The effect of using cooperative learning and problem solving strategy on achievement and development of reading and writing skills among third-grade students in Arabic language in the schools of the Southern Mazar District

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Abstract

The study aimed to in vestigate the effect of using cooperative learning and problem solving strategy on achievement and development of reading and writing skills among third-grade students in Arabic language in the schools of the Southern Mazar District. The quasi-experimental approach was used to conduct the study and it was applied to two sections in khawla bint al-azwar school in southern mazar directorate of education. The study sample, which was chosen by purposive method, consisted of (43) male and female students. It was divided into two groups: experimental group which was taught by cooperative learning, problem solving, and a control group which was taught through the traditional method. The number of students in the control group was (21) male and female students, and the number of students in the experimental group was (22) male and female students. A note card was applied to measure reading and writing skills in Arabic language after the validity and reliability of the tool was verified, and appropriate statistical techniques were used . The study found that there were statistically significant differences between the performance means of the two study groups on the note card in favor of the experimental group that was taught using cooperative learning and problem solving. The study recommends the necessity to urge Arabic language female teachers to adopt method using cooperative learning, and problem solving in teaching Arabic for the third grade class because it is an effective method for developing the skills of reading and writing. It raises the morale of the students and increases their self-confidence, along with other methods of education.

Keywords: cooperative learning, problem solving, reading and writing skills, Basic Third Grade.

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I. Introduction

Educators have paid increasing attention in recent years to activities and events that placed student at the centre of the learning and teaching process, and among the most prominent of these activities is the use of cooperative learning method, which means arranging students in groups and assigning them to work or perform an activity that together cooperatively. Cooperative learning represents one of the recent trends in the field of teaching, and aims to relate learning to action and students' positive participation. Therefore, this method has received great attention since the eighties of the last century due to its use as an alternative to the traditional method that leads to competition among learners instead of the spirit of cooperation. Despite the versatility of scientific studies that have clarified the importance of using cooperative learning instead of traditional competitive learning, especially in the United States of America, the Arab education system still suffers from a deficiency in teaching methods capable of keeping pace with the advanced technology era, due to its reliance on the traditional method. In teaching and evaluation, which is a method based on the principle of rote learning of the academic material, and measuring student's ability in memorization and retrieval which is no longer retained after the exam instead of the student's understanding of the subject and its application (Arslan, 2008).

As anyone following current teaching trends, they notice that teaching methods have tended in recent decades towards emphasis on the learner to be effective, active and participant in the educational learning process with the teacher. As there is evidence that the effective educational process takes place in a cooperative social way in order to help the student explore himself and present his views, proposed his ideas and exchanged them with others, understand others' ideas, and participate in the educational process in a way that would achieve self-confidence instead of just being a target. This is in particular the case of shy students who do not want to participate in front of their classmates, thus cooperative learning provides students with cooperation

skills and other social skills, which prepares them to work in cooperative frameworks that serve them in their future lives (Ghobashneh, 2015).

Also, the emergence of many problems on the educational scope, such as students' lack of science processes and its skills - associated with decline in achievement as a result of using the traditional teaching methods in different school subjects- has led to serious thinking to overcome these problems and mitigate their severity in a way to achieve an actual development in the teaching and learning process. This thinking is in terms of teaching strategies that take into account individual differences among students of the same class, including the cooperative learning strategy (Al-Sawamlah, 2019).

Hence, this study came with a view to identify the effect of using the strategy of cooperative learning and problem solving on achievement and developing the skill of reading and writing among third grade students in the Arabic language in the Southern district of Al-Mazar.

Study problem:

The weakness in the levels of students' reading and writing is due to the low competence of the teaching strategies used by language teachers in teaching reading, as indicated by (Al-Sawamela, 2019) study. This weakness is also due to the failure of reading and education programs to take into account individual differences, and a misunderstanding of the concept of reading and writing in public education which is confined to decoding written codes and oversimplified understanding rather than profound understanding, criticism, appreciation, an expression of opinion or problem solving.

This weakness may also be attributed to the nature of the text bookstaught or the quality of the evaluation tools and methods used in the teaching -learning process, or the inappropriateness of educational methods as far as the content of the curriculum is concerned. Through the researcher's experience.

