The Effect of Using Self Education Strategy among Students of the Technical Medical Institute in the Subject of Physiology

Associate Prof. Miaad Nathem Rasheed
Technical medical Institute, Middle Technical University –Baghdad, Iraq
Email: meiadnathem@gmail.com

ABSTRACT

The current research seeks to identify the impact of the use of self-education among students of the Technical Medical Institute in the subject of physiology. The study relied on the semi-experimental approach through two groups, the first experimental and the second control, and a random sample of students from the Medical Technical Institute in Baghdad was chosen, amounting to (50) students. An achievement test was built in the subject of physiology, in addition to verifying the psychometric characteristics of validity and stability. Before conducting the experiment, the researcher conducted a series of equivalencies between the two groups in order to ensure that they are equivalent before conducting the experiment. After conducting the experiment, the researcher conducted a post-achievement test on both groups. Results:

1. The effect of self-education in raising the level of achievement of the students of the experimental group in the subject of physiology.

2. There are statistically significant differences between both the experimental and control groups, and these differences are in favor of the experimental group.

Keywords: Self Education Strategy, students of the Technical Medical Institute, Physiology.
Introduction
Modern learning strategies are the strategies that largely concentrate on students' education to improve their mental behavior by using new creative different ideas instead of making them recite the studying curriculum to scan the exam by the same old method which is the modern strategy of learning by simple words.
Self education represents a strategy that centers around the learner. It made available for every learner to learn by himself starting from his abilities, trends and preparations in the times suits him. Then the learner becomes responsible on his education and the level of his ability to comprehend knowledge, directions and skills that need to be developed and acquired as well as responsible self evaluation.

The researcher as a teacher at the Medical Technical Institute had an urgent need to develop teaching strategies and methods due to the scarcity of using and employing these strategies in teaching students of the Medical Technical Institute in Baghdad.

First Chapter
The Definition
The Research Problem
Instead of the research problem, the current era is present in scientifically in the various areas and on all the levels, including educational and educational field, which is imposed on the relevant concern that they are aware of, two, two, investors and investors for everything that is new in their field of specialization and the use of modern ways to promote educational reality in the need of elevating and solving its problems suffering (Farman, 2012: 11). In Iraq, despite the invitations to promote educational reality in the undergraduate school by researchers and experts, but it is still suffering from the low level of his students and weaken their ability to acquire concepts, especially in self-esteem, which was found by the hidden from a number of previous studies in this area as a study (Habana, 2013) and study (Fatlawy, 2015).

Sources and paths that have dealt with different aspects of the educational process indicate that there is increasing interest in teaching methods, strategies and methods as well as directions towards adopting the teaching methods in the teaching of various subjects, including the subjects of the previous studies of the material. The current goals of teaching these materials, especially the means of self as the individuals, but the emergence of the exodus and otherwise. The methods and teaching methods are the basis of the basis of the educational process of any study. The teaching methods represents one of the science of those scientific work as to work to deliver educational experiences, activities and technical skills of the learner with a view to helping them to grow in the light of the philosophy and the approaches of the adopted education, because they represent the medical science, knowledge and skills of the learner, as those models are appropriate for the educational position and the hallness with the capabilities and means
of learners, molecules and interests, the goals achieved exhausted expansion and more interest.

He founded the above, the researcher tries to discuss modern teaching methods that help develop the teaching of self-mechanism in the Technical Medicine Institute, which will make the thinking of a student, which is expected to be relevant and loose analysis of far-reaching reasons and the declaration. The idea of using modern models in teaching the mensend of materials from what can be used to develop and achieve the conduct of the collection and conservation of the student's mind. As the theoretical theory of these trends in teaching, put it into the student's service, keeping the cognitive progress and the rice of scientific and technological development, so the researcher is trying to use a model of its progressive models to see its impact in the education of physiology. Accordingly, the researcher, which is working in the technical medical institute for a weakness in the teaching of self-esteem, to be given to the lecture of the lecture and the use of new teaching skills and methods and the approach is approached to give the lecture with the recipients and conservation, not the understanding and absorption process. This issue was selected and his experience on the students of the Institute the first phase and the humor of the researcher and her modest layers tried multiple models in teaching, but did not try the model (Bamman model), based on what progress can be summarized the problem of research on the following question: Is the BARMAN model following the students of medical Technical Institution.

