DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

The Effect of The Active Discussion Strategy on The Achievement of Physiology among First-Year Students at The Medical Technical Institute

Asst.Pprof.Dr. Haider Majed Alhashemi
Central University of Technology
Medical and Technical Institute / Baghdad

Asst.prof. Miaad Nathem Rasheed
Central University of Technology
Medical and Technical Institute / Baghdad
Meiadnathem@gmail.com

ABSTRACT

The current study seeks to identify the effect of the active discussion strategy on the achievement of physiology among first-year students at the Medical Technical Institute. With the control group, by dividing the sample into two groups, the first experimental group receives instruction using the active discussion strategy in physiology, and the second is the traditional method in the same subject. After applying the experiment and applying the post-test to it, the study reached the following results:

1. The active discussion strategy has a clear impact on raising the level of students' achievement in physiology
2. There is a clear superiority of the experimental group over the control group in post-achievement based on the effect of the strategy used in raising the level of achievement .

Keywords: Active Discussion Strategy, Achievement of Physiology, First-Year Students, Medical Technical Institute.

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

Introduction

For decades, the world has witnessed rapid progress in various fields, and this progress emerged from a huge knowledge revolution unprecedented in human history. These knowledge and technical developments must throw their students at the educational systems in the world, like other components of society that keep pace with these developments.

In this context, a new concept appeared at the end of the twentieth century, which those interested in learning and teaching theories called (active learning), and interest in this concept increased with the increase in scientific and cognitive development and progress in the early years of the third millennium (Al-Shammari, 2010).

His Excellency and others 2011 indicated that active learning is characterized by a set of characteristics, the most important of which is its focus on the responsibility of the student and his skills in learning and acquiring skills, and attention to clear learning strategies.

Active learning is based on an educational philosophy that depends on the learner's positive attitude to the educational situation and includes a number of educational and procedural teaching practices that lead to activating the role of the learner (Amer, 2014).

Why this type of learning depends on self-activity and the positive participation of the learner, through which he uses a set of scientific activities and procedures under the supervision, presentation and guidance of the teacher

The student is the most important axis in the scientific educational process, and it is the main center that must be shed light. Whatever the philosophy on which these concepts are built, its goals focus on the psychological, mental, physical, emotional and social development of the student (Al-Saadi, 2011).

Chapter One: Introduction to the Research

Research problem

The choice of teaching strategies requires their appropriateness to the characteristics of learners on the one hand, and the teacher’s ability and proficiency in their practice on the other hand (Al-Turki, 2013).

And if the importance of active learning applies from the frameworks of civic educational theories and technical and cognitive development, which represents the great change in the role of the teacher and the learner in the educational process, then the role of the teacher is no longer the forum and the only source of knowledge (Rifai, 2012).

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

Physiology teachers at the Medical Technical Institute face some achievement problems related to the low level of students' achievement on the one hand, and students' lack of interaction well on the other hand. This may be due to many teachers of the subject adopting traditional methods in teaching the subject. This was confirmed by previous private studies. With the subject of physiology on the one hand, and with the justifications for using modern and contemporary methods in the field of teaching methods and methods on the other hand, and as a teaching researcher at the Medical Technical Institute, she found it appropriate to contribute to solving this problem by moving to contemporary teaching strategies and methods. Among these strategies is the active discussion strategy. Where the researcher noted the absence of a previous study on the use of this strategy in the collection of physiology among students of the Medical Technical Institute.

Research importance

Physiology is one of the basic subjects in the Technical Medical Institute, as well as being secondary subjects in a group of colleges and scientific departments, where a clear conception of human and animal physiology is presented to the learner.

The progress in teaching methods and methods coincides with scientific and societal progress taking place in the world, as well as progress in collective sciences, including education sciences, especially with regard to teaching methods and strategies. In order to verify progress in the field of education (Muhammad and Anwar, 2004: 39).

The teacher's great knowledge of modern and contemporary teaching strategies and his ability to provide them in a smooth manner helps to choose the best, the best and the most appropriate for students, as well as its links with their daily life, needs, tendencies, desires and aspirations for the future (Maree and Muhammad, 2000: 25).

