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THE EFFECT OF LECTURE-BASED AND COOPERATIVE LEARNING METHODS OF TEACHING ON FRESHMEN STUDENT TEACHERS' ACHIEVEMENT AT THE HASHEMITE UNIVERSITY IN JORDAN

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ABSTRACT
This study aimed at investigating the effect of using cooperative learning and lecture-based methods of teaching on undergraduate student teachers' achievement at the Hashemite University in Jordan. The study also aimed at exploring if some variables have an impact on students' achievement. The research instrument used in the study was a pre-post-test developed by the researcher for the purpose of the study. Two groups of students were choose from the four groups studying in the course "study skills". The experimental group was taught by using cooperative learning strategies, whereas the control group was taught by using the lecture-based method. The results showed statistically significant differences between the means of students' scores of the two groups on the post-test in English, in favor of the experimental group. The results also revealed no statistically significant differences between the means of the students' scores according to study-year, grade point average, and school-type.

INTRODUCTION

The lecture-based method

The lecture based method of teaching is used by a vast number of university teachers. Despite the researchers and educationists' recommendations to change this method of teaching, these teachers are still using this method in the classroom. The teaching-learning environment is still teacher-centered rather than student-centered. This pedagogic orientation might have a negative impact on students' achievement and performance in general. One of the alternative methods suggested for these researchers and educationists is the cooperative learning method, through which students can work in small groups while learning. The purpose is to give them the chance to exchange ideas, share experiences, and learn from each other.

However, the lecture-based method is regarded as a traditional method of teaching both at the university and school levels. This method refers to the explanation of the topic to the students and to the clarification of the subject matter by using gestures, techniques, and facial expressions. It is economical, and it can be used among large number of students. Nevertheless, this method has four main restrictions: making students passive learners, not giving students the chance to practice what they learn, not taking into consideration individual differences, and not developing students' power of reasoning (Sharma, 2020).

Literature highlighted the advantages and disadvantages of lecture-based method. The advantages are normally associated with covering a large number of topics in a single class period, the logical arrangement of the material in order to present it orally, and the unessential need for the learning material. The disadvantages are related to the lack of recognition to the individual differences between students, students' sole listening to the teacher, and students' forgetfulness (Study Lecture Notes, 2020).

Paris (2020) argues that lecturing is a teaching method that involves an oral presentation given by an instructor to a group of students. Paris identifies three main advantages for this method of teaching. These advantages are related to the full control of the direction of the lesson, to the explanation of information on the part of the teacher, and to students' attention to take notes where they see appropriate. The researcher also identifies two main disadvantages for the lecture-based method. These disadvantages are associated with the little opportunity given to students to provide their own personal experience, with the passive experience they pass through, and with the lack of the public speaking skill of all lecturers.

Despite the advantages highlighted regarding the lecture-based method, proponents of teaching methods try hard to find alternative methods of teaching. The purpose is to make involved in the teaching-learning context. One of the alternative methods of teaching suggested is cooperative learning, which is the target in this respect.

Cooperative learning

The idea of cooperative learning has been around for decades, but it never gets the same manifestation as blended learning. Cooperative learning was defined as a process of dividing students into small groups in order to discover a new concept and help each other. This indicates that cooperative learning was based on group work through which students work with each other, having a different task to perform or concept to explain. The main thing emphasized is students' involvement in the learning process (Zook, 2018). Cooperative learning is also defined as an instructional strategy that enables students to work together on a common task. Students are sometimes individually responsible for their part in the task, and sometimes they are held accountable as a whole group. Lewis (2019) states that Johnson and Johnson during 1990s identified five main merits for successful small-groups learning. These merits are relevant to the positive interdependence through which students feel responsible for their own and the group's efforts, to face-to-face-interaction during which students encourage and support each another, to the individual and group accountability that requires each student to be responsible for his or her learning to the social skills which are taught for the group members to work with each another collaboratively and to the group processing which necessitates the group members to analyze their own and the group's ability to work together.

In every classroom which employs cooperative learning as a teaching method, teachers can structure lessons in a particular way to achieve target goals. The reason is for the students to work independently and cooperatively in small groups ensuring that all members master the assigned material (Johnson & Johnson, 2020).

