



The effect of the collaborative learning method on stimulating learning motivation performing the sending and receiving skills of middle school's female volleyball students.

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Abstract

Using the collaborative learning method to stimulate learning motivation and perform the skills (serving and receiving the serve) for middle school volleyball students. Identifying the effect of the participatory learning method in stimulating learning motivation and performing the skills (serving and receiving the serve) for middle school volleyball students. The researchers used the experimental method with a two-group design (experimental – control) to suit the nature of the research problem and the research objectives. The researchers determined the research population represented by the students of the second grade /Al-Nahrain Middle School for girls– academic year 2023/2024 / General Directorate of Education / Kirkuk Governorate, who numbered (50). Students divided into two sections (A_B) . The research sample was chosen randomly by lottery, two sections (A) were chosen to represent the two experimental groups, section (B) represented the control group. (5) students were chosen from sections (A–B) to represent the sample of the exploratory experiment for the research. The researchers were excluded (5) Older fail female students and are not committed to working hours. So, the number of section (A) becomes (20) female students (participatory learning method in stimulating motivation) and the control group is (20) female students and The number of students in the exploratory experiment was



(5) students, the percentage of the sample as a whole from the community of origin was (40%). The researchers proceeded to research procedures, including the pre-test conducting the research experiment as well as the post-test. Then they relied on the statistical bag in extracting the results to reach the most important finding. The conclusions include that the participatory learning method in stimulating motivation has a positive impact on learning the skills of (sending and receiving the serve) in volleyball. The researchers recommend using the participatory learning method in stimulating motivation by physical education teachers which has a major role in teaching other volleyball skills.

Keywords: collaborative learning method, arousing motivation, volleyball

Introduction:

Our world today is witnessing a great development in the educational field represented by the emergence of the collaborative method. It requires the teacher to have sufficient knowledge and science to get benefit in most complete way and keep pace with the scientific development trend. The activation of this method is to be used in appropriate situations. Among the methods used in the field representing the starting point in developing the teacher with the necessary knowledge and learning method. It includes the collaborative learning method which is one of the teaching methods that depend on teaching students through her colleagues in the classroom or school. It has an effective role in developing the skills of students in most academic aspects especially if the student who is doing the teaching process is directed how to deal with the learner. The collaborative learning method is about the way to influence collaborative learning. Equal to the learner in age and skill level through competition, motivation and reward from the teacher. It is a positive and effective method and one of the successful teaching methods as it works on the interactive aspect between the



students then helps them in effective achievement. The collaborative learning method is used in teaching planning educational units, focusing on the fact that the teacher is the designer, organizer, guide, advisor and evaluator of the educational process not the transmitter of aspects of education. Stimulating the student's learning motivation is the basic rule for learning, creativity and mental health. Nurturing curiosity and independence achieve learning and increasing the motivation to learn towards a better level is one of the basic tasks in learning. Volleyball is one of the games that has recently appeared in its official form which the world has witnessed. It has shown the ability of female students to play volleyball. It is a team game and enjoys a large audience due to the elements of suspense and excitement that characterize this game. The student must have the motivation to learn during the performance and program her mind with the motivation to learn that helps her find solutions.

The motivation to learn is closely linked to success when performing any of the volleyball skills. The skills (sending – receiving the serve) are among the basic skills in volleyball in terms of their use and repetition by female students during the game course in preparation for delivering the ball to the appropriate place to perform the attack process. From the above, the importance of the research lies in identifying the effect of the collaborative learning method in stimulating the motivation to learn and perform the skills (serving – receiving the serve) through the researcher's practice in the field of teaching and contribution to teaching volleyball skills. It noticed that there is a general weakness in the skills (sending – receiving the serve) volleyball especially among female students. The researcher confirms that the reason behind that many of them cannot learn the skill through the teacher's use of teaching methods that depend on explanation from the teacher only. Accordingly, the researcher decided to conduct a study in which the researcher creates solutions to the problem when using methods



that keep pace with modern technologies in learning. The learner is a vital and effective element in the educational process. Therefore, the collaborative learning method gives a degree of freedom and independence to the students and takes into account their tendencies and directions, gives them the opportunity to work with their colleagues in collaboration and under the teacher's supervision. The research aims to identify the effect of the collaborative learning method in stimulating learning motivation and performing the skills (sending – receiving the serve) related middle school volleyball students. As for the research hypotheses, the researcher assumed that there are statistically significant differences between the results of the pre– and post–tests of the experimental and control groups in stimulating learning motivation and learning the skills (sending – receiving the serve) /second–year– middle school volleyball students. There are statistically significant differences in the post–tests of the experimental and control groups in stimulating learning motivation and learning the skills (sending – receiving the serve) / second–year /middle school volleyball students. As for the research areas, the human field is represented by a student sample of the second intermediate grade / Al–Nahrain Intermediate School for Girls / General Directorate of Education / Kirkuk Governorate / for the academic year (2023 – 2024).

