



An educational program based on cooperative structural learning coupled with qualitative feedback in acquisition Some basic skills in freestyle swimming

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ABSTRACT

The detection of differences between the students of the experimental group that used an educational program based on cooperative structural learning coupled with qualitative feedback and the students of the control group that used the method used in the post-test of the basic skills specified in free swimming.

The experimental method was used, and the research community represented third-stage female students in the College of Physical Education and Sports Sciences at Salah al-Din University. Arm movements with breathing, free swimming). Equivalence and homogeneity were conducted in the variables that play an influential role in the research variables represented by age, height and mass. The t-test was used for independent and correlated samples in processing data and obtaining results.

The following two conclusions were reached:

- The students of the group who learned according to the cooperative structural method outperformed the students of the group who learned according to the traditional method in the skills of (leg strikes with breathing, arm movements).
- The size of the impact of the educational program according to the cooperative structural method was large compared to the educational method used in the basic skills specified in free swimming.

The study recommended emphasizing the use of the cooperative structural method as better than the method used in teaching the basic skills specified in free swimming.

1-1 Introduction and importance of research: -

Educational programs aim to bring about desirable changes in the behavior of the learner and provide him with information, knowledge, skills, attitudes and desired values, in order to achieve these educational goals that seek to bring about these desired behavioral changes, and the teacher must transfer this knowledge and information required to achieve scientific behavioral change in a common way that arouses the teacher's interest and desire, and pushes him to learn, taking into account his psychological, social, mental and physical qualities and characteristics.

The diversity in the use of modern learning methods in educational programs works to raise the boredom of students resulting from the use of one method, and the successful teacher is the one who is good at applying more than one method, and is interested in taking into account the tendencies and trends of students because these tendencies and trends represent motives for the excitement of the individual and methods that recent studies have proven their usefulness in increasing and speeding education and in developing skills more quickly than the rest of the methods is the cooperative structural method.

Educational programs based on cooperative structural learning are modern educational programs, as they express a method of learning and teaching at the same time, as learners participate in activities and exercises very effectively through a diverse educational environment, and that these educational programs are based on learning for understanding or meaning-based learning, by linking the previous experiences of the learner with his subsequent experiences and forming links and relationships between them and that the learner builds through generative processes used to modify alternative perceptions and concepts own in the light of correct scientific knowledge. (Ibrahim, 2004: 224)

Feedback is one of the most important methods that activate the role of the learner, because it provides him with information or data on the progress of his performance

on an ongoing basis, in order to help him modify that performance if he needs to modify or install it if he is moving in the right direction. (Resourcefulness, 2002: 66)

The structural method works if combined with feedback in achieving its educational goals through the practice of the skill individually at times and with the colleague at times and with colleagues at other times within the cooperative group, allowing the learner to rely on himself and individual accountability and cooperate with his colleagues in acquiring and learning the skill .

Swimming is one of the favorite sports activities for many people of all ages for this sport of pleasure, pleasure and motor activity for all parts of the body, and it is one of the sports activities that come at the forefront of motor skills in general and sports, especially in the educational field, which is preferred to be learned by the individual. It is one of the important sports activities and events that attract the attention of many students in colleges, departments and institutes of physical education and sports sciences, and due to the learner's need to absorb and realize the basic skills of During the basic vocabulary of swimming, the importance of the research is reflected in the following points :

- 1- The research contributes to encouraging teachers to use educational programs based on modern learning methods and increase their awareness of the importance of using them.
- 2- Finding suitable alternatives to the usual learning methods in teaching swimming skills that work to create social relations during the exercise of educational tasks in cooperative groups.
- 3 - trying to add the application of an educational program based on the method of cooperative structural learning coupled with qualitative feedback to the lessons of swimming in and perhaps this research contributes to giving the swimming teacher

a practical method applied scientifically can benefit from it in the implementation of his lesson.

