. The research community was chosen deliberately from the students of the second intermediate grade in the Sons of Iraq middle school in Kirkuk Governorate for the academic year (2020-2021). The number of students are (98) students divided into 3 classes (class A: 31 students), (B: 34 students), (C: 33 students). As for the research sample, it was also chosen intentionally (selection of practicing students), which was represented by two divisions (A and B), numbered (65) students. Forty students were selected divided into (20) students for each group. The experimental group is represented by Division (A), which will apply the analogy strategy to this group. The control group was represented by Division (B), which will apply the method followed by the subject teacher. The researchers excluded (11) students (non-practicing, disabled, and absent students) from the experimental group and (14) students (non-practicing, disabled, and absent students) from the control group. Table (1) shows that.

Class	Group	Total number	Employed style	Excluded	Sample
Α	Experimental	31	Analogy strategy	11	20
В	Controlling	34	Followed Style	14	20
Total	25	65			40

Table (1) shows the two research groups, the sample size and the method used in teaching

Parity was conducted between the two research groups in age, height and some basic skills (passing, dribbling, and shooting) in basketball, in the school yard of the Sons of Iraq Intermediate School at Kirkuk Governorate on (1/6/2021), with the help of the assistant work team. This team includes (Asst. Prof. Dr. Atef Abdel-Khaleq Ahmed, a teacher at the College of Physical Education and Sports Sciences / Tikrit University. (2) Asst. Lect. Mohamed Sabri Mohamed, physical education teacher. Asst. lect. Hisham Atta Abdel Hussein. Teaching at the College of Physical Education / Kirkuk University). It was found that the values of significance levels (sig) are greater than (0.05). This indicates that there are no significant differences between the experimental and control groups. This indicates that they are equivalent in the above skills. The researchers used the following devices in the research (Sony video camera (1), cassette tape size

(4 mm), (2) DVD discs (6), Dell laptop (1), computer (1) for measuring weight and length, (2) electronic stopwatch, and (1) Casio hand-made scientific calculator. As for the tools, the researchers used (10) basketballs, (20) figures, (3) burke bags, (1) measuring tape, one packet of greasy dye, and (3) whistles. As for the means of collecting information, the two researches used the following methods:

A questionnaire form for the opinions of experts and specialists about dividing the degree into the skill sections: A questionnaire was prepared about dividing the score for each of the basic skill sections (passing, dribbling, and shooting), and it was distributed to the experts and specialists in basketball. The final grade was determined for each section of the kinetic construction and the outward form, which includes (the preparatory section, the main section, and the closing section) for each of the skills, where the total score was determined to (100).

(Mahjoub, 1987) indicated that evaluating sport skills by calculating the degree is one of the important methods that depend on observation and the use of scientific imaging. Sport skills that are performed by athletes can be analyzed in some ways, such as movement performance and evaluation by experts or an expert in observation with the recording of scientific observation (Mahjoob, 1987). This is the method used by the researchers in evaluating skill performance, whereby each assessor gives a score to each student for each skill and their average score is taken to show the final skill assessment score out of (100).

- Skill performance evaluation form for some basic skills (passing, dribbling, and shooting) in basketball.

The researchers designed questionnaires to assess the apparent form of the skill performance of the basic skills (passing, dribbling, and shooting). The researchers used video imaging in the pre and post-tests, and then the imaging was converted to DVD. Discs with evaluation forms prepared for this purpose were distributed to three experts and assessors, specializing in basketball, to assess educational positions in the pre and post-tests for the research sample, due to the inability to attend the place of the pre and post-tests. Those assessors were "Prof. Dr. Nofal Fadel Rashid, College of Physical Education - University of Mosul - Kinetic Learning. 2- Asst. Prof. Dr. Sadiq Jaafar Sadiq, College of Basic Education - Al-Mustansiriya University - Kinetic Learning. 3- Asst. Prof. Dr. Saleh Jaweed Hillel, College of Physical Education - Dhi Qar University - Kinetic Learning". Each assessor is given a score out of (100) for the three sections, where the arithmetic mean is extracted between the scores of the three assessors for each student for each skill to show the final skill assessment score.