Through the researcher's experience as a teacher of Arabic language, she noticed inadequacy in teaching reading and weakness in the skill of writing, no responses to the continuous calls on the part of educators and researchers. The recommendations of previous studies (Ghubashneh, 2015; Ahmed, 2012; Al-Qadi, 2011), regarding the need to develop higher levels of thinking in reading and writing and the necessity of adopting contemporary trends in teaching the skill of reading, hence the need for the current study, which aimed at developing the skill of reading and writing in Arabic language among third-grade students, has emerged.

The selection of effective teaching strategies may help students to learn and increase their achievement, so that it is based on studies and scientific research such as cooperative learning. The problem of the study is the need to investigate the impact of the cooperative learning strategy and problem-solving in the achievement and development of the reading and writing skill of the third-grade students in Arabic language in the Southern Mazar district.

Study questions:

1. Are there differences in the achievement of third-grade students in the Southern Mazar District in "Our Arabic language" ascribed to the teaching method (cooperative learning, problem solving, and the traditional method)?

2. Are there differences in developing the reading skill of third-grade students in the Southern Mazar District in "Our Arabic language" due to the teaching method (cooperative learning, problem solving, and the traditional method)?

3. Are there differences in the development of writing skills for third-grade students in the Southern Mazar District in "Our Arabic language" due to the teaching method (cooperative learning, problem solving, and the traditional method)?

Study significance:

The significance of the study emanates from the importance of its topic, which is based on skill of reading, writing development and achievement among third-grade students in "Our Arabic language" through a strategy of cooperative learning and problem solving, so that its results contribute to the development of Arabic language curricula and methods of teaching. The importance of the aspects of the current study can be as follows

1. The results of the study may benefit the Ministry of Education, especially the Training Department, to organize their programs in the principles of cooperative learning and problem solving, so that they train teachers on how to implement cooperative learning and solve problems in the classroom.

2. The results of the study may contribute to the benefit of those concerned in the General Directorate of Curricula, so that they are motivated to improve and refine Arabic language curricula in a way that contributes to the use of cooperative learning and problem solving in developing students' achievement.

3- The results of the study may contribute to emphasize the importance of cooperative learning, problem-solving in raising academic achievement and retention for a longer period, using scientific thinking processes some

more, increasing internal motivation, increasing positive psychological equilibrium, and acquiring more cooperative skills.

Study objectives:

The study aimed to investigate the effect of using cooperative learning and problem-solving strategy on the achievement and development of reading and writing skills among third-grade students in Arabic language in the Southern Mazar District

Procedural definitions:

Cooperative learning: A method of teaching and learning in which the students are divided into small groups with different levels of achievement, and the students of a group cooperate in a common goal or goals (Fakhry, 2006). Procedurally, the study defines it as steps and procedures that the teacher takes in the educational situation to achieve the desired goal.

The ability to solve problems: a cognitive process through which the individual tries to discover effective strategies and ways to deal with the everyday problems he faces (Cassidy, & Long 1996). The study defines it procedurally as a process in which third grade students use their previous knowledge and acquired skills to meet an unusual situation facing them, and they have to reorganize what they previously learned, and apply it to the new situation they face, and it is measured by the degree that the student gets in the problem-solving scale that will be used in this study.

Reading skill: a linguistic skill through which written symbols (diacritics and letters) are interpreted into readable meanings that are uttered or silent, so that this skill appears in the reader's interaction with the readable text and his understanding, criticizing, appreciating, and making use of it in solving the problems, and implementing it in his behavior during or after reading (Attia, 2007)

The study defines reading skill procedurally as the student's ability to choose the appropriate letter shape, analyze words, form a word, join syllables, and sentences, complete the word with the missing letter, and it is measured by the degree obtained by students in the reading skill test.

Achievement: To what extent students comprehend scientific concepts and information that have been acquired through learning Arabic language in the third grade.

The traditional method: It is the method of teaching in which the teacher presents the educational material in any medium he wants (discussion, lecture, practical presentations,) except for using a program similar to the current program.

Third grade: one of the first cycle classes in the lowest basic education in Jordanian schools, and they are approximately nine years old.

2.1 Theoretical framework:

Collaborative learning.

