

# THE EFFECT OF USING KEEGAN STRUCTURES OF COOPERATIVE LEARNING ON TENTH GRADE STUDENTS' ACHIEVEMENT IN ISLAMIC EDUCATION IN UAE

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#### **ABSTRACT**

The study aimed to investigate the effect of using Keegan Structures of cooperative learning on the achievement of tenth grade students in Islamic education. The sample consisted of (60) students of the tenth grade from Emirates National Schools in UAE where they were distributed into two groups: An experimental group which studied the Divine Revelation Unit using the Keegan Structures strategy and a control group which studied the same unit using the routine method of education. To achieve the study objectives, an educational material according to Keegan Structures strategy was conducted, and an achievement test in Islamic education (pre-post) was used. The results showed a significant difference in the students' performance on the achievement posttest in Islamic education due to the method of teaching, in favor of the experimental group that studied using Keegan's strategy. The results also indicated no significant differences in achievement due to the gender variable. According to these findings, the researcher recommended the necessity of activating Keegan Structures strategy in cooperative learning in teaching Islamic education, and training teachers to use it optimally.

**Keywords:** Keegan's Structures, Cooperative Learning, Achievement, Islamic education, UAE.

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#### INTRODUCTION

Islamic education has great importance in imparting religious values to students and developing them in their souls, because it is one of the most fertile educational fields through which, if employed in an effective and practical way, positive education is instilled with its rich knowledge of valid information to achieve that desired goal is more powerful than any other factor, where Islamic education aims to develop the individual's ability to reflect and think by looking at and contemplating the universe, reflect and introspection of the soul, and Islamic education is concerned with both religion and world. Islamic education textbooks have taken a central place in educational curricula, as they are one of the main means of raising generations in a righteous manner, helping them to develop their Islamic culture and social values, and regulating their behavior in accordance with the principles and instructions of Islam.

There is no doubt that Islamic education has a great impact on students' lives, as it accompanies them throughout their life journey, and regulates their relationships with their Creator, with themselves, and with their community with whom they share the architecture of this universe. It is not considered a rigid subject that ends with the dismissal of a semester, but rather it's a subject that the learner lives through his worship and dealings and in all areas of life that regulate his rights and duties (Al-Khaldi, 2015).

Achieving servitude to God Almighty is the highest goal of Islamic education, The Almighty said: {I have not created mankind and jinn except to worship Me} [Ath-Thariyat, 56]. In order to achieve this goal, the love of following Sunnah of the Messenger of God "Muhammad"- Peace be upon him- must be instilled in the hearts of learners, building it on the correct belief, cultivating virtuous morals, finding individuals with principles and values who are psychologically and emotionally balanced, and consolidating the values of belonging to their homeland and nation, so that they will be ambassadors to their countries around the world.

Hence the importance of improving the methods of teaching Islamic education that contribute to instilling religious values and instructions and developing a culture of learning to build a strong nation, and not be limited to traditional methods, where studies have shown that the lack of diversification of learning strategies leads to a significant weakness in the student's academic attachment. Obeidat (2012) indicated that traditional education has many drawbacks, most of its attention is focused on the method of indoctrination, which focuses on the skills of understanding and memorization, as if other aspects were of no value, so it buried a lot of talents and creativity, so the distinguished degree became for those who have a distinct memory and are good at memorizing concepts and information, at the expense of creativity and innovation, and the rest of the skills, which in turn led to linking the lack of success or poor academic achievement to not memorizing the student and in the end feeling unfair because in this method the focus was on one aspect of learning and neglected the rest of the aspects and goals.

For all this, educators have worked in their research to study various strategies, methods of teaching to reach the best educational practices that achieve the desired outcomes of the educational process, that seeks to meet the requirements of the personality of students in all its intellectual, psychological, social and physical aspects. The student is a social being in a cooperative nature in his life; so this interest led to the famous saying that: A successful teacher is nothing but a successful method", so educators prepared and trained the teacher to use different teaching strategies and methods to achieving the goals in the easiest and most successful way (Othman & Jasem, 2013).