Questionnaire form for determining the validity of the educational units used:

The researchers prepared a questionnaire about the validity of the educational units in improving the skill performance of some basic basketball skills for students using the analogy strategy. The form was presented to the experts and specialists,. After reviewing similar studies related to the research, the experts were asked to verify the validity of the lesson plan and educational units, and they were distributed to the specialists. After returning the questionnaire, the experts' opinions were unified and the educational units were put in their final form.

The researchers arranged the steps of teaching with this strategy for the experimental group within the educational units, and the steps were as follows:

- 1- Presenting a simplified presentation explaining the topic of the lesson and the main idea in it.
- 2- Determining the students' background on some skills by stimulating the teacher to the students to know their background knowledge.
- 3- Presenting some skills in detail by asking questions, or showing specific pictures.
- 4- Link the concept in the student's mind as a result of previous experience with new experiences.
- 5- Students apply the skill based on what they have stored in their memory from previous experiences.
- 6- Presentation of a summary (a final idea) by the teacher about the analogy strategy.

Determining some basic skills with basketball:

Some skills were identified by researchers according to the vocabulary in the curriculum decided by the Ministry of Education for the academic year (2020-2021). These skills were (passing, dribbling, and shooting). (Al-Zaidy et al. 2012)

Determining and controlling the research variables: The following is a presentation of the most important variables that threaten internal and external safety:

First: the internal intactness of the design: The most important variables that affect the dependent variable are:

- Conditions of the experiment and the related factors: The research did not examine the length of the experiment from (3/3/2021) to (29/4/2021) for any accident that negatively affects the experiment.
- Processes related to maturation: since the experimental and control groups are homogeneous in age, that is, they are exposed to the same growth processes. This in turn reduces the influence of the extraneous variable on the dependent variable.
- Measurement tools: This factor was controlled by using the same devices and tools for both experimental groups and under the same measurement and test conditions.
- Differences in the selection of individuals: To avoid this variable, the researchers used the method of deliberate selection of the control and experimental groups (practicing players).
- Abandoning the experiment: It means the effect resulting from the interruption or abandonment of a section of the sample members of the experimental and control groups for the experiment, which affects the level of their skills and their learning. This never happened in the pre and posttests during the trial period and during the curriculum implementation period.

Second: The external intactness of the design: To ensure the external validity of the experiment, the experiment should be free of errors, as in the following points:

- The interaction of the effect of the independent variable (experimental) with the test biases: this factor had no effect because the sample was chosen intentionally (students practicing basketball). Then the homogeneity and equivalence between the experimental and control groups were verified.
- The effect of the experimental procedures: the individuals of the two groups were not informed of the objectives of the research. Pre-tests, educational units, and post-tests were implemented under the supervision of the researchers and with the help of the assistant work team. Thus, the effect of this variable is removed.
- The educational material: the educational material included the skills of (passing, dribbling, and shooting) in basketball. The researchers used the strategy of analogies and it was presented to a number of specialists in the field of basketball (kinetic learning, teaching methods, and sports training) in order to support the correct scientific method in this educational curriculum and to make valuable scientific observations about it.
- The teacher: The teacher of the subject (Saad Raof) implemented the educational units, after an agreement was reached with the school administration (Sons of Iraq Intermediate) / Kirkuk Governorate.
- Duration of the experiment: The experiment began on 3/3/2021 and ended on (29/4/2021), with two educational units per week at an average of (12) educational units for each group. The time of the educational unit was 40 minutes.
- Place of application of the educational units: the educational units of both groups were implemented in one place, which is the yards of the Sons of Iraq Intermediate School for Boys / Kirkuk Governorate, and each group according to the time specified for.
- Arbitrators: they are the ones who carried out the process of evaluating the skill performance of students in the pre-tests. They are the same arbitrators who carried out the process of evaluating the skill performance of students in the post-tests.

