The effect of using exercises with educational methods according to Culp style in order to retain some basic handball skills

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Abstract

The problem of research is through the researcher's observation that some methods of implementation of the lesson depend on the teacher's academic experience and may not fit perhaps with the abilities of the learner or the student when studying the game handball and practicing it with sufficient time and mastering the skills of the game, which makes the student a recipient and a beneficiary of the teacher's orders and not provide sufficient opportunities to develop his skill level, which called for the need to use educational exercises in the method of learning cooperative in order to master that may contribute to raising the level of performance and improving the learning curve and retaining some basic skills with handball.

The research aims to influence the use of educational exercises in the method of cooperative learning in order to be able to learn some basic skills in handball and keep them for students of the Faculty of Physical Education and Sports Sciences / Kirkuk University,, and the researcher used the experimental method to suit the nature and problem of research, while the research community included students of the Faculty of Physical Education and Sports Sciences / Kirkuk University for the academic year 2019/2020 while the sample of research was made up of 30 students They randomly divided the experimental and controlled groups and by (15) students per group ,and the researcher conducted exploratory experiments and identified the skills in and tribal tests and applied the method of educational exercises and dimensional tests and the use of statistical bag Spss to extract the results of the research and through this the researcher concluded that the educational exercises in the method of cooperative learning in order to be able positively in learning some basic skills with handball and retaining.

Introduction:

Facing the process Educational in the current phase has several challenges and pressures as a result of scientific and technological development in all fields life, the vast amount of information and the daily knowledge and inventions reached, as well as the increasing number of students, which are expected to continue with great acceleration, all these reasons have called on specialists in the field of education to find modern ways and means to keep up with these developments. And changes, the challenges facing the world today and the rapid change that has taken place in all aspects Life made it necessary for educational institutions to take modern means of education to achieve its goals and meet these challenges, scientific and technological development has added many new means that can be used in creating areas of expertise for learners so that the individual is prepared with a high degree of competence to qualify him to meet the challenges of the times, and the process of education is based on the means of conveying information from the teacher to the learner and this means is the teaching method which the more suitable the learning process is better, faster and less effort the diversification of teaching strategies and methods keeps the student bored and contributes immediately to encouraging innovation and sports activity has enjoyed a great deal of progress and development as a result of technological advances that have swept across various fields of knowledge. Humanity, it's who made the education workers Sports Looking forward to a better future to try to solve problems. Sports through modern scientific methods. (Al-Nuaimi and Al-Jumaily, 1990, 74) Recently, new research has emerged in the field of sports education that has contributed to the development of different teaching methods and methods, which have become a unique and unique work, and away from the traditional form of the t eaching of sports education. In light of the above, it has become a duty for all those working in the field of sports education. Firing a hand Evolution

