The Effect of Using Roundhouse Model on Developing Grammar of EFL 10th Grade Students in Jordan

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Abstract

This research aimed at investigating The Effect of Using Roundhouse Model on Developing Grammar of 10th EFL Grade Students in Jordan during the second semester 2021-2022. the researchers designed a written pre-test and a post-test to test the students' skills in Grammar. The sample of the study comprised (50) female students who were selected purposefully from AlMazar secondary school for girls tht was divided into two groups ; a group of (25) female students that was taught using the round house model and the second group of (25) female students was taught using the conventional method. To achieve the purpose of the study, a pre and post-test were designed to examine students` skills in grammar where the validity and reliability of the instruments were verified. The findings of the study revealed that there were statistically significant differences at ($α≤0.05$) in favor of the roundhouse model. Based on the results of the research, several recommendations were suggested.

Keywords: Roundhouse model, Grammar, The Conventional Method, Tenth graders, EFL

1.1 Introduction:

English language is taught as a second language in Jordanian schools, with the general goal of English language study being communication. That is, learners must, to some extent, acquire the language's four skills: listening, speaking reading, and writing. English is taught at a young age in all Jordanian schools, however, since the 1990s, English has been taught alongside Arabic in all Jordanian schools at the age of six (Yassin , 2015). Reforms and innovation in English language teaching and learning are urgently needed in Jordanian schools. The Jordanian Ministry of Education revised English language curricula and created new departments for English language learning and teaching. These effects occurred to be moving in the same direction: to more efficient practical English instruction (Al-Khataybeh,2002) It has an important role in both spoken and written language. Learning English will be more successful if learners master the grammar as well. It is known that grammar or structure is a pattern of syntax. As a result, grammar will assist students in comprehending the meaning of the statement. Learners will comprehend the point of the others' means, which might be in the shape of utterances or paragraphs, rather than just a sentence. The purpose of grammar is to discover the grammatical form that best expresses the meaning (Ameliani, 2019) According to (AL-Khataybeh and Al-Tarawneh,2018) , when writing, teachers and students should consider a variety of factors, including vocabulary, mechanics, grammar, organization, and content.Teachers must use effective strategies to develop students' skills; they must allow students

to think meaningfully outside the box and convey their ideas and thoughts without fear of making mistakes .

As a result, this study will provide two models that might help students understand how to deal with grammar, and language challenges and how to be efficient in growing mastery the English language . This is accomplished by utilizing the effect of using roundhouse models on developing grammar and vocabularies of 10th EFL grade students in Jordan.

1.2 Statement of the Problem :

By working in the education sector as an English language teacher in the public and private sectors, the researcher noticed that school students and EFL learners face difficulties in constructing words according to the correct grammatical structure From the foregoing, teachers are required to use many modern teaching strategies that help learners write their sentences in correct writing, free from linguistic and grammatical errors.(Al-Mekhlafi and Nagaratnam , 2011) said there are other sorts of obstacles that students and teachers experience when it comes to grammar education in an ESL/EFL environment. Identifying and being cognizant of such challenges would assist instructors in finding strategies to overcome them and give good grammar education. The term "grammar" refers to the relationship between language and metalanguage, text and generalizations about text, experience and theory, and the real world of human communicative activity and theoretical generalizations about its patterns and relationships and irregularities (Andrews &others ,2006).

This study investigated the effect of using roundhouse models on developing grammar of 10th EFL grade students in Jordan.

1.3 Significance of the study:

This study might provide teachers and curriculum specialists with the impact of applying the using roundhouse model in enhancing students syntactic patterns of EFL 10th grade students .

This study might be important for the following reasons:

1.   It is meant to assist students in learning how to write fully correct grammar sentences and to enlighten the problem that they may face while composing a grammatical sentence.

2.   It is anticipated to give teachers and students with the chance to use successful, beneficial, and innovative ways in teaching grammar, such as those used roundhouse model

3.   The findings of this study are likely to assist decision-makers in directing instructors to use successful teaching/learning techniques, such as Roundhouse model, in the teaching of English language grammar skills.