Cooperative learning has been proven to be effective for all students of different levels, including academically distinct and ordinary students because it reinforces learning and consolidates respect and friendships among diverse groups of students. Students normally work in teams of four. They can break into pairs for some activities, and then get back together in teams very quickly. There are some strategies that can be used with all students. These strategies include the following Round Robin which requires presenting a category for discussion and taking turns to name items that fit the category, Roundtable which calls for presenting a category and having students to take turns writing one word at a time, Writearound which demands students to finish a sentence in teams, Numbered Heads Together which requests students to number off in their teams from one another and to answer a question together, and Team Jigsaw which calls for assigning each student in a team one fourth of a page to read from any text, or one fourth of a topic to investigate or memorize (Clorin Colorado, 2019).

Literature associated with cooperative learning offered four main strategies that have not been tried yet. They are focused listening cooperative learning strategy, one-minute papers, forced debate, and cooperative Graffiti. The first strategy demands giving students a main topic, asking them to create a list of words or

phrases that describe the topic, and then putting them into small groups to discuss their lists. The second strategy calls for gathering feedback from the students by the end of the lesson, or answering two or three questions themselves in groups. The third strategy requires writing a proposition on the board. The students who agree with the proposition move to one side of the classroom and the students who disagree move to the other side. Then, a debate was forced between the two groups. The fourth strategy demands thinking about a topic and writing down as many ideas as possible, using different-colored pens (Cox, 2020).

The literature related to cooperative learning suggested three main activities to be used in the classroom, which are: (1) Think-Pair-Share, (2) Student-Lead-Teaching, and (3) Three-Minute Review. The purpose of the first activity is to ensure maximum discussion within a group and each student is held accountable. The purpose of the second activity is to enable mastery of specific parts of information with a focus on public speaking. Students are required to research sections of information and teach the group. The purpose of the third activity is to allow students to interact with previously taught material. The students are demanded to turn to a neighbor and quickly discuss a question or review information. The teacher at the beginning of a class poses a question to students to discuss briefly. After three minutes, the teacher calls their attention back and get feedback from their discussion (Administrate Limited, 2013).

Jigsaw has also been strongly recommended for successful cooperative leaning to take place in the classroom. This activity has been regarded as an efficient way to learn the material. More importantly, the jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity. Seven main steps have been suggested for the teacher to carry out jigsaw. These steps are: (1) determining the teaching material, (2) determining how many chunks of information regarding the material, (3) dividing the class into groups of four or five, (4) forming the expert groups by picking the simple method of having the students count off one through five until everyone has a number and then group the ones in an expert group, (5) visiting each expert group with a card containing the numbered pieces of the puzzle and explaining to the class that each expert group is to brain storm ideas related to their particular topic, (6) allowing students to brainstorm each other and to share ideas from their notes, and (7) evaluating the students' performance (Manis, 2019).

Aims and questions of the study

The aim of this study is to explore the effectiveness of using lecture-based and cooperative learning methods in student teachers' achievement on topics related to the reading skill. It also aims at exploring whether study-year, grade point average, and school-type have an impact on students' achievement. All in all the study addresses four research questions:

1. Does cooperative learning have an impact on students' achievement compared to the lecture teaching method?
2. Are there any statistically significant differences (α= 0.05) between the mean score of students' achievement according to study-year (second and third year)?
3. Are there any statistically significant differences (α= 0.05) between the mean score of students' achievement according to GPA?
4. Are there any statistically significant differences (α= 0.05) between the mean score of students' achievement according to the type of school they graduated from (private and public)?

REVIEW OF RELATED STUDIES

Many studies related to the effectiveness of using cooperative learning methods in student teachers' academic performance or achievement, attitudes, and participation was conducted Some of these studies tried to examine the impact of cooperative learning on students' achievement, participation, and attitude. Others attempted to compare this impact with that of the lecture method.

Tsay and Brady (2010), for example, conducted a case study which explored the relationship between cooperative learning and academic performance in higher education. The findings showed that involvement in cooperative learning was a strong anticipator of student's academic performance. They also showed that there was a significant positive relationship between the degree to which grades are important to a student and his or her active participation.

Zakaria, Chin, and Daud (2010) examined the effect of cooperative learning on mathematics achievement and attitudes towards mathematics. The study was done in Miri, Sarwak. The results revealed that cooperative learning method improved students' achievement in mathematics and attitude towards mathematics.

Drakeford (2012) investigated the impact of cooperative learning techniques on increasing student participation. The study was conducted on two male secondary schools attending the upward bound per-college program. The results showed that cooperative learning techniques increased students' participation.

Tran (2014) explored the effect of cooperative learning on the achievement of 110 first-year students studying a psychology subject at An Giang University. These students were divided into two groups. The experimental group was instructed by using cooperative learning. The results of the study revealed that the experimental group achievement and retention was higher in the post-test.