Hence, cooperative learning emerged as the most important types of contemporary teaching strategies in the global educational system, which seek to improve and revitalize students' ideas by working together in the form of groups, teaching each other, and communicating with each other, so that each individual feels his responsibility towards his group, thus gaining high confidence in the importance of the role he plays, so his motivation towards learning increases, which leads to his feeling of reassurance, lack of tension or anxiety, and a sense of the results he achieved with his group (Sa'adat, 2015).

One of the most prominent cooperative learning strategies is Keegan Structures strategy, which consists of a group of structures that are practiced successively during the teaching process and cooperatively, namely:



Searching for the other half, searching for the right person, identifying the error, hidden order, question cube, a pen for two, pointer the review, the traveling ambassador, the feedback locomotive, a sketch of what I'm saying, and finally four simultaneous pens.

Our religion has called for cooperation and urged it, as God Almighty says: {And cooperate in righteousness and warding off (evil)} [Al Ma'ida], This is to harness the value of cooperation to serve all humanity. Since the subject of Islamic education is one of the most important subjects and curricula that concern the student's life and regulate his relationship with himself, his Creator and the universe, it is necessary to develop teaching strategies for this great subject, and not be limited to traditional education, but rather must keep pace with the twenty-first century skills, like other subjects in this aspect, and for all that, the current study carried out by the researcher in order to determine the effect of using Keegan Structures of cooperative learning in the tenth grade students' achievement in Islamic education.

#### **PROBLEM STATEMENT**

The modern educational view tends to pay attention to the role of the active and participating learner and his peers in group work, where the poor choice of teaching strategy is considered one of the reasons leading to poor academic achievement among students studying Islamic education. Traditional methods lead to transforming the student into a machine for memorizing facts and information without deepening them, which leads negatively in the educational process, as Al-Sheikh (2007) confirmed that traditional teaching methods, which depend only on memorization and indoctrination lead to students' alienation from the educational process and hatred towards the subjects, and this is accompanied by a decrease in the level of their academic achievement. In addition, the study of Al-Afandi (2013) showed that (74% - 79.5%) of the problems in the classroom are due to the difficulty of applying modern teaching methods.

Several studies (Khayati, 2016; Alam Al-Din, 2010; Al-Ayaf, 2005) indicated a significant weakness in teachers' knowledge of modern teaching methods, which has led to teachers' reluctance to use modern strategies, in addition to the weakness of their continuous cognitive growth system, which led to the existence of a gap between the theoretical side that they learned and the practical side required in their teaching performance, as well as the low qualification of teachers before their service and during it in their planning, implementation and evaluation of modern teaching methods and strategies. Also, teaching Islamic education is exposed these days to great challenges and many difficulties that hinder the delivery of its lofty message as intended by those who are jealous of the sons of this nation, which ensures the building of the character of the Muslim student, due to the general climate in which the nation lives, so we now need to focus on consolidating the correct faith our students have more than ever because of the severity of internal and external challenges that are fiercer. Therefore, it is necessary to reveal those challenges and difficulties that prevent the teaching of Islamic education, which impede the delivery of concepts, instilling clear and correct values and belief, and clarifying the obstacles and solutions related to all educational elements, most notably the teacher, student, curriculum, assessment methods, teaching strategies, methods and other elements.

Through the researcher's personal experience and his work as a teacher in education for more than twenty years, he found a great weakness in the use of cooperative learning strategies, which negatively affects the achievement and interaction of students, or their orientation towards Islamic education, especially in the foreign curricula schools. The presence of difficulties in the application of cooperative learning leads to poor academic achievement, and this in turn affects the lives and personalities of students, as well as leads to a weakness in students' attitudes towards the curriculum subject.

The problem of the current study lies in the poor attitude of students towards the Islamic education subject and their aversion from it. As it has become a burden on students, marginalizing them greatly compared to other



subjects, has resulted in poor academic achievement for them and great suffering among Islamic education teachers in their teaching this subject, as indicated by (Al-Sulaimani, 2014) that students do not pay attention to the subject of Islamic education, and they see it secondary, and not at the level of scientific subjects that are considered the pioneers of other subjects, and he expressed his surprise and frustration at the same time from the suffering of students in the Islamic education subject and their aversion to it, as if it were alien to them, which leads the researcher to wonder where the defect lies?