1.2 Research problem:

Through the researcher's knowledge that on most of the studies and modern literature in the field of learning to swim and learning programs agreed these studies and literature on the urgent need for methods focused on the learner, and make it the main component in the learning process on the one hand and a producer and developer of mental and motor skills on the other hand, the education process is still based on neglect of the role of the learner in the process of making him a positive individual interactive deduced to solve scientific problems, and does not encourage the learner to research and think that does not give any encouragement. On meditation and problem solving, and through reviewing and following up the researcher, I noticed that most of the students have poor performance of the basic skills required in freestyle swimming and the ability to think about linking movements with each other.

Hence, the researchers found that it is necessary to use educational programs based on modern methods of teaching that have the ability to provide learners with the necessary skills that develop their minds, such as thinking and problem-solving skills and work to activate the role of the learner in the face of educational problems that may face, and in order to overcome this problem, the research seeks to experiment with an educational program based on cooperative structural learning coupled with qualitative feedback. Which can contribute to improving the learning of the basic skills required in freestyle swimming by linking the previous experiences of learners with the experiences they will acquire and modern in learning.

Therefore, this study tended to identify the problem through the preparation of educational units based on the method of cooperative structural learning coupled

with qualitative feedback to acquire basic skills in freestyle swimming among students of the Faculty of Physical Education and Sports Sciences.

Thus, the research problem can be identified in the following question: What is the impact of an educational program based on cooperative structural learning coupled with qualitative feedback on the acquisition of some basic skills in freestyle?

1.3 Research Objective:

1- Detecting the differences between the students of the experimental group that used an educational program based on cooperative structural learning coupled with qualitative feedback and the students of the control group that used the method used in the post-test of the basic skills specified in free swimming.

1.4 Research hypothesis:

1- There are significant differences between the students of the experimental group that used an educational program based on cooperative structural learning coupled with qualitative feedback and the students of the control group that used the method used in the post-test of the basic skills specified in freestyle.

1.5 Research Limitations:

- Al-Bishri: Third-year students at the Faculty of Physical Education and Sports Sciences at Salahaddin University.
- Timeline: Academic year 2023-2024.
- Spacial: The swimming pool of the Faculty of Physical Education and Sports Sciences at Salahaddin University.

1.6 Definition of terms

Structural learning suffering: Ibrahim (2004) defined it as: -

One of the methods of cooperative learning emphasizes the use of certain structures designed to affect the interaction patterns of learners and these structures

are used as alternatives to the traditional classroom structures. (Ibrahim, 2004: 223)

The researchers define it procedurally:

It is a method of cooperative learning, which is based on dividing students into teams that include each team (4) students, and after explaining the school's special skill in freestyle in the educational unit, special questions are asked and then given the opportunity for each student separately within his group to reach solutions, then move to dialogue with her colleague within the group for the proposed solutions, then move to dialogue with all members of the cooperative group and unify the proposed solutions for each group, then the decision of each cooperative group provides its solutions in front of The school through dialogue and discussion between cooperative groups under the guidance and supervision of the school to reach appropriate solutions.

Qualitative feedback: defined by (Al-Haila , 2002) as

"It is informing the learner of the result of his learning, whether this result is right or wrong, positive or negative, in other words, feedback is the opportunity for the learner to know whether his answer to the question posed or the problem he is intended to address is right or wrong." (Resourcefulness, 2002: 312)

Procedural definition of qualitative feedback:

It can be defined procedurally as providing third-stage students at the Faculty of Physical Education and Sports Sciences / Salahaddin University with more detailed information related to their performance of some basic skills in freestyle, through which the wrong response they fell into is corrected, and the reason for this error is explained, and the correct responses are enhanced with different patterns of verbal and non-verbal reinforcement.