Shebbar (1995) sees that the decade of the eighties of the last century is called the "decade of education." Several methods of learning emerged during this decade, the most important of which is: Cooperative learning, which took different patterns. The prominence of the trend was due to the fact that it places greater emphasis on the learner, but educators have concluded that focusing on education does not necessarily lead to the learning process occurrence for all learners. "The strong effects of cooperative learning on many important outcomes make cooperative learning one of the most important methods for educators." (Johnson, Johnson & Holbeck, 1995: 6).

Definition of collaborative learning:

(Abd al-Salam, 2000) defines it as: A teaching method or model that allows students to participate and learn from each other in small groups through dialogue and interaction with each other and with the teacher to gain learning experiences socially. They perform together educational tasks and activities under teacher's guidance and assistance, and ultimately they acquire knowledge, skills, and attitudes by themselves to achieve desired goals.

The impact of cooperative learning on learning:

Many see that cooperative learning has a positive effect on the educational process, as it "eliminates the introversion and isolation of some students," and increases students' motivation to learn.

In addition, "Cooperative learning programs can help solve some of the problems of academic retardation that some students suffer from" (Al-Shuhaibi, 1991)

Key elements of cooperative learning:

In order for learning to be cooperative, it must have a number of elements. (Johnson, Johnson and Holbeck, 1995: 18) identified the five basic elements of cooperative learning, which are:

1. Positive interdependence: Students must feel that they need each other in order to complete the group assignment, and so their motto is "Survive Together or Sink Together"

2. Enhanced Face-to-Face Interaction: Students increase each other's learning through educational exchange, as they explain, discuss, and teach what they know to their classmates.

3. Individual responsibility: The performance of each student is continuously evaluated and the results are given to the group and the individual

4. Social skills: Groups cannot work effectively unless students have the necessary social skills as well as the ability to use them. Collaborative social skills include: leadership, decision-making, confidence-building, communication, and conflict-settlement skills.

5. Tackling the group's work: The group needs to allocate a specific time to discuss its progress in achieving its goals and in maintaining effective working relationships among members

Construction of the main elements of cooperative learning among students.

Steps to build the basic elements of cooperative learning for students, as explained (Johnson, Johnson & Holbeck, 1995: 8-22), can be summarized as follows:

First: positive interdependence:

The system of using cooperative groups begins with building positive interdependence, it is what makes group members work together to accomplish something that surpasses individual success.

There are three steps to build positive interdependence:

1. Assigning a clear and measurable task to the group that, so that they can know what they are supposed to do.

2. Establishing positive interdependence to achieve the goal in that members know they cannot succeed unless all members of their group succeed.

Adding positive interdependence in achieving the goal to other types of positive interdependence which are:

1. Positive interdependence to obtain a reward.

2. Positive Interdependence for role-playing. It can be constructed by assigning a role to every member and taking into consideration that roles be complementary and interrelated

3. Positive interdependence to access resources. This is built when the member has a piece of information or materials required to complete the task.

4. Positive interdependence in self-identification. This dependence is built by establishing a common identity for the group by selecting a name or symbol to represent that group.

Second: Individual Responsibility.

The system of using cooperative groups includes building individual and collective responsibility. Collective responsibility exists when the overall performance of a group is evaluated and results are given to all members to be compared with a specific performance criterion. As for individual responsibility, it exists when the performance of each individual is evaluated separately, and the results are returned to the individual and the group in order to compare them with a performance criterion

Third: Face-to-Face Interaction.

The system for using collaborative groups includes making sure that group members meet face to face to accomplish tasks and highlight each other's success.

There are four steps to encourage face-to-face interaction among group members:

- 1. Students sit closely in one group.
- 2. Scheduling time for the group meeting
- 3. Focus on positive interdependence.
- 4. Checking out the groups and celebration when seeing examples of enhanced interaction between members

Fourth: Social Skills.

If the social skills are not learned, then the required task cannot be accomplished, and if the group members are not competent in using these skills, their performance will be below the criterion. On the other hand, the more social skills the members have, the better the quality and quantity of their learning.

In order to coordinate group efforts to achieve common goals, students must perform the following skills:

- 1. Trust each other
- 2. Correct communication among them
- 3. Accepting and supporting each other
- 4. Solving their differences constructively.

Problem Solving.