Based on it, the current study aims to reveal the effect of using Keegan's Structures of cooperative learning on the tenth grade students achievement, and their attitudes towards Islamic education in UAE. Specifically, the study attempted to answer the following two questions:

- 1. What is the effect of teaching using Keegan Structures of cooperative learning on tenth graders achievement in Islamic education in UAE?
- 2. Are there significant differences ( $\alpha$  = 0.05) in tenth graders achievement in Islamic education in UAE due to gender variable?

#### **HYPOTHESES**

The following hypotheses emerged from the study questions:

- 1. There are no significant differences ( $\alpha$  = 0.05) in tenth grade students achievement in Islamic education in UAE due to the teaching method (Keegan Structures, usual method).
- 2. There are no significant differences ( $\alpha$  = 0.05) in f tenth grade students achievement in Islamic education in UAE due to (gender) variables.

# **OBJECTIVES**

The current study aimed to reveal the effect of teaching using Keegan Structures of cooperative learning on tenth grade students' achievement in Islamic education in UAE in the light of some variables.

# SIGNIFICANCE OF STUDY

The importance of the study lies in the importance of the subject it addressed, as teaching Islamic education today faces many difficulties and obstacles that prevent the achievement of the desired results. Hence, aspects of the importance of the study can be identified as follows:

# A) Theoretical importance:

- Benefit from the results of the current research to plan and develop the future of cooperative learning.
- Reinforce previous knowledge about the effectiveness of cooperative learning.
- Contribute to the researchers' recommendation to carry out similar studies for other educational stages.
- This study is one of the rare studies- according to the researcher's knowledge- that examined the subject of Keegan Structures of cooperative learning and its impact on achievement in Islamic education.
- Enriching Arab libraries in the field of cooperative learning, especially Keegan Structures.

# B) Practical importance:



- Introducing teachers to modern and new teaching strategies and methods, which many educators were keen to call for the importance and necessity of their application.
- This study helps teachers to identify the relationship between cooperative learning and academic achievement, which raises teachers' interest in using codified and disciplined strategies.
- The results of the study may benefit decision-makers interested in the field of education in order to work on developing cooperative learning strategies in particular and the educational system in general.
- It seeks to draw the attention of decision-makers in the educational system to the importance of the nature of the strategies used in the educational process, and their impact on students' attitudes towards their subject.

#### **OPERATIONAL DEFINITIONS**

• Cooperative learning: A method of classroom organization, in which students are divided into small groups that have a clear common goal, which is to accomplish the required tasks and the group is not homogeneous in its members (Al-Qadas, 2015)

It is defined procedurally in this study as a method in which students are divided into small groups that work together according to specific controls and steps in order to achieve the desired goal.

• **Keegan Structures**: the set of actions carried out by the teacher based on cooperative learning, which aims to develop skills of deep understanding and achievement (Hathout, 2018).

It is defined procedurally in this study as a set of simple methods developed by Spencer Keegan in order to enable teachers to manage students' interaction within the classroom in a highly collaborative spirit, enhance self-confidence, and create a harmonious classroom environment.

• Academic achievement: the path that shows us the extent to which the goals are achieved by reaching clear numerical indications (Qatami & Qatami, 2001).

It is procedurally defined in this study as a special educational outcome of tenth grade students from their acquisition of concepts, generalizations and skills in Islamic education. It is measured by the total score obtained by the students on the achievement test in Islamic education, which was prepared by the researcher for the purposes of this study.

# LIMITATIONS OF STUDY

The results of this study are specified as follows:

- Time limitations: This study was applied in the third semester of 2019/2020 academic year.
- **Spatial limitations**: This study was applied in the Emirates National Schools with the American curriculum affiliated to the Department of Education and Knowledge in Al-Ain in UAE.
- Human limitations: The current study was limited to tenth grade students.

**Objective limitations**: The subject of the study was limited to the application of the Keegan Structures strategy of cooperative learning in teaching the unity of Divine Revelation from the Islamic education textbook for the tenth grade, and the generalization of study results were limited with the study tools and their validity and stability, and the application procedures.



#### **METHODOLOGY**

### **Study Approach**

The study used the quasi-experimental approach, with the aim of revealing the effect of using Keegan Structures on the achievement of tenth grade students in Islamic education; This is due to its relevance to the nature and objectives of this study.