The active discussion strategy contributes learners to applying their learned knowledge in new situations, as well as increasing the desire to continue the learning process and develop their thinking skills. It also helps to promote active learning because it helps to remember for a long time (Ali, 2011: 245).

The importance of the active discussion strategy is reflected in the students' positive participation in all stages of the lesson, as it is based mainly on mutual dialogue, opinion and other opinion between the teacher and the students and between the students with each other and this raises the motivation to learn and increases their enthusiasm (Ismail, 2013: 201).

Based on the foregoing, the importance of the current research is reflected in the following:

1. The importance of physiology for students of the Medical Technical Institute, as

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

it is one of the basic subjects in the institute

2. The importance of the active discussion strategy as it is one of the modern and contemporary strategies in the field of teaching.
3. The importance of the students of the Technical Medical Institute in Baghdad, as they will be relied upon in the field of specialization in the future.

Research Objective: The study aimed to identify the following:

The current research aims to identify the effect of the active discussion strategy on the achievement of physiology for first-year students at the Technical Medical Institute.

Fourth: hypotheses

There is no statistically significant difference at the level of significance (0.05) between the average achievement scores of the experimental group students who study according to the active discussion strategy and the average achievement scores of the control group students who study according to the usual method.

Fifth: Limitations of the search

1. First-year students at the Medical Technical Institute of Baghdad.
2. The second semester of the academic year (2021-2022(
3. Physiological material.

Sixth: Defining Terms:

First: the effect

He was known by:

(Hanafi, 1991) "It is the size of the change that occurs to the dependent variable after it has been exposed to the effect of the independent variable" (Hanafi, 1991: 253)

(Hashata, 2003) "The final outcome of the desired or unwanted change that occurs in the learner as a result of the learning process" (Shehata, 2003: 22)

Procedural definition: It is the change in the achievement of first-stage students at the Medical Technical Institute as a result of their teaching using the active discussion strategy.

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

Second: the strategy

Known by:

(Al-Heila, 1999) "A set of specific procedures to implement a skill, and the learning process is strategic when the learners are aware of all the skills that pertain to the subject" (Al-Heila, 1999: 64)

(Kojk, 2001) is an organized line set by specialists in order to achieve a set of goals and to reduce undesirable outputs, and it is designed according to organized procedural steps, whereby specific alternatives are placed for each step that allow flexibility when implementing this strategy (Kojk, 2001: 301)

Procedural definition: Organized and pre-planned procedures that are prepared to teach physiology to first-year students at the Medical Technical Institute in Baghdad.

Third, active discussion

(Saada et al., 2006): It is a strategy in the teaching process, through which students actively participate in the classroom through verbal interaction between the teacher and students or between students with each other, as it contributes to providing students with the required skills and attitudes (Saada et al., 2006). : 243)

(Al-Salt, 2010): one of the active learning methods that contribute to the students' participation in the classroom more effectively, which is positively reflected on their academic achievement and intellectual skills (Al-Salt, 2010: 19)

(Ismail, 2012): It is one of the teaching strategies, based on mutual dialogue between students with each other and with the teacher, where the teacher sends questions and the students actively answer them during the various stages of the lesson (Ismail, 2012: 111)

Procedural definition: a set of educational teaching procedures carried out by the teacher on the experimental group in an interactive dialogue process in the classroom.

Theoretical framework and previous studies

First / active discussion strategy

Birth and development

It is axioms among distinguished educators that the strategies and teaching methods that involve students in their learning are the most effective and create real and creative learning, in contrast to the traditional methods.

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

The emergence of the active discussion strategy dates back to the ancient history of learning, where it is based on deliberation and dialogue, in which the students are the main axis.

Many researchers and specialists point out that (active discussion) is one of the best methods and strategies widely used in the educational process, provided that they are appropriately developed for students' mental abilities and cognitive levels, as well as engaging students through their use in a comfortable and effective atmosphere. (Bruffee) ,1992,60)

It is also considered one of the most important active learning strategies because it has many advantages that actually contribute to the development of many types of thinking among students (Al-Hashimi, 2021, p. 67)

Strategic steps (active discussion)

The steps of the active discussion strategy can be summarized in three steps:

First/ pre-discussion: by which we mean choosing a topic to be presented for discussion in a simple and specific way, giving a brief summary of it, as well as defining the objectives of the discussion, arranging it, organizing its sessions, and defining the communication environment.