Cassidy, & Long (1996) define problem solving as: a cognitive process by which an individual tries to discover effective strategies and methods for dealing with the daily problems he encounters in his daily life. It is defined as a process in which students use their previous information, in addition to a set of acquired skills to overcome unfamiliar situations they face. In this case, the previous and new information is reorganized and employed in developing a plan that leads to a solution (Al Qiyam, 2008)

Academic achievement.

Hamdan (2007) defines academic achievement as an indicator of the status quo of an individual's performance or what he has learned, or what he has already acquired in terms of knowledge and skills in a specific program. Al-Hamid (1996) defines academic achievement as what the student learns in school from information while studying a subject, and what the student perceives from the relationship contained in this information, and the facts deduced that are reflected in the learner's performance in a test set according to community rules that enables the learner's performance to be quantitatively assessed by what It's called achievement scores

The importance of academic achievement.

Societies depend on building their present and future on human potential, and in order to benefit from everything that the individual can provide in terms of study, work and creative thinking, they must provide him with integrated care that include all aspects of his personality: (physically, mentally, emotionally and socially) so that society gets people who are able to achieve success and progress for their society in general, and for themselves in particular.

Therefore, the student in the first stage engage in learning and acquiring skills, and competes with his classmates to be at the best level, and that satisfies his sense of competence and ability on one hand, and achieves his social standing among his peers and the study community on the other hand. He draws attention to himself and to his distinction. He is driven do that, as (Adas et al., 2003) see, by desire to do a good job and succeed in that work. McClelland argue that this stage is characterized by ambition and enjoyment in competitive situations, and an unbridled desire to work independently, and solve problems.

2.2 Previous studies:

This study addressed some Arab and foreign studies related to the subject, with a view to make use of them to build the study tool and to interpret and discuss the results. With reference to the educational literature and previous studies, it was noted that there was no direct relationship with the topic of the current study, due to the scarcity of studies related to its subject.

Al-Sawamleh (2019) conducted a study aimed at revealing the effect of the cooperative learning strategy on developing the skill of reading in Arabic language curriculum for third-grade female students in Jordan, and in order to achieve the goal of the study, a test was designed to measure reading, and the study adopted the quasi-experimental approach. The experimental group (30 students) was conducted according to the cooperative learning strategy, and the control group (30 students) was taught through the traditional method. The results of the T-test analysis showed that there was a difference between the two groups due to the cooperative learning strategy.

In a study conducted by Simmons (2016), How to use of cooperative learning was examined, and how cooperative learning use was seen in primary schools. She was proud of herself and her innovative educational methods, which include integrative language learning and cooperative learning. After interviewing (16) teachers teaching grades from the first grade to the fifth grade of primary school, their classes were monitored and observed while they were using cooperative learning activities, and it was found that only one teacher used the cooperative learning model, to suit their own teaching style and the learning styles of their students. Their testing of cooperative learning activities was affected by the focus on integrative learning, and the results of the study resulted in the presence of an impact of cooperative learning on student interactions and participations where there was a strong relevance to the content and the use of multiple communication skills in order to complete the duties required.

Ghabashneh (2015) conducted a study aimed at investigating the impact of the cooperative learning strategy and reading ability on comprehension. The sample of the study consisted of ninth grade students at Samu 'Secondary School for Boys, distributed randomly into two groups: experimental, (30 students). And a control group (30 students). The researcher used the cooperative learning strategy for the experimental group, and used the traditional method for the control group. The study developed a test to measure readability, and another test to classify the sample according to their reading abilities. He also conducted a pre-test in reading comprehension, in order to verify the coherence of the members of the experimental and control groups, and a post test in reading comprehension. The results of the study showed: There were no differences on the reading comprehension test between the mean scores of the experimental and control groups attributable to the method of teaching.

Comments on previous studies against the attitude of the current study.

Through the previous presentation of the studies, there was no study that combined the use of cooperative learning strategy and problem-solving in the achievement and development of reading and writing skills in Arabic language for the third grade within the limits of the researcher's knowledge.

3.1Study methodology:

In light of the main objective of the study, which is to identify the impact of using cooperative learning in developing the required conversation skills of third-grade students in the schools of Southern Mazar District Directorate of Education .The quasi-experimental approach was used; because it is considered appropriate for the nature of the study and its objectives. Therefore, the researcher, according to this design, chose two groups, one of which was the experimental group, and the other was the control group.