The research Importance
The latest scientific and technological progress has many changes in all areas of life in order to adapt to the data and challenges of the twenty-first century. The modern education of the world has been developed and developed modernly in the world to develop their goals, means and curricula to suit the requirements of contemporary life and meet the humanitarian, physical, social, spiritual and mental humanitarian and effectiveness that has been made by a lot of change by the achievement of the enormous and rapidly as a result of the enormous and rapid progress of the fair and rapidly in progress of the enormous and rapidity of humanity and information control, the emergence of globalization and its extent to which the entire and various education and strategies are integrated into the whole and the necessary education and the education of the World The world's world (Alhadidy 2007: 256-257).

The importance of using the models in the raising of the efficiency of the teaching process and increased performance, helps to keep information, ideas and academic skills, and helps the teacher to initially appropriate the educational environment for the desired objectives and helps to build effective learning experiences, plans to design and lessons teaching methods in the chapters in the formation of integrated and easy to see the teaching models in the development of curriculum (Alodwan and Mohammed, 2012: 165). It is modern models in teaching, which appeared to be in the presence of the
Barman model, based on the theoretical theory, as Baramann has built and contains a range of steps, continuous actions and rankings when they are working for what work, it is a guide to the application (Jameel, 2014: 18). This model consists of four phases: (stage or speculation, stage, surveillance, stage of the dialogue, application phase (Zayer et al, 2014: 392).

**Based on what is mentioned above we conclude the research importance**
1. The importance of education for its role in the construction of human society and paper.
2. The importance of the Barman's model in the mercury collection in the basis of funds as a modern and effective educational model in the educational process.
3. The importance of the school phase in the technical medical institute, with this stage of clear and continuous growth towards maturity with the person's personality with all aspects.

**The Research objective**
This research aims to identify the impact of self-education at the students of the technical medical institute in the physiology subject and the researcher conclude this hypothesis.

**The hypothesis of the search:**
"There are no statistically significant differences between the average experimental group that studied according to self-education and the average of the control group that was taught according to the traditional method of" post achievemeny test.

**This research is determined by the following limits:**
1. The location limit: Technical medical institute in Baghdad
2. Time Limit: studying year 2022-2023

**Identification of terms**
1. The effect of the two-way the right thing to get the thing and the hit? of the sword and impact surprise in the thing. (Innocent son, 1995, p. 432).
2. Self-learning: Known from: (age and colleagues, 2009): "The process in which the learner has made efforts to acquire knowledge, experience and skill from their multiple sources without compliance with the standards and controls of the distance, and are not within the classroom" (Atom and the Halat, the Rounding and Wiosf, 2009). His knowledge (return and illarming, 2010): "One of the methods of acquisition of the individual for the features in a self-manually without a guarding one of the one, any individual himself" (Awad and Dammal, 2010: p. 35). He was known to the presence of the researcher: Education in which students and his personal effort appear as much as possible when the spirit of independence and farewell in the collection of the knowledge.
and skills under the supervision of the teacher and guide it. 3 - Strategic (Mustafa, 2020) is a coordinated series of procedures involving the deployment of resources that one can reach to achieve a particular purpose.

4 - Student Technical Institutes: One of old Medical Institutes founded in the 1950s and was nine of the four actions and four times the leader of the student graduated according to its competence for two calendar years.

5 - Physiology: It is aware of the functions of biosses and biopsy, which includes how the equipment is doing.

Chapter II: Theoretical Framework and previous studies teaching strategies:

Word of strategy: a word of derived from the Greek word (strategy), means: the leadership of the driving, and the use of their use on military fields, and the concept of the evolve of the wars, but the development of the time and the cognitive explosion is not the use of the strategy for minimalist fields, but extended to be a common category among all activities in the fields of science, "( Abu Alreesh and Shareef 2009 ,87): The" art of use of potential and means in an opportunity in an opportunity in an opportunity; To achieve the desired goals on the best possible; It is certain to certain problems to address problem, or direct task, or practical methods to achieve a specific goal and know the( Zayton (2003: 87) as the method of education and learning plan to follow the teacher in the classroom or outside of the teaching of specific content of a particular course; In order to achieve predeive specific targets, this definition is divided into two sets of stages: are steps, follow-up and punishment procedures in the interference, the role of the teacher and students to be done while tending to teach that content. "

"The strategy is a general plan of action is placed in achieving a specific targets and prevented inequalities in the process of primary steps, and each strategy is allowed to flexibility when implementing the strategy, each step of steps to tactics; any partial differential methods in a deseripure and planned relay in the achievement of the specific goals". (Shiltoute, Khafaja 2002,65)

Strategy in the general meaning is of the working methods, which governing the goals, with the following strategy includes:

1-Choose methods and procedures that provide access to specific targets.
2-Develop operational plans and coordinate related aspects.

