# THE EFFECT OF GRAPHIC ORGANIZERS ON DEVELOPING SIXTH PREPARATORY IRAQI STUDENTS' WRITING PERFORMANCE

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## Raad Ali IBRAHIM

## Supervisor
## Assist. Prof. Dr. Ali Sabah JAMEEL

**THE EFFECT OF GRAPHIC ORGANIZERS ON DEVELOPING SIXTH PREPARATORY IRAQI STUDENTS, WRITING PERFORMANCE**

**Raad Ali IBRAHIM**

**Assist. Prof. Dr. Ali Sabah JAMEEL**

**T.C.**

**Karabuk University**

**Institute of Graduate Programs**

**Department of English Language and Literature**

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# THESIS APPROVAL PAGE

I certify that in my opinion the thesis submitted by Raad Ali IBRAHIM titled "THE EFFECT OF GRAPHIC ORGANIZERS ON DEVELOPING SIXTH PREPARATORY IRAQI STUDENTS' WRITING PERFORMANCE" is fully adequate in scope and in quality as a thesis for the degree of Master of Science.

Assist. Prof. Dr. Ali Sabah JAMEEL                                    Online

Thesis Advisor, Department of English Language and Literature

This thesis is accepted by the examining committee with a unanimous vote in the Department of Department of English Language and literature as a Master of Science thesis  July 20, 2022.

**Examining Committee Members (Institutions)**                   **Signature**

Chairman: Assist. Prof. Dr. Ali Sabah JAMEEL (AU)                  Online

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Member: Assist. Prof. Dr. Najwa Yaseen ISMAIL (TU)                Online

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# DECLARATION

I hereby declare that this thesis is the result of my own work and all information included has been obtained and expounded in accordance with the academic rules and ethical policy specified by the institute. Besides, I declare that all the statements, results, and materials, not original to this thesis have been cited and referenced literally.

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**Name Surname:** Raad Ali IBRAHİM

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# FOREWORD

# ABSTRACT

This study investigates the effect of graphic organizers on developing sixth preparatory Iraqi students' writing performance. The respondents were 58 students from the sixth preparatory grade in Shu'aa Al-Maarifa School in Anbar Governorate. The study was conducted during the first semester of the academic year 2021-2022. A quantitative research design was adopted in this study. The respondents were divided into a control group and an experimental group. The experimental group used graphics often used to teach English writing skills. The control group used the prescribed teaching methods mentioned in the "Teacher's Guide" book. The data were collected by conducting a pre-test and post-test. The students in the experimental group were exposed to the experiment for eight weeks. The data were analyzed using the SPSS program. The results revealed that the effect of the graphics organizers was positive on the students' writing performance. The experimental group that used graphics organizers in learning writing skills got higher scores than the control group students. In addition, the use of graphic organizers encouraged the students to write; it facilitated the writing process using Tree-diagram, Mind mapping, Analogy, and Story Mapping graphics organizers. Therefore, the researcher provides suggestions for future studies that teachers may use graphics organizers to teach reading comprehension and listening comprehension, too.

# ÖZ

Bu çalışma, Iraklı altıncı hazırlık öğrencilerinin yazma performanslarını geliştirmede grafik düzenleyicilerin etkisini araştırmaktadır. Katılımcılar, Anbar Valiliği'ndeki Shu'aa Al-Maarifa Okulu'ndaki altıncı hazırlık sınıfından 58 öğrenciydi. Çalışma 2021-2022 eğitim-öğretim yılının ilk döneminde gerçekleştirilmiştir. Metodoloji için nicel bir araştırma tasarımı. Katılımcılar bir kontrol grubu ve bir deney grubu olarak ikiye ayrıldı. Deney grubu, genellikle İngilizce yazma becerilerini öğretmek için kullanılan grafikleri kullandı. Kontrol grubu "Öğretmen Rehberi" kitabında belirtilen öğretim yöntemlerini kullanmıştır. Veriler ön test ve son test yapılarak toplanmıştır. Deney grubundaki öğrenciler sekiz hafta boyunca deneye maruz bırakılmıştır. Veriler SPSS programı kullanılarak analiz edildi. Sonuçlar, grafik düzenleyicilerin etkisinin öğrencilerin yazma performansı üzerinde olumlu olduğunu ortaya koymuştur. Yazma becerisini öğrenmede grafik örgütleyici kullanan deney grubu, kontrol grubu öğrencilerinden daha yüksek puan almıştır. Ayrıca grafik düzenleyicilerin kullanılması öğrencileri yazmaya teşvik etmiştir. Ağaç diyagramı, Zihin haritalama, Analoji ve Öykü Haritalama grafik düzenleyicilerini kullanarak yazma sürecini kolaylaştırdı. Bu nedenle araştırmacı, öğretmenlerin okuduğunu anlama ve dinlediğini anlama öğretiminde de grafik düzenleyicileri kullanabilecekleri gelecekteki çalışmalar için öneriler sunmaktadır.

**Anahtar Sözcükler**: Grafik Organzer; Altıncı Hazırlık; Yazma Performansı; Ağaç Diyagramı; Zihin Haritası; Analoji; Öykü Haritası

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# ABBREVIATIONS

**EFL**  **:** English foreign language

**DL**  **:** Difficulty Level

**DP**  **:** The Posttest's discrimination power

**CG**  **:** Control group

**EG**  **:** Experimental group

**SPSS**  **:** Statistice package for the social sciences

**MA**  **:** Master

**Bh**  **:** Doctor

**2$^{nd}$**  **:** Second language

# SUBJECT OF THE RESEARCH

The Effect of Graphic Organizers on Developing Sixth Preparatory Iraqi Students' Writing Performance.