3.2Study population:

The study population consisted of the third-grade students in the schools of Southern Mazar District Directorate of Education, (1723male and female students) distributed over (56) sections and (28) schools, for the first semester of the academic year (2020/2021) according to Statistics of Southern Mazar District Directorate of Education.

3.3The study sample:

Two sections were chosen from the Khawla Bint Al-Azwar co-ed School –a public school in Southern Mazar District Directorate of Education - one of them was experimental and the other control.

The sample was divided into two groups: an experimental group, which was taught using cooperative learning, and a control group taught by the traditional way. The control group was (21) male and female students while the experimental group was (22) male and female students. The sample members were also chosen from Southern Mazar District, which is a society characterized by cultural, economic and social rapprochement, to ensure equivalence and homogeneity among the sample individuals, and the researcher was keen to teach the students of both experimental and control group the same content. The application and explanation of concepts began in the first semester of the academic year (2020-2021)

3.4Study tool:

To answer the study questions, the researcher prepared and constructed a note card for developing the skills of reading and writing in Arabic language for the third grade as follows:

- Determining the goal of the card.
- -Building a note card in its initial form.
- -Verifying the validity of the note card.
- Calculating note card reliability.
- -Building the note card in its final form.

The aim of the note card is the required conversation skills of third-grade students in Southern Mazar District Directorate of Education

Educational material: The educational material consisted of Arabic language lessons scheduled in the first semester for the third basic grade, which is taught in Jordan for the year (2020/2021). Three lessons from "Our Arabic language" were selected, namely (lesson three: friends, lesson five: my homeland Jordan, Lesson VIII: Ibn Battuta)

Writing test: in the Arabic language for the third grade, which was prepared by the researcher.

Reading test: in the Arabic language for the third grade, using the teacher's guide for Arabic language -" Our Arabic language"

3.5Validity of the note card:

The validity of the note card was verified by (12) arbitrators who were asked to judge the comprehensiveness of the items of the note card, their appropriateness, and the formulation method, their distribution according to the fields .Based on the arbitration, no paragraph was deleted. The note card remained in its final form, consisting of (24) paragraphs for the skill of reading and (24) paragraphs for the skill of writing.

of the analytical performance of the reading skill.						
Item number	Correlation coefficient	Item number	Correlation coefficient			
1	**0.94	13	0.76**			
2	**0.87	14	0.79**			
3	**0.75	15	0.91**			
4	**0.85	16	**0.79			
5	**0.80	17	0.73**			
6	**0.69	18	0.80**			
7	**0.72	19	0.76**			
8	**0.76	20	0.80**			
9	**0.83	21	0.79**			
10	0.88**	22	0.85**			
11	0.81**	23	0.91**			
12	0.71**	24	0.90**			

Table: (1) Correlation coefficients between each item of the field and the overall score of the field. A score				
of the analytical performance of the reading skill.				

** Statistical significance at the level of significance ($P \le 0.01$).

 Table: (2) Correlation coefficients between each item of the field and the overall score of the field. A score of the analytical performance of the writing skill.

Item number	Correlation coefficient	Item number	Correlation coefficient
1	**0.81	13	**0.86
2	**0.83	14	**0.81
3	**0.77	15	**0.80
4	**0.83	16	**0.69
5	0.79**	17	**0.72
6	0.85**	18	**0.76
7	0.91**	19	**0.83
8	0.90**	20	0.81**
9	0.88**	21	0.70**
10	0.73**	22	0.76**
11	**0.91	23	0.78**
12	**0.76	24	0.89**

** Statistical significance at the level of significance ($P \le 0.01$).

3.6 Note Card reliability:

The reliability was calculated for the effectiveness of using cooperative learning in teaching the development of reading and writing skills in the Arabic language to the third grade students in Southern Mazar District Directorate of Education on the pilot sample from the study population and outside the sample, where the Cronbach alpha coefficient was used. The researcher used the following (Holsti) equation to calculate the coefficient of reliability.

Reliability factor = 2 X points of agreement between analysts = 2C1C2

First Analyst Points + Second Analyst Points = C1 + C2

The reliability coefficient of the note card for the skill of reading using the (Holste) equation was (0.91) and for the skill of writing (0.88), which is a high value. This reassures the researcher of the reliability of the study tool. **3.7Determining the testing time:**

The test time was calculated by calculating the time it took for the first student to complete the test answer, which is 45 minutes, and calculating the time taken for the last student to finish the test, which is 50 minutes, (then the average time was calculated: the test time (45 + 50/2 = 47.5 minutes).

