

EFFECT OF TREAGUST'S MODEL IN ACQUISITION OF ISLAMIC CONCEPTS OF SCIENTIFIC FIFTH-GRADE STUDENTS AND DEVELOPING THEIR MENTAL SKILLS

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ABSTRACT : This research aims to identify: (the effect of Treagust 's model on acquiring Islamic concepts of scientific fifth-grade students and developing their mental skills).

The researcher used the experimental design with the two experimental and controlling groups with a pre- and post-test, as the researcher deliberately chose scientific fifth-grade students from Al-Mugheera Secondary and Ibn al-Mu'tam High School, as the research sample reached (67) students, as the Al-Mugheera High School represented (34) students, the experimental group that studied by Treagust 's model , and Ibn Al-Mu'tam Secondary School (33) students represented the control group that studied in the usual method .

The researcher constructed a test to acquire Islamic concepts that included (45) test items of multiple choice type, while the second tool was the mental skills test in its final form of (30) items, after the completion of the application of the experiment, the researcher applied the two research tools (the concept acquisition test and the mental skills test.) on the two research groups, the results showed that the experimental group outperformed the control group in the acquisition of Islamic concepts and the measure of mental skills.

KEYWORD: Treagust 's model , concept acquisition , mental skills

I. CHAPTER ONE

First: Research problem:

Despite the importance of Islamic education and its impact on our lives, teaching it in schools does not meet the modern educational philosophy that makes a positive role in the educational process for the learner. This may be due to the use of teaching methods that do not fit with the specificity of the subject, or the use of a method in teaching that does not constitute between the Islamic concept and the hearts of students, as well as the weakness of learners in understanding Islamic concepts in the curriculum, and there are no technical means used in education to bring the concepts closer to the minds It works to achieve the goals in Islamic education.

The researcher's work in the teaching domain and the problem related to the methods and methods of teaching Islamic education and Qur'an sciences, the methods of providing teachers and their methods for the topic of the lesson differ in Islamic concepts, as there are those who read it directly, and there are those who write it on the plate and explain it to these aspects, and explain the methods to themselves. Neglecting the overall meaning and aspects of awareness of the Islamic concept, and the student's role in that is limited to the concept and keeping it for the sake of the exam only, and he may forget what he read and memorized after a period of time.

Many studies conducted in Iraq have emphasized the need to search for the use of methods, methods, strategies, and teaching models that help acquire many concepts, as well as facing the low level of education in the field of Islamic education and the weakness of preparatory school students in mental skills, as indicated by Al Daini (2016) and Al-Basry (2019). In light of this, the research problem can be reached through the following question: What is the effect of Treagust model in acquiring Islamic concepts among scientific fifth-grade students and developing their mental skills?

Second: The Importance Of Research:

Our current era is characterized by information acceleration, a massive knowledge explosion, technological revolution, and rapid and successive changes in all fields, which represents a major challenge facing educators in the field of education, and confronting this can only be by finding modern and appropriate methods and methods of learning, and therefore it was necessary for those involved in education affairs Striving to develop aspects of the educational process, including curricula, books, teaching methods and strategies.

Islamic education is the first effective global education that affected civil society and found in it and directed a generation based on the curricula of the Holy Qur'an, the directions of the pure Sunnah and the applications of the Prophet's jurisprudence and jurisprudence, and it is the first education that deepened interconnected concepts in a single intellectual framework based on the value of Islam and its principles and applications in the reality of life. (Mahjoub 2006: 3).

Concepts are inherited axes around which the various academic curricula revolve, so they are products of the processes and skills in the various academic subjects. Emphasis on the fundamentals of the subjects may have become necessary to develop their curricula, strategies and methods, in a manner that is in line with recent developments, and it seems that the concepts in their entirety are broad in scope. In the various study programs, in accordance with the educational development plans (Al-Titi: 2010: 168).

The teaching methods have a major impact in achieving the goals of education, and we should know that the successful teacher is not only aware of the subject, but is aware of his method, his style, his personality and his relationship with his students, as the importance of the teaching method depends on the teacher's presentation of the subject, and how he communicates it to the student so that he accepts the dependency of the dependency and the dependency on the dependency And students' enjoyment of it to be an interactive person, not inactive, because it satisfies his needs and desires. (Abu Al-Haija: 2004: 293).

