

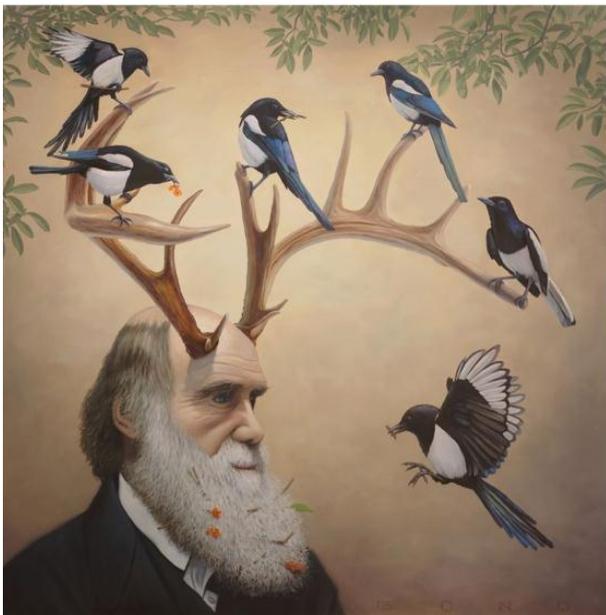
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Revista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía,
Lingüística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 35, 2019, Especial N°

22

Revista de Ciencias Humanas y Sociales
ISSN 1012-1537/ ISSNc: 2477-9385
Depósito Legal pp 198402ZU45



Universidad del Zulia
Facultad Experimental de Ciencias
Departamento de Ciencias Humanas
Maracaibo - Venezuela

The effect of the -Zahorik- model on acquiring grammatical concepts among students of the College of Administration and Economics/University of Baghdad

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Abstract

The current research aims to identify the impact of -Zahorik- model in the acquisition of grammatical concepts among students of the Faculty of Management and Economics University of Baghdad and in order to achieve the goal of research; the researcher has developed the following hypotheses:1. There is no statistically significant difference at the level of significance (0.05) between the average grades of students of the experimental group who studied the Arabic language material in -Zahorik- model and the grades of the students of the control group who studied the same subject in the usual way in the dimensional test.2. There is no statistically significant difference at the level of significance (0.05) in the average differences between the grades of the pre and post tests in the acquisition of grammatical concepts among the students of the experimental group who studied the subject of Arabic in the -Zahorik- model.3. There is no statistically significant difference at the level of significance (0.05) in the average differences between the grades of the tribal and dimension tests in the acquisition of grammatical concepts among the students of the experimental group who studied Arabic in the usual way. The current research was limited to a sample of the students of the first stage in the department of statistics in the Faculty of Management and Economics of Baghdad University for the academic year 2018-2019. 1. There is a statistically significant difference between the average grades of students of the experimental group who studied the Arabic language subject in the (Zahorik) model and the grades of the students of the control group who studied the same subject in the usual way in the post test and in favor of the experimental group. 2. There is a statistically significant difference between the average grades of students of the experimental group who studied the subject

of Arabic in the model (Zahorik) and the degrees of students of the experimental group in the pre application and their grades in the post application of the test, and this means an acquisition in the grammatical concepts among the students of the experimental group. 3. There is no statistically significant difference between the grades of the students of the control group in the pre application of the grammar test and their grades in the post application of the test, which means that there is no acquisition in grammatical concepts among the students of the control group. In the light of the results of the research, the researcher reached a number of conclusions, recommendations and proposals.

El efecto del modelo (Zahorik) en la adquisición de conceptos gramaticales entre estudiantes de la Facultad de Administración y Economía / Universidad de Bagdad

Resumen

La investigación actual tiene como objetivo identificar el impacto del modelo -Zahorik- en la adquisición de conceptos gramaticales entre los estudiantes de la Facultad de Administración y Economía de la Universidad de Bagdad y para lograr el objetivo de la investigación; El investigador ha desarrollado las siguientes hipótesis: 1. No existe una diferencia estadísticamente significativa en el nivel de significancia (0.05) entre las calificaciones promedio de los estudiantes del grupo experimental que estudiaron el material en idioma árabe en el modelo -Zahorik- y las calificaciones de los estudiantes del grupo de control que estudiaron la misma materia. de la manera habitual en la prueba dimensional 2. No existe una diferencia estadísticamente significativa en el nivel de significancia (0.05) en las diferencias promedio entre las calificaciones de las pruebas previas y posteriores en la adquisición de conceptos gramaticales entre los estudiantes del grupo experimental que estudiaron el tema de árabe en el -Zahorik - modelo.3. No existe una diferencia estadísticamente significativa en el nivel de significancia (0.05) en las diferencias promedio entre los grados de las pruebas tribales y de dimensión en la adquisición de conceptos gramaticales entre los estudiantes del grupo experimental que estudiaron árabe de la manera habitual. La investigación actual se limitó a una muestra de los estudiantes de la primera etapa en el departamento de estadística de la Facultad de Administración y Economía de la Universidad de Bagdad para el año académico 2018-2019. 1. Existe una diferencia estadísticamente

significativa entre las calificaciones promedio de los estudiantes del grupo experimental que estudiaron la asignatura de lengua árabe en el modelo (Zahorik) y las calificaciones de los estudiantes del grupo de control que estudiaron la misma materia de la forma habitual en la prueba posterior y a favor del grupo experimental. 2. Existe una diferencia estadísticamente significativa entre las calificaciones promedio de los estudiantes del grupo experimental que estudiaron la asignatura de árabe en el modelo (Zahorik) y los grados de los estudiantes del grupo experimental en la solicitud previa y sus calificaciones en la solicitud posterior de la prueba, y esto significa una adquisición en los conceptos gramaticales entre los estudiantes del grupo experimental. 3. No existe una diferencia estadísticamente significativa entre las calificaciones de los estudiantes del grupo de control en la aplicación previa de la prueba de gramática y sus calificaciones en la aplicación posterior de la prueba, lo que significa que no hay adquisición de conceptos gramaticales entre los estudiantes del grupo de control. A la luz de los resultados de la investigación, el investigador llegó a una serie de conclusiones, recomendaciones y propuestas.

