The effect of Cooperative Learning Strategy on Sensory Modeling on the Performance of Some Essential Skills for Female Students' Basketball

Zahraa Abdul-Jabbar Habib[1], Hassan Saleh Mahdi Al-Okbi[2]

[1]Assist. Lect., [2]Prof. University of Kufa - Faculty of Education for Girls / Department of Physical Education and Sports Sciences / IRAQ

Abstract

The study aimed to identify the preference for sensory modelling among fifth-grade middle school students and to identify the impact of cooperative learning strategy according to the sensory preference for some basic skills in basketball among fifth-grade middle school students and identifies the current research community of school students for the fifth middle school, the research sample was chosen in a way Random, as using this method means that each member of society has an equal opportunity to choose him in the sample. This research included the application and poll of (48) students (Al-Imam Al-Rida School, peace be upon him / Basra). The researchers concluded that the cooperative learning strategy according to sensory modelling Its positive impact on teaching some skills for fifth-grade students preparatory for experimental groups in all tribal and post-tests, and the curriculum used by the teacher has a positive effect on teaching some of the skills capabilities of fifth-grade students preparatory for the group controlling in all pre and post-tests if to use a cooperative learning strategy according to modelling Sensory has positively affected some skills of the experimental group as compared to the total The control group in the test had the least significant difference for the experimental groups compared to the control group. The use of cooperative learning strategy according to sensory modelling has provided more time that can be used to achieve the objectives of the lesson without the critical time that can be used to correct and repeat more.

***Key words**: cooperative learning strategy, sensory modelling , essential skills for female students' basketball.*

Introduction

Man has developed other methods, including methods of preference for sensory modelling(1), which have a major role in classifying learners according to the style or style they prefer in learning. In some, it is preferable to learn through sight and understand the form of movement visually and thus store the information in the form of a kinetic image that he tries to imitate, while the second style is preferred Hearing by understanding the movement and the mechanism of its work through the explanation(2), and therefore he remembers or withdraws information in the form of feedback to explain the teacher and visualizes the movement in the way he understood it through the explanation, and the third pattern which is the common style through which the student can understand the skill or information through the integrated explanation and that The principle of a sense of movement and experimentation is adopted to learn from it(3), and the teacher or educator can be useful in teaching students through knowing the appropriate style or style for them.

The importance of research through the use of cooperative learning strategy according to the preference for sensory modelling to learn some basic skills for middle school students for the fifth year of middle school(4).

Corresponding author:
Zahraa Abdul-Jabbar Habib
Zhrabduljabbar@gmail.com

Research problem:

The essential skills in basketball are among the important skills that are learned during the school period, but the school curriculum suffers from an education routine that treats students based on one level and does not care about the student's preference for how he learns the skills that help a lot in reducing the time and effort spent on learning Likewise, education based on a group basis without paying attention to what enables it to divide the groups into cooperative groups that contribute as a beehive to solving their problems and thus reduce the burden and contribute to creating an enthusiastic atmosphere based on cooperation and spreading team spirit and learn skills and raise the level of students among the students. To study these variables and develop appropriate solutions to teach essential skills in basketball in a manner that can facilitate the process of teaching essential skills for students[5].

Research Objectives:

1- Recognizing the preference for sensory modelling among fifth-grade students.

2- Knowing the effect of cooperative learning strategy according to the sensory preference for some essential skills of basketball among fifth-grade middle school students.

2- Research methodology and field procedures:

Research methodology:

The researcher used the experimental method using the equivalence groups method, as it suits the nature of the problem.

Research community and its sample:

The choice of the research community and its sample is one of the important matters in any scientific research as the correct selection of the research sample is one of the pillars or factors important to the success of the researcher's work as he applies steps or vocabulary of his research scientifically, and determines the current research community of school students for the fifth grade of middle school[6].

The research sample was chosen randomly, as the use of this method means that every member of society has an equal opportunity to choose him in the sample. This research included the application and poll of (48) students (Imam Al-Rida School, peace be upon him / Basra).

Table (1): Homogeneity of the sample in growth indicators (weight, length, and time life)

Variables	Arithmetic mean	Standard deviation	mediator	skewness*
Length	140,83	1,87	142,50	-0,456
Weight (kg)	48,08	2.54	45,50	0,860
Age (years)	16,50	1.65	16,43	0,170

The value of the torsional coefficient was between (± 1)

Table (1) shows that the research sample is homogeneous in the growth indicators (length, weight, and time life), as the values of the torsion coefficient were respectively (-0.456,0.860,0.170) and these values are all between (± 1) indicating that the grades are distributed moderately But if it exceeds or falls short of that, then this indicates that there is something wrong with selecting the sample (8: 151).

To find out the equivalence of the sample in the pre-test between the research groups, the researcher used the test (f) if the results are shown in Table (1) show that there were no significant differences between the control and experimental groups in the variables approved by equivalence because the calculated value of (f) is smaller than the value of (SIG) in front of Freedom degree (39-3) and error level (0.05). This indicates the equivalence of the research groups, as shown in Table (2).