2.1 Theoretical framework

2.1.1 Cooperative structural approach

This approach emphasizes the use of certain structures designed to influence learners' interaction patterns and uses this data as alternatives to traditional classroom data, and students work independently in small groups or groups that enjoy more collaborative rewards than individual rewards. Early Class Teaching (Cooperative Structural) is a collaborative discussion style that consists of three stages, where students talk about content, and discuss ideas before engaging with the entire group. This method introduces elements of "thinking time" and interaction between colleagues. It aims to help students process information, develop communication skills and improve thinking. Its features can be applied to any number of students. It is easy to give the student time to think on his own. Gives him the opportunity to think aloud with one of his colleagues. Increases his sense of participation in the learning process. Includes the participation of the largest number of students in the class. Develop academic achievement and accept colleagues. Do not forget the information easily. During student discussion New ideas help him correct misperceptions in his previous knowledge. This method works to overcome some problems:

A- Acquisition of a limited number of students to participate.

(b) Shortening the time available to students to think.

C – Students stopped thinking about the question by taking inventory of a student's choice of answer . Khawaldeh, 2003, p. 69)

2.1.2 Steps to implement the strategy:

1 - The teacher divides the students into teams consisting of two students each so that each two of the team sit face to face or adjacent to each other.

2 - Thinking: The teacher asks a question related to the lesson or a problem with an open end, and asks students to spend a specific time thinking alone (a minute or two) and does not allow them to walk around the class or talk while thinking.

3- Pairing: The teacher asks students to divide into pairs to discuss what they thought (pairing does not exceed 3 minutes).

4 - Participation: The teacher asks all members of the group to participate and write down one answer for the group 5- The teacher randomly chooses one of the students from the group to represent them in answering the question, and this makes each student feel that he is vulnerable to the question from the teacher. It also gives them enough time to change the answer if it calls Need and reduce the fear of giving a "wrong" answer.(Zeitoun, 2003, p. 198)

2.1.3 Feedback classifications

Feedback is categorized in its time frame into:

A- Deferred feedback: provided to the learner after a period of time has elapsed since his response.

B- Immediate feedback: It is the opposite of the previous one, as it is provided immediately after the response with the intention of reinforcing or correcting it.

Feedback is classified according to its source into:

1- Internal feedback: refers to the information that the learner derives about his performance from his previous experiences.

2- External feedback: refers to the information provided by the teacher or any external source to the learner about his response (Rajha, 1981: 4).

External feedback takes two forms:

A- Qualitative feedback: through which the learner is notified that his response is correct or incorrect.

B- Quantitative feedback: provides the learner with detailed and accurate information about the nature of his performance, which makes him more aware of what should be done, while the previous one is limited to providing the learner with a word right or wrong, so researchers tend to prefer quantitative feedback over how. (Marei, Al-Hila, 1998: 444), (Al-Hila, 2002, p. 316)

2.2 Previous studies

2-2-1 (Nasr study, 2003): "The effect of using structural learning with the help of computer environment and environmental materials in teaching engineering fourth grade primary on achievement, retention and positive mutual dependence"

It was conducted in Egypt and aimed to identify (the effect of using structural learning according to its three steps with the help of the computer environment and interdisciplinary materials in teaching engineering for the fourth grade of primary school on achievement, retention and mutual positive dependence). The study sample consisted of a group of students of the fourth grade of primary school in Beni Suef, numbering 80 students, the researcher divided the students into two groups, the number of students of the experimental group (40 students) and the control group (40 students) The study tools included a pre-achievement test in the previous information, a post-achievement test in the engineering unit, a measure of mutual positive dependence, a teacher's guide and worksheets for students.

The researcher found that there is a statistically significant difference between the average scores of the two research groups in the post-achievement test in the engineering unit in favor of the experimental group, and that there is a statistically significant difference between the average scores of the two research groups in the deferred post-achievement test in the engineering unit in favor of the experimental group, and there is a statistically significant difference between the average scores of the two research groups in the dimensional application of the positive mutual dependence scale in favor of the experimental group. (Nasr, 2003)p. 146).

2-2-2 Jaafar's study, 2012: "The effect of using structural learning on the achievement of Arabic grammar among third grade students teacher preparation institutes"

The study was conducted at the University of Baghdad / College of Education - Ibn Rushd and aimed to identify (the impact of structural learning (thought - pairing - share) in the acquisition of Arabic grammar for third grade students and teacher preparation institutes.