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and innovation to get to achievements we face the tasks of the teacher are no longer limited to the traditional role known to all, but it has become a duty for him to innovate and innovate to encourage students in sports activity and practice on scientific grounds that guarantee us continuity and continue education and practice for sports, collaborative learning One. Educational and learning strategies, which have contributed a significant share in the teacher's preparation and training in the acquisition of teaching skills. It also makes the student the center of any educational process (Axis The process Educational) By providing the necessary opportunity to make it information-oriented and a partner in the educational process and relying on himself in discussing issues, addressing problems and providing opportunities for collaborative collective action and free expression of opinion (Fatlawi, 2004, 101) and since learning is a deliberate activity, it is done to make the student learn what He's studying it. So the characteristic of education is to find a strategy taking into account individual differences in a way that leads to greater a measure of development in the behavior of the individual From this point of view came the strategy of learning to master or so called (mastery learning) which confirms that more than 90% of students can absorb what should be taught to them, as the teacher's task is to find ways to enable them to master the subject to study and to look for methods and materials that help the largest percentage of students to achieve this ability. (Muhammad and Muhammad, 1991, 161-162). So, the learning input is supposed to be able to you can. The majority of students reach the maximum level of their ability to learn if the teaching pattern used is structured and if they provide assistance to students at the time and place where they face difficulties different, and also if there are clear criteria for components Mastering and the presence of sequences and interconnection in units analysis and that the educational unit be treatable And analysis. (Mekdadi, 1988, 60), it can through this strategy uses more than one teaching method and uses multiple patterns to access learning in order to master. (Citrus, 2005,2) He appeared in the united states of the latter is a new trend that combines learning to mastery, and collaborative learning is called Name (Collaborative learning to master) (Ibrahim, 2004, 737) and a game. Handball It is one of the games that contribute effectively and directly to the development of the individual and the development of his physical abilities as well as the opportunity for the talented to show their artistic abilities in performance through creativity and unlimited innovation, there is no sport that can move the body aesthetically and with a high degree of compatibility (Beverly, 1980, P.423) therefore, they reauire special methods and methods in learning, and follow appropriate teaching and teaching methods in the sport handball gives the learner a great opportunity to learn and absorb a lot of simple and complex motor skills, and at the same time allows progress in giving new and complex motor skills, but at the level of the college students, Researcher You think that trying to experiment or use new and modern methods in learning some basic skills skills may make it easier to learn these skills and speed them up for students of all colleges and departments of sports education, for all these reasons found Researcher a strong motivation to go into this field, hence the importance of research. in giving a perception of the competence of teaching Handball About collaborative learning in order to master and the possibility of its impact on the level of performance and learning curve and retention of some basic skills skills in the students of the second stage in Faculty of Education Physical and Sports Science Most of the studies conducted on collaborative learning and on learning in order to be able to effectively implement these two strategies have shown, which encouraged researcher i have to integrate these two strategies and use it in teaching some of the basic skills in handball, The problem with research is that game handball one of the games included in the curriculum for the colleges and departments of sports education that Find on a set of motor skills that the student must learn and perform, you see. Researcher the skills Handball requires a combination of factors must to be too son. Run away in the student and work with a sapper, to learn the skill of it in terms of fitness, skill and psychology as well as the values and trends associated with cooperation, that's why most students are suffering from a difficulty .Web Many in learning basic skills in handball This is due to some of the above factors as well as the fact that they consist of several skills that must be linked at the end of learning to form the motor chain, it is by teaching researcher For a lesson. Handball I noticed that the teacher is the main focus of the educational process, Besides, I'm not. Most students can't get high grades in basic skills. On the despite the ease of this device by analogy. With the devices. The other one,

so she saw Researcher Using some modern strategies or methods that make the student or learner as the main and active focus in the educational process, to help him get the highest grades, hence the need to use the strategy of collaborative learning in order to master that may contribute to raising the level of performance and improving the learning curve and retaining some basic skills. **On this basis, the problem of research can be summarized in the answer to the. Following:** - Does the collaborative learning strategy achieve a level of performance, curve and retention of some of the basic skills in Handball Better than the teaching method? **The search aims to reveal what comes** The impact of the collaborative learning strategy in order to be able to perform some basic skills For students Faculty of Physical Education and Sports Sciences / Kirkuk University, Effect Collaborative learning strategy in order to be able to retain some basic skills for students Faculty of Physical Education and Sports Sciences / Kirkuk University, there are no statistically significant differences between the average score of the two research groups in the performance of some basic skills of students Faculty of Physical Education and Sports Sciences / Kirkuk University, there are no statistically significant differences between the average score of the two research groups in the performance of some basic skills of students Faculty of Physical Education and Sports Sciences / Kirkuk University, there are no statistically significant differences between the average score of the two research groups in the retention test for some basic skills for students Faculty of Physical Education test for some basic skills for students Faculty of Physical Education and Sports Sciences / Kirkuk University.

Research Methodology: -

The nature of the problem to be studied determines the nature of the method and in this research the researcher used the experimental method to suit it and the nature of the problem.

The research community and its appointed: -

Research Community: -

The research community will be one of the 2nd grade students at the Faculty of Physical Education and Sports Sciences / Kirkuk University for the academic year (2019/2020) and 200 students distributed to (6) groups (A-B-C-D-E-W)

Sample search: -

The researcher selected the two divisions(B, C)) randomly to represent the sample of the research and then was not chosen by lot division(e) to be the control group and division (H) to be the experimental group, and for the purpose of equals sample, the students were excluded, deferred, teachers, medical reports and absentees, thus becoming the sample of the research (20) students by (15) per student and table (1) shows the sample of the research.

	The number of search sample members and the method used									
Division	Group	Total number			Method					
В	Experimental	22	8	15	Collaborative learning strategy for mastery					
С	Control	27	12	15	The method used					
Total		50	20	20						

Equivalences of the two research groups: -

In order to reach the parity of the two research groups, the researcher performed parity in some of the changes he sees affecting the results of the experiment and of these variables.