Modern models have a great impact on the process of communicating scientific material to learners, as they make the learner active and make him motivated for education, and make him a focus for the educational process, discovering and searching for information himself, and the researcher sees keeping pace with everything that is modern in the forms and strategies of teaching, methods and methods that contribute to enriching student information And activating their mental skills, instead of relying on traditional methods just to get used to them and their ease,

Treagust model for learning is one of the most important models based on constructivist theory, which is based mainly on the principle of similes, and it is known as Treagust (1993): as a process in which the similarities between concepts are identified and recognized, and Treagust distinguishes between two types of concepts the first one is known or The familiar with the learner is called the analog, while the other, which is unknown, which is often the concept to be clarified, which is known as the target (or target) and the suspect is derived from the learner's life so that he can absorb the analogy process, just as both of the target (the similar The likeness to it has common characteristics or characteristics, but at the same time they may carry non-common characteristics (Ambu Saidi and Al Balushi: 2009: 567).

The development of mental skills in a functional way is one of the main and important goals of education, a goal affirmed by most educational systems in the whole world, and in Britain the Nuffield Foundation set a set of general goals for science education (1967), one of which was the development of students' scientific skills, such as observation and classification. Peace: 2001: 45).

The preparatory stage is of great importance because it prepares students to continue their studies, and then continue university studies and qualify them for active and positive participation in different aspects of life, which is the stage in which students' thinking matures and develops their capabilities to understand, analyze and evaluate (Al-Azzawi: 2016: 23).

Hence , the importance of research can be summarized in the following:

1. The importance of the subject of Islamic education in the lives of learners, because it is a central axis in education issues.
2. The importance of Treagust model because it is a modern teaching model that constantly stimulates the learner's mind.

3. The importance of mental skills because they affect the student's thinking and contribute to building his independent personality.

4. The preparatory stage has great importance as an important stage in the ladder of the educational system in Iraq, as it is a link between the building of thought in the stage of adolescence and the stage of maturity in higher education.

Third: Research Aim:

The current research aims to identify: The effect of Treagust model on acquiring Islamic concepts among scientific fifth-grade students and developing their mental skills .

Fourth: Research hypotheses: The researcher formulated the following null hypotheses:

1- The first null hypothesis: There is no statistical significant difference at the level of (0.05) between the mean of scores of the experimental group students who study Islamic education by Treagust model and the mean of scores of the control group students who study the same subject by usual method (traditional) in the test Acquire Islamic concepts.

2- The second null hypothesis: There is no statistical significant difference at the level of (0.05) between the mean of scores of the experimental group students who study Islamic education by Treagust model and the mean of scores of the control group students who study the same subject by usual method (traditional) in the post test of mental abilities.

3- The third null hypothesis: There is no statistical significant difference at the level of (0.05) between the mean difference between the scores of the experimental group students who study the Islamic education subject by Treagust model in pre and post-test of the mental skills test.

Fifth: Research Limitation: The current research is determined by the following:

1- Time limits: The research is determined by the first semester of the academic year 2019/2020.

2- Spatial Limits: The research is determined by scientific fifth-grade scientific students in the day (preparatory and secondary) schools for boys in the Education Directorate of Salah al-Din / Tikrit.

3- Objective limits: The research is determined by the textbook prescribed for Islamic education for the fifth grade of science.

Sixth: Defining the Terms:

Treagust model: It is defined as (certain steps that take place in order to clarify, compare and simulate new concepts and phenomena to be taught to students with concepts and phenomena familiar and present in their knowledge environment before). (Abdal-Salam: 2001: 137).

Concepts: It is defined as (it is an abstract mental perception in the form of a symbol, word, or sentence used to denote an object, topic, or specific phenomenon) (Salem: 2007: 58).

The researcher's procedural definition of the concepts: It is a set of terms and verbal notations taken from the subjects of Islamic education for the scientific fifth class. It is studied for the two groups of experimental and control research for the academic year (2019-2020).