To achieve the goal of the study, the researcher chose an experimental design with (partial control) and this design depends on one experimental group and one control group, and a post-achievement test only, and the study sample reached (55) students, (29) students in the experimental group that studied her students Arabic grammar using the strategy (thought - paired - share), and (26) students in the control group whose students studied Arabic grammar in the traditional way, and then rewarded between the two groups in variables (chronological age, and Arabic language grades for the previous year, parents' academic achievement, and intelligence). At the end of the experiment, a test was applied, consisting of (50) items of the type of multiple choice, the researcher used statistical means T-test for two independent samples (T- test) and the chi-square test (Ka2), and Pearson's correlation coefficient, and the Spearman-Brown equation, and the difficulty coefficient equation, and the discrimination coefficient equation, and the effectiveness equation of wrong alternatives. The researcher reached the superiority of the students of the experimental group that studied using the strategy (thought - pairing - share), on the students of the control group that studied in the traditional way, and the difference was statistically significant at the level of significance (0.05) and recommended the researcher to adopt a strategy (thought - paired - shared) to teach Arabic grammar. (Jaafar, 2012, p. 99)

2-2-3 Study (Taha Ibrahim Judeh, 2019)

The effect of qualitative feedback on achievement and motivation for learning among students of the Arabic Language Department at the College of Education

The aim of the research is to find out the impact of qualitative feedback on the achievement of students of the second stage in the Department of Arabic Language at the College of Education / Al-Mustansiriya University and their motivation to learn. The research sample consisted of (100) male and female students who were randomly distributed into two groups: an experimental group whose members received qualitative feedback, and a control group whose members did not receive

qualitative feedback, and the results of the research showed the superiority of the experimental group members over the control in achievement and motivation to learn.

3- Research Procedures

3-1 Research Methodology:

The experimental method was used to suit the nature of the research, and the researcher adopted the experimental design (design of the randomly selected equivalent group with a controlled pre- and post-observation). (Allawi and Rateb, 1999, 232). An experimental group studied according to the method of cooperative structural learning coupled with qualitative feedback and a control group studied according to the method used (Amri). This approach is the best that can be followed to reach accurate results, as it is "the only approach that can truly test the hypotheses of cause-or effect-related relationships. This can be illustrated in Figure 1.

Post-test (dependent variable)	Independent variable	Groups
- Freestyle Skill Tests	Structural, cooperative learning combined with qualitative feedback	Experimental
	Method	Adjuster

Figure 1 illustrates the experimental design of the two research groups

3.2 Research community and sample:

The research community was represented by the students of the third stage in the Faculty of Physical Education at Salahaddin University, who numbered (31) students, and the sample was chosen in a simple random way to represent the division (A) experimental group and the division (C) control group, as the number of members of each group (8) students and table (1) shows that.

TABLE 1

Shows the distribution of the sample among the two research groups

Final Issue	Excluded	Total Number	Educational style	Groups
8	2	10	Structural, cooperative learning combined with qualitative feedback	Experimental
8	3	11	Method	Adjuster
16	5	21	Total	

External safety was also verified by controlling the variables (the effects of multiplicity in the independent variables - the effect of the tribal test - the effect of conducting the experiment through the control of the study material and the teacher and the distribution of classes)

3.4 Homogeneity and equivalence:

Homogeneity was carried out between the members of the two groups in variables (age - height - mass).

TABLE 2
Equinox distribution of the two research groups in the variables of age-height-mass

Significance	Sig	Shapiro-Wilk	DF	The Collection	Variables
Immortal	.786	.959	8	Experimental	lifetime
	.405	.922	8	Officer	
Immortal	.424	.924	8	Experimental	Length
	.284	.905	8	Officer	
Immortal	.644	.946	8	Experimental	Mass
	.760	.956	8	Officer	

It is clear from Table (2) that the probability values of the Shapiro-Wilk test were greater than (0.05) and this indicates that the research sample in the experimental and control groups are distributed moderately in the variables of age - height - mass.

