

Received: December 2023 Accepted: January 2024

DOI: <https://doi.org/10.58262/ks.v12i2.348>

The Impact of the Brain Consensus Model on the Acquisition of Arabic Grammar Concepts for Female Students in the Fourth Grade

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Abstract

Objectives: To identify the impact of the brain consensus model on the acquisition of Arabic grammar concepts among students in the fourth grade, methodology: The pilot curriculum was used, and a partial control pilot design was adopted. There were 30 female students in the pilot group, 30 female students in the control group, and the two researchers were statistically rewarded among the two groups' students in some variables and used appropriate statistical means to analyse the results, including the test for two independent samples, the square (χ^2) and the Alpha Kronbach equation. Results: The pilot group outperformed the control group. The results showed that there is a significant statistical difference at the indicative level (0.05) for the benefit of the pilot group. In the light of the research results, the two researchers recommended a series of recommendations, including encouraging Arabic grammar teachers and teachers to use a compatibility model because of positive indications of students' acquisition of Arabic grammar concepts. Conclusion: The brain consensus model has a clear impact on raising students' level of acquisition of Arabic grammar concepts.

Keywords: Model, Consensus, Brain, Gain, Concepts, Grammar, Arabic Language.

Search Problem

The weakness of students in Arabic grammar is one of the problems that has clearly arisen in educational institutions. This phenomenon is a general problem that accompanies the teaching of Arabic language. It is the most complex educational problem, if the complaint about the low level of students in it is made, and this provision applies to many students. (Zair, Ayez, 2011, 26), which is a subject of great distaste and narrowing of students, students no longer celebrate it but often find that they hate Arabic in its entirety (Al-Jabouri, Hamza, 2016, 169).

The two researchers concerned about the weakness of the Arabic grammar by preparing a questionnaire on how to teach grammar Arabic and the level of female students in acquiring the concepts of Arabic grammar. Two questions were directed to female teachers in Arabic for the fourth grade of a number of schools for the Second Directorate of Karakh Education/Baghdad. (11) The answer to the first question was female teachers' adherence to the traditional method by 81%. In the second question, the answer was 90% that many female students had a significant weakness in the level of acquisition of Arabic grammar concepts, making them dislike it.

In the light of the foregoing, the two researchers believe that it is necessary to find solutions

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to the problem mentioned and to seek to develop the subject of Arabic grammar, develop the methods and strategies for its teaching, and employ modern models that will have an impact on students' acquisition of the concepts of Arabic grammar Summarize the problem of research by asking the following question:

(What has been the effect of the brain consensus model on the acquisition of Arabic grammar concepts for female students in the fourth grade?)

The Importance of Research

Linguists and educators gather that teaching grammar is not an end in itself, but a means of achieving the goal of straightening the tongue and the pen, including (Ibn Khaldoun, 1982:545). "The pillars of the science of the tongue are four, the language, the grammar, the statement and the literature. The most important of the pillars is that it indicates the origins of the purposes by meaning. If the actor knows the act, the initiator, the experience, and if he does not know the origin of the statement, then the science is more important than the language.

Teachers are interested in teaching concepts, as they represent a solid basis for teaching other elements of the knowledge system, and they are related to developing students' thinking. Teaching concepts facilitates learning of the subject, as well as stabilizing it in memory and mental structures, contributes to the transmission of the learning impact, and bridges the gap between past and subsequent learning. (Dakhl Haider, 2014:151), concepts are important in reducing the complexities of the environment. They are the language of science and the key to scientific knowledge. They organize and classify a large number of events, objects and phenomena, all of which constitute the main scientific principles and conceptual structures. (khataibe & hassan, 2001:197).

Teaching models are important in learning linguistic concepts and therefore help students to deal with information and knowledge in such a way as to build linguistic concepts of integrative value (Alleqaei, Ode, 1990, p. 141).

Among these models is the model of compatibility of the brain. The use of this model eliminates difficulties in teaching concepts. It also facilitates the acquisition of flexibility and activity in the teaching process, as well as the challenging, suspenseful and motivational nature, which reduces anxiety in learners and provides psychological stability. (shukry-Balaa.2018,78), it is based on the assumption that

everyone continues the learning process as long as there is no obstacle to the brain's continuing to perform its work (Kapadia, 2014, Salah, 2010).