Mental skills: It is defined as the set of mental processes necessary to apply the methods of science and scientific thinking, and it can be divided into basic and integrative processes. (Abd al-Salam: 2001: 23)

Procedural definition of the researcher: It is the degree that students in the experimental and control group attain in the scale of mental abilities prepared by the researcher in this study.

II. CHAPTER TWO: THEORETICAL ASPECTS AND RELATED STUDIES

First: Theoretical Aspects:

The First Aspect: Constructivism theory: Constructivism arose from ancient times that some researchers attribute it to Socrates, and although Piaget was the founder of modern constructivism, and from it began the contributions of Uzebel in laying down its daughters, but Piaget is not the first to have the ideas of constructivism in his mind, as its roots can be traced back to The Italian philosopher "Vico" thought about the year 1710 AD on his thesis in which he talked about building knowledge, and saw that the human mind knows only what it builds by itself, so the mind builds knowledge by itself (Attiyah: 249: 2015).

Most of the theorists of constructivism consider Piaget to be the author of the first building blocks of constructivism, for it is he who believes that the process of knowledge lies in building or rebuilding the object of knowledge. Then came a group of constructivism theorists who reformulated and modified their ideas, just as Ernst Von Glassersfeld is considered to be the most prominent contemporary constructivist theorist (Olive: 33: 1992).

The Constructivist Theory Of Learning Is Based On Two Main Foundations:

1_ The education process is a continuous, active, constructive process, and that learning is a result of the learner’s interaction with the educational environment in which he is.

2- Every learner must go through different stages of development (mental, physical and linguistic) and that the learner in these stages is able to perform multiple and varied educational and mental tasks (Zaitoun: 227: 2002).

Therefore, we can say that constructivism is considered a theory of knowledge for a long time that extends over the centuries, and it is not strange to see this repetition by several philosophers and theorists throughout this history, while the modern theorist that tried to synthesize these various ideas into an integrated and comprehensive theory, formed later on the modern foundations of science The same growth is the scientist Piaget who unified philosophy and psychology to divert people's attention to the interest in thinking and intelligence in children, opening the way to a new organized view in education and psychology (Fouad Abu Hatab and others: 22: 2011).

The Second Aspect: The Treagust Model For Teaching By Analogy:

An introduction of the Treagust model: It is an educational model developed by the Australian scientist (Treagust) in which he adopted a strategy of similes, through which identifications and knowledge of similarities between concepts are defined. They have it and it is called (Target, which is the new concept to be clarified, and that both similes have common characteristics between them, and at the same time they carry different characteristics that are not common (Ambu Saidi and Al-Balushi: 2011: 566)

The simile strategy built its idea on constructive philosophy, which relies on what determines the learner’s awareness of what is in his environment is his previous information and experiences and is based on sensory examples and simulations from the surrounding environment so that the learning process facilitates and I understand the correct information (Abdel Salam: 2001: 23)

Teaching by analogy according to Treagust model relies on random excitement and the generation of new ideas and works on investing old information in the knowledge structures of learners in new education by discovering relationships between previous knowledge and new knowledge that do not exist between them and previous experience visible relationships, but are discovered through the work of the mind in The search for a relationship between the likeness (subject) and the suspect (previous knowledge) (Fayyad: 2011: 21)

Elements of simile in the Treagust model: Zaitoun identified four main elements of the analogy:

1. Target: It is intended in the field of teaching or material to be clarified and is usually difficult to understand, and this point may be a concept or principle or procedures or law or theory. .
2. The analogous (analog): means the familiar thing (previous knowledge) that is used to clarify the similar (the new topic), that is, it is used to clarify the point of content that is taught to students.
3. Analogous Attributes: means the features or characteristics similar to similar and similar.

4. Irrelevant Attributes: It means the differences or the characteristics between the similar and the similar. (Zaitoun: 2003: 56)

Objectives of using Treagust model: The model seeks to achieve a number of objectives, including:

- It works on developing some of the students' intelligence, such as visual, logical, spatial, etc.
- It helps to change the students' misconceptions, because it works to approximate abstract practical concepts.
- It develops the mental processes of the students, because the learner seeks to employ something known, or its characteristics, to something in which there is a kind of difficulty and abstraction (similar).