1.4 Purpose of the study:

The main purpose of the study is to investigate roundhouse model on developing grammar of 10th EFL grade students in Jordan.

1.5 Questions of the study

The following research questions were addressed to achieve the Purpose of the study:

1.   Is there an effect of using roundhouse model on the development of 10th grade students' grammar and vocabularies?

2.   Are there any statistically significant differences at (α=≥0.05) on developing the students' developments in students grammar that could be attributed to the variable of roundhouse model learning strategy?

1.6 Operational Definition of Terms

Roundhouse model : the roundhouse diagram strategy is defined as a learning strategy for representing total topics, actions, and activities; it focuses on drawing circular diagrams that correspond to the conceptual form of knowledge in which the circle center represents the main subject to be learned and the seven external

sectors represent the parts of the subject (Al-Mazrou', 2005). Roundhouse is a tool for visual teaching created by Wandersee. Students can create textual components with their phrases when utilizing the roundhouse diagrams by keeping in mind the primary concepts or ideas. They then add their sentences and calculations to roundhouse diagrams. Students display inventiveness, effectively organize their knowledge, and have good memory power. By examining the connections between the student's visual representations and the specific concepts being taught in class, it enables teachers to engage with "results of student thought." It serves as a helpful work sample for comprehending the pupils' perspective. (Ward & Wandersee, 2002) .In this study RH is a learning tool model was used the study independent variable. it was implemented on (25) female student from the 10th grade of the study sample as the experimental group, the implementation conducted inside their class by drawing a cycle divided into 7 sectors related to the grammar concepts and the middle of the cercle is main object of the class , this study focuses specially on their grammar development to measure their results and compare it before and after using this tool.

Gramamr : is the conceptual system of rules and categories that helps people to produce and comprehend words and sentences (Andrews,2006) defined grammar as the structure of written sentences. It covers the study of grammar as the word order, clause and phrase structure, and the division of speech into several sections (e.g. noun, verb, predicate, clause, etc.) It has the potential to be both descriptive, by describes the existing sentence patterns, and generative or transformative, by produce sentences that are grammatically correct through the transformation of taking place from fundamental rules through to actual sentences. In this research the definition of grammar concentrates on the following: using correctly writing meaningful and grammatical sentences, also adapting their writing and grammatical stylistic features, and presenting their writing appropriately either by hand or by using information and communication technologies.

The Conventional Method: in this study the conventional method is the approach in which the teachers follow the teacher's book and the student's book in the teaching process, with the teacher expected to use chalk and talk and the students expected to use pen and paper. which is currently used in classrooms where the teacher sticks to the teacher's book procedures and dominate the class time, whereas students are inactive and only participate as listeners to the teacher who has the main role.

Tenth graders: in this study, it is the highest level of basic education classes in Jordanian schools for pupils aged 15 to 16. That the study is implanting on them

EFL : in this study EFL is regarded as English as a Foreign Language (Peng,2019) defined EFL as learning English in non-English-speaking countries who learn English in their country are EFL learners whom English is not the first language or the official language of the country

1.7 Limitations of the Study:

The findings of the study is limited to the following:

- In terms of sample size, this study is limited to tenth graders in the schools of Southern Al-Mazar directorate of education.

- In terms of instrumentation, this study is limited to the use of an English grammar test constructed by the researcher, and it's validity and reliability were evaluated.

-    In terms of time, this study was conducted during the second semester of the of (2021 - 2022).

-    In the term of subject ,this study is limited to passive voice.