Chapter 1

Research definition

Research problem:

Our time today is witnessing tremendous knowledge and information innovations that are taking place at an accelerated pace in the scientific and technological field, and this has created great challenges faced by human societies in all areas of life, which requires a special preparation to keep up with them, especially in the field of education and science, (Abu Shaira and Ghabari, 2008, 9), the curriculum has been influenced by these innovations, particularly the Arabic language subject, which is taught in traditional methods and which is not interested in linking the theoretical aspect to the practical aspect of the subject and does not focus on identifying the basic and sub-concepts of it, as well as neglecting the development of thinking skills among students, because it is still focused on the preservation and retrieval of study information, which led to a decrease in the achievement of students and their level of knowledge.

Also, the diagnosis of the strengths and weaknesses in the subject of general Arabic language in the Faculty of Management and Economics / University of Baghdad and addressing weaknesses is very necessary for the importance of the Arabic language as it is the means by which students receive scientific information mostly in all scientific departments, and

through it can evaluate the performance of students and measure their scientific information, and know their levels, because students through them disclose the information they carry, and because of the importance of the Arabic language, it is taught in all scientific departments, as the branches of the Arabic language are studied mostly in terms of literature, and dictation, and thus the teachers face difficulties in this teaching process, and this is evident through the poor performance of the linguistic students, and given this weakness that the researcher identified through complaints of the teachers from the weakness Student performance and by observing the researcher while teaching students of departments, as he noticed a clear weakness in the performance of students' linguistic, expressive, grammatical, and spelling, the teaching staff confirmed the low linguistic levels of their students, and that many of the students of the departments graduate while they are unable to speak fluent language or write correctly, as the students of these sections will manage the work in the state institutions in the future.

No matter how easy and easy the curriculum is, it cannot achieve the goals of the society without educated people with competence, ability, good linguistic and scientific performance and active practice (Eiadat, 1964: 81), therefore, the researcher is asked to carry out this study to reach better methods and methods in teaching the subject of general Arabic to achieve the educational objectives of teaching the general Arabic language to non-specialist departments through the evaluation of the teaching of the general Arabic language for departments, and the problem of research lies in the answer to the following question: Does (Zahorik) have an impact on the acquisition of grammatical concepts among students of the Faculty of Management and Economics, University of Baghdad?

The importance of research

Language is the memory of humanity, and the medium of transmission of ideas and knowledge from fathers to sons, a treasury that preserves the nation's religious beliefs, cultural heritage and scientific activities, and in it forms the hopes and wishes of the younger generations (Abu Magli, 1986:35) and if these are the basic benefits of general languages, the Arabic language is another issue that makes it more important, and makes it something that this unique reality dictates, which is the language of the Qur'an chosen by the Lord of the Worlds to be the language of revelation for all the people of the earth, hence Muslims in general and Arabs in particular should give it its rightful place.

It is no secret that the Arabic language is different from the other, and in

this Al-Furaa says: (We have found the Arabs language has leverage on all nations' language, as it is an exclusive bounty from God almighty) (Medkor, 1986: 10).

Perhaps one of the most prominent features of a successful student is his ability to speak, read and write in a correct language free from error and melody, and we do not exaggerate if we say that it is an important part of his personality as a successful student.

One of the most prominent aspects of student care at the present time is the interest of educational systems in developing curricula prepared scientifically and linguistically in order to meet the scientific, cultural, social, economic and political requirements of the education profession.

Another element is the most precious thing the nation possesses, and it is the human element of its sons and daughters who are its repertoire and its means of continuing life, developing it and raising its levels (Salim, 1984: 337).

Teaching reading and writing at the international level received a great interest, and many scholars were interested in studying it an analytical scientific study, as they paid attention to aspects of success and failure therein, and established programs to study cases of delay and weakness in them and the outcome of those efforts was a huge asset of information on reading and writing capabilities, and their skills, teaching, measuring and diagnosing Weakness in it and its treatment, and the field of reading and writing has become based on a solid scientific basis, and the results of educational research have enriched this field.

In spite of the efforts made by those responsible for the educational process and those interested in developing education to cope with the era of information and technology and overcoming the difficulties facing this process, there are still problems that did not find their way to the final solution, because they are renewed and are problems that have troubled educators and students alike, Including the problem of low academic achievement and reading and written weakness among some students, and it is one of the most important problems that hinder education (Abu Mughali, 1986: 132). In spite of this awareness of the importance of teaching skills to acquire linguistic concepts through teaching Arabic language, most studies announce their results that the teaching reality prevents the development of this skill and its practice and that teachers during their teaching in the classroom are dominated by summoning and remembering facts (Ibrahim, 2001: 276).

Moreover, most of what we observe in the teaching of the Arabic language in general is the focus on preserving and indoctrinating information and

the students' sufficiency in receiving the study material from books without examining and absorbing them all, which confirms that the philosophy of teaching Arabic for knowledge is still prevalent in schools and universities (Al Ani, 1976: 220), teaching is not just a transfer of knowledge to students, but rather a process that concerns the student's development mentally, emotionally, skillfully, and integrating his personality in various aspects. The main task is to teach students how they think? How do they learn? Not how they memorize courses and textbooks by heart without understanding them or using them in life (Al-Hailah, 1999: 265), and the teacher can show more interest in developing students' abilities to acquire linguistic concepts in the Arabic language subject if he uses effective methods in his teaching of the prescribed content, so it was obligatory for the teacher to use the teaching methods in which the student is positive, not negative, so modern education has paid great attention to teaching methods. It was taken as a pillar of building the educational process as an effective method in the success of the educational process because of its impact on student achievement, Teaching methods are not the same in every age and in every society, they are born of social needs, circumstances and demands, they change with changing educational goals and interests to meet the needs of society (Al-Musawi, 1994: 24-25), and if we know that the goal of teaching in its basic class is to facilitate learning and activate and direct and thus ensure the occurrence of learning, so it was necessary to use the method that makes the student active and effective so that it makes him reap from the process of learning as much as he makes efforts and work, the new orientation in which the center of activity moved in the process of learning from teaching to the student and became the teaching material as a means and not an end.

Hence the research in the selection of the most successful teaching method away from the forms of indoctrination and re-establishment, and is considered the model (Zahorik) of the latest methods in the teaching of The Arabic language and one of the most effective in developing the acquisition of grammatical concepts among students and their tension to study The Arabic language, as the information explored by the student using scientific steps contributes to the building of sound thinking bases for it (Bruner: 1951, P21) they call for the development of the mental forces of the student and to adopt work and experimentation instead of indoctrination and has an effect in creating the minds of a critical and examined and not received any examination and criticism of ideas before accepting them (Al-Ani, 1976: 115).