Second/ during the discussion: the type of problems that will be addressed by all students are determined, as well as emphasizing the involvement of all students in making decisions, and no student can be excluded from participation. The lesson is presented and discussed, emphasizing the important aspects of the problem and analyzing it through meaningful and enjoyable discussion Familiarize students with thanks and gratitude to everyone who contributed to enriching the discussion.

Third/ "Post-discussion: Upon completion of the discussion, the teacher writes on the board some unclear observations and questions related to the topic of discussion in order to conduct the division process and the aim is to achieve the desired goals" (Maree and Al-Heila, 2007, p. 106)

A few strategic steps (active discussion)

It is useful to add the following:

1- Formulating the behavioral objectives of the lesson by the teacher, which he would like to achieve in light of the application of the active discussion strategy
2- The teacher prepares for the lesson, and this is done by dividing the students into groups, with the student (the coordinator) at the head of each group.
3- Choosing the appropriate teaching aids as well as coherent activities that contribute to achieving the goals.
4- There must be understanding and harmony between the teacher and his students

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

5- Dividing the discussion topics into groups by the teacher
6- Students conduct the discussion according to the information extracted from the lesson, taking into account the time (Ghayyad, Ahmed, 2008, p. 101)

Strategic advantages (active discussion)

The (active discussion) strategy has a number of advantages, the most important of which are the following:

1- Make the student the main focus in the educational process
2- We encourage students to research, investigate and increase knowledge and information.
3- Stirring up students' tendencies towards the topics they study
4- Contributes to creating an atmosphere of motivation and competition among students
5- Develop students' thinking skills
6- Contributes to increasing student achievement
7- Students get used to facing embarrassing situations
8- Removing fear in expressing an opinion without hesitation
1- -9Developing students' communication and leadership skills (effective skills)
9- It develops among students according to reading and reading (Khairy, 2018, p. 183-184)

The teacher's role in the strategy (active discussion)

The teacher has an important role in the (active discussion) strategy that can be illustrated as follows:

1- “Prepare the topic to be discussed”
2- “He is the leader in managing discussion”
3- "Bringing a lively nature and activity and providing opportunities for its students to determine the topics to be studied".
4- "Searching the essence of the problem to be studied and not deviating from it, which leads to focusing on the origin of the problem and its actual content".
5- "Write down the incomprehensible terms on the board, as well as writing down the basic elements of the discussion".
6- "Using the method of reinforcement with students and arousing their enthusiasm"
7- “Focus on engaging shy students in discussions” (Hoover, 1988, p. 108)

The Student's Role in the Strategy (Active Discussion)

The student has major and important roles in the active discussion strategy, the most important of which are listed below:

1- Analyzing ideas and opinions by listening to what colleagues and the teacher say

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

through the discussion that takes place in the class".

2- Taking the opinions, directions and instructions of the teacher and continuous cooperation with his companions during the discussion, and this role is one of the most important goals of the success of the discussion

3- The fluidity of the discussion

4- Respect for time

5- Avoid being selfish

6- Allowing his companions to talk and accepting differences of opinion with all appreciation and respect, without using sarcasm and useless arguments.

7- The use of advanced educational technology, especially the Internet

8- Defending his correct ideas and opinions specifically in the places that pertain to the issue of discussion with sound scientific foundations (Al-Mihna et al., 2022, p. 210-211).

Study according to the active discussion strategy	Study according to the traditional method	No
Student main axis	The main focus of the teacher	1
The student's role is positive, active and interactive	The student's role is passive and receives information only	2
Collaborative group learning	individual learning	3
The teacher accepts all answers in order to reach the correct answer	The teacher accepts only the correct answers of the student	4
The teaching climate is comfortable, free from threats and fear, and an appropriate classroom environment that invites reflection	The teaching climate in the classroom is like authoritarianism and a future of information only	5
It measures all mental levels of the student with the aim of activating memory	The calendar measures lower levels of knowledge such as understanding and recall	6

Previous studies

1- Study (Hoehn, 1986)

Made to choose the relationship between the ability to think critically and the other to take the initiative in the group discussion with controlling the variables of the students' gender and ages and for the purposes of this study and then using (345) topics with the formation of (69) group discussion groups and each group contains five discussions and the choice is applied (low - Halbeiser)) to measure the ability to think critically, and the results of the study revealed a positive relationship in critical thinking and taking the initiative in group discussion.