The Importance of Research can be Summarized

- 1- Education is an end in modifying an individual's behaviour.
- 2- Language in general because it is the primary tool through which man interacts with his society and expresses his purpose and purposes.
- 3- Arabic language because it is the language of the Holy Quran and the prophetic Sunna.
- 4- Arabic grammar because it is the means of calendar the tongue and avoiding writers and speeches.
- 5- Concepts because they expand the student's perceptions, draw their attention to what is beyond mere preservation, in addition to making learning work.
- 6- Modern teaching models as an attempt to move from teaching in the traditional way to one

that is in line with modern developments

- 7- Brain compatibility model because it is a model that emphasizes the idea of brain-based learning
- 8- Preparatory stage because it is the stage at which female students grow physically and mentally, as well as an important stage in the formation of the student's personality.

Research Objective

This research aims to know (the effect of the compatibility model on the acquisition of Arabic grammar concepts among fourth grade literary students)

Research Hypothesis

(There are no statistically significant differences at the indicative level (0, 05) between the average grades of pilot group students studying Arabic grammar in a compatibility model and the average grades of control group students studying the same subject in the traditional way in the conceptual acquisition test.)

Search Limits: Research Is Determined by

- 1- Fourth grade literary students at the Government High and Day Preparatory Schools in Baghdad under the Second Kurkh Directorate for the academic year 2023-2024.
- 2- Subjects of Arabic grammar to be taught in the first semester of the academic year 2023-2024.

Definition of Terminology

Cainne & Crowell: A model based on the integrative view of the functions of the two spherical halves of the human brain, while being an application for brain-based teaching (BBTA) based on several principles: brain, mind, body and one dynamic unit Learning employs all aspects of the brain, searching for meaning is innate and happens through simulation And emotions are a crucial process in learning, and every brain has the potential to perceive and form parts and all at once. Learning includes conscious and unconscious processes, focus of attention and external attention, Memory systems have at least two types: spatial learning, conservation learning and brain understanding and recalling the best realities associated with spatial nature, promoting challenging learning and hindered by threat (Caine & Crowell, 1999:28)

Procedural Definition

It is a set of stages that process concepts and strengthen the linkages between what exists in brain buildings and the new concepts that the two researchers will teach to fourth grade literary students"

Third: Earnings

Procedural definition: The ability of fourth grade students to identify concepts by answering test paragraphs measuring a level (definition of concept, differentiation of concept, dissemination of concept) for each of the established Arabic language grammar subjects

Fourth: The Concepts of Arabic Grammar

Procedural definition

The basic terms of the body of law governing the last words in terms of expression, and all the subjects of the Arabic grammar book to be taught to students in the fourth grade of literary"

Background Theory

Brain Consensus Model: This is one of the most important models of constructive theory he referred to (William Font) at the foundation of his school in Germany, which was devoted to conducting research in an experimental manner (Jacob, 1993, 560).

Al-Saeed and Al-Nimr, 2006, noted that the philosophy underlying the constructive theory was based on the acquisition of knowledge through active constructive science, through which it modifies students' knowledge structure, organizes their information, deletes or adds to their current lesson. (Al-Saeed and AL-Nimr, 2006, 12).

The main objective of this theory is to place the student at the centre of the educational process through information in their proper memory (zaïton, 2007, 36). Recently, interest in this theory has increased considerably because it calls for the rearrangement of students' ideas through the restructuring of ideas and concepts existing in students or their evolution or the inventing of new concepts (Al-Anoun and Fatlawi .2012). 151).

The brain compatibility model is a model that employs both sides of the brain. The model is designed in such a way that it is compatible with brain perception as well as its function to ensure learning and education. The human brain has a number of divisions, most notably the two sides of the brain, which distribute brain function to the right and left lobes. Each has special functions. (Al-Otaibi .2019, 242).

To ensure the functioning and effectiveness of the learning process, we need to understand the structure of the human brain and recognize its functions and patterns. And the thinking and how learning happens, the educational view of the human brain of students has changed after they see it as just white papers inscribed on it, Lan is seen as a dynamic member who receives and organizes new knowledge and works on the interconnectedness and complementarity of existing and past information to solve situations and problems that need solutions.