And he sees the building model (Zahorik) that the provision of information in its overall form and then the progress of its parts and the need for the cohesion of information and refinement and concepts through the procedures of its application, and that the discovery of individual differences between new learning and learning based on previous knowledge achieves the desired understanding of information and enables the student to carry out many scientific activities and participate actively in them to deduce knowledge himself and to learn to advanced levels lead to the organization of the knowledge structure of him and the researcher agrees with the objectives of modern education seeking in all programs to develop thinking and practicing meditation to transform The individual is a consumer of knowledge to the process of generating it (Lyons,2010:12).

The importance of research is illustrated by the following:

1- The current research examines the subject of the impact of the model (Zahorik) in the acquisition of grammatical concepts, which did not receive much attention to the knowledge of the researcher.

2- The study was applied to the university level as university students represent the important category in the process of development and modernization and after graduation constitute specialized scientific cadres. The progress of human societies is linked to the amount of concern for human development, which are the pillars of the important public development of society.

3- The current research is one of the leading local studies in this field (to the knowledge of the researcher) because it researched the topic of (Zahorik) model in the acquisition of grammatical concepts.

Research objectives:

The current research aims to identify the impact of (Zahorik) model in the acquisition of grammatical concepts among students of the Faculty of Management and Economics University of Baghdad, so the researcher developed the following hypotheses: -

1- There is no statistically significant difference between the average grades of students of the experimental group who studied (Zahorik) and the average score of the students of the control group who studied the same subject in the usual way in the post test at the level of indication (0.05).

2- There is no statistically significant difference between the average grades of students of the experimental group in the pre application of the concept acquisition test and their average score in the post application of the test at the level of indication (0.05).

3- There is no statistically significant difference between the average

score of the students of the control group in the pre application of the concept acquisition test and their average score in the post application of the test at the level of indication (0.05).

Research boundaries:

The current research is limited by studying the subjects of Arabic language for the first stage in the Faculty of Management and Economics of the University of Baghdad in a sample of the students of the first phase of the academic year 2018-2019.

Terms definition:

First: Zahorik model:

Defined by Al-Najdi and others, 2005: 'A constructive teaching model based on the fact that knowledge is built by the student, and it is not a set of facts and concepts waiting for the student to discover and that knowledge is not something that exists independent of the student (Najdi and others, 2005:416).

Al-Baydani defined it, 2015: 'It is a model of teaching based on five stages, the first stage (activation of information), the second stage (acquisition of information), the third stage (understanding information), the fourth stage (the use of information) and the fifth stage (thinking about information). (Al-Baydani, 2015: 12)

The researcher adopted the definition of al-Baydani, 2015, theoretically.

The procedural definition is (the model used in the current research in its five stages, in order to acquire grammatical concepts among students).

Second: Acquisition of the concept:

Al-Suwaidi, 1992: 'A conception of things, events, attitudes, values or behaviors related to the Arabic language expressed by a word, term or phrase. (Al-Suwaidi, 1992:17)

Al-Mataroudi defined it, 2009: 'A word or phrase that expresses a common characteristic or several characteristics involved in several things, positions, events or grammatical concepts' (Al-Mataroudi, 2009:109)

The researcher defines the acquisition of grammatical concepts procedurally as a set of meanings, words and terms expressed in words, sentences or phrases so that the student is able to define them and apply them in different learning positions).

Chapter 2

Theoretical framework and previous studies

About (Zahorik) model:

In the midst of the search for everything new in the educational field, a great interest appeared since the end of the eighties to experiment with many unconventional methods in the processes of learning and education, and models and strategies based on (Constructivism Theory), which are referred to as a vision in learning theory, emerged based on the fact that the individual He is active in building his thinking patterns, as a result of the interaction of his innate abilities with experience (Olives and Olives, 2002: 28), It is also the theory that concerned with how to properly build knowledge for the student, by changing his roles in the educational learning process, and converting the role of the teacher to drawing teaching plans; in order to connect the student to new knowledge by distributing roles, drawing methods, and using methods that communicate the new information smoothly, Based on what the student retains from previous experience, in addition to focusing on disseminating knowledge, and using and benefiting from it in the social life of this student.

Hence, constructive learning came as a contemporary educational theory, deep in cognitive theory, and its interest in the learners' concept plans, and its active and effective application in new situations, and the transfer of experience and knowledge, to benefit from it in building new experiences in new situations, in addition to this general weakness in the Arabic language, to represent as an important reason why Arabic language administrators have explored new teaching models, which benefit salvage the teaching of Arabic, by linking previous experience to the subsequent, and then employing new knowledge in life situations, therefore, the need to use teaching methods and teaching models with clear specific standards to achieve the desired effectiveness. (Collins, 2008:1-9)

The structural models represented procedures that enable the student to carry out many scientific activities, and his active participation in them to deduce knowledge himself, and where learning occurs to advanced levels leading to the organization of his cognitive structure, and from these models model (Zahorik through continuous studies in the last few decades, (Zahorik) model derived its philosophy from the structural theory, and proceeded from it, and this model is based on five steps, representing his biographical map. (Zahorik, 1971, 91)

(Zahorik) model:

Professor of Curriculum and Teaching Methods at the University of Wisconsin Milwaukee, Zahorik has derived his philosophy from the structural theory, and proceeded from it, and his vision of knowledge is based on the knowledge that it is not a set of facts, concepts or laws waiting to be

discovered, but lies as a process of building and establishing knowledge, meaning it is an attempt by students to provide meaning to their experiences and this model consists of several steps respectively (Zayer and others, 2017, 348-436) as follows:

1- Information Activation: At the beginning of the educational situation, the teacher explains the previous information, in which the previous knowledge of the students is taken into account when starting to learn a new subject, not the test that has to test the new information and the previous knowledge must be stimulated or adopted before the new information is given, The acquisition of knowledge is done through adapting to the new experiences, we face it surrounding us in the environment, as the learner learns his previous ideas in understanding and assimilating the new experiences and the knowledge building remains balanced as long as the experience conforms to the expectations of the learner in light of his previous experience integrates the new experience within the knowledge that he has Or, he is at a loss when there is a contradiction between what he has in the cognitive structure and the new experience, which leads him to amend the cognitive structure to accommodate the new experience and through the use of concrete work and then abstraction.