2- Al-Zahrani study (2012)

The reality of teaching Islamic education on active learning from the point of view of

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

educational supervisors in the governorate of Taif and Makkah Al-Mukarramah, and identifying the information on the use of this strategy, where the research sample consisted of (53) educational supervisors and followed the descriptive survey method. Good and varied The information that got to a large degree came in the lack of appropriate material capabilities for the use of active learning strategies and the large number of students in the classroom and the teacher's consideration of the use of teaching methods that do not require great effort.

The study recommended that teachers should make more effort in their teaching using active learning strategies through continuous reading in the field of teaching strategies and more active participation in training courses.

Commenting on previous studies

The results of the two studies can be summed up as follows: Active learning increases students' motivation and works to form positive attitudes to push them, as active learning increases students' understanding of the content of the subjects and creates their own self-learning.

Chapter Three: Research Procedures

First: Research Methodology and Experimental Design:

The experimental method is one of the most popular and most widely used and accurate methods of scientific research, as well as its advantages (Melhem, 2002: 404). Also, this method is a flexible method that can be adapted according to many cases, especially with the nature of the human phenomenon that is characterized by flexibility and complexity (Al-Assaf, 2010: 297)

The researcher chose the experimental design with partial control, through two groups, the first is an experimental one that is taught according to the (active discussion) strategy, and the second is a control group that is taught according to the normal method. It is shown in the following table:

Table (2) the experimental design of the research

variable	independent variable	groups	No
collection	Active discussion strategy	Experimental	1
	traditional way	control	2

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

Second, the research community

The research community is defined as a well-known group of people or things. It represents a comprehensive and integrated group through which a representative sample of this community is selected (Awda and Al-Khalili, 1988: 171)

The population of the current study consists of students of the first stage at the Medical Technical Institute / Baghdad for the academic year 2021-2022, and since the size of the community is small (50) male and female students, so the researcher took all members of the community as an experimental sample for the current research.

Third: the research sample

The sample is part of a population on which the study is conducted and is selected according to certain criteria in order to become a representative of the research community (Daoud and Abdel Rahman, 1990: 67). Therefore, the researcher chose the students of the medical equipment in Baghdad, where she chose the students of the first stage to be the experimental research sample consisting of (50) Individuals were randomly divided into two groups, the first experimental and the second control, as shown in the following table:

Table (2) shows the individuals of the sample according to the two research groups

the total number	future variable	the group
25	Active discussion strategy	Experimental
25	lecture	control

Fourth: Equality of the two research groups:

There is a set of variables that the researcher seeks within the experimental approach and its multiple designs to subject to equivalence before the experiment, and these variables are taken into consideration based on previous studies that confirmed the effect of experimental work with them. The achievement test consists of 30 objective questions, as follows:

1. Age parity

In order to verify that both the experimental and control groups are equivalent in the

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

chronological age, which was estimated in months, we used the T-test for two independent samples, and the results showed the following:

Table (3) parity between the two groups in chronological age

Judgment	Indication level	value -t-		standard deviation	Arithmetic mean	Number	the group
		tabular	calculated				
nonfunctional	0.05	2.02	0.857	3.266	232.20	25	Experimental
				2.644	232.92	25	control

Through the foregoing, it is clear that both groups are equivalent in the chronological age because the calculated value is not statistically significant.

2- Equivalence in the IQ test

In order to verify that both the experimental and control groups are equivalent in the intelligence test that is estimated through the Raven test, we used the T-test for two independent samples, and the results showed the following:

Table (4) Parity between the two groups in the IQ test

Judgment	Indication level	value -t-		standard deviation	Arithmetic mean	Number	the group
		tabular	calculated				
nonfunctional	0.05	2.02	0.974	1.977	43.32	25	Experimental
				1.472	44.40	25	control

Through the foregoing, it is clear that both groups are equivalent in the Raven intelligence test because the calculated value is not statistically significant.