Learning according to this model occurs by regulating the information and concepts involved, such as the occurrence of learning naturally. It is also accused of the way in which the brain works, as well as how students receive and process new information, and promotes the appearance of brain obedience (for stressful plasticity) that defines it as the brain's ability to Dealing with problems is a reflection of a number of studies that have established a link between teaching, learning and the biology of the human brain. The nature of the brain does not monopolize to think without another, especially those that need higher and higher mental processes. The brain consensus model expresses the brain's mental habits in its skill and cognitive treatments. (Madrazo & Molz,2005,48).

Education Based on a Compatibility Model of the Brain Must Overlap the Following Elements

- 1- Relaxing mindfulness - the psychological climate: This element involves providing a safe and reassuring learning environment and addressing away from any factor that causes fear and threat to students, i.e. achieving a relaxed readiness and a comfortable environment that stimulates them without hesitating to ask any question or opinion, even if the wrong

discussion is open and unrestricted by specific thinking.

- 2- Coordinated immersion: This element is meant to provide a real learning environment that allows students to go through meaningful real-life experiences and creates a love of discovery, knowledge and challenge.
- 3- Active Treatment-Strengthening: Teaching and learning processes require conscious and unconscious processes. Active processing analyses educational attitudes or tasks through a range of methods to gain knowledge, allowing students to use their senses and experiences to communicate with the materials they learn (Zaghoul, Shakir, 2007, 277).

Stages of the Compatibility Model of the Brain:

- 1- Activation Phase: It is also called "Tribal Information Preparation" or "Processing Phase". Guidance on the subject is given at this stage and allowing students to build mental perceptions on the subject. At this stage, it builds a preliminary framework for new learning, as the learner's child will have a background on the new subject the faster it will be absorbed.
- 2- The grading stage of the outputs and the drawing of the general picture of the study: In the second stage, the students are the ones who make the personal goal of learning. This helps to alleviate the intensity of the tutu and the anxiety they have from their lack and length to understanding the new concepts of the article in question and the relationships between them.
- 3- The stage of building associations and developing meaning: at this stage the formulations occur and the new linkages between the subject or the educational unit form the subjects of mastery and what the students teach earlier and with the knowledge expected thereafter linkages are stronger whenever inputs are clear and experienced and familiar to them, The focus of this phase is on linking new knowledge to past knowledge and stimulating the learning process through memory, i.e. learning in the way of retaining facts, skills and procedures.
- 4- The stage of building educational activities: At this stage, students engage in a range of educational activities, including (disposal, thinking) using audiovisual senses. The aim of these activities is to acquire the knowledge to be achieved and reach a solution, providing a variety of such experiences.
- 5- Learner's Proof of Understanding: At this stage, new knowledge is installed in addition to providing adequate opportunity for experimentation and interaction with new experience. Thus, learning becomes more profound, harsh and durable due to the existence of associations, Quoted from al-Uteibi, 2019:250)
- 6- The stage of reviewing the learner's recollection and preservation of concepts: the objective at this stage is to emphasize the formation of memory or the weathering of a cognitive structure that links studied concepts and the extent to which they can be retrieved. At this stage, a number of mental activities are used where information and concepts are easily retained and the importance of this phase lies in the formation of the learner's memory (Al-Gorani, 2008:39)
- 7- The review phase of the new topic: "Job integration", where new learning is used for its promotion, development and expansion, by encouraging female students to study the subject and asking a series of thought-provoking questions, applying knowledge in new situations and encouraging female students to ask their different questions about the concepts and ideas (Mahmoud, 2005:289).

Arabic Grammar Concepts

Learning Concepts: Scientific development and cognitive explosion have underscored the importance of concepts in all teaching subjects. It has become difficult to put the learner in front of this huge amount of knowledge and information. Concepts play an important role in the formation and building of knowledge (Haider and Abaniya, 1996, 17). Learning concepts is one of the most important challenges facing teachers in the field of education. It has led to a change in the aims of education, from simply communicating information and facts to students to creating mental habits that enable them to live in a changing society (Hmaida & Others : 2000, 53).

There are a number of theories that have confirmed that learning is based on conceptualization, because learning concepts is the main composition of the cognitive structure. Many educational psychologists have pointed out the importance of learning concepts because of the important role that concepts play in our lives (Saraya, 2002, 222).