# **Participants**

The study population consisted of all tenth grade students in private schools in Al-Ain, which consists of 1296 students, within the third semester of 2019/2020 academic year, according to the statistics of the Department of Education and Knowledge (2020). The Emirates National Schools with the American curriculum were chosen due to the availability of several study divisions for the tenth grade in this school, and the availability of educational and technical tools and means that suit the objectives of the study and its implementation procedures, in addition to the cooperation and welcome of the school administration. The study sample consisted of (60) students who were distributed randomly into two equal groups, an experimental group (15 male, 15 female) taught by the Keegan Structures strategy of cooperative learning, and a control one (15 male, 15 female) that was taught in the usual method. Table (1) shows the distribution of the sample according to the study variables.

Table (1): Distribution of the sample according to gender variable

variable	Variable Level	No.	Percent
	Male	30	50,0%
Gender	Female	30	50,0%
	Sum.	60	100.0%

#### Instruments

After reviewing the educational and research literature related to the subject of the study, two instruments were used as follows:

# A. Islamic Education Test

The researcher prepared a test to measure achievement in Islamic education before and after the experimental treatment. In its final form, the test may consist of (30) multiple-choice items, each of which has four alternatives, only one of which is correct. The following steps were followed in preparing this test:

- 1. Determining the educational material: The Divine Revelation Unit in Islamic Education (Part Three) has been selected for the tenth grade, which is to be taught by the Ministry of Education for the 2019/2020 academic year.
- 2. Determining the special outcomes that cover the content in light of the cognitive levels, namely: The stage of concept discovery, the stage of verbal significance, the stage of application, and problem solving.
- 3. Preparing a specifications table that included the content of the study unit, its percentages, test items, levels of objectives and their percentages for each item, and the percentage for each level.
- 4. Formulating the test items in its initial form (30) of a multiple choice type with four alternatives, taking into account the clarity of the phrases, the level of the students, and the absence of more than one possibility to answer.

# **Test validity**

To verify the content validity of the test, it was presented to a group of arbitrators from the faculty members of the curriculum and methods of teaching Islamic education, and the educational supervisors in Islamic education, where they were asked to express their opinion on the extent of the comprehensiveness of the test items, their suitability for the test objectives, their linguistic formulation and scientific accuracy. In light of the arbitrators' observations, some items were modified. The construction validity of the test was verified by applying it to an exploratory sample of (20) students from the same school and outside the study sample. The duration of the test lasted half an hour. It was then re-applied to the same sample two weeks later, with the same conditions as in which it was applied the first time. One mark was recorded for each correct answer, and zero for each wrong answer, then the difficulty and discrimination coefficients were calculated for each of the test items, as shown in Table (2).

Item Diff. Coeff.	Disc.	Item	Diff.	Disc.	Item	Diff.	Disc.	
	Coeff.	Coeff.	пеш	Coeff.	Coeff.	iteiii	Coeff.	Coeff.
1	0.52	0.34	11	0.62	0.56	21	0.54	0.60
2	0.47	0.60	12	0.70	0.60	22	0.66	0.54
3	0.37	0.45	13	0.63	0.48	23	0.70	0.60
4	0.69	0.52	14	0.64	0.32	24	0.44	0.38
5	0.54	0.51	15	0.68	0.41	25	0.71	0.63
6	0.47	0.55	16	0.72	0.58	26	0.39	0.47
7	0.43	0.41	17	0.38	0.51	27	0.45	0.51
8	0.58	0.36	18	0.58	0.50	28	0.57	0.48
9	0.40	0.42	19	0.50	0.62	29	0.48	0.52
10	0.68	0.63	20	0.58	0.57	30	0.55	0.49

Table (2): Difficulty and discrimination coefficients for test items

Table (2) shows that the difficulty coefficients for the test items ranged between (0.37-0.72), and the discrimination coefficients ranged between (0.32-0.63). Accordingly, all indicators of difficulty and discrimination of the test items are considered acceptable for the purposes of the study, as indicated by Odeh (2010).

# **Test reliability**

In order to extract the reliability coefficient of the test, an equation (Kouder- Richardson -KR20) was applied to the results of the first application of the test, where the reliability coefficient of the test was (0.87), which is a high value that statistically indicates the stability of the test.