- The time age is measured by month.
- The length is measured in centimeters.
- The mass is measured in kilograms.
- Intelligence is measured by grades.
- Some elements of fitness and mobility.

Table (2)	Table (2) shows the mean, the standard deviation, and the calculated value (T) of the variables (age, length,											
	mass, and intelligence).											
	Features Statistics	Experiment	ntal Group The Control group Calcu		Calculate	Table	Significanc					
Variables	Unit of measur ement	А	Std	А	Std	d (t) value	value (t)	e				
Age	Month	242.844	12.819	244.444	12.042	0.247		Not Sign				
Length	Cm	170.801	4.447	171.122	4.822	0.192		Not Sign				
Mass	Kg	48.484	4.272	47.447	4.022	0.427	2.04	Not Sign				
Intelligen ce	Degree	42.922	4.091	44.004	4.822	0.724		Not Sign				

Equality of the two	sets of research i	n variable at (age.	height, mass	. intelligence)
Equality of the two	beeb of rescurent	i variabie at (age,	menging muss	, meensence,

The tablet (t) was at error rate \leq (0.05) and in front of a degree of freedom (28) = 2.05

Table 2 shows that the differences were non-moral between the two research groups in variables (age, height, mass, intelligence) as the calculated (t) values lower than the ratio (t) at the error ratio \leq (0.05) and against the degree of freedom (28) which indicates the equality of the two groups in these variables.

The devices, tools and means of collecting information used in the search:

- Means of collecting information:
 - Arab and foreign sources and references.
 - Testing and measurement.
 - Observation and experimentation.
- Hardware and tools:
 - Handball court.
 - Measuring tape.
 - Hand balls.
 - I'm not going to do that.
 - I'm not going to do that.
 - Objectives.

Experimental design: -

The design of the research is related to the problem of research and its abundance, so the researcher must choose the design that answers the Questions or tests the assumptions with the greatest capacity of the upper thousand, and the use of the design of the experimental design is appropriate is important in each research and according the researcher used the experimental design called (the design of the random group equals choice with tribal and dimensional test). Demonstrates the experimental design of the research (AbuAllam, 2004a, $\frac{1}{2}209$)...

	Experin	ental design research	n shows	
Tests Groups	Pre-Test	Independent variable	Pos-Test	Absolute retention test
Experimental	Basic skills under	Collaborative learning strategy for mastery	Basic skills under consideration	Following the same

Control	consideration	The method used	dimensional test conditions

Identification of search variables:

One of the characteristics of the experimental work is that the researcher performs the experiment based on certain factors under strictly controlled conditions in order to verify how a situation or accident occurs and thus limit the causes of its occurrence, as well as the variable affected by multiple factors other than the experimental factor \cdot and therefore it is necessary to adjust these factors and all independent variable(experimental) alone to influence the dependent variable. (Van Dallin, 1984, 242-248). The research includes the following variables:

1- The independent variable (experimental): the strategy of collaborative learning in order to be able.

2- The dependent variables: the level of performance and the learning curve and retention of some basic skills.

Skills used in research:

After referring to the vocabulary of the curriculum for handball for students of the second stage of the Faculty of Physical Education and Sports Sciences, some of the prescribed skills were adopted for basic skills and the scientific sources of these skills were consulted to find out the technique of these skills and methods of teaching them and methods of assistance and common mistakes(Han tosh and Saudi, 1988), (Brahm, 1995)

These skills are: - (delivery, receipt, correction).

Educational programs:

"The program in its general sense means a plan that needs to be followed, and the sports education program is a planned set of experiences practiced by participants through sporting events" (Saleh, 1981, 1999).

For the purpose of applying the experiment, it is necessary to prepare educational units for the two research groups represented by two units per week for each group and each according to its strategy, as the researcher has access to sources, references and previous studies(al-Atato, 1998), (Tailor, 2006), (Obeidi, 20) 07), (Shihab, 2008) related and refer to the opinions of experts and specialists in the field of teaching methods and motor learning and handball through the preparation of a to clarify the nature of the program and in light of that the researcher was able to prepare the educational program which obtained a rate of agreement more than(75%) After taking advantage of some of the amendments and observations made by some experts and specialists.