Hosseini, Navkhasi, and Shahsavan (2017) investigated the effects of cooperative learning on students' achievement. These Students were classified into two distinct groups; trained and untrained. That is, one of the groups was trained during the first five lessons by using cooperative learning methods. The results of the t-test showed that cooperative learning had a significant impact on students' achievement.

Singh and Yaduvanshi (2018) explored the impact of structured and informal cooperative learning strategies on students' achievement in a Biology subject. Sixty-three male and female students participated in two experiments. A biology achievement test was developed by the researchers consisting of 100 items. The results showed that the two types of cooperative learning strategies enhanced students' achievement. However, they revealed that both structured and informal cooperative learning strategies had no significant effect on students' achievement with regard to gender.

As for the studies which were conducted to compare the effectiveness of cooperative learning with the effectiveness of the lecture-based method, the majority of them showed that the use of cooperative learning strategies benefited students a lot in the classroom. That is, these strategies enhanced students' understanding and improved their academic achievement. Here are some examples of the relevant studies conducted in this regard.

Herrmann (2013) reported the results of a quasi-experimental study which used cooperative learning strategies with undergraduate students. The results indicated that students did not adopt a deeper approach when taking part in cooperative learning classes compared to student presentation classes. They also indicated that the students did not achieve higher on the surface approach scale in the cooperative learning classes compared to student presentation classes. In addition, the results showed that age and GPA did not significantly affect students' achievement scores.

Gull and Shehzad (2015) examined the effect of cooperative learning method on students' achievement in the subject of Education. A quasi-experimental design with a pre-post-test of control and experimental groups was used for this purpose. The results indicated that there was a significant difference in scores of the control and experimental groups. The results also indicated that there was significant difference between scores of experimental group before and after intervention.

Alshammari (2015) explored the effects of cooperative learning on the academic performance of 40 female college students in Saudi Arabia. The study was conducted on two classes: one class was the experimental group, and the other was the control group. The experimental group was instructed by using a jigsaw strategy while the control group was instructed by using the lecture-based method. The results indicated that the students who were taught by the jigsaw strategy understood the content better than those who were taught by lecture.

Estebanez (2017) examined the effects of cooperative learning (CL) against traditional learning (TL) in the academic performance of students in higher education. The study was conducted on two groups of first course of Computer Science Degree at the university. The results revealed that the students who were exposed to CL techniques got higher scores because they acquired a deeper understanding of the material.

Eachempati, Kumar, and Ismail (2017) compared the effect of jigsaw cooperative learning strategy and the lecture-based method on learning a topic related to design. Seventy-two fourth BDS students were involved in the study. They were divided into two groups. The experimental group was taught by using the Jigsaw strategy, while the control group was taught by using the lecture method. The results of the study showed that the post-test and retention scores were better for jigsaw group with statistical difference.

Yemi, Azid, and Ali (2018) investigated the effects of Jigsaw cooperative learning on students' academic achievement of first senior secondary school (SS 1) students in Nigeria. The study was carried out in two groups. One of the groups was randomly assigned to the Jigsaw strategy, and the second group was assigned to the traditional teaching method (Lecture). The results indicated that the teaching of mathematics via the Jigsaw strategy was more effective than the traditional teaching method in increasing students' achievement.

Rajati, Sharifirad, Babakhani, and Mohebi (2018) compared between the effect of team-based learning method (TBL) and lecture-based method on the achievement of 37 public health students. Twenty three students were taught by using TBL, and 14 were taught by using the lecture method. The results showed statistically significant differences between the two groups, in favor of TBL group in the post-test. That is, the mean score of final examination in TBL group was significantly higher than the traditional lecture group.

It is apparent from the literature above that the majority of studies done on the impact of lecture-based and cooperative learning methods of teaching showed that the latter method was more effective. These studies were conducted in various educational settings at both higher education and school levels. A few of these studies were done in Jordan and in the Middle East as a whole, particularly at the university level. The reason lies in the fact that the university instructors focus only on lecturing to cover the required material and the studies done normally insist on exploring the effects of the lecture-based method. Therefore, the present study is an attempt to complement the role of the studies conducted in the international literature. It also tries to show whether the cooperative learning strategy affects students' academic achievement.