3.8Study procedures:

1. Note card was constructed to verify validity and reliability.

2. The official approval for applying the test was obtained from the university administration.

3. The control and experimental groups were assigned.

4. The equivalence of the two study groups(control and experimental) was verified by applying the observation card to teach the development of conversation skills in the English language, before teaching the two study groups, and the arithmetic means and standard deviations of the scores of the two groups were calculated, and Table (3) shows that.

Table (3): the arith the difference	,	dard deviations, and control and experim		-	-
Group	Arithmetic mean	Standard deviation	Standard error	(t) value	Level of significance
Control	14.493	5.234	0.70	0.985	0.536
Experimental	15.351	4.214			

Table (3) shows that there were no statistically significant differences at the level of significance ($\alpha \leq 0.05$), and this result indicated the presence of equivalence between the control and experimental groups, on overall tests. Conducting appropriate statistical analyzes to produce the results5...

3.9 Study variables:

The study includes the following variables:

A- Independent variables: Teaching method (cooperative learning, the traditionalmethod) B- The dependent variable: development of conversation skills in English language

Study design

G1	×	02
G2	-	02

G1: the experimental group

G2: Control Group

O2: The post measurement of the note card for the experimental and control groups

X: Teaching using collaborative learning

Teaching in the traditional method- :

Results: Presentation of 14.

The answer to the first question: Are there differences in the third-grade students' achievement in Southern Mazar District in "Our Arabic language" attributable to the teaching method (cooperative learning, problem solving, and the traditional method).

Table (4): The arithmetic mean, standard deviations, and (t) test results for the achievement scores of the thirdgrade students (The experimental and control group) attributed to the teaching method.

Teaching method	Group	Arithmetic mean	Standard deviation	(t) value	Level of significance	Effect size (η²)Eta squared
Traditional method	Control	49.13	13.51	0.617		
nictilou	experimental	52.21	13.55		0.524	0.09
Cooperative learning	Control	53.66	14.61	8.23*		
	experimental	71.78	14.55		0.000	0.47
Problem solving	Control	62.08	14.76	9.76*		
sorving	experimental	76.01	14.50		0.000	0.53

*(Statistically significant at the level of significance ($P \le 0.01$).

Table (4) shows that there was a statistically significant difference between the arithmetic mean of the grades of the third grade students (the experimental and control group) in the achievement of the third grade students ascribed to the teaching method, as it was found that the cooperative learning method has an effect on the achievement of the third grade students (t value = 8.23) and the statistical significance (0.000). The differences were in favor of the experimental group, and the value of the ETA coefficient for the size effect was (0.47). This indicated that (47%) of the variance between the two groups was due to the use of cooperative learning in the educational process. There was a difference in favor of the experimental group, i.e. the experimental group students outperformed the control group students.

It was found that problems solving had an impact on the achievement of the third-grade students and the value was (t = 9.76) and the statistical significance (0.000). It was also clear that the differences were in favor of the students of the experimental group, and the value of the ETA coefficient of the effect size reached (0.53), which means that (53% The difference between the two groups was due to the implementation of problem solving in the educational process. This indicated that there was a difference in favor of the experimental group, that is, the superiority of the experimental group over the control group students

It was found that there was no difference for the traditional method in third-grade achievement, and the (t) value was (0.617) - statistically insignificant - . The value of ETA coefficient of the effect size was (0.0.09)

The answer to the second question: Are there differences in developing the reading skill of third-grade students in the Southern Mazar District, in "Our Arabic language" attributed to the teaching method (cooperative learning and problem solving, and the traditional method).