Preparing the educational curriculum: After taking the opinions of experts and specialists in the field of teaching methods, kinesthetic learning and sports training, and through personal interviews conducted by researchers about preparing an educational lesson plan for each of the skills using the analogy strategy and applying it to the group. The curriculum has been approved. The two research groups were as follows:

The experimental and control groups are similar in the preparatory part and the concluding part, but are different in the main part. The analogy strategy was introduced to the experimental group to improve the skill performance of a number of basic skills to be learned in the educational units, with a total of (12) educational units and a total time of (480) minutes taught by the teacher. The teacher used the analogy strategy on the experimental group to improve the skill performance in light of the skills used in the research. As for the control group, they learn the skillful performance of a number of basic skills in basketball, using (the method of the subject teacher), with (12) educational units, and with a total time of (480) minutes taught by the same teacher. The researchers gave an introductory and explanatory lecture to

the teacher and the assistant work team, which included an explanation of the concept of the analogy strategy and how to work with it with the experimental group. The educational plans have been divided as shown in Figure (2) below:



Figure (1) shows the sections of the educational plan

The researchers conducted two exploratory experiments, the first of the skill performance. It was conducted with the help of the assistant work team and related to the performance of some basic skills and educational attitudes on a sample of (10) students. The reconnaissance experiment was conducted on Sunday, 24/2/2021, in the Sons of Iraq School for Boys. The aim was to:

- Verify the clarity of educational attitudes that measure the performance of the apparent form of movement.
- Verify the suitability of the tests to the level of the research sample members.
- The possibility of adjusting the time required to implement students' performance in educational situations.
- Knowing the obstacles that may occur, and to avoid errors that may occur during the application of the pre and post tests for the research.
- Verify that the place is suitable for carrying out the tests.
- Preparing the requirements for carrying out all the tests.
- Adjusting the location of the camera for filming the tests and the appropriate angle for filming.

As for the second exploratory experiment, it was about the mechanism of applying the analogy strategy in the lesson. The researchers, with the help of the assistant work team, conducted a second exploratory experiment on Thursday (2/25/2021) on a sample of (10) students. The aim was to:

- Verify the suitability of the place to implement the educational plans.
- Verify the suitability of the educational plans and the method of their implementation to the level of the research sample members.
- Verify the efficiency of the assistant work team and their understanding of the procedures of the educational plans.
- Identify errors and obstacles that may occur and try to develop solutions before starting the implementation of the educational curriculum.
- Ensure that the teacher is able to carry out the experiment.

The final outcome of the first and second exploratory experiment was that they formed a clear picture for the researchers and the assistant team about the nature and procedures of the research with its pre-tests, main experience, post-tests, and overcoming the obstacles and difficulties they face.

Pre-test: The pre-tests were conducted for the experimental and control groups by photographing the standardized tests that were developed to evaluate the performance of the apparent form of basic skills. This procedure took place on Wednesday and Thursday, corresponding to (3-4/3/2021), at 9 o'clock in the morning, and as follows:

- Install the camera in a suitable place to allow a clear view of the skill.

- The students are arranged according to the number sequence from (1) to (20).
- The students of the experimental group wear different clothes from the clothes of the students of the control group.
- Before the student starts performing the skill, he is photographed holding his identification number.
- Videoing the performance.

After videoing all the sample members, the researchers collected the photographed films and stored them on CD-ROM for use in the subsequent research procedures. The same method was adopted for the other group and in the same order. The purpose of this arrangement is to ensure that no errors occur in the order of the files for each skill when photographing the post-test.

The main experience: The subject teacher carried out the curriculum on Sunday (7/3/2021) according to the weekly lesson schedule, until Sunday (25/4/2021). In view of the occurrence of holidays and occasions during the implementation period of the educational curriculum, the educational plans were compensated on other days by an increase of a week to work on completing the implementation of the plans allocated to the educational curriculum. Educational plans were applied to the research sample and the experimental group was given the educational material using the analogy strategy. As for the control group, the educational material was given by the method followed by a teacher.