As for the time frame, it was the period (25\9\2023 to 28\12\2023), as for the spatial frame: the courtyard of the Intermediate School (Al–Nahrain for Girls), General Directorate of Education, Kirkuk.

2. Research methodology and field procedures

2.1 Research methodology: –

The researcher used the experimental method with the experimental and control group design to suit the nature of the research problem and research objectives

2.2 Research community and sample:



The researcher used the experimental method with the experimental and control group design to suit the research problem's nature and research objectives

2-2 Research community and sample:

The researcher determined the research community represented by female students of the second intermediate grade / Al-Nahrain Intermediate School for girls – academic year 2023–2024 –the General Directorate of Education / Kirkuk Governorate, numbering (50) female students divided into two sections (A_B). The research sample was randomly selected by lottery. Section (A) was chosen to represent the experimental group and Section (B) represents the control group. (5) female students were selected from Sections (A–B) to represent the exploratory sample of the research. It amounted to (10%) and were excluded from the research sample. The researcher also excluded (5) female students from the two sections due to failure. They are not committed to attendance and advanced in age. So, the number of Section (A) became (20) students for the experimental group (participatory learning method in arousing motivation) and the control group (20) students. The sample percentage reached (40%) for each group from the original community. This is a representative and real percentage for the research community.

2.3 Methods, devices and tools used in the research

2.3.1 Methods used in the research:

1. References and Arabic and foreign sources.
2. Questionnaire for the scale of arousing learning motivation, Appendix (1).
3. Internet

2.3.2 The devices and tools used in the research:



The researchers used the following devices and tools to accomplish the requirements of the research

1. One Chinese-made laptop (Lenova310).
2. One Chinese-made camera (kinon)
3. Volleyballs (15)
4. Measuring tape
5. Whistle (1)

2.4 Field research procedures.

2.4.1 Determining the skills under research:

The researcher relied on (Kadhem and others) "Methodological skills Prepared by the Ministry of Education, General Curricula Directorate. Physical Education Teacher's Guide (Sending – Receiving the Send). (Kadhem and others: 2012: 112–113)

2.4.2 Skill tests that were determined by the researcher

First: Testing the skill of sending from below the opponent (Mohamed Hassanein: 1995: 253)

Second: Testing the reception of the send (Mohamed Hassanein: 1995: 241).

2.5 Exploratory experiments

2.5.1 The first exploratory experiment (for skill tests):

The exploratory experiment is a preliminary study conducted by the researcher on a small sample before conducting the research with the aim of choosing research methods and tools. In addition, the researcher can identify the obstacles that she may face during the procedures of her applied research. The test was conducted on 10/2/2023

2.5.2 The second exploratory experiment for educational units

When starting to apply the educational units using the collaborative learning method. The researcher gave two educational units to the research group. So, the learners could learn about the types and forms of the collaborative learning method. This unit is considered one of the educational units prepared by the researcher. It is considered one of the necessary basics at the beginning of learning, as well as arousing motivation in . Learning with volleyball, and the exploratory experiment was conducted on 8/10/2023

2.6 Pre-tests:

The pre-test was conducted on the research groups (experimental and control) before starting implementing the teaching curriculum to determine the level the skills of sending and receiving in the volleyball service. In the research sample, the tests were conducted on 10/10/2023 in the yard of Al-Nahrain Intermediate School for Girls.