# PURPOSE AND IMPORTANCE OF THE RESEARCH

The study aims to investigate the effect of graphic organizers on developing sixth preparatory Iraqi students' writing performance. This study derives its significance from highlighting the characteristics of the graphic organizers in the writing process via utilizing cluster diagrams: Mind Mapping, Tree diagram, analogy graphic organizer, organizer, and story Mapping in fostering the teaching writing process and the students' writing skills in Iraqi preparatory schools.

# METHOD OF THE RESEARCH

The methodology of the study consisted of the population, the participants, the design of the study, the procedures, the instructional steps, the plan of the lessons, the description of the instruments, the reliability and validity of the instruments, and the statistical analysis.

# HYPOTHESIS OF THE RESEARCH / RESEARCH PROBLEM

To verify the aims of the study, the following hypotheses have been set:

1- There is no significant difference at ($\alpha$= 0.05) in the mean scores of the writing achievement of the sixth preparatory grade EFL students in the experimental group and the control group that can be attributed to the teaching strategy.

2- There are no significant differences in the experimental group students' writing achievement that can be attributed to the type of graphic organizer.

Based on the researcher's experience as an English language teacher at a secondary school, a need analysis is represented by an open question: "write the skill that you need to develop". The question was distributed to the sixth preparatory

students. After analyzing the students' responses, the researcher found that the writing skill had the first rank, followed by listening, speaking, and reading skills. The literature review has been reviewed to choose the most appropriate teaching strategies, techniques, and methods that the learners can use and implement in learning writing skills. Ample teaching strategies and techniques have been found. The researcher selected the "Graphic Organizer Techniques" based on the sixth preparatory Iraqi students' language levels.

## POPULATION AND SAMPLE

The population of the study is all the students in the sixth grade in the Directorate of Education in Anbar Province-Iraq. The respondents were sixth-grade preparatory school students in Ramadi City. The respondents were devided into two groups: the experimental group and the control group.

## SCOPE AND LIMITATIONS / DIFFICULTIES

Despite its impact, the researcher should acknowledge any challenges and limitations encountered in the present study to show that he is aware of them and explain how they might affect conclusions that can be drawn from the thesis. However, the present study has encountered a few limitations. These include:

1-Research sample and selection: It has been shown in the methodological approach that a large number of the respondents provide valid data and reliable results. The present study selected (58)  girls. The selection of a small number can be assigned to the breakout of the Covid-19. This number seems to be fair due to its effect in terms of reflecting an image of the case study on certain learners. The study has also focused on girls since there was a very small number of male participating.  The researcher believes that choosing either male or female does not affect the results of the study because this study is not related to gender-based research nor does it aim to show the difference between their writing performance.

2-Space and Time: The study was conducted in a preparatory school in Al-Khaldia City in the Anbar Province in West of Iraq.This limitation can be attributed to the breakout of the Covid-19

# 1. INTRODUCTION

This chapter presents the theoretical background, statement of the problem, the aims of the study, the research question, the hypotheses of the study, the objectives of the study, the limits of the study, and the significance of the study.

## 1.1. Theoretical Background

Human beings' communication is done in four ways: listening, speaking, reading, and writing. There are two major skills that we use to communicate, namely productive and receptive skills. Writing skill is the second used skill to produce a language after the speaking skill which is more common in everyday life (Wagner, 2002, p. iv).

In Iraq, the basic elements of the writing skill are taught starting from grade five at the primary schools. The students practice actual writing skill by writing a composition and email at grade Nine (which is labeled in Iraq as 3$^{rd}$ Intermediate grade). The students practice guided compositions at the intermediate and secondary levels, while at grade twelve (6$^{th}$ secondary grade), they practice semi-free composition via training doing exercises located at the student's textbook "English for Iraq" by writing emails about subjects related to the social life. Thus, the Iraqi students are not exposed to writing free compositions or texts in English language, and they require some instructional programs to develop their writing skills before enrolment at the university level.

The individual does not learn how to write unless there is a pedagogical atmosphere, thus implying having someone to teach the writing system of the target language. Learning how to write is not as learning how to speak. One may learn how to speak in a foreign language from the surrounding environment naturally, but learning how to write needs an educational curriculum (educational institutions, textbooks, teachers, etc.) (Brown, 2001, p. 334).