Post-tests: Post tests were conducted for the experimental and control groups after completing the implementation of the educational units. The students' performance of the basic skills (passing, dribbling, and shooting) were videoed through their performance of the standardized tests, and under the same conditions in which the pre-examinations were conducted in terms of place, devices, tools and method of implementation. That test took place on Wednesday and Thursday (28-29/4/2021) at nine in the morning.

Statistical means: The researchers used the (Spss) statistical package (the Statistical Package for Social Sciences) in order to process the data for the research, which included the statistical requirements of the research (arithmetic mean, standard deviation, coefficient of variation, variance coefficient, percentage variance). (t) stands for correlated samples, (t) stands for the test for independent samples.

Results

Presentation and analysis of the results of the differences (t) between the pre- and post-test for the control and experimental groups in evaluating the skill performance of some basic skills (passing, dribbling, and shooting) in basketball.

Table (2) shows the significant differences between the pre and post-test in some basic skills (passing, dribbling, and shooting) in basketball for the control group (skillful performance)

	Measuring units	Calculated –T tests	Post-tests		Pre-tests			
Statistical processing			Standaı deviatic	Arithmet mean	Standa deviatio	Arithmet mean	Level of sig	Significance
Passing	Degree	24.075	3.504	63.055	3.512	42.465	0.000	Sig.
Dribbling	Degree	20.809	3.505	62.770	4.766	41.475	0.000	Sig.
Shooting	Degree	18.180	3.510	62.750	6.549	37.435	0.000	Sig.

Significant at the level of significance < (0.05) and in front of the degree of freedom (19)

Table (3) shows the significant differences between the pre and post-test in some basic skills (passing, dribbling, and shooting) in basketball for the experimental group (skillful performance)

StatisticalMeasuringCalculatedPost-testsPre-testsLevel of significant	Statistical	Measuring Calculate	Post-tests	Pre-tests	Level of sig	Significanc
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processing	units	-T tests	Standa deviatio	Arithmet mean	Standa deviatio	Arithmet mean		
Passing	Degree	20.304	4.964	69.958	3.817	44.733	0.000	Sig.
Dribbling	Degree	25.887	3.707	67.891	3.145	42.985	0.000	Sig.
Shooting	Degree	21.846	5.830	66.478	3.390	40.475	0.000	Sig.

*Significant at the level of significance < (0.05) and in front of the degree of freedom (19)

Presentation and analysis of the results of the differences (t) between the post-test of the experimental and control groups in evaluating the skill performance of some basic skills (passing, dribbling, and shooting) in basketball.

Table (4) shows the significance of the differences between the post tests of the control and experimental groups in some basic skills (passing, dribbling, and shooting) in basketball (skillful performance)

Statistical	Measuring units	Calculated –T tests	Experimental Group		Controlling Grou			
processing variables			Standa deviatic	Arithmet mean	Standa deviatio	Arithmet mean	Level of sig	Significance
Passing	Degree	20.304	4.964	69.958	3.504	63.055	0.000	Sig.
Dribbling	Degree	25.887	3.707	67.891	3.505	62.770	0.000	Sig.
Shooting	Degree	21.846	5.830	66.478	3.510	62.750	0.000	Sig.

Significant at the level of significance < (0.05) and in front of the degree of freedom (38)

Discussion

Discussing the results of the pre and post-test for the control and experimental groups in evaluating the skill performance of some basic skills (passing, dribbling, and shooting) in basketball. It is clear from the previous tables (2, 3) that the effect of the lesson plan and the educational units were evident through the results of the control and experimental groups in the pre and post-tests in favor of the post test for the experimental and control groups. The researchers attribute the reason for this to the effectiveness of the educational curriculum used, which was applied to the experimental and control groups by the physical education teacher. This curriculum was used in a different application method for the experimental group using (analogy strategy) than for the control groups in improving skill performance. The experimental group that used the analogy strategy and what the educational plans contained of sports exercises and gradation in them, as well as what was presented of the cognitive information and the illustrative pictures that were presented thus led to an accurate description of the skill performance of the movement. The researchers do not forget the role played by the teacher through performing the skills and exercises, and giving notes, directions and praise to the students while performing the skill exercises, as well as the feedback when