It makes the learning process appealing to students because the similes work to connect students with their lives.

(Ambo Saeedi and Al-Balushi: 2011: 569)

Steps of the Treagust Model ((Treagust: David Treagust , Treagust, 1993)), the Australian educator suggested three steps to teaching using similes, and these steps are called (F.A.R) for short:

1. The first step: focus includes:

- a. The concept: is it difficult, just or unfamiliar?
- B. Students: What information do students know about the concept?
- C. Similarity: What is the thing that the student knows and is similar in some of his characteristics to the concept he is studying?

2. Action includes:

- a. Similar: What are the similarities between a scientific concept and something similar to it? Write it on the board.
- B. What is different: What is the difference between the scientific concept and the like and write it on the board.

3. Reflection: It includes:

- A. Outputs: Is the analogy clear and useful and does not lead to ambiguity and dispersion?
- B. Improvement: Emphasizing the above and giving examples.

The Third Aspect : Concepts:

The growth of concepts and their development: The concepts are an essential basis for teaching and learning, as they are the building block of knowledge, and from it generalizations and special theories are formed. A specific category according to a specific standard (Al-Sakran: 2000, 44).

Teaching and acquiring the concept: means any activity that requires the individual to combine two things or two events or more, and this activity that the person performs for classification is supposed to lead to the growth of concepts to the point that when new or different things are presented to him, he can classify them correctly So that he distinguishes between positive and negative examples, and the individual is considered to have learned the concept when he performs the classification process for new things with an acceptable degree of validity (Sahib and Jasim: 2011: 52)

(Zaitoun) indicates that the concept learning process includes three processes:

- 1. Discrimination: Means the learner's ability to distinguish between similar elements, i.e. positive examples and negative examples.
- 2. Organization and classification: it means the ability to organize and classify information, by noting similarities and finding common relationships or characteristics between the different elements.

3. Generalization: the ability to reach a principle or a base that has the character of inclusion, as it is possible to benefit from the concept and use it in new situations. (Zaitoun: 89: 1986)

The concept learning is any activity that leads to the classification of relatively different events, things or stimuli in one class, and the learner's ability to classify these stimuli in a coordinated and consistent way, and in the light of some dimensions or common characteristics is evidence of understanding the concept. (Nashwati: 1985: 434)

Islamic Concepts: The concept is defined in Islamic education as a description of things, a situation, or mental perceptions that have common characteristics that distinguish them from others, and is expressed in one or two words, or a description of a single or one thing that is unique to what is in the universe.

During learning Islamic concepts, reality should be linked to the thought that is to be converted into a concept, or linked to the legal evidence, so that there is a conscious representation of the Islamic concept, full awareness of it with positive and negative examples, and a stand on its characteristics that distinguish it from others. (Al-Tai: 2004: 22).

Since the concepts of Islam had a great impact on controlling and correcting the behavior of a Muslim, it required that those concepts be linked to the legal evidence derived from the Holy Qur'an and the cleansed Sunnah, because it has a tangible reality that the learner understands, so these Islamic concepts should have an impact on the behavior of the individual, and change his path, Islamic concepts are not merely theoretical information or imaginary developments, but are realistic connotations, and moreover, they are an explanation of the things that logic presupposes. (Abdullah: 1994: 129).

Concepts In Islamic Education Are Divided Into Several Types:

1. Concepts that have a tangible reality that are perceived through a sense of their effects indicating their existence. Examples of this type are: the inference of the existence of God the Creator (glorified and exalted be He) through the various manifestations of his creation, which are transmitted in this vast universe such as the sun, moon, and planet.

. Concepts have a reality that a person does not perceive with his senses because they are from the world of the unseen, for example: jinn - demons - angels and life after death (heaven and fire), they are concepts that have a reality that man does not realize with his senses, but the source that told us has cut the mind honestly (Coward: 2019: 67).