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## 1.2. Statement of the Problem

The Iraqi students at schools and university levels learn English as a foreign language. Based on the researcher's experience teaching the English language at the intermediate and preparatory schools, most Iraqi school students are anxious about learning the English language. The most influenced factor that generates anxiety is the fear of failing to succeed. In order to master the English language and overcome the language anxiety, the researcher conducted a need analysis represented by an open question distributed to the sixth-grade preparatory students to write the most needed skill that students feel they need to develop. After analyzing the students' responses, the researcher found that the writing skill was ranked first, followed by listening, speaking, and reading skills. The literature review and previous studies have been reviewed to choose the most appropriate teaching strategies that the learners can use and implement. Ample teaching strategies and techniques have been found. Based on the Sixth preparatory Iraqi students, the researcher selected the "Graphic Organizer Techniques" based on the studies conducted by Clarke (1990), MCWhorter (1997), Bulehl (2001), Kimball (2008), Nair et al. (2012), Saed (2014), Wahyuni (2016), Bala (2017), Chintya (2018), Lestari (2018), Khumairo (2019), (2020), Hanafiawi et al. (2020), and Annisa and Oktavia (2020). They have proved the significant positive effect of the graphics organizers on developing learners' writing skills. The most advantageous point of the graphic organizers is that they are both teaching and learning techniques, thereby implying that the teacher can use them to teach writing skills. After training how to use them, the students can use them to develop their writing performance. Out of a large number of the graphic organizers, the researcher selected the following:Cluster diagram. The teacher (the researcher) used it to train the students on how to generate the ideas.

1- Mind Mapping: it trains students to plan for the writing text.
2- Tree Diagram: it trains students to arrange and organize the paragraphs.
3- Analogy Graphic Organizer: It trains students to identify the similarity among things.
4- Story Map: It trains students to describe, analyze, interpret events, and reflect one's own life.

## 1.3. The Aims of the Study

The study aims to investigate the effect of graphic organizers on developing sixth preparatory Iraqi students' writing performance. The graphic organizers are namely: the cluster diagram, Mind Mapping, Tree diagram, analogy graphic organizer, and story Map. Another aim is to reveal if there are any differences between students' writing achievements that can be attributed to the type of graphic organizer being used in writing. The aim of using this chart is to develop students' skills in the writing process, so students in the sixth grade of middle school need multiple techniques in order to develop their writing skills. It also stimulates students' creativity in developing writing skill. It also stimulates students' creativity in developing writing skills and helps students organize and simplify the information provided for students by exploring the relationships between concepts. Therefore, it is considered a powerful tool in order to convey information to the students correctly, and it allows the user to plan ideas through the use of many different structures. We can use graphic organizers through and after instructions. Students can use the organizer to develop information and make it easily understandable. The graphic organizers have a major role in developing students' skills in the writing process, as it encourages students to develop their creative writing skills and continue writing in an easier way, and that the student finds pleasure in developing his/her skill, as well as improving his/her performance and continuity in writing.

## 1.4. Research Questions

The present study seeks to answer the following research questions:

1-Do the graphic organizers affect the Second language learners' writing?

2-In what sense and context do they affect?

3-Is there any relation between the 2$^{nd}$ learners' performance and their use of these organizers?

## 1.5. Hypotheses of the Study

To verify the aims of the study, the following hypotheses have been set:

1- There is no significant difference at ($\alpha$= 0.05) in the mean scores of the writing achievement of the sixth preparatory grade EFL students in the experimental group and the control group that can be attributed to the teaching strategy.

2- There are no significant differences in the experimental group students' writing achievement that can be attributed to the type of graphic organizer.

## 1.6. Limits of the Study

1- Despite its impact, the researcher should acknowledge any challenges and limitations encountered in the present study to show that he is aware of them and explain how they might affect conclusions that can be drawn from the thesis. However, the present study has encountered a few limitations. These include:

2- Research sample and selection: It has been shown in the methodological approach that a large number of the respondents provide valid data and reliable results. The present study selected (58) girls. The selection of a small number can be assigned to the breakout of the Covid-19. This number seems to be fair due to its effect in terms of reflecting an image of the case study on certain learners. The study has also focused on girls since there was a very small number of male participating. The researcher believes that choosing either male or female does not affect the results of the study because this study is not related to gender-based research nor does it aim to show the difference between their writing performance.

3- Space and Time: The study was conducted in a preparatory school in Al-Khaldia City in the Anbar Province in West of Iraq.This limitation can be attributed to the breakout of the Covid-19

## 1.7. Significance of the Study

This study derives its significance from highlighting the characteristics of the graphic organizers in the writing process via utilizing cluster diagrams, Mind Mapping, Tree diagrams, graphic analogy organizers, and story Mapping in fostering the teaching writing process and the student's writing skills in Iraqi preparatory schools. Also, it hopes that the graphic organizers' techniques will promote learners'

creative thinking abilities as writers. Charts help develop students' writing skills, so graphic organizers encourage students to deal with writing tasks systematically and creatively; they develop students' ideas and develop concepts, and they are present in the academic stages, so they have a significant role in activating students' ideas and giving them the skill and pleasure in writing the English language. The study could provide the English language teachers with insight into learners' strategies and activities that make writing valuable and interesting. Furthermore, the findings are hoped to help in the following domains:

1- **The Iraqi Ministry of Education**: Serving the Ministry to enhance the outcomes of the writing process in Iraq.

2- **Educational Supervisors and Curriculum Designers:**

- Supplying them with the techniques that facilitate the writing process need to be taken into account before planning the curriculum of the English language for the Iraqi context.

- Presenting the most applicable techniques that everyone can use to create a good writing piece of work.

3- **EFL Teachers**: Encourage them to follow appropriate techniques, modals, and strategies for promoting learners' writing performance and achievements in the English language.

4- **Students**: Enhancing and developing their writing achievement.

5- **Pedagogical Researchers**: It may open up a window for other researchers to investigate other graphic organizers in developing different kinds of language skills.