performing the motor skills and the active role that the teacher plays in the performance and giving feedback. All this led to an improvement in the students' skill performance, which was reflected on the students of the experimental and control groups in the post-test. The better their performance, the better the results, and this in turn led to a focus on the special effort that serves the skill performance of the basic skills (passing, dribbling, and shooting). The explanation and demonstration of the pictures, and the practice of performing the skills, and the correction of errors, and the time period specified for the educational units helps to reach effective and effective learning, which led to an improvement in the skill performance of the basic skills (passing, dribbling, and shooting for both groups) with reels. This was confirmed by (Al-Hela, 1999) that "when the curriculum is implemented effectively, the student's general performance improves a lot and students can gain the additional benefit of developing new learning about how to learn skills" (Al-Hela, 1999).

Basketball is one of the sports in which successful performance is associated with theoretical and scientific construction of students. Providing the student with information and knowledge that he works to integrate with what he previously learned, and his previous experience to achieve access to the thinking that is reflected during performance, especially since the rhythm of playing changes. This requires compatibility of mental work with motor work to form correct motor responses to different situations. (Al-Khuli and Al-Shafiai, 2000)

Giving directions to students during performing the skill exercises had a significant role in improving the skill performance of the students who obtained it in the post-test. The closer the performance is to the optimum picture, the higher the results will be thanks to obtaining the economy with the expended effort and focusing on the special effort that serves the skill performance of the three basic skills. This in turn works to achieve harmony between the student and the required skill. Performing the skill regularly helps to learn and install it (Al-Hela, 1999).

Discussing the results of the post-test for the control and experimental groups in evaluating the skill performance of some basic skills (passing, dribbling, and shooting) in basketball.

It is clear from table (4) that the results indicated the superiority of the experimental group, according to the analogy strategy, over the control group that used the adopted method. It turns out that there are significant differences between the two post-tests of the experimental and control groups in improving the skill performance of the basic skills (passing, dribbling, and shooting) in basketball and in favor of the experimental group according to the analogy strategy. The researchers attribute the reason for this to the effectiveness of the educational curriculum, which was applied to the experimental group using the analogy strategy. If compared to the educational curriculum that was applied to the control group using the followed method, because the analogy strategy is an effective tool that facilitates the process of building knowledge for the individual on the basis of the concepts he knows and available in his previous knowledge structure (Zaytoon, 2002).

The analogy strategy makes the learner do his best in sports activities instead of being passive. This strategy encourages the student to interact and participate in the educational process. In addition, this strategy develops the student's ideas, acquires skills, and encourages him to solve problems that hinder him. These differences can be attributed to the fact that learning in the light of the analogy strategy helped students to think, visualize, and retrieve what was stored in their memory from previous experiences of the required skill. The student, according to the constructivist theory from which the strategy of analogy emerged, is no longer the student receiving the information as it is, but he has started to use his mind in all the information presented to him and link it to his previous information and experiences. The students achieved the factor of perseverance, suspense and excitement, as the analogy strategy used is simple, uncomplicated and close to the student's environment. Through the strategy, the skill is explained through the model or the players' pictures are shown, the basic skills are known and applied, and then the errors that occur are corrected. In addition, the improvement of skills according to the analogy strategy helped to attract the students' attention and increase their motivation, which helped to improve their performance. It is clear that the analogy strategy positively affects the stages of learning sports skills in general and the basic skills of basketball in particular. This is consistent with the findings of studies similar to (Abdul Muti, 2000), (Al-Agha, 2007), (Al-Qatrawi, 2010), and (Al-Adila, 2014).

Also, the control group improved their skill performance according to the adopted method, through the physical education lesson plan. We do not forget the role that the subject teacher played in explaining and applying skills and correcting mistakes.

Conclusions:

In light of the research procedures and the use of appropriate statistical methods, presentation, analysis and discussion of the results, the researchers concluded the following:

- 1- The analogy strategy has a significant impact on improving the skill performance of some basic skills in basketball.
- 2- The two research groups were superior in the post-tests compared to the pre-tests in the skill performance test for some basic skills (passing, dribbling, and shooting) in basketball.
- 3- The experimental group outperformed the control group in the results of the post-test in relation to the skill performance of some basic skills (passing, dribbling, and shooting) in basketball.