2- Information Acquisition: At this stage, the information is given in a holistic manner and not as parts. The general rule is given and presented with a deductive approach. For example, the teacher presents the new information in a holistic way, not as parts, for example, when teaching the listening skill, we need in this step to present it as a skill that has complete elements in general, without specifying its sub-skill, and indications for each skill,, then submit it completely without a detailed breakdown of its indicators, next step for this step, and in this step the teacher also offers his students, many activities and related training, so that they can face the new information explicitly, then they meet with cooperative groups to solve the problem or Solve activities and exercises.

3- Understanding Information: At this stage, students are required to fully discover and examine the nuances of new concepts, and the teacher assists students by expanding activities and increasing discussions, thereby earning students an insight, meaning that this step requires students to discover and thoroughly examine all possible nuances of new information, rather, they interpret and provide explanations and evidence of what they understood from them, as the information has previously been activated for them, and new information has been gained through many exercises, groups gathered to solve them and forming a whole idea about them, and

now it is time for a careful examination and a useful search for the small and large details of the new information, with the assistance of the mentor teacher A guide that helps clarify information and increase its understanding.

4- Information Use: At this stage, students are given a full opportunity to work on using what they have learned to solve the problem or the new situation. The new knowledge structures that are learned are refined.

5- Thinking about Information: It is necessary to think about employing the understandable information so that it is employed in practical life at the school level or outside, and this important and new step in the (Zahorik) model, which is a good development for the process of acquiring, understanding and using information, by searching for clues of new information in a different situation, Inside and outside the classroom, which requires students to have a clear understanding and thinking to implement what they have learned.

(Zahorik) model assumptions:

1- The student depends on building his new knowledge based on his previous experiences as the basis and the starting point for any new teaching and learning that achieves knowledge as much as he exerts effort, and new experiences are gained through the pursuit of the learner student.

2- A deeper understanding is through discussion.

3- Knowledge is not fixed and it is built and the student is not isolated from it. (Najdi and others, 2005:417)

Al-Qaisi concludes, 2019, that` the role of the teacher according to (Zahorik) model and according to educational literature and as a basis for building thought is determined by the following:

Presenter: The teacher integrates students into experiences on which some assignments are built and encourages them to participate in the group discussion, i.e. during the discussions show responses that make great use for a real lesson that learners interact with, the teacher must change the teaching style in teaching content, for example, the subject of the lesson about permissible food, and here the student was asked about his favorite food, which the teacher does not have information about, and thus the teacher is eager to reach with social negotiation as enrichment for the lesson and without the teacher thinking that the curriculum requires its completion in a specific time, allowing in the change of method a solution to reach to enrich learning and build the concept.

Observer: Identify the characteristics of students and achieve effective education and seek to share students with their initial responses and clarify

them, and take their previous knowledge in consideration, i.e. providing an educational environment and learning practices and employing previous experiences of students in an educational-educational situation.

Question guide: The teacher seeks to expand and develop the initial learners' responses, giving them more time to think and answer the questions asked, i.e. they may not necessarily be their final response and by clarification of the teacher, the students rebuild and reform their concepts and evaluate their mistakes.

Organizer: Providing a classroom environment based on survey, discovery, experimentation and problems, the survey is the stage of research and investigation of information and try to realize concepts and relationships in trying to reach an answer to the questions that the learner was not able to deal with, but the discovery gets the learner accustomed to get rid of the just follow the crowd and the traditional dependency and gives him an active role in the discovery of information, which helps her to retain learning.

Coordinator of Public Cooperative Relations: Providing students time to build relationships and create innovation with each other, and that they have the will, he encourages learners to engage in discussions with him and each other, that social dialogues are an effective way to change and root concepts, and that allowing students to present their ideas and listen to others does not make it easier to find meaning.

Learning Documenter: Documents the learning of students and measures the development of their skills using new methods of evaluation, including performance estimates, performance records, writing tests and concept maps.

Designer: Who designs and builds teaching strategies based on the building idea and its standards in effective teaching, and to be a facilitator and guide to the educational process, does not judge learners to fail but takes from the citizens of their mistakes ways to motivate them to look for the right ways (Al-Huwaidi, 2005, 306).

The role of the learner in (Zahorik) model is as follows:

- Finder of what he learns through his practice of thinking and the learner is creative and all the conditions are prepared to help him to innovate and discover relationships and build knowledge.
- Researcher for the meaning of his experiences with the tasks of learning the activity of the learner and during the process of learning through discussion, exploration, problem solving and brainstorming.
- A builder of knowledge, i.e. that the learner refuses to be negative

and just an empty vessel pours information in his mind and thus builds itself from the cognitive system of the pupil himself and does not be transferred from the teacher and the meaning is formed in the mind of the student as a result of the interaction of his senses with the outside world and not to the teacher's account of him (Al-Obaidi, 2006:35).

- A participant in the management of learning and evaluation, the learner is supposed to be less dependent on the teacher and responsible for his learning to a large degree and the specific environment for learning (Al-Waher, 2002:109)

- - The learner discovered what he learns through the practice of thinking and is a researcher for the meaning of his experience with learning as he is a builder of his knowledge and share the responsibility of managing learning and evaluating the most important what distinguishes his activity during learning and building his own knowledge and social interaction with and more active research and exploration and search for information that is in line with the nature of the learner and the educational means and different teaching methods taking into account the integration of this information to suit the requirements of the community and the surrounding environment to discover solutions to the problems by himself (Saudi, 1998:42)

Concepts

Introduction to the concept:

Concepts are the building block of knowledge, and its importance has increased at the present time more than ever, because of the explosion of knowledge and the breadth of its branches, because of the difficulty of knowing the aspects of any branch of it, so the teacher's concern is to help students understand the structure of the conceptual and logical material while leaving the details (Merhi and Muhammad, 2009: 211). The identification of the components of the knowledge system occupies an important place in the educational system, thus forming the broadest base in the knowledge system, as concepts form principles, laws and scientific theories, so providing learners with them means that learners will have a part of the knowledge system (Fatlawi, 2006: 170-171), Since the concept follows the facts in the structure of the knowledge system, it differs from them in several characteristics that are referred to by (Ibrahim, 2009) with the following points:

1. Discrimination and classification: by distinguishing between things and classifying them according to common elements between them.

2. Symbolism: It symbolizes a property or a set of abstract characteristics.

3. Generalization: It is comprehensive, as it applies to a range of things and attitudes.

In the light of the foregoing, the concept is a mere mental perception given a name or symbol to indicate certain phenomena, or events that combine one or several attributes (Ibrahim, 2009: 68-69).