## 1.8. Summary

This chapter presented the theoretical background, statement of the problem, the aims of the study, the research questions, the hypotheses of the study, the objectives of the study, the limitations of the study, the significance of the study, and a summary of the chapter.

# 2. LITERATURE REVIEW

The present chapter introduces two major sections: the literature review (including definitions) and previous studies. The literature review presents in general the writing process, writing techniques, and writing mechanism. Furthermore, the graphic organizers techniques were presented in detail. The cluster diagram, the mind mapping, the tree diagram, the analogy graphic, and story map were presented in detail. This chapter ends up with a conclusion which presents a comparison between the previous studies and the current study in the levels of the aim, the participants, the instrument, and the findings.

## 2.1. Introduction

Writing texts take different types; each one is an example of a genre of a written form. In a pedagogical context, the most writing types that students exposed to are the non-fiction (such as essays, compositions, and articles), letter (personal, business, and trade), messages, academic writing (such as short answer tests, reports, papers, and chapters in book.), fiction (such as novels, poetry, short stories, and drama), labels greeting cards, and filling forms or applications (Brown, 2001, 302). The written language is last for-ever; it is permanent. One can read any information written and return again to it. Written information can be a word, a phrase, a sentence, and even an utterance or a paragraph (Ibid, 303).

We use writing skill to express our ideas, emotions, thoughts, and feelings. Writing is a visual pattern, and in order to present a written work, the written material is governed by some mechanism: grammar, spelling, punctuation, word order, coherence, and cohesive devices (Saied, 2011, p. 135).

## 2.2. Writing Skill

The researcher believes that being aware of how to write needs to be learned' it is not a matter of acquisition. A learner needs to go through steps to learn how to write. Thus, teaching writing skills is important in learning a foreign language. Harmer (2001, p. 80) states that teaching writing skills embodied three purposes that concern

the English language learners who learn English as a foreign language. Behind learning the writing skills are linguistic development, reinforcement, and learning writing styles.

## 2.3. The Nature of Writing

The nature of writing is based on the combination of two sciences, namely the product and the process. The process is to generate ideas and form them to be presented in a comprehensible way. The process mechanism presents the writing task in steps; these steps are arranged logically. A foreign language learner needs to learn these steps as a helpful guide to learn how to express feelings, thoughts, and ideas in a written form. Thus, the product mechanism is based on the process steps which lead to produce a good quality piece of writing (Linse, 2005, p. 98).

As an English language teacher, a teacher who teaches writing skills needs to balance between the process and the product. The major steps of the writing process in teaching writing skills as a foreign language are as follows:

1- Prewrite: it is the first step before writing. The writer gathers the ideas, thoughts, and themes. The writer may use one or more of the graphic organizers techniques to help in gathering and arranging the idea related to a specific topic. A writer may use a mind map, cluster diagram, and tree diagram in the first phase that precedes the process of writing.

2- Write: In this step, the writer writes down everything and does not worry about grammatical mistakes, spelling errors, and word order. This step helps the writer put down the information related to the topic in a rapid manner.

3- Revise: in this step, the writer checks the written text, and revises the ideas and the paragraphs.

4- Edit: In this step, the writer checks the grammatical, spelling, and word-order, errors, and mistakes. Foreign language learners may seek the help of proofreading before editing the written piece of work.

5- Publish: The final step is the product step. In this step, the writer writes the final draft on a formal sheet of paper (Lins, 2005; Brown, 2011; Cook, 2008; AlKhayyat & Mclean, 2012).

To be a good writer, especially to write a text in the English language, a writer has to take into consideration the subject-verb agreement, verb tenses, pronouns, word order, capitalization, commas, semicolons, colons, apostrophes, spelling, word choice, negative statements, modal auxiliaries, synonyms, and antonyms,….etc (Mclean, 2012).

## 2.4. Basic Writing Elements

## 2.4.1. Sentence Components

The researcher in the current study believes that, the English language has a system that a foreign language learner has to learn before engaging in writing a simple sentence in the English language. The role of the English language teacher is to teach the language system which usually differs from the language system of the learner's mother language.

A sentence, in the English system, contains a subject, a verb (helping verb), and a complement. In English language system, we have a clause. There are two kinds of clauses: the independent clause and the dependent one. The most important aspect in writing a well sentence is to be independent. A complete sentence that has a distinct meaning is referred to as an independent clause and is made up of a subject, verb, and other words that can stand alone in brevity. (Mclean, 2012, p. 49).

### 2.4.1.1. Subject

A subject is a word that is always  in the form of a noun or a pronoun. A subject may identify a thing, a person, and places. Also, we have a compound subject which refers to more than one place, person, or pronouns and joined with a preposition. Eg.. Ali and Ahmed visited their friends (Fisk, 1998, p. 35).

### 2.4.1.2. Prepo sitional Phrases

A prepositional phrase is a sentence that has more than one noun or even a pronoun and is connected by words, such as by, and, etc A verb, pronoun, or noun was connected with another word that modified the verb, noun, or pronoun in the pre-position. A "Prepositional Phrase" is a collection of words that all begin with a preposition. (Vitto, 2006, 35).

### 2.4.1.3. Verbs

A verb is a part of a complete sentence. A verb informs the subject's action in the English language system, whereby there are three major kinds of verbs: the action verbs, the helping verbs, and the linking verbs (Leech, 2004, p. 5).