Exploratory experience: -

The researcher conducted his exploratory experiment before implementing the main experiment on a sample of the research community and outside the scope of the main sample(12) students in order to find out the pros and cons facing him during the main experiment (which is a mini-experiment of the main experience) in which the conditions must meet the same conditions and the conditions in which the main experience, and the goal of the survey was:

- Make sure the prepared tutorial is valid.
- Find out the teacher's ability to apply the prepared program.
- Learn how students respond to the implementation of the contents of the prepared tutorial.
- Avoid mistakes that can occur during the application of the experiment.
- To ensure the validity of the devices and tools.
- Identify the obstacles encountered by the researcher.
- Adjust the performance time for each exercise and repeat it.

• Give a clear picture of the course teacher to implement the educational program in the way that students are taught according to the strategy of collaborative learning in order to be able.

The main experience:

Pre-test: -

Before the start of the main experiment, tribal tests were applied to the two research groups on the day of Monday 11/1/11/2019 in order to identify some of the basic skills of each student, as well as the students were divided into non-homogeneous cooperative groups through the degrees of this test. **Implementation of the tutorial:** -

Pos-Test the research sample and distributing it to two groups (officer and experimental), conducting the process of parity and Pre-Test and preparing the necessary requirements for the implementation of the experiment, (24) educational units were implemented to show their impact on the level of performance and learning curve and to retain some basic skills. The beginning of the experiment was in (18/11/2019 to 2877/1/2020).2020) The educational units were given the same amount of two educational units per week and for each group, and the educational units of the two research groups were similar in the preparatory section - (introduction, public and private warm-up) and educational activity and the final section (final)or difference was only in the applied activity as the research sample exercises to help to learn some basic skills through the educational program and as follows:

Experimental group:

Members of the experimental group practice learning some basic skills in accordance with the strategy of collaborative learning for mastery, which is the nature of learning in order to be able to determine the level of mastery of the skill to be learned according to a test where by it is determined to identify students who are capable of the unable and identified by presenting the to a number of specialists in teaching methods and handball, as more than 90% of the total experts have been obtained as a tester of all the skills under consideration. Therefore, the researcher adopted this degree as a test for ability in the formative tests after the students perform the general warm-up and then the special and the teacher explains the skill and presents it to the students. Students are divided into (5) heterogeneous cooperative groups, so that each group consists of three students or members who are (leader, performer and assistant), practicing skill learning cooperatively, as the duties of the leader are to perform the instructions to help learn the skill through the duties which he provided from the teacher to the next educational unit he receives at the end of Each unit and note the mistakes of the performer and the duties of the performer perform the exercises already explained by the teacher and the performance of the leader, but the assistant helps the performer to perform the exercises correctly and note the mistakes which is a common characteristic with the leader and after the end of the cooperative groups of learning skill is conducted a mastery test for each student and individually in order to identify the students who are able to perform the exercises, Then additional time is given to the unable students to be immediately after the lecture and it takes (20) minutes as this time is represented by the application activity only and in which the effects programs represented by the projector (CD)are given students watch the performance of the player through the monitor (TV) and is Comment and explanation by the teacher on the skill (the subject of the educational unit) through the slow presentation and stop the image at each section of the movement (preparatory, main, final) shown by the teacher to the students with the giving of therapeutic programs and the statement of common mistakes after which the opportunity is given to students to practice the application in the form of cooperative groups to master the learning of the skill that is formed by distributing some able students to the students who are able to complete the practice to learn the skill and then conduct a second test that can be able only to be able, either, **The group** of officers practice sought members of this group represented by division(C)exercises to help learn basic skills according to the method followed, the teacher performs the general warm-up of the students and then warms up and then private warm-up and then forms a square minus a rib or half circle until the explanation of the skill to be learned and performed in front of the students of the teacher and then from one of the good students and provide an explanation of some exercises to help learn the skill and then each student performs skill performance with the help of the teacher and under his supervision and guidance and then ends the educational unit in the department The finale.

Post-test: -

After completing the prepared educational program, the researcher conducted the dimensional test of the two groups on the same day and on(30/1/2020) and followed the same procedures that he used in the tribal test and under the same spatial and temporal conditions, as was used by a number of experienced and competent holders of arbitration certificates in order to evaluate the level of basic skills of some basic skills and each student.

Retention test:

The researcher calculated the retention rate by retesting the basic skills level of the2020) skills in after a period of two weeks from the date of the tele testing and the two groups.