References

- 1. Abdel Hafeez, I. M. & Bahy, M. H. (2002) *Methods of scientific research and statistical analysis in the educational, psychological and sports fields.* 2nd Edition: Cairo, Al-Kitab Center for Publishing.
- 2. Amin Anwar Al-Khouli and Jamal Al-Din Al-Shafei. (2002) *Contemporary Physical Training Curricula*, 1st Edition. (Cairo, Dar Al-Fikr Al-Arabi for Printing and Publishing.
- 3. Agha. I. (2007) The effect of using the analogy strategy in acquiring and retaining scientific concepts among the ninth grade students (unpublished MA thesis, The Islamic University College of Education, Gaza.
- 4. Abdel Moati. H. (2000) The effectiveness of using the analogy strategy in correcting misperceptions about some biological concepts for the primary stage, (unpublished master thesis, Ain Shams University, College of Girls, Egypt.
- 5. Al-Adeleh, S. R. (2014) The effect of using the strategy of analogies in teaching science to develop achievement and attitude towards the subject among first-grade students in the intermediate grade in *Al-Mahd Educational Governorate*, (Unpublished Master thesis, Umm Al-Qura University, College of Education.
- 6. Al-Zubaidi, A. R. and et al. (2012) *Research Methods in Education, 1st Edition.* (Baghdad, Higher Education Press.
- 7. Al Qatrawi. A. J. (2010) The effect of using the strategy of analogies in the development of science processes and reflective thinking skills in science for eighth grade students, (Gaza, unpublished master thesis, The Islamic University.
- 8. Afana, A. I. and Al-Jaish. Y. I. (2009) *Teaching and learning with the two-sided brain*, 1st Edition, (Jordan, Dar Al-Thaqafa Publishing.
- 9. Van Dalen. (1977) *Research Methods in Education and Psychology*, translation, by Muhammad Nabil Nofal, and et al. (Cairo, The Anglo-Egyptian Library.
- 10. Zaytoon. K. A. (2002) *Teaching Science to Understanding a Constructive Vision*, 1st Edition (Cairo, Alam Al-Kutub)
- 11. Zaytoon. K. A. (2002) Instructional Design from the Perspective of Constructivist Theory, Studies in Curriculum and Instruction, (The Egyptian Association for Curriculum and Instruction, No. (91), Faculty of Education, Ain Shams University.
- 12. Attia. M. A. (2009) *Comprehensive Quality and the New in Teaching*, 1st Edition, (Amman, Dar Safaa for Publishing and Distribution.
- 13. El-Hela. M. M. (1999) *Instructional Design Theory and Practice*, 1st Edition (Amman, Dar Al Masirah for Publishing and Distribution.
- 14. Nouri Al-Shouk and Rafe' Al-Kubaisi. (2009) *Correction in some terms of letters and treatises* (Baghdad, University House for Publishing and Translation.
- 15. Mahjoob. W. (1987) Kinetic analysis. (Baghdad, Higher Education Press.

- 16. Moati. H.A. (2000) The effectiveness of using the analogy strategy in correcting misperceptions about some biological concepts for the primary stage, (unpublished MA thesis, Ain Shams University, College of Girls, Egypt.
- 17. Agha. I. I. (2007) *The effect of using the analogy strategy in acquiring and retaining scientific concepts among the ninth grade students*, (unpublished MA thesis, The Islamic University College of Education, Gaza.
- 18. Abd al-Aziz Jamil al-Qatrawi. (2010) The effect of using the strategy of analogies in developing science processes and reflective thinking skills in science for eighth graders, (Gaza, unpublished master thesis, Islamic University.
- 19. Al-Adeleh, S. R. (2014) The effect of using the strategy of analogies in teaching science to develop achievement and attitude toward the subject among first-grade students in the intermediate school district of Al-Mahd Educational Governorate, (unpublished master thesis, Umm Al-Qura University, College of Education.