3. Equivalence in the pre-achievement test

In order to verify that both the experimental and control groups are equivalent in the pre-achievement test, we used the T-test for two independent samples, and the results showed the following:

Argument (5) Parity between the two groups in the achievement test

Judgment	Indication level	value -t-		standard deviation	Arithmetic mean	Number	the group
		tabular	calculated				
nonfunctional	0.05	2.02	1.176	0.970	17.24	25	Experimental
				0.954	16.92	25	control

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

Through the above, it is clear that both groups are equivalent in the pre-achievement test because the calculated value is not statistically significant.

Fifth: The achievement test:

In order to verify the objectives of the current research, the research has prepared an achievement test for physiology among students of the first stage, and the test may consist of 30 objective questions with four alternatives, three wrong and one correct that measures the levels (knowledge, understanding, application).

Psychometric properties of the test

1. The validity of the test

To verify the validity of the test logically, it was presented to a group of (10) experts and specialists. They were asked to express their opinion on the apparent validity of the paragraphs and the extent to which the paragraphs are related to the levels required to be measured within the physiology subject. Accordingly, no paragraph was dropped.

2. Test stability

The researcher verified the reliability of the test through two methods:

1. Application and re-application: The researcher applied the test on the significant stability sample (20) students, and after two weeks passed, the application was repeated again on the same sample. Pearson correlation coefficient was used between the two times of the application, and it was found that the stability value is (0.86)
2. Cronbach's alpha coefficient: Cronbach's alpha equation was applied to the stability sample and for all items, and it was found that the stability value was (0.84)

Sixth: Application of the final experiment:

After we verified that both groups are equivalent, the experiment was applied to the experimental and control groups, and the control group was taught by the (active discussion) strategy, while the control group was taught according to the normal lecture method, and at the end of the experiment a post-test was applied to measure the effect.

Seventh: Statistical means:

The researcher used the following statistical methods in data processing:

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

1. Arithmetic mean
2. Standard deviation
3. Two-sample independent t-test for equivalence and hypothesis verification
4. Alpha Cronbach to check for stability
5. Percentages for verifying expert agreement.

Fourth chapter

Research results

The research hypothesis states:

There are no statistically significant differences between the average of the experimental group that studied with the (active discussion) strategy and the average of the control group that studied by the lecture method in physiology in the post test, and until the researcher verifies the validity of this hypothesis, the researcher applied the post test on the two groups (experimental and control). To find out the extent of differences between the two groups, a t-test was used for two independent samples, and the results were as shown in the following table:

Table (7) comparison between the experimental and control group in the post-test

Judgment	Indication level	value -t-		standard deviation	Arithmetic mean	Number	the group
		tabular	calculated				
functional	0.05	2.02	5.849	1.080	24.40	25	Experimental
				0.816	17.40	25	control

Through the foregoing, it becomes clear to us that the calculated t-value amounted to (5.849), which is greater than the tabular value of (2.02), and this means that there are statistically significant differences between both groups in the post-achievement and it is in favor of the experimental group because its arithmetic mean in the post-test is greater than The control group, and as a result, we reject the null hypothesis and accept the alternative hypothesis, and thus we confirm that there is a clear effect of the active discussion strategy in physiology among first-stage students.

This result is in agreement with the findings of previous studies that used the active discussion strategy in raising the level of students' achievement.

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

Conclusions:

1. The active discussion strategy has a clear effect in raising the level of students' achievement in physiology
2. There is a clear superiority of the experimental group over the control group in post-achievement based on the effect of the strategy used in raising the level of achievement.

Recommendations:

1. Paying attention to modern and contemporary teaching strategies in the field of teaching methods through courses and research
2. Paying attention to learner-based learning, which focuses on the learner's activities, experiences and own experiences in the educational process.
3. Seeking to develop the skills of the educational staff with regard to the use of modern strategies and methods and the required devices and equipment.

Suggestions:

The researcher suggests conducting the following studies:

1. The effectiveness of the strategy of the magnet poles in the collection of physiology for first-stage students in the Technical Medical Institute, Baghdad
2. The effect of service learning on acquiring concepts in physiology among first-year students at the Medical Technical Institute of Baghdad.