### 2.4.1.4. Sentence Structure

Writing a text in the English language needs to use a variety of structures to add creativity to the work. The English sentence structures are as follows:

1- Subject + Verb:                           He plays.

2- Subject + Linking verb + Noun :           He is a teacher.

3- Subject + Verb + Adjective:               Ali is cleaver.

4- Subject + Verb + adverb :                 She ran fast

5- Subject + Verb + Object:                  He rides a horse

6- Subject + Verb + Indirect Object + Direct object: Our teacher gave us the project (Krohn, 1971, p. 169).

### 2.5. Academic Writing

To write an academic text, the writer as a foreign language learner needs to learn and practice certain activities to get a well-formed academic text. The first phase to be learned is to set a point and make it clear, then support it with logical and academic evidence to be sure that the point is clear and free of ambiguity. The second

phase to be learned is to make the points clear by understanding the question that the writer asks himself for the purpose of writing, also to use a simple language in formulating a statement, and to write down a simple conclusion. The third phase to be learned is to show clarity that is to explain an idea and focus on it (Coleman, 2020, p. 8).

At the schools and universities level, academic writing fulfills four general purposes; foreign language learners learn academic writing which helps in summarizing, analyzing, synthesizing, and evaluating materials (Mclean, 2012, p. 306).

## 2.6. Type of Academic Writing

English foreign language learners learn writing skills for the purpose of narration, definitions, cause and effect, and contrast and comparison.

### 2.6.1. Definition

Writing skills are a specific capacity which help writers put their thoughts into words in a full sense form and mentally interact with the message. Writing is free of ambiguity. The second phase to be learned is to make the points clear by understanding the question that the writer asks himself/ herself for the purpose of writing. Also, this phase includes the use of a simple language in formulating a statement, and write down a simple conclusion. The third phase to be learned is to show clarity to explain an idea and focus on it (Coleman, 2020, p. 8).

At schools and universities level, the academic writing fulfills four general purposes. The use of a set of signs or symbols by foreign language learners represents the language in textual media. Writing necessitates not just the ability to generate words and ideas from scratch, but also the skill to critique them in order to determine which ones to use. Writing well is frequently the result of complex thinking, composing, and revising processes that necessitate specialized abilities that not every speaker is born with (Hamer 2007, p. 34).

### 2.6.2. Cause and Effect in Writing

A cause is something that delivers an occasion or a condition whereas an effect is a thing that is the outcomes of an occasion or a condition; a cause and an effect are used in writing to decide how different phenomena relate as far as origins and outcomes. When identifying the precise relationship between circumstances and logical outcomes is frequently difficult in a teaching situation, employing a cause and effect map is an appropriate graphic organizer that can assist students in organizing their writing assignment. (Clark, 2014, p. 147).

The cause-and-effect essay starts with a general introduction to the issue, then the main statement highlights the primary cause, primary effect, or multiple causes and effects of a circumstance or an occurrence. One of the two major approaches to organize a cause-and-an effect essay is as follows:

1- Begin with the cause and then go on to the consequences.

2- Begin with the effect, and after that go on to the reasons.

The conclusion ought to bring the topic to a close and restate the thesis, leaving the reader with a clear grasp of the relationship under consideration (Mclean, 2012, p. 519).

### 2.6.3. Comparison and Contrast in Writing

Comparative aspects are referred to as comparisons, whereas dissimilar ones are referred to as contrasts. Two subjects are analyzed by comparing, contrasting, or both in compare-and-contrast written work. Pick two or more topics that are related in some way to write a successful compare-and-contrast text. The goal of the comparison or contrast is to draw attention to minute differences or surprising similarities rather than to state the obvious. (Hamp-Lyons & Heasley, 2006, p. 40).

### 2.6.4. Narration

Narrative writing aims to tell tales. Narration is the art of storytelling. The individual engages in a type of storytelling whenever S/he tells a person(s) about an event or an occurrence from a day. Furthermore, a story can be fictional or factual. A

factual story is one that is shown throughout true events that occurred actually in everyday life and attempts to be as accurate as possible. A fictional tale is one that is made up or created by the author, who is free to invent main characters and events that are appropriate (Mclean, 2012, p. 485).

### 2.6.5.    Description in Writing

A description is used by writers to ensure that their audience are completely engaged in the words on the text. This necessitates the writer to make a determined effort to explain his/her environment via visual elements. Typically, description texts are used to describe people, setting, or an item in tactile details. A descriptive essay's framework is more adaptable then those of other argumentative styles. The tone and objective of a description text should be established in the introductory. The writer's overall impression of the individual, setting, or item mentioned in the body of the text should be conveyed in the texts (Jayanti, 2019).

### 2.7.  Writing Pedagogy

Teaching writing skills for foreign language learners need special techniques that differ from the techniques being used in teaching native language learners or second language learners who gain the initial writing elements. Brown (2001) suggests some types of writing that the English language teachers use inside the classroom to teach the writing skills, as follow:

1- Imitative

To understand the norms of the orthographic code, learners will write the English letters, words, and phrases at the starting level of learning to write. Dictation can help students learn how to write. The followings are the steps included in dictations:

a- The instructor reads a brief text at regular speed once or twice.

b- The instructors read the text in a short sentence which consists of some words, with a pause.

c- Students write down precisely what they hear during the pause.

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2- Intensive writing.