The researcher believes that the teaching strategy is: the basics of the teacher to put it in order to provide the educational process within the classroom room regularly without a faulty, in accordance with the strategy that leadership teaches their objectives through its exploitation of a range of methods and methods; Or the same motor, and also knows that the intelligent use of resources through a particular system of action in achieving the goal.

Specifications of the good strategy for good education Dairy and Hayek (2011: 43) mentioned Good specifications for teaching strategies:
1-Clarity of goals to be achieved in the lesson. 2-Sponsored needs, and educated trends. 3-Works to implement exciting learners and pay them more effectively and active participate.
4- advancing gradually in skills teaching, easy to hard, and simple to the composite.
5- Concern the course of the lesson depends on a scientific method that takes into account the level of students and their abilities.
6-Concern the Individual differences are taken into account among the educated.
7- Concern the level of students and physical and mental and their physical abilities. It can not be said that there is a particularly strategic strategy in whole, but there is a strategy to achieve some of the most effective learning aspects of other strategies, and may also prefer to use a strategy for other strategies in certain educational conditions and within the limits of material or human resources. The teacher should put all in mind when planning teaching and choose his teaching strategies to be followed; In order to achieve the educational goal "(Kogk, 2002: 76). There is also one suitable strategy for all skills, and all learners, all the times, and the diversification of these strategies is an important thing; because that makes a lot of benefits and benefits and (Asir, 2006 ,76)), a number of benefits, and the most important of them.

1-Mastering of the scientific material or the knowledge structure of the curriculum content.
2-Expand the relation circle between the teacher and the learner
3-Develop the emotional and skill aspects of teachers.
4- Active integration in the learning process. 5-Implement the curriculum and achieve its goals correctly

The Branches Teaching Strategies (Zayton ,2003: 76) Teaching strategies to categories of their most important:
1-How much of the student is made from an effort to discover knowledge by himself in the category of testing strategies.
2-The way the student has access to knowledge, and the way they acquire to the class teaching strategies.
3-The role of the teacher in the educational process and controls in the classification strategy and focused on the teacher, and the role of the teacher is the foundation role, it is the direction of that process. On the other hand,( Abdel Latif ,2005: 43) pointed out that the classification of teaching strategies on the basis of the axis that has been around the way and was as follows:
1-teaching strategies around the teacher: the leadership of the teacher, and the staff of the professors of teachers in the study class. Like the lecture method and recipients, all strategies are going one.
2-Teaching strategies around the same subject: Teams of teaching materials, include the training of the era, the expression and text of strategies in the teaching of Arabic language.
3-Teaching strategies about the learner: The learner is active in the educational process; Such as: method problem solving, discussion, inferring measurement, discovery.

**Self-learning strategy known**

(Mosston, Ashworth 1986) defined it as a comprehensive method different style of the previous methods is that there are several levels of teachers to provide students with a member, not a standard or one standard and when using this style chooses the level of the level to be made for each task. Mohammed, (Naif, 2009: 76), recognized that it is a learning method that depends on the levels of pupils during education, by providing the subject in the form of educational steps in the difficulty of the denomination, which is suitable for his abilities, as a first step, which takes into account the following duty, even reaches the requirements of the last duty. This strategy is given the opportunity to learn multiple levels of multiple theme. The students take the proper starting point for each. All students have the work to perform at different levels and are doing their own calendar of themselves, and take decisions about the following steps after the previous step, the goal here is teaching learners how to make appropriate learning on the right level of the best starting to them. If the teacher learns to work and follow the performance again, the teacher is waiting to see if the learner can determine the error, if he can not, the teacher, to guide him to the right step, then moving to learner and so on. The researcher believes that this strategy is based on the teacher, where the selection of the tasks to be applied, and the content to teach him. The learner provides the teacher with self-assessment of the same nature of its performance and determining the organization of the application when applying this method is important; In order to apply the style in a sound manner, the role of the teacher is applied when applying this style with the help of the learner to own the ability to perform independently, and its performance assessment, and then move to the next phase of the application.