METHOD

Study design

A quantitative study design was employed in the present study. The main aim was to explore the effect of cooperative learning and lecture-based teaching on the achievement of university student teachers. To achieve this aim, a quasi-

experimental design including two-group pre- and post-test was used. Due to the heavy emphasis on the lecture-based method in Jordan, the present study is seen an opportunity to examine the extent to which cooperative learning method is effective compared to the lecture-based method. Therefore, this study may help researchers and university teachers gain insight into the method or approach which best suits the students' level of achievement.

Setting and participants of the study

The study was conducted in the Department of Curriculum and Instruction during the first semester in the academic year 2019/2020. Forty-seven freshmen student teachers enrolled in section 1 and section 2 in the course Study Skills participated in the study. The participants, regarded as the experimental group, comprised 21 students in the first section, while the second section comprised 26 students. Twenty five of these students are second-year students and 22 are third-year students. 28 of them graduated from public schools and 19 from private ones. In terms of the participants' grade point average (GPA), they were: 13 of them got 2-2.49/Satisfactory, 12 had 2.5-2.99/Good, 10 with obtained 3-3.49/Very good, and 12 were 3.5-4/Excellent. Both the experimental and control groups were taught by the researcher.

Teaching material

The teaching material employed to examine the impact of cooperative learning and lecture-based methods was chosen from the book adopted by the Department of Curriculum and Instruction, entitled Study Skills. The topics taught by using these two methods were library systems, types of reading, reasons for slow reading, ways of making reading effective, reading strategies, underlining and highlighting, taking notes from a written material, and methods of arranging notes from written material.

Instructional treatment

The first cooperative learning strategy used in the present study is Team Jigsaw. Eight main steps were followed to carry out this strategy: (1) determining the target material, such as types of reading, (2) determining the types of reading included in the book, which are: survey reading, sliding reading, detailed reading, enjoyment reading, and fast reading, (3) dividing the class into groups of five, (4) asking the students in each group to number off themselves or to choose the number they like, (5) grouping the ones in one group, the two in another group, etc. (6) Assigning a type of reading for each expert group, (7) allowing the students in each group to brain storm each other with regard to the assigned type of reading, and (8) asking the students to reassemble in their original jigsaw groups to share ideas from their notes. The second cooperative learning strategy employed is Focused Listening Cooperative Learning Strategy. Three main steps were followed in this strategy: (1) giving the students a main topic, such as underlining and highlighting, (2) asking

the students to read the topic silently and then summarize its main ideas, using key words or phrases, and (3) putting the students in groups of five to discuss their lists. These two strategies were used since they normally offer students the chance to move from one group to another and give them the freedom to exchange ideas.

Instrument of the study

The research instrument used to achieve the aims of the study was a pre-post-test developed by the researcher. This test consisted of two sections. The first section comprised 15 true/false questions, while the second section consisted of 5 multiple choice questions. In order to ensure the validity of the test it was handed to two instructors teaching the course, and they were requested to suggest any necessary modifications or changes. As soon as the researcher received the copies of the test, he modified the original copy according to the instructors' comments. Then, he conducted a pilot study by giving the test to 25 students enrolled in section 3. 2 weeks later, the pilot group received the same test. By using Pearson's formula, the researcher calculated the reliability of the test, finding it to be 0.84 which is statistically suitable to the study.

Data collection and analysis

The researcher distributed, collected and marked the pre- and post-tests. As for the pre-test, he used it to make sure that the experimental and control groups were equivalent. The results revealed that the means of students' scores for the experimental and control groups are almost equivalent in the pre-test. This indicates that the two groups are equal with regard to their knowledge of the reading skill, as shown in the table below:

Table 1. Means, Standard Deviations and T-test results of the experimental and control groups on the pre test

	Group	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Pre-test	**Experimental**	21	10.60	3.500	.542	44	.590
	Control	26	10.12	2.566			

Results are Significant at p.-0.05

With regard to the post-test, the researcher handed it to the students after they were taught 8 lessons on each teaching method. He used particular statistical techniques in the data analysis; they are the means, standard deviations, the t-test, and the analysis of variance (ANOVA). The researcher tried to find out if there were any statistical significant differences between the means of students' scores in the pre- and post-tests.

The achievement test developed for the purpose of the preset study:

Achievement test on the reading skill

Put a (√) next to the correct answer and an (x) next to the wrong answer. (15 marks)

(   )   1. Reading for learning is normally performed by lower education stage students.

(   )   2. Survey reading is suitable for reading stories, exams, and home works.

(   )   3. Quick reading removes boredom and makes the mind work while carrying it out.

(   )   4. One of the reasons for slow reading is that the eye passes a line in a sequential manner.