Learning the concept is a complex process that requires an individual to balance the characteristics of the concept with the abstractions required to learn the concept. (Al-Sadiq, 2001, 65) The concept learning process is an activity that requires an individual to link two or more incidents. This activity leads to a distinction between concepts. When providing examples, he can distinguish them and identify which examples of the concept is high and which are not (Al-Sharbini and Yasereia, 2000, 45).

The concepts are growing and evolving in individuals according to their experience. The concepts do not grow to a single degree but differ in their degree of development by the same concept. Physical concepts grow faster than abstract concepts, because physical concepts use direct experiences and factual examples while abstract concepts use abstract experiences (Al-Zand, 2004, 254).

Factors Influencing the Learning of Concepts

It is bad when teaching concepts that there are a range of influential factors that drive the learning of concepts and regulations. These factors include:

- 1- Examples and examples: Examples (evidence) are positive and negative examples that help to learn concepts. Studies have shown that learning with positive evidence is faster and easier than negative evidence.
- 2- Relational and non-relational qualities: relational qualities mean that qualities have to do with the concept. Non-relational are qualities that have nothing to do with the concept. Learning is faster and better when you recall and multiply the relational qualities.
- 3- Past experiences: Past experiences of a learner influence his or her learning of concepts, the more his or her experiences of the lesson concept the more he or she learns, and individual differences between learners influence differences in learning concepts.
- 4- Type of concepts: the concepts differ from mere and material ones. If the concept is simple and few examples of it are more involved in the process of learning. If the concepts are material or perceived, the teachers must direct the learners to it and help them to reach out to the targeted concepts. (Al-Titi, 2004, 68).

Earning Concepts

are a fundamental tool of thinking, so attention should be paid to their formulation and development, for example by different educational trips or means, and they are provided directly to them so that they become meaningful. (John,1980:274)

Modern education has become interested in how learners learn and care about them by developing their awareness and refining their emotions in order to gain knowledge, information, concepts, values and trends. This is not done without the efforts of educational and educational institutions (Saber, 2007:10).

The process of conceptualization is a natural process. This process is carried out in gradual stages. It occurs on a daily basis and at every moment. This process appears before the child enters school. It detects and learns from the environment in which he lives. This process involves the similarities and differences that exist in this world (Alshrbini & yaseria , 2000, 45).

Concepts are usually acquired through senses through perceptions that get concepts are shaped by individuals' interaction with the excitement they face and the attitudes they experience. Individuals have an image, name or symbol of this concept. and thus concepts of individuals are formed at an early age, and the concept is further shaped and learned as the individual grows and experiences increase. (Abu Kloop, 1997:45)

He considers that there are many principles that teachers must take into account in shaping and acquiring students' concepts:

- 1- There are concepts that evolve from students through their experiences outside the school, while other concepts evolve within the school
- 2- The development of the concept depends on students' experiences and maturity on the one hand.
- 3- Focus on its diversity of experiences more than duplicate experiences.
- 4- Concepts are shaped and diverse and this takes a long time, so it is not possible to give concepts at once. This does not lead to students' understanding (Sa'ada , ALYousef, 1988, 70).

Arabic grammar was the means to master language skills. There was a need to find methods to help understand them. Educators had come to the conclusion that the method of learning and acquiring concepts was the best in learning grammar by using the processes of the mentality of balancing the range of excitement offered such as examples and not examples (Ali, 2012, 80).

Levels of Concepts

In this area, Ozbel distinguishes between three levels of concepts according to the learner's classification in his knowledge structure according to his opinion. These levels are:

- 1- High-ranking concepts: these are concepts derived from other, simpler concepts, ranked higher than those of simple concepts, which many educators need to focus on in teaching.
- 2- Secondary concepts: concepts that are classified under certain concepts that are generally more comprehensive and highly relevant.
- 3- Compilation concepts: concepts that are classified with a set of concepts so that they remain with them at the same level of general and inclusiveness and in appropriate harmony (Samarraei and Raed, 2014, 28).

Previous Studies

The two researchers drew on a series of research-related studies, as in the following table:

Table (1): Previous Studies.