district Mazar.						
Teaching method	Group	Arithmetic mean	Standard deviation	(t) value	Level of significance	Effect size Eta squared (η²)
Traditional method	Control	8.11	5.36	0.170		
	Experimental	9.27	5.17		0.859	0.06
Cooperative learning	Control	12.88	4.64	*7.22		
iour ming	experimental	20.60	4.48		0.000	0.40
Problem solving	Control	13.63	4.70	*10.31		
~~~ <b>…g</b>	experimental	22.10	3.44		0.000	0.55

## Table (5): The arithmetic mean, standard deviations, and t-test results of the third-grade students 'scores (experimental and control group) in reading skills development for third-grade students in Southern

#### *(Statistically significant at the level of significance ( $P \le 0.01$ ).

Table (5) shows that there was a statistically significant difference between the arithmetic mean of third grade scores (the experimental and control group) in the reading skill development of the third grade in Southern Mazar District ascribed to the teaching method. it was found that the cooperative learning method had an effect on developing the skill of reading For third-grade where (t) value (7.22) and the statistical significance (0.000). It was also evident that the differences were in favor of the experimental group students, and the value of the ETA coefficient for the size effect was (0.40) and this means that (40%) of the variance between the two groups is due to the implementation of cooperative learning in the educational process. This indicated that there was a difference in favor of the experimental group, i.e. the experimental group student's outweighed the control group students.

It was found that solving problems had an impact on developing the reading skill of third-grade students, and the value of (t) was (10.31) and the statistical significance (0.000) was also evident that the differences were in favor of the experimental group, and the value of the ETA coefficient of the effect size reached (0.55). This means that (50%) of the difference between the two groups was due to the use of problem solving in the educational process. This also indicated that there was a difference in favor of the experimental group, i.e. the superiority of the experimental group students over the control group students.

It was evident that there was no difference as to the traditional method of reading skill development for third-grade students. The t value (0.617) was not statistically significant, and the value of the Eta coefficient of the effect size was (0.0.09).

The answer to the third question: Are there differences in the development of writing skills for thirdgrade students in the Southern Mazar District, for" Our Arabic language" attributable to the teaching method (cooperative learning and problem solving, and the traditional method).

# Table (6): Arithmetic meanings, standard deviations, and results of (t) test for third-grade students' scores ( The experimental and control group) in writing skills development for third-grade students in the Southern Mazar District.

Teaching method	Group	Arithmetic mean	Standard deviation	(t) value	Level of significance	Effect size (η²)Eta squared
Traditional method	Control	9.63	4.70	1.108	0.336	
method	Experimental	10.10	3.44		0.550	0.08
Cooperative learning	Control	11.95	4.74	*11.01		
learning	Experimental	21.66	4.47		0.000	0.63
Problem solving	Control	12.44	3.61	16.47*		
sorving	Experimental	20.23	2.49		0.000	0.79

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#### *(Statistically significant at the level of significance ( $P \le 0.01$ ).

Table (6) shows that there was a statistically significant difference between the arithmetic mean of the third grade students' scores (the experimental and control group) in the writing skill development for the third grade students in the Southern Mazar district ascribed to the teaching method where it was found that the method of cooperative learning had an effect on developing the skill of writing For third-grade students, the t value (10.01) and the statistical significance (0.000). It was also evident that the differences were in favor of the experimental group students, and the value of the ETA coefficient for the size effect was (0.63). This means that (63%) of the variance between the two groups was due to the implementation of cooperative learning in the educational process. This indicated that there was a difference in favor of the experimental group, that is, the superiority of the experimental group students over the control group students.

It was found that problem solving had an impact on developing the writing skill of the third-grade students, and the t value was (11.01) and the statistical significance (0.000). It is also evident that the differences were in favor of the students of the experimental group, and the value of the ETA coefficient for the size effect was (0.79). This means that (79%) of the difference between the two groups was due to the use of problem solving in the educational process. This also indicated that there was a difference in favor of the experimental group, that is, the experimental group surpassed the control group students.

It was found that there was no difference with regard to the traditional method in the third-grade students' achievement where the t value was (0.617) and was not statistically significant. The value of the ETA coefficient for the size of the effect was (0.0.09).

#### 4.2 Results:

The results indicated that there were differences in development of the skills of reading and writing necessary for third-grade students ascribed to the teaching method and in favor of the concept maps. The superiority of the experimental group female students who studied problem-solving method over those in the control group who studied through the traditional method can be explained by the effectiveness of this method in teaching the experimental group students the concepts related to the form of vocabulary in Arabic language material. Consequently, this led to the development of the skills of reading and writing, through the steps included in the strategy and its educational activities .In addition , this strategy makes students more ready to receive information pertaining to concepts.