Acquiring concepts:

The process of acquiring concepts is one of the main objectives that educators seek to achieve through different educational attitudes and for all stages (Al-Jubouri, 2001:2), the task of acquiring the concept is a key part of the learning process within the classroom, and teachers constantly teach new concepts to students that vary in their presentation of their methods and methods so that the disparity may occur in the teacher himself in presenting two different concepts for one category (Abu Zeina, 2010: 226), the acquisition of concepts helps to retain, benefit from and apply information in different situations, if it is regular in the form of specific categories, the acquisition of the concept depends on a combination of factors, including the learner's cognitive status, which means the extent to which the learner knows the previous required concepts, which are essentially necessary to acquire new concepts, the learner's ability to learn a new concept is influenced by the extent to which he or she understands the concepts he has learned in the past, it has to do with the new concept, (Gange & Berliner) noted that it is the acquisition of the concept that makes learning possible because it depends on the learner's previous information regarding the new concept to be learned, the acquisition of the concept is done by providing the learner with the name of the concept, then the distinctive qualities, and the use of examples and not examples (Ahmed, 2008: 153), the acquisition of concepts by students is essential to understand the basics of knowledge on the one hand and increase the ability to self-learning on the other, by organizing it, simplifying it and giving it a specific name for similar things, this makes them interact with knowledge with some consistency because they will deal with objects, attitudes, events and processes with common qualities as members of a single class (Ellis,1972:13)

(Turnner) identified several factors related to the role of the teacher in acquiring the concept of students, including:

1. Identify the necessary stimuli and inform the learner about them.
2. Identify the desired responses and inform the learner

3. Identify appropriate strategies and inform the learner
4. Creating the necessary information for the concept.
5. Preparing students to retrieve appropriate information
6. Increase the level of motivation of the learner. (Al-Yamani, 2009:251).

According to (Al-Titi, 2004) encouraging students to acquire the concept and guiding them is achieved through:

1. Presenting a real and meaningful problem to students.
2. Encourage them to collect data and information related to the problem.
3. Provide a responsive environment in which they can get proper feedback.
4. Provide them with instructions on what they are looking for and looking for. (Al-Titi, 2004:122).

It is not easy for children to acquire concepts because they do not have the cognitive background or experience of older ones.

Children's attempts to learn about multiple concepts are based on:

1. Accurate observation of their surrounding environment.
2. The ability to classify materials and things that are related to each other.
3. The ability to put things from one hand and give them different levels.
4. The ability to give some superficial meanings to some of the concepts they have learned from the environment. (Al-Wandawi, 2007: 33-34)

Previous studies

Al-Baydani (2015):

The goal of the research is to identify the typical effect (Zahorik) and Daniel in the achievement of students of the third grade of physics and their cognitive motivation, and to verify the goal of the research put the researcher the following zero hypothesis: 1) There are no statistically significant differences at the 0.05 indicative level between the average scoring scores for the students of the three groups in the achievement test. 2) There are no statistically significant differences at the 0.05 indicative level between the average scoring for the students of the three totals in the cognitive motivation measure. The research was carried out on the students of the third grade in the al-Sadiq Al-Amin For Boys Medium of the Directorate General of Repure education (2, and for the academic year 2014-2015, after the researcher prepared the research requirements included (identification of the scientific material, formulation of behavioral purposes, and preparation of teaching plans for the two experimental groups and the control group after presenting it to a group of specialists), the re-

searcher's two research tools, the 50-paragraph thematic multi-choice test, and the 50-paragraph cognitive motivation measure, applied a three-way estimate, (Always apply to me, sometimes it applies to me, it doesn't apply to me) The psychometric characteristics were calculated, and the research sample was selected intentionally, consisting of 81 students in three divisions, randomly selected to represent the experimental groups and the control group after the statistically failed students were excluded, there were 26 students in the first trial group, 28 in the second trial group and 27 in the control group. The three groups were balanced in the following variables (age in months, physics for the second grade, intelligence, and cognitive motivation), and the first experimental group was studied using (Zahorik) the second experimental group using the (Daniel) model, and the control group in the usual way. The two research tools, the achievement test and the cognitive motivation measure, were applied to the students of the three groups, and after the study of the vocabulary of the rapporteur book, the researcher used the analysis of monocontrast, Pearson correlation coefficient, the Chevy equation, the mathematical averages, the equation (Spearman-Brown), the equation (Alpha-Kronbach) and the Cooper equation statistical means of data processing, the results showed as follows: statistically significant differences between the students of the first and second experimental groups and the students of the control group in the learning and cognitive motivation variables in favor of the two trials, statistically significant differences between the students of the two experimental groups did not appear in the variables. In light of this, the researcher developed a number of recommendations, the most important of which are: the topics of in-service physics teacher training courses should include structural teaching models, including (Zahorik) and (Daniel) models, as well as attention to cognitive motivation and its areas as a principle in effective teaching is important in solving many of the problems facing the student. To complement this research, the researcher suggested conducting studies of Zahorik and Daniel in other variables, and their impact on other science subjects. (Al-Baydani, 2015:229)

Abdul Hamza and Murad (2017)

The study aims to identify the effectiveness of (Zahorik) model in: A-Achievement of middle-class students in physics, science processes in middle second graders.

The researcher prepared two research tools, the first tool of the collection test that is in its final form of (40) objective paragraphs of the type of choice of multiple with four alternatives, the other instrument (the scale

of science processes) that is in its final form of (32) paragraphs is evenly distributed on the basic processes of science, which are (observation, classification, inference, forecasting, measurement, communication, use of numbers, temporal and spatial relationships), after processing the data statistically the researcher reached the results of the research which is superior to the students of the experimental group over the students of the control group in the testing of achievement and testing the processes of science, and in the light of the results the researcher came out a set of conclusions, recommendations and suggestions (Abdul Hamza and Murad, 2017:765). Al-Bhadli Study (2019):

The study aims to know the impact of the use of (Zahorik) model in the achievement of chemistry and analytical thinking skills in the middle second grade students, and to achieve the objectives of the research was adopted the experimental method and the choice of the design of equal groups with pre and post tests for the experimental and control groups, the research community identified middle-grade second-grade students in the General Directorate of Education of Baghdad Al-Rusafa 3 for the academic year 2016-2017, a random sample consisting of (58) students and 30 students for the experimental group that was studied according to the building model and (28) students were selected for the control group that was studied according to the traditional method, parity between the two groups was performed in variables (time age, previous achievement in chemistry, previous information, analytical thinking skills), two tests were built, one of which is a post-cumulative achievement consisting of (30) paragraphs, and the other a measure of analytical thinking skills consisting of (32) paragraphs applied before and after, the experiment was applied in the first quarter of the academic year (2016-2017), the researcher used a number of appropriate statistical methods, the results were reached on the existence of a statistically significant difference in favor of the experimental group in achievement and analytical thinking skills, in addition to the existence of a statistically significant difference in favor of the post-test of the experimental group of analytical thinking skills. (Al-Bhadli, 2019:1)

Chapter 3

Research procedures

First: Experimental design:

The researcher adopted the design of the experimental and control groups with pre and post testing, in light of the objectives set and hypotheses to be verified, and that this design is characterized by the presence of the control group and this increases the accuracy of attributing the result of change to the independent variable

Although the control group has not undergone any change, the time factor, and the education to which the student is exposed in the college may affect the level of rigidity and to reduce this effect the experimental design was chosen.