2.1 Theoretical Framework:

As previously said, during the process of language learning, learners will encounter more problems and challenges, such as with their pronunciation, vocabulary, grammar, and other

areas of language (Hana,2011) . Grammar is essential, especially in the process of learning to use a language. It has an important role in both spoken and written language learning English will be more successful if the learners master the grammar as well. As a result, grammar will assist students in comprehending the meaning of the statement. Learners will comprehend the point of the others' means, which might be in the shape of utterances or paragraphs, rather than just a sentence. The purpose of grammar is to discover the grammatical form that best expresses the meaning. Learning English entails the grammar that is taught to young learners, which is not always straightforward. Grammar is a common source of difficulty for learners, particularly young learners. When students are learning English, they should be aware of the structure or pattern of the sentence since it differs from their native language. When students attempt to construct grammatically correct sentences, they frequently become perplexed (Ameliani,2019)Semantics, grammar, phonology, morphology, and syntax are all significant aspects of language learning, and a good student should be familiar with them all. These elements are not self-contained, and they must be studied in tandem. The syntax is a rule that determines the order in which words in a sentence are combined to form a valid statement. It also joins together smaller parts such as phrases, clauses, and short sentences to form compound sentences. A learner who does not have a strong grasp of a language's syntactic features may generate ambiguous sentences that are puzzling to the listener (Smith, 2015).The link between syntactic knowledge and writing has not been extensively examined, yet it can be seen as an essential part of the writing process. Writers spend a significant amount of time selecting and then altering word order as they study and make intentional decisions regarding sentence length, grammatical accuracy, and expression of intended meaning and tone (Collins and Norris,2017).

What is Grammar? Grammar, according to the Oxford English Dictionary, is the system and structure of a language that deals with "in flexional forms showing the connection of words in a sentence." Grammar according to

(Crystal,2003) is made up of rules that govern how a communication system operates. The computational system of language is known as grammar. It is a collection of principles that govern how sentences are constructed from words. It is the foundation of human language's limitless expression. According to (Clark et al.2008), grammar is "the systems of a language phonology, morphology, syntax, semantics, and lexicon required to produce and understand language." (Thornbury ,2005) broadens the notion of grammar to encompass its functional component. Grammar, according to him, is a mechanism for making communication intelligible when contextual information is absent. Grammar, according to Halliday and (Mattiessen amd Halliday ,2014), is a "central processing unit of a language, the powerhouse where meanings are formed." (Komarova ,2001)

What is Roundhouse model ? Wandersee invented the roundhouse diagram in 1994 to help pupils learn and construct new information in a meaningful way, which highlights the need of using both verbal and visual knowledge when learning and remembering (Alsous, 2020). The roundhouse diagram is a two-dimensional circular figure that consists of a core circle and seven portions that surround it (Robin and Samsonov ,2011). When necessary, the number of parts can be raised or lowered. The diagram is filled in clockwise from the first segment, which is positioned at 12 o'clock. The information in the sections is not only related to the central notion, but it is also related to one another. The data is presented in portions as textual units with varying expressions. These texts are made up of student words that describe the primary notion in a more understandable way (Quinzi,2013).

(Ahmed,2012) argues that the Round House strategy is a way exceeding Knowledge offered by Wandersee 1994, the central image represents the basic primary idea, and the major idea is separated into two sections, similar to the circle structures used in railways to switch train cars which is why the house strategy was given this term. Its segmentation and the round hose shape is a two-dimensional circular engineering sketch with a central circle.It is divided by an optional line and surrounded by seven sectors, which

indicate the conceptual structure of a part of knowledge. The seven surrounding sectors are used to partition complex concepts, arrange a sequence of events, or understand the steps to solve a problem.

Round house and Grammar : Because of the nature of theoretical grammar concepts, persons who learn them must have a specific comprehension ability.They were able to extrapolate, classify, and generalize, whereas the current method does not take any of these factors into account.It is founded on the teacher's instruction.Because the basic symbols and language are unable to do so, the learner has been unable to obtain the grammatical idea, which resulted in the frequency of grammatical errors, demanded a focus on it.Appropriate teaching approaches for teaching the grammatical notion provide the intended results and assist the learner in distinguishing between them (Ahmed,2012).One of the strategies used in communicating and learning the concept of grammar is the Round House strategy.According to (Mena, 2013), its significance in generalizing concepts is as follows:

1 -It allows the student to see the idea in a more comprehensive light.