(   )   5. One of the benefits of fast reading is that it causes you to break dependence back to back while reading.

(   )   6. One of the appropriate steps of highlighting the important points in the material you read is read, think, and decide.

(   )   7. Underlining the important words or completing sentences is recommended because they are sufficient and achieve the desired goal.

(   )   8. One of the best ways to evaluate the process of highlighting important points is to inform the teacher of what has been high lighted.

(   )   9. One of the characters of a good note-taker is that s/he writes everything that the teacher says or writes during class time.

(   )   10. One of the general rules for taking notes from a written article is to put down lines on any book you read.

(   )   11. The linear method for arranging notes taken from a written material requires the use of colors, symbols, and images.

(   )   12. The basic rule in building a learning map is to use the keyword only.

(   )   13. The web map includes a central idea from which many supportive details branch out.

(   )   14. The chains of events method in arranging the notes taken from a written material is used to illustrate the timelines that represent the sequence of events in a location.

(   )   15. The tree method of arranging notes from a written material is used to indicate the causal interactions of a complex accident.

Put a circle round the correct answer (10 marks)

1. Courses are used to arrange notes taken from a written material for indicating:
a. how a series of events interact with one another.
b. causal and hierarchical information.
c. similarities and differences between two things.
d. the stages of something.
2. The ideal learning map uses the following things:
a. the main idea, supporting details, and key words.
b. headlines, subtitles, and bold fonts.
c. the main category, subcategories, and the levels for each category.
d. bold colors, symbols, images, and fonts.
3. The classification system used in the library aims to facilitate access to:

a. books of similar nature.

b. author's cards.

c. address cards.

d. subject cards.

4. The structure of the book includes:

a. headline index, chapter list, and list of names.

b. book's title, author's name, and publication date.

c. table of contents, introduction, and chapter summaries.

d. all of the above alternatives.

5. detailed reading is used when you:

a. do not want to know everything.

b. want to remember everything.

c. want to know and remember everything.

d. want to read a subject in depth.

RESULTS

Results Related to the First Research Question

In order to answer the first research question "Does cooperative learning have an impact on students' achievement compared to the lecture teaching method?", the means of students' scores, standard deviations, and the 2-tailed significance were used as shown in the table below.

Table 2. Means, Standard Deviations and T-test results of the experimental and control groups on the post-test

Test	Group	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Post-test	**Experimental**	21	17.30	3.854	3.516	44	.001
	Control	26	14.00	2.498			

*Mean out of 25.

Results are significant at p.-0.05

Table 2 shows statistical significant differences at (α= 0.05) between the means of students' scores in the two groups on the post-test, in favor of the experimental group. This indicates that the students instructed by using cooperative learning strategies obtained higher scores than those instructed through the lecture-based method.

Results related to the second research question

In order to answer the second research question "Are there any statistically significant differences (α= 0.05) between the means of students' achievement according to study-year (second and third year)?", the means, standard deviations, and the 2-tailed significance as presented in the table below.

Table 3. Means, Standard Deviations, and T-test results of second- and third-year students

Test	Year	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Post-test	Second	24	16.25	2.967	1.667	44	.103
	Third	22	14.55	3.937			

Mean out of 25.

Table 3 shows no statistically significant differences at ($\alpha= 0.05$) between the means of second- and third-year students' scores. This indicates that students' achievement in the post-test is relatively the same regardless of study-year or level.

Results related to the third research question

For answering the third research question "Are there any statistically significant differences ($\alpha= 0.05$) between the means of students' achievement according to grade point average (GPA)?", the means and standard deviations of students' scores according to GPA were calculated as shown in the table below.

Table 4. Means and Standard deviations of descriptive statistics related to students' scores according GPA mean out of 25.

Grade point average groups	N	mean	Std. Deviation
2-2.49	13	14.43	4.014
2.5-2.99	12	15.23	3.219
3-3.49	10	15.11	3.689
3.5-4	12	17.40	2.675
Total	47	15.43	3.532

Table 4 reveals somewhat variance in the means and standard deviations of students' scores in the post-test according to GPA. In order to find out if there are significant differences between students' scores in this test, one-way ANOVA was used as illustrated in the table below.

Table 5. The mean square, F value and the Sig. value of students' scores according to GPA

	Sum of Squares	df	Mean Square	F	Sig.

Between Groups	54.279	3	18.093	1.499	.229
Within Groups	507.025	42	12.072		
Total	561.304	45			

Table 5 shows no statistically significant differences at (α= 0.05) between the means of four GPA students' scores on the pre-test. This indicates that there is no difference in students' achievement in the reading skill whether the academic average is high or low.