TABLE 3

Homogeneity of sample variance in age-height-mass variables using Levin test

It is clear from Table (3) that the probability values of the Levene Statistic test were greater than (0.05) and this indicates the homogeneity of the variation of the age-height-mass variables of the members of the two research groups.

The availability of these two indicators (moderate distribution and homogeneity of variance) are prerequisites for processing data by parametric statistical means (t.test).

TABLE 4
Shows homogeneity and equivalence of age-height-mass variables between

Significance	Sig	T. test	flattening	Convolution	\pm	Going to	The Collection	Variables
Immoral	.831	0.621	-0.626	0.541	6.12	234.33	Experimental	lifetime
			-0.249	-0.671	7.29	243.80	Officer	
Immoral	.620	0.759	0.824	0.407	3.19	161.85	Experimental	Length
			1.183	0.745	4.05	160.41	Officer	
Immoral	.312	1.043	1.552	0.832	4.34	61.56	Experimental	Mass
			1.329	0.628	3.11	59.43	Officer	

the two research groups

Table (4) shows the following:

Homogeneity: The torsion values of the age-height-mass variables were confined between (± 1) and the flattening values were confined between (± 2), and these two indicators are the homogeneity of the members of the experimental and control groups in all variables.

Equivalence: The probability values of the (t) test were greater than (0.05) in the variables of age - height - mass, and this indicates that there are no significant differences between the members of the experimental and control groups, and this

is an indicator of the equivalence of the members of the two groups in the variables of age - height - mass.

3-5 Skill tests: determined by the following tests:

1- Arm movement test with breathing:

Test objective: to measure the distance traveled by the laboratory when performing arm movement with breathing.

Test instruments: swimming pool, flood board, tape measure.

Test description: The tester stands inside the pelvis with his back facing the edge of the pelvis, fixes the flood plate between the thighs, when hearing the start signal, the laboratory pushes the wall with one of his legs and flows over the surface of the water and performs the skills of the arms with breathing.

Test recording: The test is recorded by calculating the distance traveled from the edge of the pelvis until the tester is standing on its feet. (Saher, 2011, p.78)

2- Test the strokes of the legs with breathing:

Test objective: to measure the distance traveled by the laboratory when performing the movement of the legs with breathing.

Test instruments: swimming pool, flood board, tape measure.

Test description: The tester stands inside the pelvis, his back facing the edge of the pelvis, holding the flood plate with the hands and arms extended forward, one leg is straight and her foot is on the floor while the other is bent from the knee joint and her foot is leaning against the pelvic wall, when hearing the start signal, the tester bends the trunk and pushes the wall with the leg's bent foot, flows forward and performs the skills of the legs with breathing.

Test recording: The test is recorded by calculating the distance from the edge of the pelvis to the tester standing on its feet. (Saher, 2011, p.79)

3- Freestyle Test:

Test objective: to measure the distance traveled by the laboratory when performing freestyle.

Evaluation of the technical performance of the laboratory when performing freestyle.

Test instruments: swimming pool, tape measure.

Test description: The tester stands inside the pelvis, his back is facing the edge of the pelvis, one leg is straight and her foot is on the ground while the other leg is bent from the knee joint and her foot is leaning against the pelvic wall, when hearing the start signal, the tester pushes the wall with the leg foot based on the edge and performs freestyle as far as possible and with the best technique for it.