2 -It aids the learner's retention of the information because it has been expressed vocally and visually.

3 -It assists the student in organizing concepts and rephrasing successive events.

4- It assists the student in downloading and categorizing the content by extracting the important ideas.

Round House Model Steps :

1. Explain the function of the roundhouse diagram.

2. Determine the major topic written inside the circle axis.

3. Divide the fundamental idea into seven ideas that may be increased or decreased by two ideas; here, the learner reduces complicated concepts to a manageable quantity of information.

4. Create a basic image or symbol for each idea to promote it in each area.

5. Begin filling up the roundhouse model with thoughts and iconography, working clockwise from the sector pointing to the clock (12).

6. If a tricky sector of the roundhouse design requires extension, the student can increase it as shown in the diagram.

7. Create a control form for the roundhouse diagram so that the learner may guide themselves.

8. As a follow-up, learners can write a brief essay in their notebooks describing the charts, or they can swap their charts; the learner can even tell a tale by looking at the graphs, which helps integrate the language arts and promotes his learning (Wandersee, 2001).

Round house model significant:

1. Connect the knowledge obtained from instructional content.

2. Improving the learner's fluency, flexibility, and visual uniqueness.

3. Creating a solid knowledge basis, which eliminates misunderstandings and connects past information with subsequent knowledge.

4. Encouraging the student's self-confidence by allowing him to voice his opinions and select the right technical clip (Multu, 2013).

5. Using academic content by studying texts and searching for acceptable explanations in Draw.

6. Transitioning from a teacher-centered to a student-centered classroom atmosphere

7. Increasing instructors' confidence and efficiency in the classroom as a result of students' interest and active engagement, as well as teachers' metamorphosis from mentors to facilitators and mentors.

2.2 Review of related literature:

Alsous (2020), determined the impact of the round house method on the accomplishment of physical concepts in the ninth grade. The study included (48) students from This study discovered a statistically significant difference in the post-test in the students' acquisition of physical concepts at (= 0.05) between the average performance of the experimental group studied using the circular house strategy and obtained an average of (19.70) and the control group studied in the traditional manner and obtained an average of (14.63), in favor of the experimental group. In light of these findings, the researcher advocated for the usage of the circular home technique, citing its usefulness in students' acquisition of physical ideas.

Alkaltham (2020) examined the effect of the roundhouse strategy on the achievement and attitudes of grade eight students toward the national and social studies modules. The sample included forty 8th students. The students were divided into two groups: one that received roundhouse instruction and another that received traditional instruction. The findings revealed a statistically significant difference in the posttesting results of the international relations unit in favor of students in the experimental group. Furthermore, a statistically significant difference (0.05) was found in favor of the experimental group in the post-testing of the attitudes scale. Because of its role in strengthening students' national allegiance, loyalty, and recognition of the kingdom's efforts

Amenah and Ghaida (2019) The purpose of this study was to determine the efficacy of the roundhouse technique in fostering visual thinking skills in first-year intermediate students. A quasi-experimental method was adopted. The study sample comprised of 60 female students from an intermediate school's first grade. they were divided into two groups. the control group had 30 pupils, while the experimental group had 30 students as. The findings revealed that the roundhouse technique has an impact on the development of visual thinking skills.The roundhouse technique was recommended by the study for use in the teaching of the Fiqh course

due to its favorable and beneficial impact on the development of visual thinking abilities.

Jaradat (2018) identified the effectiveness of the roundhouse diagram strategy on fourth grade achievement in the social and national education curriculum in the Irbid directorate of education The quasi-experimental method was employed. The research sample comprised of (56) male and female fourth-grade students from Irbid's directorate of education schools; they were divided into two groups: control (14 males and 14 females) and experimental (14 males and 14 females). The researcher administered an achievement test consisting of (20) items. The findings revealed statistically significant differences in the students' scores in favor of the experimental group. The study suggested integrating the roundhouse diagram strategy into instructional method to be used when students are taught and involving teachers in roundhouse diagram strategy training curriculums.