Table (2) :showsesults of the ANOVA analysis of variance of the variables searched in each group

Skills	Source of contrast	Sum of squares	Degree of freedom	Average squares	Computed f value	SIG	Indication of differences
Pectoral handling	Between groups	1.620	3	0.540	0.297	0.827	random
	Within groups	70,845	39	1.817			
High chump	Between groups	0.075	3	0.025	0.141	0.935	random
	Within groups	6.900	39	0.177			
Return handling	Between groups	0.260	3	0.087	0.097	0.961	random
	Within groups	34.717	39	0.890			

Steps to conduct the research:

Determine the skills used in the research:

After informing the researcher about the sources and references for basketball and the essential skills and education curriculum, she prepared a questionnaire and presented it to some experts and specialists in the basketball game to nominate some essential skills and then interviewed the experts and presented them to determine the most appropriate skills for this study. The following skills were reached (chest handling, High chump, bounce handling (driven by both hands) and these types were chosen because they are considered one of the important basketball skills that students must learn[7].

Specifying tests:

The researcher designed a questionnaire to choose the appropriate tests and presented it to a group of gentlemen experts and specialists, to choose the appropriate tests for the skills of this study that contribute to the accurate and appropriate measurement of the researched skills, and the researcher adopted a ratio of (75%) or more of the experts' approval as a criterion for maintaining the axes (14: 126), As several skill tests were identified (chest handling, high freshness, bounce handling (both hands are driven) as follows:

1- Chest Handling Test:

2- Test the high plump for a distance of 20 meters in the dominant arm: (6: 101)

3- Test pass accuracy test: (9: 126).

Scale of Sensory Modeling Preference:

Since the research aims to identify sensory modelling, the researcher used a measure to complete the requirements of conducting the research and the modelling was used by the researcher (Firas Suhail Ibrahim) (7: 156) It consists of (20) paragraphs of the scale of sensory modelling distributed on three axes which are (optical axis, the axis of auditory The axis of kinesthetic) and in front of each paragraph there are three choices in which there is no right or wrong alternative, but rather a preference for sensory modelling is given, and the grades are given in the paragraphs, and each alternative (1) has a degree and can choose more than one alternative for the same paragraph and that the

highest score obtained by the respondent is (60) The lowest degree is (20).

Tribal tests:

The auxiliary work team, under the supervision of the researcher and the supervisor, conducted the tribal tests for the research sample (experimental and controlling), at the end of ten in the morning in the stadium of the Imam Al-Rida School (peace be upon him). The researcher intentionally established all the conditions related to the research in terms of time, place, used tools, work for team The assistant, by performing the tests, to ensure their availability in the post-tests, as the tests were conducted as follows:

- The first day: 12/11/2019, Sunday, at ten o'clock, skills were tested, (chest handling, high class, sensory modelling scale).

- Day Two: On 12/12/2019, Monday, as the "back handling" tests were applied.

The main experience (educational curriculum):

It is the basic experiment that the researcher will apply to solve or come up with methods that help in solving the tagged research problem.

To achieve the goals of scientific research, the researcher has prepared an educational curriculum according to the cooperative learning strategy and included (12) educational units, by two educational units per week, the duration of one unit (40 minutes), on two days (Monday and Wednesday), and the educational units were divided into some basic skills, as All educational units have been applied according to the cooperative learning strategy, and the exercises varied for each selected skill by (10) exercises for each type and totalled (30) basic cooperative exercises. After examining the researcher on scientific sources and taking into account the opinions of experts and specialists in basketball, the researcher used exercises the educational units, noting the following points in the process of developing exercises:

1- The exercises used are appropriate to the level of the sample.

2- That there is a graduation in the level of difficulty of the exercises used in the single educational unit and within the entire curriculum.

3- To achieve the exercises used for the purpose:

The researcher conducted personal interviews with the experts and specialists in the field of basketball, kinetic learning and teaching methods, to present the educational units after modifying them in light of the exploratory experience dated (12/12/2019) to ensure the validity and suitability of these units and the extent to which they achieve the goals set for them, and was taken Amendments and notes to enhance the validity and integrity of the educational curriculum

The educational curriculum was implemented on the experimental group in the first semester of the year (2019-2020) for the period from (16/12/2019) to (01/30/2020) in the middle school of Imam Al-Rida (peace be upon him). The time of the educational unit reached (40 minutes) The proposed exercises were carried out in the main section of the educational unit.

Dimensional tests:

After completing the application on the research sample, the researcher conducted the dimensional tests on the research sample at (ten o'clock) on the two days (Sunday and Monday) coinciding with the 2-2 / 2/2020, as I followed in that same way that was followed in the tribal tests taking into account in That includes spatial and temporal conditions, the means of testing, the tools themselves, and the auxiliary team that performed the same tribal tests.

Statistical means:

The researcher used the statistical bag (spss). The following statistical methods were extracted in this study.