Test recording: The test is recorded by calculating the distance from the pelvic wall to the tester's standing on its feet. (Saher, 2011, p. 80)

3-6 Honesty of tests: In the interest of the researcher, the tests were presented to a group of specialists* in the field of swimming and motor learning for the purpose of ensuring the sincerity of the tests and their suitability for the members of the research sample and the researcher relied on a percentage of (75%) as a minimum for the agreement of specialists "as Bloom indicates that the researcher feels comfortable if the degree of agreement specialists (75%) and more. Bloom:1971:p76)

3-7 Stability of tests: To ensure the stability of the tests used, the method of testing and re-testing was used to obtain stability, with an interval of (10) days The values of stability were as follows:

Table 5

Shows the coefficients of stability and subjective validity of the tests used in the research

Coefficient of self-honesty	Coefficient of stability	Tests
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0.87	0.77	Movement of the arms with breathing
0.96	0.93	Hitting the legs with breathing
0.91	0.83	Freestyle

3.8 Exploratory experiment of the tests used in the research:

This experiment was conducted on (8) students from outside the research sample in order to identify:

- 1- The appropriateness of the tests for the sample members.
- 2- Preparing the assistant staff for the tests.
- 3- The time taken for each test.
- 4- Identify the difficulties that may occur during the tests.

3-9 Educational Program: The educational program included (16) educational units distributed over two groups and by (8) educational units, and the actual experience lasted four weeks, and the time of one unit was (90) minutes and by two units per week. The program was presented to those specialized in the field of teaching methods, motor learning and swimming, and to express their opinions regarding:

- 1- Ensure the validity of the application of the curriculum to the members of the research sample.
- 2- Time division of unit parts
- 3- Exercises developed in order to achieve the objectives of the unit

The amendment was made based on the observations of the specialists and the program was then implemented.

3-10 exploratory experiment of the teaching method: Before the implementation of the final experiment conducted exploratory experiment on a sample of (8) students excluded from the final experiment, in order to find out

the most important observations and obstacles that may face the method of cooperative structural learning coupled with qualitative feedback , and the experiment was for the following purposes:

- 1- Ensure the control of the subject school to produce its lesson according to the method of cooperative structural learning coupled with qualitative feedback.
- 2- Make sure of the time spent performing the exercises.
- 3- The validity and adequacy of the tools used.
- 4- Identify the expected difficulties when implementing the lesson and develop appropriate solutions.

Through the exploratory experiment, it was confirmed that the subject school can produce its lesson according to the method of cooperative structural learning coupled with qualitative feedback and its awareness in the application of the method and avoiding the obstacles that it may encounter.

3-11 Application of the final experience: The educational program was applied to the members of the two research groups as follows:

First: The experimental group: This group was studied according to the method of cooperative structural learning coupled with qualitative feedback as follows:

1. The subject school pre-tests students in a breath test for the purpose of dividing students into heterogeneous cooperative groups.
2. The subject school ranks the students in descending order according to their achievement in the previous pre-breathing test.
3. The subject school divides the class into a number of small groups, where each group consists of (4) bat, as well as identifying the cooperating couples within each group .
4. The school explains the topic of the study allocated with a number of questions .
5. A time period of one minute is given for each question that allows the student to think about answering the questions posed by each student individually.

6. The school asks students to go in pairs that have been determined in advance to discuss what they have thought.
7. The couples then go to their cooperative groups to discuss what they thought and identify the solutions that each group has come up with.
8. During the three stages , the learner is notified that her response is correct or incorrect (qualitative feedback).
9. Each group presents the solutions they have reached in front of the school with the opening of discussion between the cooperative groups under the guidance and guidance of the school in order to identify appropriate solutions.
10. Under the guidance and supervision of the school, the cooperative groups apply the exercises for the implementation of the educational tasks specified for the educational unit.

Second: The control group: The control group studied in the traditional style and as follows:

- 1- The subject school implements the objectives of the lesson without the help of female students.
- 2- There is no direct interaction between the students of this group.
- 3- The grade group is not divided into regular totals throughout the application period.
- 4- They grow in this style individual competition in the implementation of the skill.
- 5- The school is responsible for monitoring and correcting errors individually.

3-12 Post-tests: The post-tests were conducted after the completion of the educational program.