Serhan (2018) **,** The purpose of this study was to investigate the effectiveness of the Roundhouse Strategy in teaching Arabic syntax on the accomplishment of ninth grade students.The study's sample comprised of (121) 9th grade students who were distributed on. The study's findings revealed significant differences at (=0.05) related to the instruction approach utilized, in favor of those taught with Roundhouse, and significant differences due to gender, in favor of females. The results showed that the influence of the interaction between Strategy and gender on the Arabic syntactic test favored females.

Mutlu (2013), The purpose of this study was to see how using roundhouse diagrams affected prospective classroom teachers' understanding of ecosystems, food chains, energy flow, and material cycles. The roundhouse diagram was used with the experimental group (n = 44), while the control group (n = 43) received traditional instruction.As a pretest and posttest, the 87 preservice teachers were given the Environmental Achievement Test, which consisted of 25 questions. According to the findings, using roundhouse diagrams considerably enhanced prospective classroom teachers' understanding of the ecosystem, food chain, energy flow, and

material cycles. Some key findings were also discussed in light of the obtained results.

Shehada (2013), investigated the influence of employing the Roundhouse Diagram Strategy on immediate and delayed scientific accomplishment and attitudes of tenth-grade physics students in governmental schools in Nablus governorate. The researcher performed this study on the participants of the study, who comprised of (141) boys and girls in a public school in Nablus, to answer the study's questions and test its assumptions. The study conclusions were as follows: There were substantial statistical differences between the experimental and control groups in terms of achievement and attitudes about studying physics and the physics teacher. There were no statistically significant differences in students' achievement and attitudes toward physics and physics teachers.

Robin and Sansonov (2011), This study looked into how creating and using Roundhouse diagrams affected the meaningful learning of science ideas in a sixth-grade science classroom. To verify the Roundhouse diagram's usefulness, the researcher gathered and examined both qualitative and quantitative data. Schoolchildren improved their comprehension of scientific ideas. The 10-week Roundhouse diagramming session resulted in increasing Roundhouse diagram scores. As they become increasingly adept at creating the Roundhouse diagrams, students' scientific grades rose.

Comments on the previous studies and literature review : After reviewing some of the most related studies to the topics of this study, this study found out that there was no any previous study, in the best knowledge of the researcher, that compares between the learning models in the developing of grammar of 10th EFL grade students, most of the previous studies investigated the using of the it in in different skills areas as in social studies, physical concepts, science, online learning, achievement and attitudes and thinking skills. No study was conducted the effect of using Roundhouse Model in the developing of grammar and of 10th EFL grade students whereas this study investigated the effect of using roundhouse model on developing grammar of 10th EFL grade students in Jordan during the second semester 2021-2022.

3.1 Design of The Study:

A quasi-experimental research design was employed for this research. This approach uses the design of equivalent groups depends on choosing two groups; the first one is the experimental group were taught using the strategy of the roundhouse, while the second is the control group that was taught according to the conventional method.

Table (1)

Diagram of Study design

Group		Teaching Strategy	
Experimental Group A	Pre -Test	Round house	Post -Test
Control Group		Conventional	

3.2 Population of the study:

The study population consisted of all the students of the tenth grade in the Directorate of Education of the Southern Mazar District during the second semester of the academic year (2021/2022), and their number is (1430), according to the statistics of the Planning Department in the Directorate of Education of the Southern Mazar District.