Table (1)
shows the results of the equivalence of the control and experimental groups in the research variables

Statistical significance	Level of Error	Calculate d value(t)	Control group		Experiment group		variables
			Standard Deviation	arithmeti c mean	Standard Deviation	arithmetic mean	
Non-moral	0,08	1,831	0,686	8,55	0,681	8,40	Sendin
Non-moral	0,90	0,116	2,067	32,20	1,618	32,25	Receiving Sending



	0,10	1,710	0,786	7,75	0,605	7,55	Learning Motivation
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Significant below 0.05 level

2.7. Implementation of educational units:

After the researcher reviewed a group of scientific sources and benefited from previous studies and the experiences of the supervisors. As they are specialists in the field of teaching methods, motor learning and volleyball. After the researcher completed the exploratory experiments and pre-tests, the researcher prepared a curriculum according to the collaborative learning method to achieve the research objectives. The curriculum included (16) educational units (Appendix 2), at a rate of two units per week, with a time of (45) minutes per educational unit according to the allocated lesson time and schedule. The following is the time distribution for the proposed curriculum:

- Number of weeks (8).
- Number of educational units per week (2) units.
- Total number of units (16) educational units
- Time of the educational unit (45) minutes, as shown in the educational unit.
- The researcher applied the complex exercises during the educational units.

2.8 Post-tests.

The post-tests were conducted on the research sample members after completing the implementation of the curriculum. It was performed on 12/24/2023 at Al-Nahrain Intermediate School for Girls, under the direct supervision of the researcher

3.Presentation and analysis of the results

3.1 Presentation and analysis of the results of the pre- and post-tests in the skill variables and learning motivation in the experimental group

Table (2) shows the values of the arithmetic means and standard deviations for the research groups the experimental group and the value of (t) in the skill of sending and receiving the sending then learning motivation in the results of the pre- and post-test

Table (2) shows the values of the arithmetic means and standard deviations

Statistical significance	Level of error	Calculated value	Post-test		Pre-test		Variables
			A	S	A	S	
Moral	0,00	-38,223	1,021	9,10	0,686	8,55	sending
Moral	0,00	-33,514	4,283	71,35	2,067	32,20	Receiving sending
Moral	0,01	-16,088	0,686	11,55	0,786	7,75	Learning motivation

Significant below 0.05 level

3.2 Displaying the results of the pre- and post-tests in the skill variables and learning motivation for the control group.

Table (3) Values of arithmetic means and standard deviations for the groups

Statistical significance	Error level	Calculated value(t)	post-test		Pre-test		Variables
			A	S	A	S	
	0,02	-13,937	1,667	14,60	0,681	8,40	sending



Non-moral							
Non-moral	0,00	-25,238	3,360	49,85	1,618	32,25	Receiving sending
Non-moral	0,03	-6,242	0,834	9,20	0.605	7,55	Learning motivation

3.3 Presentation and discussion of the results of the post-tests for the control and experimental groups in the skill variables and learning motivation

Table (4) Values of arithmetic means and standard deviations for the groups

Statistical significance	Error level	Calculated t-value	Post-test of the experimental group		Post-test of the control group		variables
			A	S	A	S	
Moral	0,01	-14,047	1,021	19,10	1,667	14,60	sending
Moral	0,00	-19,230	4,283	71,35	3,360	49,85	Receiving sending
Moral	0,02	-9,647	0,686	11,55	0,834	9,20	Learning motivation

3.4 Discussion of the research variables results (stimulating learning motivation and sending and receiving skills):

By presenting the results of Table (2), the researcher found significant differences between the pre- and post-tests of sending and receiving skills for the experimental group. The researcher attributes these differences to the students' commitment to



attendance. The information and clarification provided by the researcher during the skill 's explanation and presentation was the reason for the students' continuation and commitment to receiving the educational units. Also, the exercises in these units were organized and effective exercises, in addition to the correct directions and instructions appropriate to the students' abilities and capabilities. This is confirmed by (Wagih Mahjoub) that "the importance of skill performance repetition and the use of motor models in front of learners helps to learn and consolidate the skill" (Wagih Mahjoub: 1987: 161).

While stimulating learning motivation for the experimental group, there were significant differences between the pre– and post–tests. The researcher attributes them to effectiveness collaborative learning method and stimulating learning motivation which is one of the important methods in teaching scientific knowledge. It seeks to improve students' educational skills and develop their performance by dividing students into several groups and developing social relations among them, all cooperation and harmony and exchange of opinions and reducing the state of fear among students. This is confirmed by (Basma Naeem 2010) quoting Abdullah Hassan 2005) that "caring for the learner and making him the focus of the educational process, the center of activity, respecting his opinions and abilities, immersing him in affection, acceptance and encouragement is a basic factor that helps learning" (Basma Naeem Mohsen: 2010: 168).