T	Researcher's Name Study Year And its place	Method of Research	Search Goal	School level	Sample number and sex	Study Tool	Statistical Tools	Results
1	Ahmad Study (2014) Iraq	Experimental	Effect of selective model in the acquisition of concepts Arabic grammar	Intermediate level	(61) Only females	Acquisition Test	T test for two independent samples, kai box, binding coefficient, pearson, difficulty coefficient, differentiation coefficient, effectiveness of the traditional alternatives.	The results showed the superiority of the experimental group's students and the control group students studied using the traditional method.
2	Kazim Study (2012) Iraq	Experimental	Impact of Woods Model In acquiring the concepts of Arabic grammar In the second graders	Intermediate stage	(60)	Arabic grammar concepts	Test two independent samples, Pearson binding coefficient, Kai square, difficulty coefficient and distinction coefficient, Alfa Kronbach.	The results showed that female students outperformed female students of the control group who were studied in the traditional way.
3	Gedan Study (2012) Iraq	Experimental	The impact of selection models and Fryer on the acquisition of grammatical concepts in female first graders is average	Intermediate Stage	Only females	Choosing my dimension in acquiring the difficulty factor, concepts of Arabic grammar		The results showed that female students outperformed female students of the control group who were studied in the traditional way.

Research Curriculum and Procedures

First: Research Methodology

The researchers relied on the (experimental) approach because it suited the nature of their research, relying on the observation seized in the test of sincerity of assumptions, and its ultimate objective was to detect the causal link between phenomena and variables (Alsammak, 2011, 67).

Second: Search Papers

1- Experimental Design

The selection of an experimental design that fits the research procedures and achieves its objectives, is one of the first steps to be implemented, because the selem selection ensures that accurate and sound results are reached. It means the part that summarizes the logical composition of the experiment, including an explanation of the variables studied, the number

of examiners and how they are divided into groups, and the adjusting of other variables (Raouf, 2001, 152).

The two researchers adopted a partially tuned design in their research procedures, and the design of the non-random selection control group with a dimensional test was selected only to test the acquisition of Arabic grammar concepts for fourth grade literary students, Table No. (2)

Table (2): Experimental Design Used in Research.

Group	Independent Variable	Affiliate Variable	Tool
Pilot Group	Brain compatibility model	Gain Arabic grammar	Earning Test
Control Group	Traditional method	concepts	concept

2- Research Community

The researchers identified the research community as the fourth grade female students in preparatory and daytime high schools in Baghdad governorate, spread over six general directorates for the academic year (2023-2024), among which the researchers chose the General Directorate for the Education of Baghdad the Second Karakh by intentional means, for being located within the geographical area of its residence.

3- Sample Search

After the two researchers identified the school in which the experiment would be applied, they visited the school in question, finding that it included two divisions for the fourth grade of literature and opted for a division (a) To represent the experimental group that will study the substance of the rules using (brain compatibility model) The Division (b) to represent the control group that will study the subject of the rules using the traditional method, and the number of female students reached the divisions (63) Female (32) Female Students in Division (a) and (31) Student in Division (b). After the female student deposits were excluded, the number became (60) 30 students in Division A and 30 in Division B, table (3).

The two researchers selected the Girls' Numerical High School for experimentation, one of the day schools of the Second Directorate of Karakh, because of the cooperation of the school administration and its proximity to the two researchers' residence, which makes it easier for them to move there.

Table (3): Number Of Female Students In The Pilot And Control Research Groups.

Group	Division	Number of Female Students Before Exclusion	Number of Female Students Depositing	Number Of Female Students After Exclusion
Experimental	a	32	2	30
Control	B	31	1	30
Total		63	3	60

Parity of the Two Research Groups

Before starting its trial, the two researchers made sure to equalize the two groups in a number of variables that may affect the results of the experiment. These variables are:

- 1- Female students' ages calculated in months, supplement
- 2- Parents' educational achievement.
- 3- Intelligence

The researchers obtained data on the ages of time and the academic achievements of the parents from the students themselves, by means of a questionnaire containing the disclosure of this information prepared by the researchers and distributed to the students. As explained in the supplement (2), the third variable applied the researchers' Raven test to the successive matrices. The tables show the parity of the two research groups in the previous variables between the two research groups:

1- The age of female students is calculated by months:

Table (4): T Test Results For The Two Time Age Research Groups.