Intensive writing usually emerges in written grammar tasks that are regulated. A typical kind of controlled writing is giving learners a paragraph in which they must change the structure of the paragraph throughout. Guided writing reduces the instructor's influence while yet providing a variety of stimuli. In 'dicto-com', a text is read at regular speed more than one time, after which, the instructor invites learners to create a text using their best experience of the reading.

3- Self-writing

Self-writing includes note-taking and dialogue journals.

4- Display writing

The elements of the display are essay examinations, research reports, and short answers.

5- Real Writing

Classroom real writing involves academic writing, vocational writing, and personal writing.

## 2.8. Writing Techniques

To develop the EFL Students' writing performance, and to enable the EFL students to be good writers, some writing techniques need to be presented.

### 2.8.1. Integrate Practices

The EFL teachers should train the students to do the followings:

1. In writing, concentrate on a single purpose or a major theme.

2. Take into consideration the target audience.

3. Plan the writing task.

4. Allow the initial thought pour into the blank paper.

5. To write according to the organizing strategy.

6. Ask for and act on criticism on writing.

7. Avoid surface structure.

8. Revising the written task effectively.

9. Make plenty of adjustments as necessary with patience (Olive & Levy, 2002, p. 28).

### 2.8.2. Process and Product Equalization

The EFL teachers have to train the EFL students to balance between the process, what they write down, the product, and the final draft. This action needs special strategies to be followed:

1. Ensure that the EFL learners are guided via the necessary stages of the writing process.

2. Students need to pay close attention to the function as a guide and as a writer.

3. The EFL students do not have to get wrapped up in the steps leading up to the final product. The goal is to produce a piece of writing that is clear, eloquent, well-organized, and successful (Pat & Tompkins, 2019, p. 18).

### 2.8.3. Cultural Background

The cultural background helps students comprehend what they used to gradually introduce them to acceptable English terminology (Brown, 2001, p. 347).

### 2.8.4. Writing Content

Students can obtain valuable insights into how they must write as well as the subject matter that may become the focus of their writing by reading and studying a variety of relevant forms of texts (Urquhart & McIve, 2005, p. 26).

### 2.8.5. Authentic Writing

The EFL teachers have to explain the importance of using authentic materials and events in writing. They need to show to the students the real purpose of writing. Second is to train the students that one method to bring authenticity to the students' writing is to share it with other students in the class. Third is to tell students that authentic writing involves activities, such as publishing a class newsletter, writing letters to people outside the classroom, creating a screenplay for a skit or dramatic presentation, writing a CV, and writing advertising (Rice, 2021, p. 6).

### 2.8.6. Composing Prewriting, Drafting, and Revising Phases

Prescribing encourages the generation of ideas. This can be done in a variety of ways: passage reading (details), passage skimming and/or skimming, offline research, brainstorming, listing (description-individual), clustering (starting with keywords and adding other words using free association), discussing the topic or doing a teacher-initiated question and a survey, free writing (Veach, 2018: 19)

The drafting and revising phases are the center of the writing process. To make the action easy and go smoothly, it is better to begin with free-writing, practice content peer review, correction of grammatical errors, technique of "reading aloud" (Students read their nearly-final versions to each other in small groups or pairs for a final check on errors, flow of ideas, and so on), and finally make proofreading (Ibid, p. 21).

### 2.8.7. Instruct Writing

To teach writing skills, the EFL teachers have to take in consideration the following:

1. Explicitly state formal qualities.
2. A clear statement of the thesis, theme, or purpose is a feature of English rhetorical speech in writing.
3. Developing or clarifying the thesis through the utilization of main themes.
4. The application of supporting ideas.

5. Supporting by "telling": describing - supporting by "showing": providing proof, facts, figures, and so on.

6. Reinforcing by tying cause and effect together - enhancing by utilizing comparison and/or contrast (Brown, 2001, 349).

## 2.9. Graphic Organizer

Graphic organizers are a type of visual knowledge representation that organizes information by labeling essential parts of an idea or an issue. Their primary purpose is to assist in the presentation of information in a succinct manner that emphasizes the order and connections of concepts that arrange essential parts of an idea or an issue into a pattern using labels to organize information. Their primary purpose is to assist in the presentation of information in a succinct manner that emphasizes the order and connections of concepts (Bromley, DeVitis & Modlo, 1999).

### 2.9.1. Implementing the Graphic Organizer

#### 2.9.1.1. Critical and Innovative Thinking Tools

Graphic organizers assist students in focusing on what is essential by highlighting significant concepts and terminology. This involves the connections between them, thereby offering critical and creative thinking tools.

#### 2.9.1.2. Information-Organizing Tools

In a series of networks, the human mind organizes and stores information. Students can add or alter their prior knowledge by identifying the links and inconsistencies between current knowledge and new information using graphic organizers, which are visual representations that mimic networks (Ausubel, 1968).

#### 2.9.1.3. Tools for comprehending data and connections

EFL learners can use graphic organizers as mental tools to help them grasp and remember essential information and relationships (Vygotsky, 1962).

### 2.9.1.4. Tools for Illustrating Knowledge and Comprehension

Students who struggle to explain relationships between components of economic ideas in writing form will benefit from graphic organizers, which give an alternative approach of showing knowledge and comprehension (Sorenson, 1991).

### 2.9.1.5. Self-Teaching Resources

Students who use graphic organizers in the classroom learn how to use them independently as note-taking, planning, presenting, and review tools. In other words, visual organizers help students learn both inside and outside of the classroom (Dunston, 1992).