It became clear that the method of collaborative learning and stimulating learning motivation, the work of the students and the effort of the researcher. The teacher was put in place to give Information about performance and use the feedback that the students give her focus in developing skills.

Through what was presented from the results of Table (3), it becomes clear that the differences between the tests (Pre- and post-tests) of sending and receiving skills and a scale of arousing learning motivation in favor of the post-tests of the control group. The researcher attributes this development in two skills, Motivation to the school program as well as the students' willingness to work and perform with motivation. In addition to, reducing the tension that helped to receive the educational units.

Through Table (4) it shows that the experimental group outperformed the control group in the post-tests of arousing learning motivation and the sending and receiving skills. Sending to the modernity of the collaborative learning method in the field of volleyball and the variety of exercises used in the educational units, the means used, the students' willingness to perform the skills and their participation in the learning process helped to overcome difficulties and obstacles increased their motivation. All of this caused their energies to be highlighted and improving the skill performance achieving the goals.

4. Conclusion

After presenting and discussing the results, the researcher concluded: –

1. There is an effect of the collaborative learning method used in learning the two skills (sending – receiving the sending) for intermediate volleyball students under investigation, with varying proportions for the experimental and control groups.
2. Using the collaborative learning method has an effective role in making the experimental group students able to understand the paragraphs that stimulate learning motivation in a better way.

The researcher recommends

1. Adopting this method because of its major role in learning volleyball skills.



2. The necessity of holding educational courses and seminars for physical education teachers in using the collaborative learning method and benefiting from it.

References

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Appendices

Appendix (1) Learning Motivation Scale

Questionnaire showing the learning motivation scale

Dear student....

- ✓ Put a check mark () in front of the appropriate alternative in each paragraph of the scale, noting that the scale has two alternatives.



Not suitable	Suitable	The skills	Number
		I approach studying with passion and comfort	1
		I reject any advice the teacher gives me	2
		I do my homework just to please my teacher	3
		My teacher is the type who attracts me to study	4
		My teacher takes care of my interests and seeks to develop them	5
		I have a specific goal that I seek to achieve	6
		When I feel a little tired, I stop studying for another day	7
		I feel stressed when I cannot memorize the lessons	8
		I feel comfortable when I complete my homework	9
		I study on my own without pressure from my parents	10
		I love the subject because I love its teacher	11
		I can challenge all the obstacles that stand in the way of achieving my goal	12
		I study for fear of failure, not to achieve success	13
		The presence of obstacles increases my desire to achieve my goal	14

Appendix (2) Educational units

The first educational unit for the experimental group using the collaborative learning method

Educational objective: Teaching the skill of sending from below the face

Behavioral objective: That the student realizes the correct performance

Week: First

the skill Time: 45



Educational objective: Accustoming the student to order and love of cooperation Tools used: Schoolyard, volleyballs and net

Notes	Organizational forms	Activities and skills	Time	Sections of the educational unit
Ensure proper performance	*****	Students attend the sports salute performance area	10 minutes	Preparatory Section
	*****	Walking, jogging, swinging arms forward and backward, twisting the trunk to the sides, jogging with high knees, walking.	5 minutes	General Warm-up
	*****	(Standing, open) Rotate the neck in all directions. <Free>	5 minutes	Specific Warm-up
	*****	(Standing, open) Bend and extend the arms high... 2 counts		
	*****	(Standing) Bend the trunk forward and down, press into position, then extend it high...8 counts.		
	*****	(Standing) Bend your knees then jump up...10 times.		
Pay attention to the school's explanation and presentation while implementing the skills.	*****	Explanation and presentation of the sending skill from below the wave using the collaborative learning method, with some learners performing the movement with the teacher correcting the errors, and displaying posters.	30 minutes	Main Section Educational Aspect
	*****		10 minutes	
Diversify the approach between the collaborative groups	*****	The class is divided into groups of four students each, with each group given an assignment sheet and roles exchanged using the participatory method.	20 minutes	The practical side



Apply skills .correctly To ensure that the supervisor and the observer's instructions are followed by the performer. Emphasizing continuous encouragement Emphasis on teamwork Make sure to leave quietly and return the tools.	***** &	Exercise: Perform the skill of sending from below, four meters away from the wall. Exercise2: Perform a sending from below three meters above the net T3 Perform a sending from below six meters above the net. Recreational game (signal and go game) Performing the salutation and leaving	5 minutes	Final section
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