Experimental Group	Pre-Test	Independent Variable (Educational Program)	Post-Test
Control group	Pre-Test	It hasn't been exposed to the independent variable.	Post-Test

Shape (1) Experimental Design

Second: The research community: The research community represents the 3,170 students of the Faculty of Management and Economics at Baghdad University for the academic year (2018-2019).

Third: Sample research:

The research sample was selected from the Statistics Department (Phase 1) for the following reasons:

- A. Because the researcher is teacher in the department
- B. For the scientific cooperation shown by the management of this department with the researcher.
- C. The number of students is appropriate in this department.

The Pre and Post - test (acquisition of grammatical concepts) have been applied to all students of the first stage in the department of the number (69) students in the department of statistics the extent to which students acquire grammatical concepts, they were then divided into two groups: the first is experimental with (33) individuals, and the second is control with (34) after the exclusion of the failed students.

Fourth: Parity of research groups: Before starting the experiment, the researcher was keen to statistically equalize the students of the research groups in some variables that she believes may affect the integrity of the experiment, and these variables are:

1- The age of the students calculated in months:
 After applying the T test for age in years between the experimental and control groups, the test result shown in table (1).

Table 1: Results of the T test for the life expectancy between the experimental and control groups

Group	Number	Arithmetic mean	Standard deviation	T-Test Value		Indication level 0.05
				Calculated	Tabular	
Experimental	33	244,123	2,200	0,900	2.045	No difference
Control	34	244,156	2,074			

It is noted from table (1) that the calculated T value (0,900) is below its Tabular value (2,045), indicating that the differences in the life expectancy between the two groups are not indicative.

2- Grammar acquisition test scores

This was verified by the T-test for average grammar acquisition scores in the test

Table 2: Results of the T test for average grammar acquisition scores in Pre-testing between the experimental and control groups

Group	Number	Arithmetic mean	Standard deviation	T-Test Value		Indication level 0.05
				Calculated	Tabular	
Experimental	33	19.3939	0.60927	,0828	2.045	No difference
Control	34	19.2647	0.66555			

It is noted from table (2) that the calculated T value (0.828) is lower than the Tabular value (2.045), and therefore there are no statistically significant differences in the level of acquisition of grammatical concepts between the two groups, and therefore the parity between them was achieved in the level of acquisition of grammatical concepts.

4. IQ TEST:

The researcher relied on Raven's intelligence test, as it is one of the testing that has been codified in the Iraqi environment (Al-Dabagh and others, 2001:58) to check the parity of the research groups, the test consists of 60 questions, and it has been distributed to the students of the experimental and control research groups, and it was marked on the basis of one mark for each question, the arithmetic mean of intelligence for the experimental group was (30.2424), while the arithmetic mean of intelligence for the

control group was (29.9706) my using the (T) test for two independent samples to see the significance of the difference between the two groups, it appeared that there was no statistically significant difference at the significance level (0.05), as the calculated T value was (1.188) which is smaller than the tabular T value of 2,38 and with a degree of freedom (65) This indicates that the two research groups are equivalent in this variable, and Table (3) illustrates this.

Table (3): T-test results for the average IQ scores in the pre-test between the experimental and control groups

Group	Number	Arithmetic mean	Standard deviation	T-Test Value		Indication level 0.05
				Calculated	Tabular	
Experimental	33	30.24242	0.9024	,0828	2.045	No difference
Control	34	9.9706	0.9687			

Fourth: Defining the scientific material: The researcher specified the scientific material that will be taught to students of research groups during the experiment according to the vocabulary of the curriculum, namely the following topics: 1- Nominal sentence, 2- Kan and her sisters, 3- Inn and her sisters, 4- Actual sentence, 5- Number.

Fifth: Formulating behavioral goals: The researcher formulated (35) behavioral objectives based on the general objectives and content of the topics to be studied in the experiment, distributed at the general levels in the classification of Bloom (knowledge, understanding, application, analysis, composition, and evaluation) in order to stabilize its validity and fulfill the content of the subject presented to a group of experts and specialists in Arabic language and methods of teaching and in psychological sciences, after analyzing the responses of the experts, some of the objectives were adjusted, depending on the percentage of the agreement adopted by the researcher, which is (80 percent) from expert approval. Thus, the number of behavioral goals in their final form (35) became behavioral goals.

Sixth: Building a test acquisition of grammatical concepts:

Since this research required the preparation of a test to measure the acquisition of grammatical concepts for students of the experimental group and the control sample research to find the effect of the Badydy strategy in the acquisition of grammatical concepts, and the lack of a ready test in the

subject of Arabic grammar (grammatical concepts), and suitable for this research, the researcher prepared a test, relying on the educational content of the study material, and the three levels of concepts (definition, discrimination, generalization) with honesty, consistency and objectivity.

Drafting of test paragraphs:

In drafting the test paragraphs, the researcher adopted the objective paragraphs because of their objectivity in correction, not affected by the subjective characteristics of the corrector, characterized by honesty, fortitude and comprehensiveness, as it is built on the foundations of scientific, and it enables its description to cover the parts of the subject and its objectives (Khalafallah 2000:33), the researcher chose one of its types, which is the multiple choice because it is more common and used and reduces the factor of conjecture, the researcher prepared a test, to measure the three levels of concept acquisition and the number of test paragraphs (35) Paragraph.

Preparation of answer instructions: The instructions for the answer should be as clear and concise as possible, and show the learners what is required of them, the method of recording the answers and the time allocated for the answer. The instructions for the test were formulated and how to answer them, giving an idea of the total number of paragraphs and the time of the answer and the time taken to answer the test paragraphs (40) minutes.