**The Objectives of this Strategy:**

1-Every student will succeed in performing the duty.
2-It suits the performance with the level of the learner.
3-Give the opportunity for the comparison of the ambitions and its real estate.

**The Stages of the Self-Education Strategy**, of three stages:

First: the preparation of the teacher in order to make all preparations for the preparation of the lesson, which determines the content of the lesson. The content must be a strictly and detailed registration, and the teacher must do the following duties:

1-Planning of the study, which includes the identification of public and private goals for the study.
2- Content design.
3- Design model card tasks, the evaluation form, so that contains information (the information on the student, exercises, the performance of the performance (preferably illustrations), (performance rating standards).

**Second: Application Phase:**

1- Prepare for students.
2- Explain the subject
3- Explain the role of learner accurately and preference.
4- Explain the role of the teacher.
5- Explain the exercises.
6- Identify the required standards to achieve.
7- Applications of the tasks, where the learner chooses the place of performance of the task to start the application process when bent.

**Third: Evaluation stage:**

1- The evaluation phase appears in two bases for both teachers and the learner.
2- Role of the teacher. Assessment of students' performance of the tasks.
3- Assess the performance of students according to their way of view.
4- Evaluation of feedback for students at the end of the lesson about how to apply them to the style, the level of their performance, and the role of each student.
5- The role of learner.
6- Filling the evaluation form.
7- Compare accomplishment with evaluation criteria for improving a level of achievement. (Mosston & Ashworth, 2002).

The objectives of self-education strategy accordance to Abu Nagra, HE (2009: 76) and Mohammed (2003: 87) that the objectives of the Self-Education Strategy were the following:

1- The opportunity to all participants in all levels.
2- Interest in individual individuals to the learners.
3- Provide more time to the teacher to monitor all learners during the application.
5- The opportunity for the learner is because it is more independent for receiving feedback. 5- Acquire the ability to learn and follow up.
6- Training the learners is to be honest and poor than his performance.
7- Availability of more than one other method; Because there are levels within the work of pleasure.

**The Distinguishing Characteristics of the Self-Education Strategy**

1- The distinction of self-education strategy takes into account individual differences between learners.
2- Provides opportunities for all learners to apply the exercise.
3-Learners help the calendar themselves during the application.
4-Encourages learners to strengthen confidence and self-reliance.
5-Learners help to do more for performance; To go to the next level.
6-Save time for the teacher in the note and correct spelling errors, promote good performance.
7-Reduce systematic problems for the level of levels of learners through which more learners are applied.

The Self-Education Strategies Disadvantages
1-probability if making same mistakes
2-imprecise self evaluation of the learner
3-The learner works as how it suits it.

Second: Previous Studies
First: Arab Studies Study (Jaghp, 2016): "Interactive Strategy of Single Learning Strategy in the Development of Technical Tasks in the Student of the Arts of the Arts"
Different aspects of the educational process have eaten that there are increasing interest in teaching methods, strategies and methods as well as directions towards the latest technical modalities in teaching various subjects, including subjects that form a technical education teacher, which aims to develop different aspects of the learner with the same factual, "the current goals of this article shall be established in the development of the research of the individual," said. The study of Ubaid Khudher 2021 "the effect of the self-learning strategy in the collective education of the Islamic education in of the fourth year students in Alalem town center"
The study aimed to know the impact of the self-learning strategy on the achievement of the fourth grade students in the subject of Islamic education in the science district center. Of the students of the fourth scientific grade in the schools of the knowledge district, they were chosen by the intentional method, and two groups were chosen from each school randomly, and the study sample consisted of (80) students for boys distributed into two groups, each of which includes (40) students in the experimental group and (40) students in the experimental group. students in the control group, and (80) students distributed into two groups, each of which includes (40) students in the experimental group and (40) students in the control group. It came in favor of females with an arithmetic mean of (18.42), and males came in second place with an arithmetic mean of (16.36). The results of the study also indicated that there were no statistically significant differences at the level (0.05) due to the effect of the interaction between gender and teaching method.
Second: Foreign Studies Study (Montague 2008): The relationship between self-regulating learning, and the ability of solving mathematical issues of at revealing the relationship between self-learning, and the ability of solving the issues of the sports. The results were adopted on the signs of the University of 324. Students. The results resulted in a positive and decline in self-regulatory learning strategies and the ability of solving
the mathematical issues of, as well as existing statistical differences of both pupils and the decline in collective learning strategies in favor of the attached business strategy.