3. Islamic concepts that have a tangible reality, and are perceived by the senses, and examples of this type are all other provisions that were mentioned in the book of God Almighty and the Sunnah of His Messenger, may God bless him and grant him peace, such as prayer, Zakat, Hajj (Abdullah: 1997: 125).

The Fourth Aspect : Mental Skills: that mental skills represent the activities, actions, practices, or actions that scientists perform during achieving the possible results of science on the one hand, and while judging its results on the other hand, and they take short or prolonged time, they lead to A specific job and to acquire new information or modify existing information in the learner's knowledge structure (Al-Khalili et. al .: 1996: 239).

The scholars paid attention to mental skills, for some of them consider them the basis for which attention should be directed in the first place with regard to teaching science.

(Yeany & et al, 1986) is a set of processes that are used to solve a problem and that can be learned by creating exciting opportunities for thinking, as this should be a major goal for educational institutions (Jarwan: 1999: 6).

Development of mental skills: The education of mental skills of learners and their training in them organizes mental processes that would help to form a scientific, intellectual personality that exceeds the information boundaries related to the course to be employed in other educational or practical situations, hence the need to learn and teach mental skills (Al-Kubaisi: 2008: 22).

Section Two: Related Studies:

1. **Al-Daini Study (2006):** This study was conducted in Iraq, the study sample reached (59) students. The study aimed identifying the effect of cognitive strategies stimulants on the achievement of scientific fifth-grade

students and developing their mental skills. The researcher used for the purpose of data analysis statistical methods including (Arithmetic Mean s, Standard Deviations, t-test, etc. ...)

The result of the study was the superiority of the experimental group over the control group in the achievement test, as it showed that there were statistically significant differences in the scores of the post-mental skills test in favor of the experimental group, as well as the presence of statistically significant differences between the scores of the pre and post mental skills test in favor of the experimental group.

2. **Al-Basri study (2019):** This study was conducted in Iraq, the sample of the study reached 114 students. It aimed to identify the effect of Treagust Woods models on the achievement of second-grade intermediate students in the subject of physics and the development of their mental skills, and the researcher prepared the achievement test and the mental skills test, The researcher used the following statistical methods (correlation coefficient, Cronbach’s alpha equation, Eta squared, and t-test for two independent groups), the result of the study was that there were differences between the three groups in achievement and mental skills and in favor of the two experimental groups.

III. CHAPTER THREE: RESEARCH METHODOLOGY AND PROCEDURES

This chapter contains the research procedures in terms of choosing the experimental design, determining the research community, choosing its sample, and its equivalence in a number of variables, preparing its tools, preparing its requirements, and then applying the experiment, and choosing the statistical means that suit it, and as follows:

First: Research methodology: The researcher used the experimental a broach , in order to achieve his research objectives.

Second: Experimental design: Experimental design one of the basic methods when studying human phenomena in general, and whenever the design is compact and suited to the phenomenon to be studied, the experimental research method succeeds in understanding the phenomenon and its interpretation. The factors surrounding the phenomenon that we study in a certain way, and then a note of what is happening (Dawood and Abdul Rahman, 1990: 250-256). Therefore, the researcher chose a partial experimental design with two experimental and control groups with pre and post testing, to suit the research conditions. The experimental design can be illustrated as follows:

Figure (1) Experimental Design

Group	Pre-test	Independent variable	Dependent variable	Post-test
Experimental	Mental Skills test	Treagust model	Concept Acquisition - Mental skills	Concept Acquisition Test Mental skills test
Control		Usual Method		

Third: Defining the Research Community:

1- Research community: The research community consists of scientific fifth-grade students in secondary and preparatory schools for boys in Salahiddin Governorate, Tikrit District for the academic year (2019-2020), as the number of students in it reached (1088) students of scientific fifth grade, according to the statistics that were carried out by Department of Educational Planning in the General Directorate of Education, Salahiddin Governorate, Tikrit District.