3.3 Sample of the study:

The study sample consisted of (50) female students from the tenth grade, who were randomly distributed into two groups: a control group that was taught in the conventional method, its number was (25) students and experimental group, that was taught using the roundhouse strategy was (25) students, student, Table (2) Shows this

Table (2)

Sample Distribution

Group	Number of students	Percentage
Experimental Group (Round house)	25	50%
Control Group (Conventional)	25	50%
Total	50	100%

3.4 Design and variables of the study:

This study followed quasi-experimental research design. The variables of the study are the independent and dependent variables, where independent variable includes (the teaching method), which of two levels:

1. Roundhouse model

2. Conventional method

While the dependent variables will be:

1. Grammar of EFL students.

3.5 The instructional material:

The test topic is taken from (Edwina , 2014) Action Pack,10th grade English textbook

Action Pack is a twelve-level course for Jordanian students, leading them from the Basic to the Secondary stage. It is based on the most modern methods of teaching language, combining a topic-based approach with functional language practice, careful attention to grammar and vocabulary and a comprehensive skills syllabus.

The textbook is divided into six modules: three in the first semester and three in the second semester, with each module including two sections. The book covers a variety of subjects designed to fit the educational goals and learning styles of Jordanian tenth grade pupils.

The Ministry of Education has decided to adopt this book for Jordanian schools in accordance with the approval of the Board of Education decision No. 56/2013 in its meeting No. 4/2013 on 17/6/2013 for the 2013/2014 academic year.

The passive voice , will be chosen as the study's implementation topic by the researcher from units five and ten.

3.6.1 Test validity: To assure the test's validity, it was submitted to a jury of (10) professionals, as well as supervisors of English language and three English language instructors. Each specialist was given a copy of the written test to remark on to ensure that the subject of writing and grammar is appropriate for tenth grade pupils.

The first draft of the test consisted of five questions, each with a number of needed sentences to be answered; it included grammatical passive voice abilities and relative clauses sentences .

3.6.2 Test Reliability: To validate the test's reliability, the (test – retest procedure) used on a pilot sample of (33) tenth female students chosen from the study's population but excluded from

the study's sample. The same test implemented again in two weeks, Table (3) Shows this

Table (3)

Correlation Coefficient between to Applications

Application		Second
	Pearson correlation	0.76
First	Sig	0.000
	N	33

Table (6) shows that The correlation coefficient was (r = 0.76), at the level of (α=0.000) which is a statistically significant value at the level (α≤0.05), and the stability of the test was also verified using Richardson equation (KR21), and the reliability coefficient calculated in this way reached (0.94), and these values are considered Good and indicates that the test has an appropriate degree of reliability.

3.7 The procedures of the study:

1. Reviewing the previous studies, which were relevant to the current study and related to writing, smart boards, technology and learning materiel.

2. Having the official approvals from Mu'tah University and the permission from Al-Mazar Directorate of Education to conduct the study .

3. The researchers selected the schools where the study's strategies to be applied. In addition, within these schools the 10th graders were randomly selected.

4.   The selected sections of the 10th graders were classified into experimental and control groups according the strategy to be employed for the purpose of this study.

5. The researchers made all the arrangements with the headmistress of the schools to conduct the study.

6. The researchers developed and verified the validity and the reliability of the study's instruments

7. The researchers designed the units plan for the material that taught for students

8. The researchers designed lesson plans for the material that will be taught for students (Roundhouse model)

9. The researchers designed a lesson plan for the conventional method according to the material that will be taught for students

10. The researchers checked with the teachers that the material main subjects' structure is already had been given to students

11. The researchers conducted the two exams (pre-test) for the three groups and asked students to answer the questions .

12. The test was included with some necessary instructions clearly and concisely to help the student in the accuracy of the answer and included

13. The researchers contacted the test

14. The researchers with the teacher corrected students` papers .

15. The researchers started the process of teaching the model Roundhouse model, as the following:

  i. The researchers explained to the students from class the strategy they will be using in the grammar lesson

ii. The researchers introduced the concept of Roundhouse model in front of the first class.

iii. The teacher started explaining and implementing the passive voice rule on each strategy from the 2 above

iv. The teacher makes sure that the grammar is clear and related to each strategy

v. The teacher makes the student experiment each strategy practically

vi. The researchers introduced test in front of the class and teacher will give them the directions that help them do well in their test.

vii. Teacher corrected their papers and grade it.

viii. Students with the conventional method were taught in a room with a table, a board, and desks: using mainly white board and talk, Then researcher starts with students for the units subject's and the grammar mentioned above and make sur to understand it and finally a test was given to them .at the end the researcher with another teacher corrected students` papers

16. Three weeks after, the researchers introduced the post - test and asked students to answer the questions of the same test that they had for week before.