Results related to the fourth research question

In order to answer the fourth research question "Are there any statistically significant differences (α= 0.05) between the means of students' achievement according to the type of school they graduated from (private and public)?", the means, standard deviations, and the 2-tailed significance were used as presented in the table below.

Table 6. Means, Standard Deviations, and T-test results of students' scores according to type of school

Test	Type of school	N	Mean	Std. Deviation	t	df	Sig.(2-tailed)
Post-test	Public	28	15.14	3.679	-.695	44	.491
	private	18	15.89	3.341			

Table 6 shows no statistically significant differences at (α= 0.05) between the means of students' scores in the post-test according to the type of school they graduated from. This suggests that students' achievement in the reading skill has not been influenced by whether the student graduated from a public or private school.

DISCUSSION
The present study aimed at exploring the impact of cooperative learning on student teachers' achievement compared to the impact of the lecture-based method. In order to achieve this aim, the study attempted to answer four research questions through the results presented above. This section, however, discusses the results of each question.

Regarding the first research question about whether cooperative learning has an effect on student teachers' achievement compared to the impact of lecture-based method, the results showed significant differences in favor of cooperative learning. This indicates that the students who were taught by using Team Jigsaw, Focused Listening Cooperative Learning Strategy, and Student-Lead-Teaching got higher scores in the post-test than did students who were taught by using the lecture-based method. The research highlights the importance of face-to-face interaction,

individual and group accountability, collaboration, and independence in enhancing students' learning in general and in improving their achievement in particular (Rajati, et al., Lewis, 2019, & Johnson & Johnson, 2020). In addition, cooperative learning strategies, such as Team Jigsaws (Colorin Colorado, 2019), Focused Listening Cooperative Learning Strategy (Cox, 2020), and Student-Lead Teaching (Administrate Limited, 2013) have been proven to be effective for all types of students because they reinforce learning. This result agrees with what Zakaria, Chin and Daud (2010); Tran (2014); Gull and Shehzad (2015); Hosseini, Navkhasi and Shahsavan (2017); Estebanez (2017); Yemi, Azid, and Ali (2018); and Singh and Yaduvanishi (2018) obtained in their studies. They found that the students who were taught by using the cooperative learning method got higher achievement scores than did the students who were taught by using the lecture-based method.

Concerning the second research question related to whether there are any significant differences between the means of students' achievement according to study-year, the results revealed no significant differences between the means of second- and third-year students' posttest scores. This indicates that study-year did not have an impact on students' achievement, regardless the method used was cooperative or lecture-based. It was anticipated from third-year students to achieve better results than the second-year students. The reason lies in the fact that they were exposed to more methods of teaching, such discussion groups and project work, which might have enriched their experience in the teaching-learning context at the university and had a positive effect on their achievement in general.
With respect to the third research question about any significant differences in the means of students' achievement according to GPA, the results showed no significant differences between the means of students' post-test scores, whether their GPA is satisfactory, good, very good, or excellent. This result can be attributed to the fact that this subject is taught in Arabic and reading is familiar to all students. However, the result agrees with what Herrmann (2013) found that grade point average did not significantly predict change scores on students' deep approach.

As for the fourth research questions which is related to the presence of any significant differences in the means of students achievement according to the type of school they graduated from, the results revealed no significant differences between the means of public- and private-sector students' scores. This indicates that school type (public and private) had no significant effect on students' achievement. It was expected that the students graduated from private schools achieve significantly higher mean scores since they were exposed to more advanced and up-to-date courses in all subjects and to more eclectic methods of teaching. Despite this exposition, students who graduated from private schools did not achieve better than those who graduated from public ones.

CONCLUSION
The results of this study were limited to the setting and tested participants. However, conducting research studies on this instructional issue, particularly on cooperative learning and its effects at the university level, is of paramount

importance nowadays. The reason lies in the fact that the majority of studies conducted on this area comparing it with the lecture-based method was carried out at the university level. This indicates that a few studies were conducted on freshmen students. Therefore, the researcher has found it necessary to explore how much students' active participation through cooperative learning affects their achievement, compared with the effect of traditional or current method in this regard.

Consequently, researchers are highly requested to conduct other studies, both in developed and developing countries, related to the impact of cooperative learning and lecture-based methods on students' performance and academic achievement. This might help university teachers vary their methods in the teaching-learning context. This might also help universities develop in-service training courses for teachers to gain insight into contemporary methods of teaching.

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