### 2.9.1.6. EFL Teachers and Graphic Organizers

EFL teachers can use graphic organizers to demonstrate and explain associations between content and sub-content, as well as how they relate to other topic areas. Students, on the other hand, can create more abstract comparisons, assessments, and conclusions using the organizers. In a nutshell, graphic organizers enable students to take an active role in their education. Specific advantages to students and instructors are given in the following organizer for simple comprehension (Candler, 2012).

The researcher in the current study designs a diagram that shows the merits of graphic organizer for both the EFL learners and the EFL teachers as shown in Figure 1

| Recognizes the notion of part-to-whole. | Explains and arranges thoughts. | Identifies and integrates a variety of viewpoints. | Keeps track of learner's connections. | Boosts cognition. |
|---|---|---|---|---|

Merit for Students

**Merit of Graphic Organizer**

Merit for Teachers

| Identifies and integrates a variety of viewpoints. | Creates an interactive lesson. | Assists visual learners in gaining knowledge more quickly. | Elicits the intrinsic and extrinsic EFL students' motivations. | Helps EFL students in the pre-writing phase. |
|---|---|---|---|---|

**Figure 1.** Graphic Organizer Model

### 2.9.1.7. Steps of Implementing Graphic Organizers

The graphic organizers are exceptionally adaptable in teaching writing skills. EFL teachers use them for teaching, revision, extending, and enjoyment, and learners can finish them in groups, pairs, or the entire class. Before beginning to create a written work, EFL learners might use graphic organizers to help them organize their thoughts. They can assist beginner writers in generating ideas and planning out what will be written during the pre-writing stage of the writing process. They enable EFL students to arrange materials into logical patterns such as sequence, cause and effect, and issue – solution. Because students approach the work with a strategy, graphic organizers reduce the need to erase the written text. The EFL students can create a

more cohesive and focused text when they utilize a graphic organizer as a pre-writing practice (Lestari & Wahyuni, 2018, p. 3).

Freeman (2013) suggested general steps that help EFL students write a text in English language by using a single graphic organizer or different kinds of graphic organizers.

1- Become familiar with many types of graphic organizers.
2- Clarify what graphic organizers are and why they are helpful in learning to pupils.
3- Show the graphic organizer for a certain topic. Make a note of the subject and organizational structure.
4- Utilize real-life evidence to inform how to use graphic organizers.
5- Assign the graphic organizer as a solo, group, or pair task.
6- Examine the work of the kids. Encourage students to talk about how to use graphic organizers effectively in the classroom.

To implement a specific graphic organizer in a writing task, the researcher in the current thesis suggests the following steps:

1- To begin by drawing the organizer which is suitable to fulfill the task. For example, if the task is to write about a person's history and achievements, the " the Biography Graphic" will be the most suitable one to achieve the task.

2- To write a central, key, word and generate several ideas that belong to the mother keyword around it.

3- Review the keyword, idea, and the ideas that surround it, and then do editing (to add, omit, elaborate, merge, and/or split).

4- To write the first draft quickly.

5- Review the written paragraphs. In this phase, the writer sharpens and tailors the paragraphs.

6- Finally, Re-write the task as a final draft.

### 2.9.2. Kinds of Graphic Organizers

There are many kinds of graphic organizers. In the current study, the researcher selected the most appropriate graphic organizers that fit the Iraqi context which is the Cluster Diagrams  as follows:

### 2.9.2.1. The Cluster Diagram

It is convenient to start with a cluster diagram because clustering is a form of pre-writing that enables a person to investigate a large number of ideas at once. Clustering, similar to brainstorming or free association, enables individuals to start writing without having any specific ideas in mind. Write rapidly, circling each word as you go, then arrange words together around the center keyword. Clustering is a strategy for condensing a wide topic into a more manageable topic for a brief composition or an essay. It is a writing approach that can help you come up with new ideas. In its broadest definition, a cluster diagram is exactly what its name implies. This style of diagram depicts a grouping of thoughts or things that are close in proximity to one another (Benjamin, 2014, p. 84).

### Designing Cluster Diagram

To teach  EFL students how to use the cluster diagram, the EFL teachers instruct their students to follow the following steps that were suggested by Anisa (2021, p. 11).

1- In the center, start with your primary concept or topic.

2- Expand on your core concept by adding subtopics or classifications.

3- Add thoughts or materials under each subtopic/category.

4- Do as much as you need to do in terms of levels.

5- Use different colors to color-code your diagram. Colors may be used to differentiate various parts or levels in your diagram.

**The Merit of Cluster Diagram**

Kimball (2008) found that a cluster diagram can help the EFL students in the pre-writing phase as follows:

1- Generating thoughts and ideas: When the EFL learner writes the main word, the related words can generate smoothly.

2- Reduce students' anxiety. A student can feel self-confidence when starting to generate ideas that relate to a given topic.

3- Sharing thoughts and recalling previous information in a smooth way. When a student writes an idea or a word, it helps write other words and so on. After writing many words and ideas, the connection between them can be an easy task to write several paragraphs for a given topic.

In supporting the significance of using a cluster diagram in the process of writing, Taylor (2010) found several advantages to adopting a clustering mechanism in writing. The advantages for the students are as follows:

1- Clustering help students edit their writing. The students can easily choose words that fit together to compose a sentence.