Results and discussion: -

× /	Table (3) shows the arithmetic mean, standard deviations, and the calculated value (T) between the two tests (pre and post) for the control group in the basic skills level.										
		Pre-	Test	Pos-Test							
Variables	Unit of measurement	A	Std	А	Std	Table value (t)	The value of (t)calculated				
Send	Degree	4.462	0.672	6.582	1.654	2.14	4.575				
Crushing beating	Degree	5.562	0.672	6.582	1.454	2.14	5.665				

Presentation of the results of the first hypothesis and discussion:

The value of (t) tableis 14° C and error rate $\leq 0.05 = 2.14$

Table (4) she	Table (4) shows the arithmetic mean, standard deviations, and the calculated value (T) between											
the two tests.												
	Unit of	Pre	Test	Pos-	Test	Table	The value of					
Variables	Unit of measurement	Α	Std	Α	Std	value (t)	(t)calculated					
Send	Degree	4.597	0.781	8.101	0.747	2.14	12.274					
Crushing beating	Degree	5.597	0.781	8.101	0.757	2.14	13.354					

The (t) Table value was in front of a degree of freedom (14) and the error rate $\leq 0.05 = 2.14$

The researcher attributes the reason for this escape lands in the results of the control group to the positive impact of handball lessons carried out by the group and over the period of (6) weeks, as well as the role of the teacher in the use of the teaching method followed, as it was not bad that it does not show results in the positive results, but it has benefits in education and the way the teacher in teaching during lectures so that it produces acceptable results in teaching students mobility for certain skills. Since the " method used is currently used in teaching educational materials in all fields of study, there is no doubt that it is a good practical method and useful in using it, but the ambition in learning does not stand there because it is an old method that does not comet the student only to use a small part of the amount of his other thinking, as the student's attitude in it is negative towards the learning process, "Each member of the regular groups (the officer) is dependent on a unified educational and administrative program, supervised by the teacher and the student is the recipient of the information.". (KAZU AND KAZU,2005, p. 222)

The researcher also attributes the difference in the results of the experimental group to the fact that the strategy of collaborative learning for mastery has had an impact in increasing the level of performance of some basic skills in the basic skills of the students of the second stage more than the method used because the cooperative groups have shown their students cooperation, ,enthusiasm and

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active participation in the implementation of the educational tasks assigned to them as well as "The (MANNING AND LUCKING,1991) use of collaborative learning works to actively engage students and show our cooperation between members of the same group and the groups as a whole and achieve a collective goal," he said. He accepts to learn more effectively and enthusiastically than in the way that is devoid of cooperation and meaningful participation and generates a kind of selfishness.". (MANNING AND LUCKING,1991, P. 125)

"The best way to get better results and to reduce individual differences in performance is to emphasize that teachers should be more diversified in teaching methods because students differ in their abilities and learning methods," he said. (GUSKEY,2007, P. 17)

In addition, the reason for the development in the level of performance is the conduct of mastery tests that show able and unempowered students, in addition to the extra time (extra lesson) interspersed with archaeological programs and corrective feedback (therapeutic) in order to ensure that most students reach the level (degree) of ability and confirms (Lavi 2006)" that learning to be able to raise the level of learners and reach a high degree of mastery of the lessons learned, and this is done through them certain procedures consisting of studying subjects, then performing training tests and practicing archaeological activities and the learner cannot move to another lesson until after reaching the degree of mastery or appropriate proficiency. (Lavi, 2006, 212).

This hypothesis was validated by using the Test to identify statistical differences in the average level of basic skills between the two research groups (control and experimental) for the dimensional test and table (5) shows this.

Table (5) Shows the computational circles, standard deviations and the value of (T) calculated for the level of basic skills between the control and experimental groups in the dimensional test									
Groups	os Number Unit of measurement			Std	Table value (t)	The value of (t)calculated			
Experimental	15	Degree	8.101	0.645	2.05	2.282			
The Control	15	Degree	6.593	1.656	2.03	2.282			

The (t) table value was in front of a degree of freedom (28) and the error rate < 0.05 = 2.05

Accordingly, it can be said that the use of a collaborative learning strategy in order to master leads to raising or increasing the level of basic skills of students more than the method followed, due to the mutual interaction that does not come between the members of the group as the student is active and in velveting the learning process and not just the future of information from the teacher This strategy also benefits in overcoming the problem of large numbers in the class and reduces the teacher's responsibility in the management of the class, as the teacher deals with small groups that are the class instead of dealing with each individual as used in the method used, as this strategy makes students feel responsible for the achievement of each student, The students only have contact with their leader and not the teacher of the subject except in some of the difficulties facing the group.