17. 12. Collecting data from both groups and analyzing it using the statistical   Package for Social Sciences (SPSS).

18. Results were obtained and discussed.

19. Recommendations were proposed to the concerned.

3.8 Statistical analyses:

The statistical software (SPSS) used to analyze data in order to answer the study's questions. To examine the findings of the 4 questions of the study the results were calculated using the following statistical treatments:

1. Cronbach Alpha stability coefficient to verify the stability of the achievement test.

2. One-way analysis of variance (ANOVA) to verify equivalence between groups.

3. T-test for a pair sample to answer the cecond question of the study .

4.1 Results and Discussion of the Study Questions:

1. Results and discussion related to the first question that says " Is there an effect of using Roundhouse Model on the development of 10th grade's students' grammar?"

To answer this question, the researchers applied grammar and vocabularies test to the experimental group that studied with round house Model before and after performing the experiment. To investigate the differences, the participants were subject to a t-test for related sample analysis as presented in Table:

Table (4)

t-test for related sample for the experimental group that used round house model

Test-variable	Means	Std. Deviation	Degree freedom	ofT value	Significance	Significance Value
Pre- test	33.12	4.969	24	**7.501***	**0.000**	0.701
Post -test	36.92	3.707				

* Statistically significant at level ($\alpha \leq 0.05$)

Table (4) showed that there were illustrations differences among students scores between pre-achievement and post- achievement results where

the maximum mark was (40) points.   The difference between the results of student in the pre -test and post-test were even more

pronounced (3.8) points which reflects the effectiveness of the round house model on developing the development of 10th grade's students grammar and vocabularies, in addition these differences were statistically significant differences at level of (α≤0.05) between the pre-posttest of the students in the group taught with round house model. In relation to the mean value of the students in the post –test (36.92) is above the level achievement of the students in the pre-test (33.12) , which indicates that the differences where in favor of the post –test . moreover the , the effect size calculated reached (70.1%) this results , according to cohen's classification, confirmed the round house model had a significant effect on achievement of the 10th grade's students grammar and vocabularies.

Discussion of the results related to the research Second question: The results showed that there was a statistically significant effect at the (α≤0.05) of the method of teaching using the round house model in developing grammar and vocabulary for tenth grade students, where the differences were in favor of the post-test that was taught using the round house model at the pre-exam that was taught in the conventional way. The researcher attributes this result to the impact of visual learning, which is one of the most important pillars of the round house model, as it is based on organizing knowledge, discovering relationships and links between the main subject and its divisions, clarifying the meaning of vocabulary and grammar used in the lesson, as well as realizing the importance and connection of concepts with the main subject and with each other and analyzing them. Accurately and reviewing vocabulary building has facilitated students' acquisition of vocabulary, learning of grammar and its divisions, retention and retrieval of them when needed, and visual learning may improve students' memorization of previous experience.

This result can also be attributed to the cooperative learning represented by suggesting topics and dividing them into their parts, and learning using the round house model may constitute a positive excitement for the learning motivation of the students, as this model reduces the level of boredom among the students and attracts their attention and keeps them in constant contact with the lesson. One of the skills developed by the round house model and which has a positive impact on learning grammar of the English language is the skill of solving problems, where the problem is divided into the main one that represents the main topic into sub-problems. Dividing the main topic into parts and subsections and in a logical sequence contributes to learning it faster and clearer, especially since this model makes the student a positive and active participant. Her classmates make sense of English grammar. The focus on the verbal and visual aspects provided by this model helps the student to retain what she has learned for a long period of time and to link previous knowledge to the current one. Understanding the content represented by the shape and searching for interpretation. This result can also be interpreted based on correcting the wrong information about the term and the rule during the construction of the round house model.