3.13 Statistical Methods:

- 1- Arithmetic mean
- 2- standard deviation
- 3 - Torsion coefficient
- 4 - flattening coefficient

5. T test for independent samples of equal number.
- 6- Simple correlation coefficient. (Al-Tikriti, 1996: 121-272)
- 7- The size of the effect. (Al-Badawi, 1988, p. 237)

4. Presentation and discussion of results

4.1 Presentation of results related to the research hypothesis:

"The existence of significant differences between the students of the experimental group that used an educational program based on cooperative structural learning coupled with qualitative feedback and the students of the control group that used the method used in the post-test of the basic skills specified in free swimming"

Table(6)

Shows the arithmetic means, standard deviations and value of (t) calculated in freestyle skill tests for the two research groups

Significance	degree (Sig)	t-value	Control group		Experimental Group		auditions
			+p	Going to	+p	Going to	
Moral	0,014	2.79	3.24	13,15	2,04	16,93	Test of the skill of blows of the legs with breathing/m
Moral	0,000	4.15	4,07	12,08	1,14	18,82	Arm movements with breathing

Moral	0,000	4.59	3.47	15.66	2.63	22.74	Freestyle test
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Degree of freedom (n – 2) = 14 significance level (0.05)

It is clear from the above table that the probability values of the test (t) were less than (0.05) and this indicates that there are significant differences between the members of the two groups in the basic skills (leg blows with breathing, arm movements with breathing, freestyle) and by reviewing the arithmetic media, it is clear that the difference in favor of the members of the experimental group that was studied according to the cooperative structural method coupled with qualitative feedback and this result accepts the research hypothesis.

To find out the size of the effect of the two educational programs, the ETA effect size test (η^2) was used, which measures the effect size of the independent samples, and Table (7) shows the effect size criteria for the ETA test (η^2), in the light of which the size of the extracted effect is determined if it is small, medium or large.

TABLE 7

Shows the effect size criteria for the values of (η^2)

Impact size	Standard	audition
Tiny	0.01	η^2
medium	0.06	η^2
big	0.14	η^2

(Al-Badawi, 1988, p. 237)

TABLE 8

Between the size of the effect between the experimental and control groups on the basic skills in freestyle swimming

Impact size	η^2	Df	t.test	Variables
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big	0.35	14	2.79	Leg blows with breathing
big	0.55	14	4.15	Movement of the arms with breathing
big	0.60	14	4.59	Free Plumbing

It is clear from Table (8) Mayati:-

The values of the effect size of the basic skills (leg blows with breathing, arm movements with breathing, freestyle) respectively (0.35 – 0.55 – 0.60) and when comparing these values with the criteria of the effect size (η^2), it is clear that the size of the effect of the educational program based on the cooperative structural method coupled with qualitative feedback in all basic skills in freestyle compared to the educational program followed was at a level of **(large)**.

4.2 Discussion and interpretation of results related to the research hypothesis

It is clear from tables (6 and 8) that there are significant differences between the experimental and control groups in the basic skills specified in free swimming and in favor of the students of the experimental group and the size of the large impact, and the researcher attributes this result to the following reasons: -

1- The use of the cooperative structural method coupled with qualitative feedback allows students to interact with each other, and helps to increase their motivation and link learning experiences, which leads to the acquisition of skills to be learned better.

2- Learning using the cooperative structural method is an active cognitive process, as it focuses on the positive learner and his activity, as information is not provided in a direct way, but rather directs the heart to obtain it in a functional framework in addition to the diversity of activities and their continuity individually at times and in a double way at times and collectively at other times.