In this regard, al-Fatlawi, 2004, emphasizes that "collaborative learning prepares learners so that they work with each other within groups and help each other to achieve a common educational goal so that all members of the group reach the level of mastery." (Fatlawi, 2004, 101).

He also stressed (Lavi, 2006) that in cooperative learning the learners in the group realize that they are pursuing a common goal and trying to reach it, and there is a sense that what benefits the group benefits the individual and what benefits the individual benefits the group which helps them to work and accomplish. (Lavi, 2006, 194).

Table (6) shows the arithmetic mean, standard deviations and the calculated value (T) between									
the two tests									
(Dimensi	onal and retention) of the control gro	oup						
Unit of Pos-Test Retention test Table The value of									

Variables	measurement	A	Std	А	Std	value (t)	(t)calculated
Handling and receiving	Degree	6.582	1.645	5.861	0.973	2.14	1.478
Correction	Degree	6.682	1.646	6.861	0.883	2.14	1.678

The value of (t) table is 14° C and error rate $\leq 0.05 = 2.14$

Table (7) Shows the computational circles, standard deviations and the (t) value calculated between the two tests (dimension and retention) of the experimental group									
		Pos-	os-Test Retention te	ion test					
Variables	Unit of measurement	Α	<u>P</u>	А	Р	Table value (t)	The value of (t)calculated		
Handling and receiving	Degree	8.101	0.645	7.675	0.808	2.14	1.583		
Correction	Degree	9.122	0.675	8.644	0.977	2.14	1.793		

The (t) Table value was in front of a degree of freedom (14) and the error rate $\leq 0.05 = 2.14$...

Conclusion and Recommendations:

The educational program of the experimental group has positive progress in the level of basic skills between the tests (tribal and dimensional) and in favor of the dimensional test, and the educational program of the control group has developed positive progress in the level of basic skills between the test (tribal and dimension) and in the interest of the dimensional test, In addition to the superiority of the strategy of collaborative learning in order to master (experimental group) in the test to retain the level of basic skills compared to the method followed by the control group, the researcher recommends the use of the strategy of cooperative learning in order to be able to teach scientific subjects in general and handball in particular, the need to urge the curators and guide the educational process to conduct tests after each leave period to know the level of skill retention.

References

- Ibrahim, Magdi Aziz. (2004a). Learning Strategies and Teaching Methods, Sons and Heba Hassan Press, Anglo-Egyptian Library, Mohamed Farid Street, Egypt.
- Citrus, Mahmoud, (2005). Learning to master mathematics, Teacher's Magazine, Al-Aattan Center for Educational Research and Development, Gaza, Palestine.
- Rashidi, Nagham Muayyad Muhammad Younis. (2006) . The impact of a proposed training curriculum in some special physical Aualities and skill level in the ground movements of the young gymnasts, an unpublished master's thesis, faculty of physical education and sports sciences, Mosul University, IraA.
- Rimawi, Mohammed Odeh and others. (2006). General Psychology, Second Edition, Al-Safar Publishing, Distribution and Printing House, Amman, Jordan.
- Al-Fatlawi, Suhaila Mohsen Kazim. (2003). Entrance to Teaching, I1, Al Shorouk Publishing and Distribution House, Amman, Jordan.
- Farhat, Laila El Sayed. (2005). Measurement and testing in sports education, i3, Book Publishing Center, Jordan.
- Tribes, Raji Issa. (2005). Methods of teaching science in the lower basic and kindergarten stages, Culture House for publishing and distribution, i1, first issue, Amman, Jordan.

- Mohammed, Da'ad Maher and Mohammed Majid Mahdi. 1991. Basics of general teaching methods, Dar al-Hikma Printing and Publishing Press, Mosul University, IraA.
- Mekdadi, Mohammed Fakhri. (1988). Learning for Mastering, Teacher's Letter Magazine, Volume 29, Issue 2, Jordan.
- Al-Nuaimi, Taha Tayeh and Al-Jumaily, Harith Taha. (1990). Curriculum and prospects for the future, Book House for Printing and Publishing, Mosul University, IraA.