2- Selecting the research sample: the sample is defined as: “a small part of the community that is specially selected to properly represent the community, and through the sample the characteristics of the community that you are studying and analyzing are known (Al-Bayati: 2008: 183). To determine the research sample, the researcher follows the following steps:

3- The research sample: The researcher has identified Al Mugheera secondary School and Ibn Al Mu’tam secondary School for Boys to which the experiment will be applied, and the researcher used random method in selecting Al Mugheera secondary School to represent the experimental group that will be studied using Treagust model, and Ibn Al-Mu’tam secondary School represents the control group that will be taught in the usual method . The sample members reached (67) students, including (34) students from Al-Mugheera Secondary

School, which represents the experimental group, and (33) students from Ibn Al-Mu'tam Secondary School, which represents the control group.

Fourth: Equivalence of the two research groups: Before starting the experiment, the researcher conducted statistical parity between students of the two research groups in some variables, including:

1. Age of students calculated in months: the researcher used the t-test for two independent samples, in order to find out the significance of the statistical difference between the experimental and control groups, and the results showed that there was no statistically significant difference between the two research groups and Table No. (1) shows that

Table No. (1) The results of the t-test for the two research groups in the chronological age calculated in months

2. Pre-test scores for mental skills: The researcher used the t-test for two independent samples, in order to find

Group	N	Mean	Std. Deviation	df	t-test		Significance 0.05
					Calculated	Tabled	
Experimental	34	195.65	3.95	49	0.40	2.00	Non-significant
Control	33	193.08	3.64				

out the significance of the statistical difference between the experimental and control groups. The results showed that there is no statistically significant difference between the two research groups.

Table (2) arithmetic mean, standard deviation, and calculated and tabulated T-values for pre-test scores for mental skills.

Group	N	Mean	Std. Deviation	df	t-test		Significance 0.05
					Calculated	Tabled	
Experimental	34	66.85	7.36	49	0.79	2.00	Non-Significant
Control	33	68.44	7.00				

Seventh: Preparing the Research Tools:

1 - Concept Acquisition Test: The researcher prepared the test consisting of (45) items, covering the material contained in the experiment, it was noted that each concept should have three processes that measure (the level of identification, the level of discrimination, and the level of application) - after completing the statistical procedures related to the test and its items the test has become in its final form consisting of (45) items in acquiring Islamic concepts of (15) multiple-choice concepts.

2- The mental skills test: The researcher prepared the mental skills test consisting of (18) objective items of a multiple choice type, at a rate of (6) items for each skill. The researcher chose three skills, choice of assumptions, interpretation, and generalization.

Eighth: Statistical means: The researcher used the following statistical methods: (t-test for two independent samples, χ^2 , difficulty coefficient for test items, discrimination of test items, Pearson correlation coefficient, and Cronbach's alpha equation).

IV. CHAPTER FOUR : VIEW AND INTERPRETATION OF RESULTS

First: Presentation of the results:

A- Result of the first null hypothesis: For the purpose of verifying the first zero hypothesis which states that (there is no statistically significant difference at the level (0.05) between the mean grades of the experimental group students who are studying Islamic education subject by Treagust model and the scores mean of the control group students who study the same subject by usual (traditional) method, in the test of acquiring Islamic concepts. The researcher used t-test for two independent samples, to measure the significance of the difference between the two means, the calculated t value reached (3,77), which is greater than the tabled value (2.00), at (0.05) and with a degree of freedom (65), and Table (3) shows that.

Table (3) results of the T-test for students of the two research groups in the test of acquiring Islamic concepts

Group	N	Mean	Std. Deviation	df	t-test		Significance 0.05
					Calculated	Tabled	
Experimental	34	30.65	3.20	65	3.77	2.00	Significant
Control	33	26.71	4.18				

It is clear from the above table that there is a statistically significant difference between the mean of the experimental group scores that were studied according to Treagust model, and the mean of the group scores that were studied in the usual way and in favor of the experimental group, and accordingly rejected the null hypothesis, which states that there is no significant difference At the level of (0.05), between the mean scores of the experimental group that teaches the subject of Islamic education according to Treagust model, and the control group that studies the subject of Islamic education according to the usual (traditional) method in the test of acquiring Islamic concepts.