# **Educational Material**

The educational material (educational content) was built according to the strategies of Keegan Structures of cooperative learning according to the following steps:

- Determining the scientific subject (content): The content of the scientific subject included the unity of "Divine Revelation" from the Islamic education textbook for the tenth grade (Part Three).
- Preparation of the educational material: The educational material was prepared according to the following procedural steps:
- 1. The topics covered in the unit were divided into sub-topics, where the educational content was formulated based on the Keegan Structures strategy.
- 2. Study plans have been prepared for each subject of the scientific subject, so that each plan includes a set of educational activities.
- 3. Study plans were presented to a group of educational arbitrators, and modifications were made in light of their suggestions and opinions.
- 4. In order to maintain accuracy and objectivity in the research results, the researcher supervised the teaching of the experimental and control groups; This is to ensure that students are not affected by any influence that may result in a change in the results of the dependent variable.

# **Procedures**

After reviewing the literature and previous studies related to the subject of the study, the study instruments were prepared and their validity and reliability were verified, then the study population was determined from tenth grade students, and the Emirates National School at Al-Ain was chosen to be the subject of the study, where two divisions were chosen to be an experimental and control groups. The researcher obtained two letters to facilitate a task from the university and the Department of Education and Knowledge; Then he applied the study instruments on the sample. Finally, the data was entered into the computer memory, and the appropriate statistical analysis was conducted using the (SPSS) program, and the results were extracted, interpreted and discussed.

# Study variables

- Independent Variables
- **Teaching method,** which has two categories: (usual method, the cooperative learning method using Keegan structures)
- Gender, which has two categories: (male, female)



#### Dependent variable:

Academic achievement in Islamic education.

# study design

The study used the following quasi-experimental design:

EG:  $O_1$   $\times$   $O_2$  CG:  $O_1$  -  $O_2$ 

As: EG: Experimental Group, CG: Control Group,  $\times$ : Teaching using Keegan Structures, O<sub>1</sub>: Pre-test in Islamic education, O<sub>2</sub>: post-test in Islamic education.

# Statistical analyses

To answer the study's questions and test its hypotheses, means and standard deviations were extracted, and an accompanying analysis of (t-test) was performed.

# **RESULTS AND DISCUSSION**

The results related to the first hypothesis: There are no significant differences ( $\alpha$  = 0.05) in tenth grade students achievement in Islamic education in UAE due to the teaching method (Keegan Structures, usual method).

To test this hypothesis, means and standard deviations of the participants performance of the two groups on the post-test in the Islamic education were calculated, as shown in table (3).

Table (3): Means and standard deviations of the participants performance on the post-test in the Islamic education according to the method teaching

		High	Post-Test	Post-Test		
Group	No.	Score	Mean	St. Dev.		
Control	30	20	21,70	2,215		
Experimental	30	30	27,50	2,543		

Table (3) showed an apparent differences between the mean of the tenth grade students in the experimental and control groups on the post-test in the Islamic education, where the mean of the control group students was (21.70), and its standard deviation was (2.215), while mean of the experimental group students was (27.50), and its standard deviation was (2.543), which indicates that there is an apparent difference between the two means of (5.80) degrees. To determine whether the difference between the means of the two study groups is significant ( $\alpha = 0.05$ ), t-test for two independent samples was used, as shown in table (4).

Table (4): T-Test results for the participants performance on the post-test in the Islamic education according to the method teaching

Group	Mean	St. Dev.	Variance	T-Value	Sig.
Control	21.70	2.215	4.906	*9.416	0.000
Experimental	27.50	2.543	6.467	9.410	0.000

Table (4) indicates that the value of (T) for the teaching method reached (9.416), significance level (0.000), which indicates the existence of a significant difference between the mean performance of the two study groups according to the different teaching method (Keegan Structures, usual method) on the post-test in Islamic education among tenth grade students. With this result, the null hypothesis is rejected, which states: "There are no significant differences ( $\alpha$  = 0.05) in tenth grade students achievement in Islamic education in UAE due to the teaching method (Keegan Structures, usual method)".