Test Correction Instructions:

A model answer was set for the test paragraphs, and one degree was allocated to the paragraph that indicates the correct answer, and zero for the incorrect answer, and the abandoned paragraphs, and the other that carries more than one choice to treat the incorrect paragraph, and the maximum score obtained by students was (35) degrees.

Analysis of test paragraphs:

Statistical analysis of test paragraphs: The purpose of the analysis of paragraphs is to improve the quality of the test by detecting and reformulating weak paragraphs and excluding invalid paragraphs: 1- paragraph difficulty factor and 2- paragraph recognition factor.

In order to achieve this, the following measures have been followed:

- 1- Correcting the students' answers.
- 2- The order of the grades descending from the highest score to the lowest score.
- 3- Choosing two sets of grades, including the first group of grades of students who received the highest grades and the second grades of students who received the lowest grades and preferably the ratio of grades in the

upper and lower groups 27% of the total grades, because it provides two groups on the best possible size and differentiation, the purpose of finding the difficulty factor of the paragraph is to select the appropriate difficult paragraphs and delete the extreme paragraphs (very easy, very difficult), and after calculating the difficulty factor for each paragraph was found to range from (0.30-0.85) to table (4) shows this:

Table (4)

Difficulty factor for concept acquisition test paragraphs

#	Difficulty Factor	#	Difficulty Factor	#	Difficulty Factor	#	Difficulty Factor
1	0.31	10	0.46	19	0.46	28	0.40
2	0.44	11	0.50	20	0.36	29	0.44
3	0.38	12	0.67	21	0.47	30	0.41
4	0.35	13	0.30	22	0.83	31	0.36
5	0.46	14	0.81	23	0.35	32	0.39
6	0.34	15	0.85	24	0.37	33	0.43
7	0.33	16	0.49	25	0.37	34	0.45
8	0.30	17	0.33	26	0.43	35	0.42
9	0.31	18	0.45	27	0.76		

(Bloom) noted that the test is good if the difficulty of its paragraphs is between (0.20-0.80) (Bloom: 1971, 66), the paragraph's coefficient of distinction means the ability of the paragraph to distinguish individual differences between individuals who possess the attribute or know the answer and those who do not have the measured character or do not know the correct answer for each paragraph of the test. (Al-Imam and Others, 1990: 114) After applying the coefficient equation, all the values were greater than (0.30) and table (5) showing this:

Table (5)

The distinction factor for concept acquisition test paragraphs

#	Difficulty Factor	#	Difficulty Factor	#	Difficulty Factor	#	Difficulty Factor
1	0.66	10	0.70	19	0.51	28	0.62
2	0.44	11	0.37	20	0.44	29	0.48
3	0.37	12	0.77	21	0.66	30	0.40
4	0.66	13	0.33	22	0.62	31	0.51
5	0.59	14	0.48	23	0.37	32	0.37
6	0.55	15	0.51	24	0.51	33	0.44
7	0.70	16	0.33	25	0.40	34	0.55
8	0.44	17	0.70	26	0.48	35	0.37
9	0.96	18	0.74	27	0.70		

From the presentation of the results in table 5, it is clear that all the results are more than (0.30) and thus conform to the standard set by (Ebil) indicating that the paragraph is good for excellence if the strength of its distinction (0.30) and above (Ebil ,1972: p406)

Validity of the test: Obtaining virtual validity is one of the necessary measures to extract the coefficient of the validity of the test or the scale, and there is no doubt that the best way to extract the virtual validity is to present the paragraphs of the scale to a group of experts and specialists in tests and standards and to take their opinions on the extent to which the paragraphs of the scale are implemented for the attribute to be measured (Odeh, 1998:370), in the current research, the test paragraphs were presented to a group of experts and specialists attached (2) for the purpose of knowing their opinions on the validity of the paragraphs and the test in all paragraphs obtained the agreement of the experts and in proportions ranging from 80-100% to the paragraphs except for some typographical errors referred to by the experts and corrected.

Stability of Scale:

Re-application method: This method is one of the most important methods of calculating stability by giving us information on the stability of the results with a time interval between the two applications (Ahmed, 1981, 242) To calculate the stability of the scale in this way the researcher applied it to (30) students of the third stage in the Faculty of Management and Economics and the time period between the first and second applications (15) days, (Al-Zahir et al., 1999) indicates that the duration between the two applications should not be long so that the student learns new things or forgets things he learns and is not short, so he remembers the answers of the first scale so that the duration of (10-20) days depends on the age of the student and the number of test questions (Al-Zahir and others, 1999: 140-141). Using the Pearson correlation coefficient, the test stability coefficient was (0.84), which is a high persistence coefficient.

Application of the Experiment: The researcher in the application of the experiment follows:

- 1- Start applying the experiment to the members of the two research groups on Sunday, 4/11/2018, by teaching two hours per week for each group and continuing teaching until Wednesday, January 2, 2019.
- 2- The researcher taught the two research groups, as the researcher used the (Zahorik) model to teach the students of the experimental group, and the traditional method to the students of the control group.
- 3- The test of the acquisition of grammatical concepts was applied to the students of the experimental and control research groups simultaneously on Thursday, 3/1/2019, to measure the acquisition of concepts.

Statistical means:

- 1- Pearson Correlation Factor: This method was used to identify the stability of the test in the retesting method (Imam and others 1990: 155)

2- Paragraph difficulty factor: This method was used to find the difficulty coefficients of the test paragraphs.

3- Paragraph coefficient distinction: to find the coefficients of the distinct power of the test paragraphs (Al-Imam and others 1990: 115)

4- (T-Test) for two independent samples: to calculate the parity between the two groups of research in the variables as well as the use of the hypothesis test. (Bayati and Anhasius, 1977, 260)

Chapter 4

Results presentation and interpretation

First: Results presentation:

1. The first hypothesis: By comparing the post-test for the two groups, the mean score for the experimental group students has reached (34.1515) with a standard deviation (0.36411), while the mean for the control group scores (19.5000) and with a standard deviation (0.50752) Using the T-Test for two independent samples to see the significance of the differences between these two means, it was found that there are statistically significant differences between the two groups, and Table (6) shows that:

Table (6) (T-Test) results of two independent samples for the post test in concept acquisition

Group	Number	Arithmetic mean	Standard deviation	Degree of freedom	T-Test Value		Indication level 0.05
					Calculated	Tabular	
Experimental	33	34.1515	0.36411	65	135.41	2.045	0.05
Control	34	19.5000	0.50752				

Table (6) shows that the calculated T value (135.41) is greater than the tabular T value (2.045) with a degree of freedom (65) and at the level of significance (0.05), which indicates that there is a statistically significant difference between the mean scores of students of the two research groups and in favor of the experimental group. Therefore, the zero hypothesis is rejected and the alternative hypothesis is accepted, that there is a statistically significant difference between the average grades of students of the experimental group who studied -Zahorik- and the average grades of the students of the control group who studied the same subject in the usual way in the dimensional test.