This method has placed students the centre of the learning process, and the problem-solving strategy enable students to study Arabic language in an atmosphere of fun, pleasure, affinity, love and cooperation with each other through the interaction of students within the group with each other. Thus, they have positive attitudes towards Arabic language subject. It becomes their favorite in contrast to the traditional method where students feel bored the routine and rigidity, and this in turn led to the students' interaction with the educational material, which is reflected positively on the development of the skills of reading and writing.

The reason for this may also be attributed to the nature of the test with its appropriate preparation activities, the extent to which its components and various training activities are related to the skills of reading and writing, and the test addressing of reading and writing skills related to the academic unit, which in turn

Aroused the students' interest, and fostered a spirit of competition and question which made them more energetic, and motivated. This may also be attributed to the fact that training students to elaborate skills in reading and writing skills development ,In fact, is training for them to create new thinking patterns, by organizing or reorganizing knowledge .Developing these skills contributes to increase students' awareness of their abilities, which may affords them self-confidence. Which is, in turn, reflected on the stimulation of their skills and mental abilities in scientific observation. Students' motivation has also improve the skills of reading

and writing, leading to their original creative and original performance. Moreover, the reason can be ascribed to the program's inclusion of a set of activities and questions that enrich and challenge the student's reasoning

While applying the test, the researcher noticed a set of behaviors among female students in the experimental group, which may be the reason for their superiority. These behaviors were:

1. The students showed enthusiasm and vigor, as they were granted the freedom to produce alternatives and choose among them

2. The experimental group student's performance was faster and more interactive

.It was obvious- through some students' conversations with the teacher- that they wish all their lessons to be in this way.

This result can be explained by the fact that implementing problem-solving in teaching helped students to connect the previous embedded knowledge with the new knowledge structure they are required to learn. This connection has become meaningful, and this method also helped to arrange their ideas in a hierarchical and manner and to understand what they are doing. Thus, the conceptual aspects of the practical activities that they carried out have been connected to procedural aspects.

The use of problem solving in teaching makes students more active and more positive in the learning process instead of being indoctrinated by the teacher. Problem solving implementation requires students' participation to have access to new knowledge by their own through observation of things and events, making recordings .Students also recall previously learned concepts and relate them with new concepts. This method also helps students' ability to apply what they learn from new information through the value requirements that are among the main parts of the lesson.

The results that indicate the effectiveness of using the cooperative education strategy on creativity compared to the traditional group can also be explained in that using this strategy allows effective student participation and constructive cooperation through which the students' capabilities of one group are merged

To lead to a single outcome that benefits all members of the same group who feel that they are responsible for a collective goal, so they learn more effectively and enthusiastically than their counterparts in the traditional method, who learned in a manner lack of cooperation and meaningful participation. The nature of the cooperative strategy and its procedures is a reason for increasing the achievement as it is imposed on all students They learn and do many skills that don't exist in the traditional method such as listening, reading, watching, generating ideas and discussion.

The reason for this is also attributed to the role played by the cooperative learning strategy in raising the level of participation and cooperation among students, stimulating their enthusiasm and motivation towards participation, and in increasing their capabilities in self-reliance and character development and forming positive attitudes towards each other. The interaction among individuals and their active discussion about the educational task that they undertake, and their reference to the various educational sources affected their understanding of the educational material, which was positively reflected on their achievement in the test.

#### 4.3 Recommendations:

According to the study results, the researcher can recommend the following:

1. Urging Arabic language teachers to prepare educational activities and tasks based on problem- solving strategy because of their many advantages that can contribute to increase students' academic achievement.

2. Utilizing the current test to provide teachers 'guides in various educational stages with lessons prepared in light of the skills of skills of reading and writing development.

3. Applying the same study on other students of different groups of gender, age, class, and academic achievement to see if these strategies render the same results with different groups of students.

4. It is necessary for the Ministry of Education to hold educational courses and workshops in the use of problem-solving strategies and cooperative learning because of their impact on increasing the level of development of reading and writing skills.

5. Encouraging students to acquire profound knowledge through training in concept maps for academic subjects.6. Conducting comparative studies of teaching methods using concept maps against other methods, such as the problem-solving method, the summarization method, and the form method.

7. Use the current test to conduct further studies on other classes.

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