Table (7). T-Test Results For The Two Time-Age Research Groups.								
Group	Number of Sample Personnel	Standard Deviation	Variability	Free Limit	T Value		Indicative Level	
					Calculated	Scheduling		
Experimental	30	207.8	3.188	10.163	58	1.362	2	No Indicative
Control	30	209.1	2.951	8.708				

A- Parents' Educational Achievement

The researchers conducted parity in the parents' academic achievement. The results of parity were as follows:

Parents' Educational Achievement:

Table (5): Repetitions of Educational Achievement of Parents of Students of Both Groups, Degree of Freedom, Values (c2) (Calculated And Tabular) and Level of Indication.

Collection Group	Read Sample Size	s and write	Primar y	mddl e	Secondar y or Institute	PCL and above	Fre e limit	Value c2		Indicative Level
								Calculate d	Schedulin g	
Experiment al	30	5	4	8	7	6	4	1.28	4.49	No indicative

B- Mothers' Educational Achievement

Table (6) Repetitions of school achievement for mothers of students of both groups, degree of freedom and values

(C2) (Calculated And Tabular), And Indicative Level

Collection Group	Reads Sample Size	and writes	Primar y	mddl e	Secondary or Institute	PCL and above	Free limit	Value c2		Indicative Level
								Calculate	Schedulin g	
Experimental	30	6	7	5	5	7	4	1.38	4.49	No indicative

3- Intelligence

The two researchers applied the Raven test for sequential matrices for the purpose of equalizing the two groups in this variable due to its suitability for the research sample students as well as being legalized on the Iraqi environment (Al-Dabbag, 1983: 60), where this test consists of (60) multiple selection-type paragraphs, divided into five totals, and consists of (12) questions, graded in difficulty.

Table No (7): Parity of the Two Research Groups in the IQ Variable.

Group	Number Of Sample Personne l	Arithmeti c Average	Standard Deviation	Variabilit y	Free Limi t	T Value		Indicativ e Level 0,05
						Calculat e	Scheduli n	
Experimenta l	30	30, 366	12, 831	164, 634	58	0.253	2	No indicative
Control	30	29, 566	13, 479	182, 169				

4- Control of Extraneous Variables

In addition to the above statistical parity procedures between the two groups, research into some variables affecting the independent variable, the two researchers tried to adjust some of the intrinsic variables that may affect the integrity of the results of the experiment, as their adjustment results accurately, as follows:

- 1- Sample Selection: Adjusted by Random Sample Selection
- 2- Maturity: adjusted from the trial time route since it was uniform for the experimental and control groups
- 3- Experience conditions and accompanying accidents:

The experience of this research was not interrupted by any incident, so this factor could be avoided.

- 4- Experimental breakdown: This research was not subjected to such circumstances except for individual absences, a normal condition, to which both research groups were exposed in a small and equal proportion.
- 5- Impact of experimental actions: For the accuracy of the experiment from a number of experimental actions that may affect the dependent variable, the two researchers worked to minimize this factor by:
 - A- Study subject: The subject was uniform. The researchers relied on subjects according to the Arabic language book for the fourth literary grade - first semester.
 - B- Teacher: This factor had no effect because the subject's school itself had not changed
 - C- Distribution of lessons: Fair distribution of lessons between the two research groups
 - D- Duration of the experiment: the duration of the experiment was equal.
 - E- School building: The experience was applied in one school, in one adjacent and similar classrooms in terms of area, lighting, ventilation, number, type and size of windows and seats, to avoid the impact of this factor on the results as much as possible.

5- Search Requirements

Select The Following Requirements

- 1- Scientific subject: Eight subjects of the Arabic language book for the fourth grade of the school year (2023-2024).
- 2- General Goals and Behavioural Goals: 100 Behavioral Goals Have Been Set
- 3- Preparation of teaching plans: The two researchers prepared a plan for each of the subjects (8) found in the Arabic language book to be scheduled. There were 16 (8) plans for the experimental group to be studied according to the compatibility model of the brain, and (8) plans for the control group to be studied according to the traditional method.

They were all brought before the arbitrators.