3- Presenting, analyzing and discussing the research results:

Display the results of variance for the four search groups for the exams examined:

Table (3): Contrast analysis of the four research groups in the examined tests

Skills	Source of contrast	Sum of squares	Degree of freedom	Average squares	Computed f value	error level	Indication of differences
Pectoral handling	Between groups	791.336	3	263.779	203.986	0.000	Morale
	Within groups	70,845	39	1.293			
High chump	Between groups	27,117	3	9,039	19,348	0,000	Morale
	Within groups	18.221	39	0.467			
Return handling	Between groups	143,495	3	47,832	68,342	0,000	Morale
	Within groups	27.295	39	0.700			

3-6 Presenting the results of the four groups' dimensional tests with a value of the less significant difference (LSD) for the examined tests:

Discuss the results of (F) and (LSD) of the research results of the research tests for the four research groups:

By looking at the search results for the two tables (2-3) of the research variables, we notice that the results values have shown that the results of the research showed that there are significant differences in favour of experimental groups. The group with visual sensory modeling has obtained the highest levels of differences, and the researcher attributes those results to exercises that were Her situation had a direct impact on the student learning process, as well as the appropriate repetition of the performance of the female students through the lesson unit, which increased the experience of female students in learning the skill and storing the dynamic program of skills and in various cases that occur in play, the researcher was keen to make exercises applied in conditions Identical to what is going on in the competition as well, as playing or exercising takes place between cooperating groups and takes place on a competitive basis between these groups, so that a state of competition arises between them that raises a desire to learn and advance over competitors, and also it is not possible to be satisfied with fast performance in isolation from accurate performance, so it was one of the goals Units is to achieve access to good performance among students in all aspects of skill in performance, speed, accuracy, and good mastery of skills in various changing conditions, As mastering the basic skills of basketball is of great importance in playing and achieving victory, and the researcher has worked to make repetition sufficient for each student, this is one of the tasks that must be taken care of in particular, the repetitions crystallize the learning process and reach the students to the required capabilities of them as well, the process of explanation and description For the skill and its presentation to each group of them was of great importance in the educational units, it is the main pillar that the learner begins to rely on until it reaches an optimal degree of learning and understands how to perform those skills, and therefore the researcher at this point paid special attention to be the fuel for progress in the learning process of students. As the player's access to technical integration and accuracy

in mastering the basic skills does not depend only on the number of times the exercise is repeated, but also on the player's understanding of the way the skill is performed technically[8-10]

Conclusion

The cooperative learning strategy according to sensory modeling has a positive effect on teaching some skills for fifth-grade students in preparatory groups for experimental groups in all pre and post-test.

The curriculum used by the teacher has a positive effect on teaching some of the skill capabilities of fifth-grade students to prep for the control group in all pre and post exams.

The use of cooperative learning strategy according to sensory modelling has positively affected some skills of the experimental group compared to the control group in the test, the least significant difference for experimental groups compared to the control group.

The use of cooperative learning strategy according to sensory modelling has provided more time that can be used to achieve the objectives of the lesson without the embarrassment of time that can be used to correct and repeat more.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both MOH and MOHSER in Iraq

Conflict of Interest: None

Funding: Self-funding

References

1- Shaaban, Kassim. "An initial study of the effects of cooperative learning on reading comprehension, vocabulary acquisition, and motivation to read." Reading Psychology. (2006); 27.5: 377-403.

2- Cervantes, Carlos M., et al. "Incorporating PACER into an inclusive basketball unit." Journal of Physical Education, Recreation & Dance . (2007);78.7: 45-50.

3- Willis, Judy. "Cooperative learning is a brain turn-on." Middle school journal . (2007);38.4: 4-13.

4- Murayama, Kou, and Andrew J. Elliot. "The competition–performance relation: A meta-analytic review and test of the opposing processes model of competition and performance." Psychological bulletin . (2012);138.6: 1035.

5- Cooper, Judy, Cathy Smith, and Veralee Smith. "Enhancing Student Social Skills through the Use of Cooperative Learning and Conflict Resolution Strategies. (2000);40.4:142-148.

6- Annetta, Leonard A., et al. "Investigating the impact of video games on high school students' engagement and learning about genetics." Computers & Education. (2009);53.1: 74-85.

7- Gray, Shirley, et al. "Understanding students' experiences in a PE, health and well-being context: a self-determination theory perspective." Curriculum Studies in Health and Physical Education. (2018); 9.2: 157-173.

8- Wall, A. E., et al. "A knowledge-based approach to motor development: Implications for the physically awkward." Adapted Physical Activity Quarterly. (1985); 2.1: 21-42.

9- Ullen, Fredrik, David Zachary Hambrick, and Miriam Anna Mosing. "Rethinking expertise: A multifactorial gene–environment interaction model of expert performance." Psychological bulletin . (2016);142.4: 427.

10- Michael, Shannon L., et al. "Critical connections: health and academics." Journal of School Health. (2015); 85.11: 740-758.