B - Result of the second null hypothesis: For the purpose of verifying the second zero hypothesis which states that **(there is no statistically significant difference at the level (0.05) between the mean scores of students of the experimental group who are studying Islamic education subject according to Treagust model and the mean score of the students of the control group who They study Islamic education subject to the usual (traditional) method of testing mental skills.** The researcher used the T-test for two independent samples, as the calculated T value reached (2.98), which is greater than the tabular T value of (2.00), at the level of The significance (0.05) and the degree of freedom (65), and table (4) illustrates this.

Table (4) Results of the T-Test for students of the two research groups in the mental skills test

Group	N	Mean	Std. Deviation	df	t-test		Significance 0.05
					Calculated	Tabled	
Experimental	34	72.35	7.63	65	2.98	2.00	Significant
Control	33	66.52	6.25				

This indicates that there is a statistically significant difference between the mean scores of the two research groups and in favor of the experimental group. Accordingly, the second null hypothesis, which states that there is no statistically significant difference at the level of (0.05), between the mean scores of the Islamic experimental group that studies the subject of education was rejected. According to Treagust model and the control group that studies Islamic education subject to the usual (traditional) method. In the post test of mental skills.

C - Result of the third zero hypothesis: For the purpose of verifying the third null hypothesis which states that **(there is no statistically significant difference at the level (0.05) between the mean differences between the grades of the experimental group students who are studying Islamic education subject to according to Treagust model in the pre and post-test For mental skills).** The researcher used the t-test for two related samples, as the calculated t value reached (6.39), which is greater than the tabular T value of (2.04) with a degree of freedom (33), and at a level of significance (0.05), meaning that the result is statistically significant and in favor of the skill test Dimensional mental. Table (5) illustrates this.

Table (5) the results of the t-test for two correlated samples for the pre and post application of the mental skills of the experimental group

Group	Mean	Std. Deviation	Differences Mean	Differences Dev.	df	t-test		Significance 0.05
						Calculated	Tabled	
Pre-test	66.81	7.34	5.54	4.42	33	6.39	2.04	Significant
Post-test	72.35	7.63						

Thus, it rejects the third null hypothesis, which states that, at the level of (0.05), there is no statistically significant difference between the mean differences between the grades of the experimental group that teaches the subject of Islamic education according to the Treagust model in the pre and post scale of mental skills.

Second: Interpretation of results: After analyzing the results, the researcher sees that the students of the experimental group outperformed the control group students in the conceptual acquisition test due to the following reasons:

1. Treagust model focuses on the student, in that it makes it the focus of the educational process, so the use of analogy has made the student in a thinking position of the material studied, in addition to that she worked on enriching the student's learning in a better and deeper way and discusses with his colleague about the concepts presented and explains them and overcome these problems and difficulties through their own capabilities, which may help in increasing the acquisition of concepts with them.

2. The Treagust model works on the mental skills of the students of the experimental group by presenting them to concepts and focusing on them, and revealing about the relevant information by increasing the discussions and the many questions and inquiries.

Third: Conclusions: In light of the researcher's findings, the following can be concluded:

1. The superiority of students in the experimental group due to Treagust model, which allowed students to learn more freely, in diving into the depths of the subject, and that the success of the individual in the group means the success of their groups, and they accept to learn motivated more than their peers in the usual method .

2. That students who have been exposed to new models that lead to understanding and application and showing what the student will discover himself will establish in the mind a longer period and show a greater motivation to learn from their peers who have studied the usual method based on memorization and indoctrination.

Fourth: Recommendations: In light of the research results, the researcher recommends the following:

1. The necessity of diversifying the teaching methods used in teaching Islamic education with an interest in using Treagust model in preparatory school teaching, because of its impact on achieving the teaching objectives.

2. Emphasizing the importance of Treagust model in education, because it is considered one of the teaching models that develop students 'mental and cognitive skills.

Fifth: Proposals: As a compilation of this research, the researcher suggests conducting future studies, including:

1. Conducting a study to identify the effectiveness of Treagust model in the achievement of scientific fifth-grade students in the subject of Islamic Education and development of their moral intelligence.

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