References

1. Al-Astal, Muhammad Ziyad, the effect of applying two strategies for active learning on the achievement of ninth-grade students in history and in developing their critical thinking. Middle East University for Graduate Studies, College of Educational Sciences, 2010.
2. Ismail, Baligh Hamdi. Strategies for teaching Arabic, theoretical frameworks and practical applications. Curriculum House, 2013.
3. El Hefny, Abdel Moneim. Encyclopedia of Psychology and Psychoanalysis. C 3, 2nd floor, Dar Al-Awda, Beirut, 1991 AD
4. Saadeh, Judah Ahmed et al. Active learning between theory and practice, Dar Al-Shorouk, 2nd Edition, Amman, 2006.
5. Al-Zahrawi, Samat (2012), Studying the motivation of teaching Islamic education for the secondary stage in the light of active learning strategies from the point of view of the educational supervisors, an unpublished master's thesis, Al-Farabi University
6. Al-Shammari, Abdullah Ne'meh, 2010, applying the relationship of active learning methods in teaching Islamic education to ninth grade students in the State of Kuwait and its impact on their achievement and creative thinking (unpublished master's thesis, Middle East University, Amman, Jordan

DOI: https://doi.org/10.33193/JEAHS.14.2022.265
ISSN Online: 2709-071X
ISSN Print: 2709-0701
مجلة العلوم التربوية والإنسانية
Journal of Educational and Human Sciences
www.jeahs.com
Volume (13) July 2022
العدد (13) يوليو 2022

7. Al-Bakr Muhannad bin Abdul Karim, 2008, Teaching using active learning strategies, Department of Education, Imam Muhammad bin Saud University, pp. (4-57)
8. Shaheen Muhammad Ahmed, 2010, Problems of the field application scheduled for practical education at Al-Quds Open University from the point of view of the teachers, Al-Quds Open University Journal, January 4th issue
9. Amer, Tareq and Al-Masry, 4014, Active Learning, Thebes Foundation for Publishing and Distribution, Amman
10. Al-Saadi, Ammar Tohme Jassim, 2011, the effect of using active learning on the achievement of third-grade students in the middle school in mathematics and their tendency to study it. Journal of Educational and Psychological Research, Nissan University, 30th issue
11. Shehata, Hassan and Zainab Al-Najjar. A dictionary of educational and psychological terms. Ain Shams University, Faculty of Education, Egyptian Lebanese House, Cairo, 2003.
12. Melhem, Sami Muhammad, Research Methods in Education and Psychology, Amman, Dar Al Masirah for Publishing and Distribution, 2002.
13. Al-Assaf: Saleh bin Hamad, Introduction to Research in Behavioral Sciences, Riyadh, Dar Al-Zahra.2010.
14. Odeh, Ahmed Suleiman, Khalili, Khalil Youssef, Statistics in Education and Human Sciences, 2nd Edition, Jordan, Dal Al-Amal for Publishing and Distribution, 1987.
15. Ali Muhammad Al-Sayed, Trends and Applications in Curricula and Teaching Methods, Edition 1, Dar Al-Masira, Amman, 2011.
16. Marei, Tawfiq Ahmed, Muhammad Mahmoud, Modern Curricula: Its Concepts, Elements, Foundations and Operations, Edition 1, Dar Al Masirah, Amman, Jordan, 2000.
17. Muhammad, Nahmada, 2012, The effectiveness of active learning in reducing reading difficulties for a sample of primary school students, childhood studies for a PhD thesis.
18. Rifai, Akil, 2012, Active Learning, Concept, Strategies, and Evaluation of Learning Outcomes, New University House, Egypt.
19. Muhammad Sabah Mahmoud, Anwar Sabah Mahmoud, New Directions in Teaching Geography, i 1, Al-Warraq, Amman, 2004.
20. Daoud, Aziz Hanna, and Anwar Hussein Abdel Rahman, Educational Research Methods, Dar Al-Hikma Press for Printing and Publishing, Baghdad, 1990.
21. -1tloehn, Dorothy (1985), critical thinking ability of nurse education and nursing stadents.dissertation abstracts internatonal.vol3 ino2
22. Mosher.b.g.2002,blended learning whate does it realy take to make it work,Element,Retrie ved,April,7.