Study (Tsai, & Liang, Chiu 2013): The relationship between Internet-based knowledge and self-regulated learning activities while using the Internet to obtain academic information.

The study aimed to investigate the relationship between knowledge based on the Internet and self-organized learning activities while using the Internet to obtain academic information. The study sample consisted of (758) university students.

The results of the study indicated the need for efficient self-organized learning activities to obtain better internet-based knowledge.

Comment on previous studies and the researcher has previously studied the following aspects:
1- Explain the research problem and its importance and identify some of the theoretical framework
2. Determine the volume of the experimental sample used in studies and applying them in the current study
3- Specification of the type of statistical statistics used for the current research.
4-Compare this study results with previous studies results.

Chapter three: the Research Procedures
First: The Methodology of Research and Experimental Design
The researcher of the semi experimental method, which is considered the most important research method and its proportionality in research and studies, as well as this approach of the elastic curriculum can adapt to the nature of the important matter. The researcher chosen the micro-demographic design, through two first trials of experimental experiment, and the second the intervention of the equalization of the equalization and throughout the researcher is a final testing to measure the impact of the strategy in the experimental group as described in the following table:

<table>
<thead>
<tr>
<th>Ser.</th>
<th>Groups</th>
<th>Independent variable</th>
<th>The variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental</td>
<td>Self education</td>
<td>Achievement</td>
</tr>
<tr>
<td>2</td>
<td>Control</td>
<td>Traditional</td>
<td></td>
</tr>
</tbody>
</table>
Second: The Community of the Search
The current research community is about the first grade students in the Technical Medical Institute in Baghdad Governorate for 2022-2023, and the research community is estimated at 50 students. The whole of the receiver's choice is to be the current search sample.

Third: The sample of research
The sample of the technical medical institute of Baghdad was represented by the first grade students, the sample of 50 students have been selected and distributed randomly on your current segment and the mode of the following table:

<table>
<thead>
<tr>
<th>Group</th>
<th>Independent variable</th>
<th>Total no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Self education</td>
<td>25</td>
</tr>
<tr>
<td>Control</td>
<td>Traditional</td>
<td>25</td>
</tr>
</tbody>
</table>

Fourth: Equivalent Group
Before starting the experience, there is a range of variables that have a relationship with the interior design of the experiment must be aware and equivalent between the group of experience before starting, and such changes are made by reviewing the theoretical entity and previous studies. The equivalence between the two groups was made by:

1-Equivalent in age
The researcher used the t-test for two independent samples to verify that both groups are equal in age, which was estimated in months, as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Math. mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Inferenc e level</th>
<th>Judgmen t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>231.80</td>
<td>2.483</td>
<td>Calculat ed</td>
<td>Tabular</td>
<td>0.05</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>229.32</td>
<td>2.854</td>
<td>0.356</td>
<td>2.02</td>
<td>0.05</td>
</tr>
</tbody>
</table>

It is clear through the previous table that is equal to both groups in the time of age as the estimated number of life as the calculated value of the volume of the

2-Equivalence in IQ
, the researcher was used to test the RAVEN to integrate both equity in the level of intelligence and the researcher used the two-point terminal as set out in the following table:
Table (4) Equivalence between the two groups in IQ test

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Math. mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Inference level</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>45.04</td>
<td>1.399</td>
<td>Calculated</td>
<td>Tabular 0.05</td>
<td>Non inference</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>45.12</td>
<td>1.536</td>
<td>0.193</td>
<td>2.02</td>
<td>0.05</td>
</tr>
</tbody>
</table>

It is clear from the previous table that there is equivalence between both groups in the intelligence test due to the fact that the calculated value is greater than the tabular value 3. Equivalence in the pre-achievement test

The researcher used the pre-achievement test in order to ensure the achievement of equivalence between both groups, and the t-test was used to measure that test for two independent eyes, as shown in the following table:

Table (5) the equivalence between the two groups in the achievement test

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Math. mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Inference level</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>15.32</td>
<td>1.030</td>
<td>Calculated</td>
<td>Tabular 0.05</td>
<td>Non inference</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>14.92</td>
<td>0.756</td>
<td>1635</td>
<td>2.02</td>
<td>0.05</td>
</tr>
</tbody>
</table>

It is clear through the previous table that is equal to both groups in the test of the tribal collection because the calculated value of the value of the typical value is: the investigation test: from the achievement of the current research targets is to prepare an investigation test in the merger materials in the first grade students in the Middical Technical Institute in Baghdad. The test is 30 items with three substitutes. Three of them are wrong and one is correct. They covet the three levels of Bloom (knowledge, understanding, applied). Speedite Specification Properties.