2. Second hypothesis:

To verify this hypothesis, the T-Test was used for two interrelated samples to see if there was an acquisition in grammatical concepts among students of the experimental group that studied with (Zahorik) model, the mean differences between the grades of the group's students in the post concept

acquisition test (34.1515) were a standard deviation of (0.36411) and the mean differences between the grades of students in the pre concept acquisition test (19.3939) with a standard deviation of (0.60927) table (7) shows this:

Table (7) The results of the T-test for two interrelated samples of the pre and post application to test the acquisition of concepts for the experimental group

Test	Number of samples	Arithmetic mean	Standard deviation	Degree of freedom	T-Test Value		Indication level 0.05
					Calculated	Tabular	
Pre	33	34.1515	0.36411	64	107.072	2.045	0.05
Post	33	19.3939	0.60927				

Table (7) shows that the calculated T value (107.072) is greater than the T-tabular value (2.045) with a degree of freedom (32) and at the level of indication (0.05), meaning the result is a statistical function and in the favor of the post test, thus rejecting the zero hypothesis and accepting the alternative hypothesis that there is a statistically significant difference between the mean grades of students of the experimental group in the pre application of the concept acquisition test and their mean score in the post application of the test, and this means an acquisition in grammatical concepts among the students of the experimental group.

2. Third hypothesis:

To verify this hypothesis, use the T-Test for two related samples to see if there is an acquisition in grammatical concepts among the students of the control group that studied with traditional method, the mean differences between the grades of the group’s students in the post concept acquisition test (19.5000) with a standard deviation of (0.50752) and the mean differences between the grades of students in the pre concept acquisition test (19.2647) with a standard deviation of (0.9687) table (8) shows this:

Table (8) The results of the T-test for two interrelated samples of the pre and post application to test the acquisition of concepts of the control group

Test	Number of samples	Arithmetic mean	Standard deviation	Degree of freedom	T-Test Value		Indication level 0.05
					Calculated	Tabular	
Pre	34	19.5000	0.50752	66	0.834	2.045	0.05
Post	34	19.2647	0.9687				

Table (8) shows that the calculated T value (0.834) is lower than the T-tabular value (2.045) with a degree of freedom (33) and at an indication level (0.05), meaning the result is not statistically significant, thus accepting the zero hypothesis that there is no statistically significant difference between the mean scores of students of the control group in the pre-application of the acquisition test and their mean score in the post-application of the test, this means that there is no acquisition in grammar concepts among the students of the control group.

Second: Interpretation of the results:

By reviewing the results of the current research, the search results were interpreted in two axes:

The first axis : (interpretation of the first and second assumptions)

The results of the two hypotheses showed that teaching with the (Zahorik) model affects the acquisition of grammatical concepts for experimental group students, as this method was superior to the traditional method, and the reason for this may be due to one or more of the following reasons: -

1. Through the teaching of the (Zahorik) model, students are accustomed to following procedural steps that require them to think to obtain knowledge instead of getting lost in molecules that do not develop critical thinking skills.
2. The (Zahorik) model is superior to the traditional method, as it encourages students to absorb new information.
3. The suitability of the (Zahorik) model for the age of students, because of the intellectual and mental maturity students enjoy at this stage.
4. The subjects studied in the experiment may be one of the subjects that are suitable to be taught according to (Zahorik) model.
5. This method helps students solve problems, as it gives students the full opportunity to work on employing what they have learned to solve the problem or the new situation, and the new knowledge structures that they have learned are refined.
6. (Zahorik) model has attracted the attention of students and increased their focus as a new teaching method that students have never been accustomed to before.

- This result was agreed with the study (Price, 1967), (Tamimi, 1995) and (Al-Maliki, 2004).

- Differed from the study (Williams, 1981), which showed no differences between the experimental and controlled groups in critical thinking.

The second axis: (interpretation of the third hypothesis)

The result of the third hypothesis showed that teaching in the usual way does not lead to acquiring grammatical concepts for the students of the control group. Perhaps the reason for this is that this method emphasizes the memorization and memorization of information, which prevents students from thinking about employing the understandable information that must be used in practical life at the university level or outside, and this is

what the (Zahorik) model provides.

Conclusions:

In light of the results of the current research, the researcher concluded the following: -

1. (Zahorik) has shown a clear positive impact in acquiring the grammatical concepts of the students of the first phase in the statistics department.
2. (Zahorik) generates new ideas and meanings for students and develops their abilities to analyze, interpret, criticize and acquire new facts and information.
3. (Zahorik) gives them more time to think and answer the questions asked, which means they may not necessarily be their final response and through teaching clarification students rebuilding and forming concepts and evaluating their mistakes.

Recommendations: In light of the results of the current research, the researcher recommends the follows:

- 1- Using (Zahorik) model in teaching Arabic language along with other methods because of its importance in acquiring grammatical concepts.
- 2- Attention to teach students how to think more than the quantity in the educational subject and this leads to interest in the way the subject is presented.
- 3- Organizing the content of the Arabic language book in such a way as to allow the professor to use (Zahorik) in the teaching of this subject, and to introduce enrichment activities to suit the level of students and take into account the individual differences between them.
- 4- Providing a classroom environment based on survey, discovery, experimentation and problems, the survey is the stage of research and investigation of information and try to realize concepts and relationships in an attempt to reach an answer to the questions that the learner has not been able to deal with.

Suggestions:

In light of the results of the current research, the researcher suggests the following:

1. Conducting similar studies for current research on subjects and other stages and on both sexes.

2. Conduct other studies to find out the effect of using (Zahorik) in other variables such as critical thinking, information resolution and treatment of learning difficulties.
3. Conduct a study to compare the impact of this (Zahorik) model with other teaching methods in the acquisition of linguistic concepts.

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Revista de Ciencias Humanas y Sociales

Año 35, Especial No. 22 (2019)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.

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