This result may be attributed to the fact that the use of Keegan Structures in teaching Islamic education for the tenth grade helped students to build a meaning for what they learn within their knowledge structure through social negotiation between the members of the cooperative group, as the new knowledge is linked to their previous experiences in a manner consistent with correct meaning.



Also, teaching according to Keegan Structures helped students to build their knowledge through their bilateral and group discussions, as the teacher is facilitating, enhancing and stimulating students' motivation to think and generate information, and the use of cooperative education according to Keegan Structures led to equal opportunities for participation among group members in the discussion and exchange of information and exit from the familiar educational routine so that students can retain the scientific material and understand, organize and interrelate cognitive experiences and retain them and keep the impact of their learning, which enabled them to retrieve it and not forget it. Keegan Structures also facilitated the student of the experimental group obtaining information, and his ability to think fluently and flexibly through various educational activities with a variety of structures during one lesson.

The result may also be attributed to the fact that teaching according to Keegan Structures strategy makes the student a researcher, thinker and critic of the opinions presented in the lesson, and increases the level of classroom interaction, which develops the inclusion of more modern and original ideas, in addition to developing language skills, and improving students' ability to expression, all of which works to create an orderly interaction in thinking.

Moreover, the usual method creates an atmosphere of monotony and boredom in the lessons of Islamic education, in addition to making the teacher the focus of the educational process, as he is the active element, and the student is just a recipient of information. Thus, this negatively affected the achievement of the students of the control group.

The researcher believes that the reason for the superiority of the experimental group over the control group is due to the fact that Keegan Structures in cooperative education are more effective than the traditional method of teaching Islamic education, and that the use of Keegan Structures in cooperative education, and the concern for quality performance and sound understanding during the transition from one structure to another and representation the meanings and the elicitation of lofty judgments, is positively reflected on the students' understanding of these topics.

The researcher may attribute that the Keegan Structures strategy requires mental effort; It emphasizes the active role of students in learning, as students carry out many activities and intellectual processes. It also emphasizes intellectual participation in the activity so that meaningful learning occurs based on understanding, which increases the student's ability to achieve academic achievement at its various levels. Keegan Structures strategy is concerned with both the content to be learned and the student's knowledge structures, so it is concerned with how to select and organize content experiences, so that it is easy to represent the material to be learned in the student's cognitive structures and to create new knowledge structures and thus cognitive growth occurs. In addition to the student's positivity, the Islamic education teacher has a key role in teaching in the Keegan Structures strategy so the interaction between the student and the subject matter would create an educational atmosphere that helps in understanding the Islamic education subject.

Perhaps one of the most prominent reasons that made the students of the experimental group who studied according to Keegan Structures in cooperative education outperformed the students of the control group who studied according to the usual method in the post-test of Islamic education, is that Keegan Structures in cooperative education made the students the focus of the educational process, and gave them freedom to expressing their opinions, without fear or hesitation, this was reflected in their thinking positively, and the use of Keegan helped in providing students with capable knowledge and active participation in the classroom, and creating positive attitudes towards follow-up of the lesson and respect for opinion, as that interaction and participation reduce the element of shyness and fear, which encouraged them to participate in the topics of the lessons of the unit of jurisprudence and its analysis, and that the use of Keegan Structures in the teaching of Islamic education enhanced the participation of students in generating and discussing ideas, which opened the way for them to deep understanding and retention of information, which reduces the process of forgetting. Thus, it increases student achievement.

The result of this research is in agreement with the results of a number of previous studies that showed superior achievement among students who learned by the cooperative learning method, such as the Areeq study (2009),



which resulted significant differences in the achievement test between the four pens strategy and the control one in favor of the four pens synchronized strategy. In addition, the study of Jalal (2009) which indicated the effectiveness of the Keegan Structures in raising the achievement level of the experimental group students compared to the control group students who were not exposed to the experiences of the program.

It also agreed with the result of Al-Awadi study (2019) which showed a significant difference between the means of the creative thinking test for students in favor of the experimental group. A study by Abdul Muttalib (2018) which showed a significant difference between the first experimental group (with monocular thinking) and the control group in creative thinking and academic achievement in the dimensional measurement in the direction of the first experimental group.

The results related to the second hypothesis: "There are no significant differences ( $\alpha$  = 0.05) in tenth grade students achievement in Islamic education in UAE due to gender variable".