1- Test validity

The researcher verified the validity of the test through logical validity through a sample of experts and arbitrators, where they were asked to express their opinion on the linguistic and scientific integrity of the test items. put in order to measure it.
2- Test stability
The researcher verified the stability of the test through two methods:

1. **The method of application and re-application**: Where the analytical test was applied to a sample of students amounting to (15) male and female students, and after more than two weeks had passed since the first application, the application was repeated on the same sample and under the same conditions. The researcher used the correlation coefficient (Pearson) to find the stability value that amounted to (0.879).

2. **Cronbach’s alpha coefficient**: The Cronbach's alpha equation was applied to the stability sample and for all test items, and it was found that the stability value was (0.74).

Sixth: Apply the final experience: The experience was made on the research sample after researchers that both groups were equal to a range of variables. The experimental group was taught according to self-education as the control group has received the traditional way of the end of the experiment.

Seventh: Statistical means:
Use the researcher the following statistical means in data processing:

1. Mathematical mean
2. Standard deviation
3. T-Test for two independent samples and verification the hypothesis.
4. Alpha-Kafonbach to verify the proven.
5. Percentage of verification agreement.

Chapter Four
The Result of the Research
First: the Results of the Research
This research is based on the following hypothesis: "There are no statistically significant differences between the average of the experimental group that was taught according to self-education and the average of the control group that was taught according to the traditional method in the post achievement test."

The researcher verified the researcher's hypothesis by applying the achievement test on the experimental and control research sample at the end of the experiment. The researcher used the t-test for two independent samples in order to verify the hypothesis.
Table (7) Comparison between the experimental group and the control group in the post-test.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Math. mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Inference level</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>25</td>
<td>24.88</td>
<td>0781</td>
<td>Calculated</td>
<td>Tabular</td>
<td>0.05</td>
</tr>
<tr>
<td>Control</td>
<td>25</td>
<td>15.12</td>
<td>881</td>
<td>4.441</td>
<td>2.02</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Through the foregoing, it is clear to us that the calculated T-value amounted to (5.849), which is greater than the tabular value of (2.02). This means that there are statistically significant differences between both groups in post-achievement, which 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.

Through the previous table, it was found that the calculated t-value is (4.441), which is greater than the tabular t-value (2.02), and therefore there are statistically significant differences between both groups, which are in favor of the experimental group with the largest arithmetic mean. This means rejecting the null hypothesis put forward by the researcher and accepting the alternative hypothesis. The researcher attributes these differences between both groups to the effect of self-education on the achievement and skills of the learners as it is one of the effective learning methods, which was reflected in the learners' desire to learn and make more effort. The results of the current study agreed with the results of previous studies.

Conclusions:
1. Self-education has been upgraded in the level of collection of students of the experimental group in self-esteem.
2. There are statistically significant differences between both experimental and responsible groups and these differences are in favor of the experimental group.

Recommendations:
1. The need to shed more light on self-education strategies in teaching methods through the development of the developmental training course for science.
2. Interest educational offices with active education and self-education as it proceeds in parallel with modern trends in methods of teaching.
3- Work on the development of curriculum in accordance with the effective and self-teaching strategies and basic instructions and teaching strategies of the Basic is the course.

**Recommendations**

The researcher suggests conducting the following studies:
1- The impact of the (Think, Pair, Synthesize ) strategy on the achievement of the students of the Pious Medical Institute in Physiology.
2- The effectiveness of flipped learning in developing scientific concepts in physiology among students of the Technical Medical Institute.

**References**

1. Ibn Manzoor, Ahmad Al-Afriqi, Lisan Al-Arab, Madbouly Bookshop, Beirut, 1995.
5. Habana, Maryam Muhammad (2013AD), the effect of cognitive conflict schemes on the acquisition and retention of historical concepts among first-grade intermediate students in the subject of History of Ancient Civilizations, an unpublished master's thesis, University of Babylon, College of Basic Education.


17. Kojak, Kawthar Hussain (2002). Recent trends in curricula and teaching methods, applications in the field of family education, Alam Al-Kitab, Cairo.