6- Search Tool

The two researchers prepared tests appropriate to the nature and purpose of their research. The researchers followed the following procedures:

- 1- Determining the objective of the test: The objective of the test is to measure the acquisition of Arabic grammar concepts among literary fourth grade students (research sample)
 - 2- Test levels: measures the three conceptual levels (definition, excellence, and generalization)
 - 3- Determination of the type of test paragraphs: The researchers prepared the test paragraphs for Arabic grammar material of the type of objective tests; Of multi-choice type.
 - 4- Test instructions: When drafting instructions, the researchers took into account that the applicant should be clear and easy to understand while clarifying the objective of the test, and how to answer its paragraphs.
 - 5- Certification of the test: The two researchers adopted the apparent honesty, certified the content and presented to a group of specialists in Arabic language curricula, teaching methods and educational and psychological sciences.
 - 6- Test validity: The two researchers applied the conceptual gain test to a reconnaissance Sample and had Two Phases
- A-** The first exploratory experience of the test: to verify the clarity of the test's instructions and vertebrae, and calculate the time taken to answer the test, applied to a survey sample of literary fourth graders from the research community itself, composed of After the application of the test, a female student of the numerical secondary level found that his/her paragraphs were all clear and understandable. The average time of responding to his/her paragraphs was reached by calculating the time of the test by calculating the average time of the female students by recording the time on each student's answer paper after the completion of the answer. The researchers used the following formula in extracting the time of the answer:

Time 1 + Time 2 + Time 3 +... etc.

Average response time =...Total Number

The average time to answer test paragraphs was 35 minutes, which is enough time to answer.

B- Second test exploratory experience:

The researchers applied the test to a second sample of 100 female students from the four literary grades after ascertaining the clarity of the test instructions and the clarity of the wording of its paragraphs, the time taken to answer these paragraphs. The purpose of this application is to know its Cycometric characteristics and verify the vertebrae's correctness, as follows:

A- Difficulty of testing paragraphs

After calculating the difficulty factor for each of the test paragraphs according to the difficulty equation, the researchers found the difficulty factors to be between (32, 0) and (68, 0), and (BLOOM) indicates that the test paragraphs are acceptable if they are confined between (20, 0) and (80, 0). (60:BLOOM, 1971), and therefore all test paragraphs were accepted.

B- The Power To Distinguish Paragraphs

That is, its ability to distinguish between high-level examiners and lower-level examiners relative to the quality of the test (Al-Zubei et al., 1981:79), after calculating the power to

distinguish each paragraph of the conceptual acquisition test using the paragraph distinction equation, found that the power to distinguish was limited between (38, 0) and (63, 0), and sees (Ebel) test paragraphs are good if they are the force of their distinction (20) or more (Ebel, 1972:40). Thus, the researchers found that all test paragraphs were valid, with good discriminatory ability.

C- Effectiveness of Incorrect Alternatives

The wrong alternatives (camouflages) are meant as "an expression of incorrect choices of the multiple-choice question" (Majid, 2014. 84), the alternative that is not chosen by the most members of the lower group means that it is not a good alternative, and the alternative is effective the higher its value in negative (Alkayat 2010: 260), in calculating the effectiveness of test substitutes, the researchers found that incorrect substitutes attracted a larger number of lower group students than higher group students, thus deciding to keep incorrect substitutes unchanged.

The two researchers chose the retest method to calculate the stability, adopting the same statistical analysis sample scores, and two weeks later re-applied the test to the same sample, after correcting the answers, setting the grades, and using the Pearson correlation equation reached the constant factor (0.81) which is an acceptable constant factor for non-metered tests.

6- Final Picture of the Test

After the termination of the test's statistical procedures and vertebrae, the final test consisted of 40 multiple choice-type paragraphs.

7- Applying of the Experiment

During the applying of the experiment, the two researchers followed the following:

- 1- The researchers began applying the experiment to the students of the two groups on 15/10/2023 day by teaching two lessons per week for each group. The teaching continued throughout the first semester of the academic year 2023/2024. The experiment was terminated on 15/1/2024.
- 2- On the first day of application of the experiment, the two researchers explained before the actual teaching of the students of the experimental group the model of compatibility of the brain in teaching the subjects of the Arabic language book, and explained to the students of the control group the traditional method of teaching the same subjects.
- 3- 10 days before the end of the experiment, the researchers informed the students of the existence of a test in the substance studied in the experiment, and on time according to the grammatical test on the students of the two groups simultaneously and one hour.