To test this hypothesis, means and standard deviations of the performance of the participants of the two study groups on the post-test of Islamic education were calculated according to gender variable, and table (5) illustrates this.

Table (5): Means and standard deviations of the participants achievement education according gender variable

Variable	Variable Level	No.	Mean*	St. Dev.
Gender	Male	30	26.44	2.812
	Female	30	28.56	2.274

<sup>\*</sup> High score= 30

It is noted from table (5) that there are apparent differences between the means of students' achievement in Islamic education resulting from the different levels of the two variables; In order to verify the significance of the apparent differences, t-test for two independent samples was used, as shown in table (6).

Table (6): T-Test results for students' achievement according to gender variable

Gender	Mean	St. Dev.	Variance	T-Value	Sig.
Male	26.44	2.812	7.907	1.912	0.251
Female	28.56	2.274	5.171	1.912	0.251

Table (6) shows no significant differences at ( $\alpha$  = 0.05) between the means of students' achievement in Islamic education due to the gender variable. This indicates the effectiveness of the Keegan Structures strategy in cooperative education in raising the achievement level in Islamic education for all students, males and females. This result can be attributed to the multiple advantages that the use of Keegan Structures confers on the educational process in terms of presenting the educational content in an interesting, attractive, and enjoyable manner, by presenting ideas using different structures, thus attracting students' attention and increasing their participation and interaction with his teacher and colleagues on one hand, and with the presented article on the other hand. In addition, the use of Keegan Structures is in line with contemporary trends in education, such as focusing on the pivotal role of the student by giving him the opportunity to search for knowledge, discover it, and investigate it himself, which leads to its smooth and sequential assimilation, and helps him to remember and retain it for a longer period of time. Thus, it has become suitable for all students regardless of their gender.

Also, the teaching procedures according to Keegan's structures made the student a main focus for learning, as it helped the teacher to communicate information to the student without trouble and diversity in teaching methods through diversity in the use of structures during one lesson, which gave space in the classroom for the distinguished student and an increase in the student's level. The weak, and thus the individual differences between students disappear significantly, whether in terms of gender.



In addition to the student's positivity, the Islamic education teacher has a key role in teaching in Keegan Structures in cooperative education, as the interaction between the student and the subject would create an educational atmosphere that helps in understanding the subject of Islamic education. The use of Keegan Structures in cooperative education leads to diversification in teaching strategies, educational activities, and methods of evaluation, which creates an educational environment full of activity, fun, and work commensurate with the levels of all students, free from boredom and monotony that dominates the atmosphere of the usual teaching method.

The researcher also attributes this to the fact that the use of Keegan Structures in cooperative education contributed to organizing lessons in the form of real and meaningful educational tasks for students, so that these tasks constitute the main axis in the teaching and learning process. The Keegan Structures strategy also enables students, regardless of their gender, to understand Islamic education topics, improve students' achievement, and expand students' imagination and thinking and help in its growth.

This result may also be attributed to the fact that modern teaching strategies, including Keegan Structures in cooperative education, arouse students' interest and push them to learn and their eagerness for knowledge. It requires the teacher to choose the appropriate teaching methods, and there are contents that are predominantly theoretical, and others are predominantly practical or experimental. The problem stems from the fact that the contents of the subjects being taught now tend to have a dense theoretical nature, which focuses on delivering information to the minds of students. For this problem, we find two groups, one of whom believes that this content can only be used with the usual methods, and another group sees the multiplicity of teaching methods because of their importance in terms of motivation, suspense and other benefits.

This result differed with the results of Al-Khatib's study (2015), which indicated that the degree of interaction of female students with the teaching method using Keegan Structures was better than males. The difference may be attributed to the variance in the two populations of the two studies and their samples.

# **RECOMMENDATIONS**

According to the findings of the study, the researcher recommends the following:

- Training teachers to use Keegan Structures in cooperative learning, because of their clear impact on academic achievement.
- Providing the facilities that teachers need when applying Keegan Structures in cooperative learning by the educational and school administration.
- Conducting other studies on the use of Keegan structures in cooperative learning on other grades and stages of study.
- Conducting a study on building a program to train male and female teachers on the use of Keegan Structures in teaching and measuring its impact on developing information generation skills.

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