2. Results and discussion related to the Second question that says "Are there any statistically significant difference at (α≤0.05) on development of 10th grade's students' grammar that could be attributed to models taught with (round house model and conventional method)? To answer this question, means and standard deviation of the students results on the post achievement test in English grammar for the two groups (round house and conventional method). One way ANOVA was used to examine the differences between the groups in term of post- test achievement levels . the output results are shown in tables (5) and (6) :

Table (5)

Means and standard Deviations of students achievement according to the different teaching strategies

The model	N	means	Std. Deviation
Round house	25	36.92	3.707
Conventional method	25	33.72	2.731

Table (6)

results of One Way ANOVA of variance to show the differences between the three groups in the achievement in the post -test

Source of variance	Sum of Squares	Degree of freedom	Mean Squares	F Calculated Value	Level of significance	Effect size Eta Squares
Between Groups	180.833	2	90.416	**8.611***	**0.000**	0.195
Within Groups	745.505	71	10.500			
Total	926.338	73				

* Statistically significant at level (α≤0.05)

Table (7)

results of Scheffe post hoc comparisons to show the Direct of the differences between the three groups

The model	means	Differences among Group	
		Round house	Conventional method
Round house	36.92	-0.21	**3.20***
Conventional method	33.72	**-3.20***	**-3.41***

* Statistically significant at level (α≤0.05)

The results of table (5) show that the students means achievement as follows; round house model (36.92) whereas the conventional method was (33.72). these results show the superiority of the round house over the conventional method, these results indicate that the achievement of experimental group outperform their counterparts who taught by conventional method, to insure the significance of the statistical differences between the student in the post –test in the three groups at the level of (α≤0.05) , one way –ANOVA, was used and the results as presented that there were statistically differences among the two group, in favor of round house on account of conventional method on development of 10th grade's students' grammar.

Discussion of the results related to the second question: the results showed that there were statistically significant differences in the

development of grammar in the English language among tenth grade students, due to the conventional teaching method in favor of the round house models.the researcher attributes the convergence of the effect of the round house on the acquisition of grammar, to the fact that the models is collaborative learning, and develop the skill of solving problems scientifically among the students and enable the students to express their opinion freely and without restriction, as they improve remembering, storing information and retrieving it when needed. the researcher also believes that round house model have knowledge friction between the students, and therefore the students benefit from each other's experiences, and they form sources of support for each other, and this forms a feedback that reinforces and corrects their wrong information. the researcher also believes that the roundhouse model focus on the student as the focus of the learning process and an active and positive component, so they must search for information, and remain ready to provide an answer to a question that the teacher randomly directs. From the students' self-confidence and push to search for information, link the information together and give it a meaning. the convergent level of impact can be attributed to the cognitive organization, the development of the skill of generalization and deduction, and the giving of meaning to the term and the rule, which can be provided by the roundhouse model. this result may also be due to the convergence of the level of excitement and motivation in the round model, as it raise the learning motivation of the students, encourage positive competition among the students, and maintain the continuity of the students' attention to what is presented during the lesson.

4.2 Recommendations:

Based on the results of the study, the following recommendations were proposed :

1. Holding training workshops to train English language teachers on the use of the Numbered Heads and the Round House models in developing English vocabulary and grammar.

2. Encouraging English language teachers to use the Numbered Heads and Round House models to develop vocabulary and English grammar, as the results of the current study revealed their impact on developing vocabulary and grammar

3. Conducting further studies on the effect of the Numbered Heads and Round House models on developing English language skills such as speaking, listening and writing skills.

4. Conducting further studies on the impact of the Numbered Heads and Round House models in developing vocabulary and grammar of the English language on other communities and samples to benefit from the results of the current study.

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