Eighth: Statistical means: The two researchers relied on the statistical pouch (spss) to calculate the research data statistically:

- 1- Two independent samples:
- 2- Box Kai
- 3- Equating the difficulty factor
- 4- Equating the force factor of the substantive paragraphs' distinction
- 5- Equating the effectiveness of incorrect alternatives

6-Alpha Cronbach equation (a)

Search Results

First: View the Result

After the two researchers applied the gain of dimensional grammatical concepts to the students of the two groups extracted the calculated average of each group's grades, averaging the scores of the experimental group (633, 27) Standard deviation score (307, 5) while average control group scores (766, 22) Standard deviation score (446, 4), and when using the T test (t - test) The calculated T value (85, 3) was shown to be greater than the total tabular T value (2) Which means a statistically significant difference at the level of (05, 0) and to the degree of freedom (58), this result rejects the first zero hypothesis, which states that "there is no statistically significant difference at 0.05 between the average attainment of female students studying the rules using a compatible brain strategy, who study the rules using the traditional method".

Results of the T-test of the Difference Between the Average Scores of Female Students of the Two Research Groups in the Arabic Grammar Conceptualization Test

Group	Number of sample personnel	Arithmetic average	Standard deviation	Variation	Free limit	T value		Indicative Level
						Calculate	Schedulin	
Experimental	30	27.633	5.307	28.164	58	3.85	2	D statistically at level 05, 0
Control	30	22.766	4.446	19.767				

The results indicate that the pilot group examined the rules using a compatibility strategy outweighed the control group studied using the traditional method.

2- Interpretation

The results showed that the pilot group students who studied Arabic grammar by using a brain consensus model outweighed the control group students who studied the same subject using the traditional method of testing the acquisition of Arabic grammar concepts conducted at the end of the experiment. The researchers consider that this superiority is due to several reasons, including:

- 1- The Brain Consensus Model has helped to upgrade the acquisition of Arabic grammar concepts and organize the teaching of Arabic grammar subjects in a coherent, sequential and integrated manner.
- 2- The Brain Consensus Model carried out the transfer of female students from the case of direct receipt of information to female researchers themselves, through their direct interaction with the subjects. The student experienced live experiences and targeted activities moved to her performance in testing the acquisition of Arabic grammar concepts.
- 3- The brain compatibility model clearly distinguishes educational goals, as focusing on the desired goal facilitates the learning process for female students and keeps it an impact.

2- Conclusions

In the light of the findings of the present research, the following can be concluded:

- 1- The impact of the brain consensus model on the teaching of the subject of Arabic grammar, which has a positive impact on the achievement of literary literary class students in this subject.

- 2- The brain compatibility model increases students' effectiveness in learning more than their peers and accepts learning more effectively than their peers in the usual way.
- 3- Teaching according to the compatibility model of the brain has had a significant impact on the attention of female students towards the subject. This has been demonstrated by the many questions, inquiries and interventions made by female students on scientific subjects, which has created a positive atmosphere and a sense of satisfaction for both teacher and learner alike.
- 4- The ease of use of the brain compatibility model in practice, as the pilot group's students responded positively to and interacted with this method.
- 5- Teaching in accordance with the "compatibility model of the brain" is consistent with the emphasis placed on making the student the focal point of the process from which to begin and conclude; Confirming the student's participation in the learning process, and increasing his effectiveness and activity within the classroom.

3- Recommendations

In the Light of the Research Researchers' Findings, They Recommend the Following

- 1- Using a compatibility model in teaching the subject of Arabic grammar for the preparatory stage, being a modern teaching method.
- 2- In-service training of Arabic teachers and teachers on the use of modern models, and not limited to teaching methods based on indoctrination and preservation.
- 3- Provide Arabic teachers and teachers with pamphlets that include active learning models, as this helps them to choose the right model that fits with learners and takes into account their individual differences.
- 4- Encouraging Arabic grammar teachers and teachers to use this model in view of the positive evidence of students' acquisition of Arabic grammar concepts.

4- Proposals

To complement this research, the two researchers propose a number of studies aimed at identifying the impact of the use of the brain consensus model:

- 1- Conduct impact comparison studies (brain trivialization model) with other models in the acquisition of Arabic grammar concepts
- 2- Conducting studies to identify the impact (compatibility model of the brain) in other study subjects with different stages.
- 3- Conduct a study to identify the impact (compatibility model of the brain) with another model in the collection of Arabic grammar material.

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