3- The nature of the cooperative structural method, which Al-Khawaldeh (2003) confirms that it is concerned with the transfer of the impact of learning, and the

generalization of previous experiences in new situations by moving from one stage to another, where it gives enough time for students to apply what they have learned of skills, while providing students with the opportunity to discuss with each other and with their teacher (Al-Khawaldeh, 2003, p. 141)

4 - The pivot on which the structural method depends cooperative coupled with qualitative feedback as mentioned Zeitoun (1998) is the use of ideas that capture the core of the learner to form new experiences in the first stage and access to new information, and learning occurs when modifying the ideas in the possession of the learner in the later stage, or adding new information to his cognitive structure, or reorganizing the ideas in that structure (Zeitoun, 1998, p. 84)

5- Wheatley (Wheatly, 1999) emphasizes that the nature of the cooperative structural style helps students to build meaning for what they learn, and develop confidence in their abilities to solve problems, they rely on themselves and do not wait for anyone else to tell them this solution in a ready-made manner in the first stage of the structural style, as they feel that learning is the industry of meaning and not just save deep information (Wheatly, 1999, p9-21)

6- The nature of the cooperative structural method, which is confirmed by Khairia Saif (2003) that it allows students to reconstruct the skill to be learned, process and arrange ideas, and organize them in a special way, and the consequent students' awareness of the different connections and their awareness of them, through the various activities performed by the learner during the three stages of structural learning (Saif, 2003, p. 144)

7- The nature of feedback how the student and behind her colleagues are in a state of anticipation to participate in opinion and discussion, if she knows that her answer is wrong, she follows her school and her colleagues to find out where the error is in her answer and seek to overcome this error and not to repeat falling into it in the future, while if his answer is correct, this proves the experiences stated in that answer and enhances his self-confidence and benefits the rest of her colleagues within the classroom who are waiting for their colleague's answer to benefit from

the form of reinforcement, or perhaps It is due to the fact that the students of the experimental group obtained a large amount of detailed information related to their performance, which makes each of them more aware of what skills he must do, so some educators such as "Richard" point out that it is not important for the learner to know whether his answer is correct or false about the questions posed to him, but it is more important that the teacher shows the learner why his answer was correct and supports it, and why it was wrong and corrects it. (Al-Haila, 2002: 318).

5. Conclusions and recommendations

5.1 Conclusions:

1. The experimental group students who learned according to the cooperative structural method coupled with qualitative feedback outperformed the control group students who learned according to the traditional method in the skills of (leg strokes with breathing, arm movements with breathing, freestyle swimming)
2. The magnitude of the impact of the educational program according to the cooperative structural method coupled with qualitative feedback was large compared to the educational method used in the basic skills specified in freestyle.

5.2 Recommendations and proposals

1. Emphasis on the use of the cooperative structural method coupled with qualitative feedback as better than the method used in teaching the basic skills specified in freestyle.
2. To complement the current research, the researcher proposes to conduct future studies aimed at exploring the use of strategies from cooperative learning to teach other activities in physical education.

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A model for an educational unit according to cooperative structural learning coupled with qualitative feedback

Educational Unit :

Date:

Time (90) D Number of Dates : 8

Behavioral goal: The student should be able to learn the skill of arm movement in freestyle swimming

General Objective: Accustom students to cooperation, synergy and social interaction

marshalling	Time	Parts
		Prep Part (12m)
Preparing the final appearance and taking the absence	2 min	Introduction
General and special exercises to prepare the body	10 min	Warm-up
		Main Part (75m)
A short introduction to the skill by the teacher	5D	Educational Section (25min)
Ask (3) questions on how to perform the skill of arm movement while raising the student's motivation to learn by helping her to discover the correct responses during the three stages (qualitative feedback)	3D	Steps of the structural style
In which the learner tries to reach appropriate solutions to perform the skill individually	4D	*-Thinking
Discuss with the colleague the appropriate solutions for the performance of the skill	4D	*- Pairing
Participate with the members of the cooperative group to reach the final decision for appropriate solutions, and then each cooperative group presents its solutions to everyone with the opening of the way for discussion and under the supervision of the teacher	9 min	*- Participation
1- Work improve hand position and entry. 2- Work to land the arms in the right place. 3- Work to pull the hand and forearm towards the center of the body. 4- Work to push the arm in motion up and back. 5- Work to move the elbow from the water.	40min	Applied Department (50D)
Playing a game that serves the skill	10 min	playing
Calming and leaving exercises.	3 min	Concluding part