2- As clustering is a pre-writing technique, it helps the students focus on any idea that emerged suddenly.

3- Clustering helps create a circle of idioms that enable the students to discuss and explain a specific topic.

4- Clustering helps organize the concepts that share a specific topic, thereby enabling the students to build a plot gradually and join the thoughts respectively.


**Cluster Diagram in Classroom**

Clustering is significant in helping students  stimulate ideas and write directly to the point. It is a technique which provides the students to think and  write in a creative style (Owen, 2009). It helps students  write all the ideas that spring from their own thoughts.

Dewi and Ayunisa (2020) trained EFL students to use clustering technique inside the classroom by conducting the following steps. The 1$^{st}$ student write the main theme in the center of a blank paper and draw a shape (triangle, circle, etc) around it. The 2$^{nd}$ one continues generating sub-ideas related to the main theme and also circle them, and draw lines to connect them with the main theme. Finally, the EFL teacher provides feedback. Based on this notion, the researchers selected "clustering technique" to enable the EFL students overcome the problem they face in writing a descriptive text in English language.

Khumairo (2019) stated that the clustering technique guided the EFL students to give a valuable description of the characteristics of a given subject. Implementing the clustering technique inside the classroom can create enjoyable, valuable, and interesting learning environment. This thing proves that the clustering technique is an effective instructional tool to improve the students' writing competence to write a descriptive text.

Samad et al. (2020:13) suggested seven principles to use cluster diagram in teaching writing as follows:

1- The EFL teacher should train EFL students to construct the previous knowledge automatically by engaging them in authentic learning activities.

2- The EFL teacher should ask questions that demand from students to provide answers from their real life.

3- The EFL teacher should activate the inquiry techniques (as a creative techniques) by asking the EFL students to reply to the teacher's questions in a correct way.

4- The EFL teacher should use a model which could be a picture that represents the topic.

5- To train the students to generate ideas for a given topic, the EFL teacher should ask them to write a descriptive essay after dividing the students into groups; this technique helps the students generate ideas and arrange them correctly.

6- To ensure students' comprehension of the use of cluster diagram, the EFL teacher may use the reflection technique by asking students to recall the clustering process.

7- Finally, assessment is required to measure students' understanding by monitoring classroom activities and judging students' writing outcomes.

### 2.9.2.2. Kinds of Cluster Diagram

There are many types of cluster diagrams that students may use to write a task. The researcher in the current study selected the most used diagrams as follows:

### Tree Diagram

The Tree diagram is applied to present how ideas are related to each other. The main idea is located in the middle, and the branches show relevant events,  sub-ideas, and the results. The following tree diagram is the most used one in the pre-writing phase as shown in Figure 2.
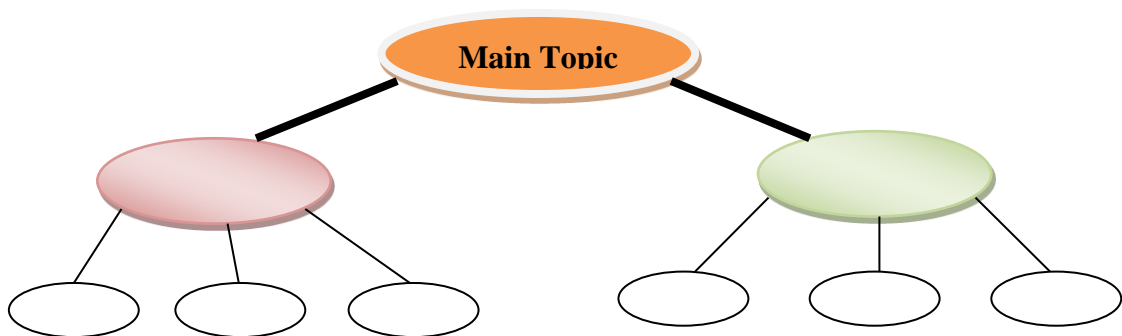


**Figure 2.** Tree Diagram

The Tree diagram is used to save time and classify the thoughts. It is a visual tool that reflects the whole picture of the theme (Samad, 2020, p. 16).

Nair et al. (2012) stated that the EFL learners feel comfortable when they use 'Tree-diagram' in a pre-writing phase. It can be considered as an aid instrument to manage their task; it is an easy simple strategy that leads to a well-organized text. The not-strategic students are not successful in writing a given topic; they are far from controlling their time and efforts. The students perceive the writing task as a complicated task when they do not use a pre-writing strategy such as a 'Tree-diagram'.

In another study, Liu (2018, p. 140) explained that argumentative writing is based on two facts: the integration and the logics, and to analyze argumentative paragraphs, one needs to use a diagram. The diagram role is to show the relation between the words' connections. The diagram reveals the organization, the connections, and the logic by drawing lines which connect the ideas. This action is called a"Tree Analysis Diagram".

The basic notion of the "Tree Diagram" is the "Toulmin Model". The Toulmin Model is a structural argumentative writing which is proposed by Stephen Toulmin in 1958. The model suggests that a learner may be guided by drawing an outline as a pre-writing phase. The lines that the students draw can help  form thoughts and ideas. The whole picture forms a tree diagram. The use of "Tree diagram" is helpful in the pre-writing phase; it helps the EFL learner  organize their ideas clearly and  create a logic argument.

Nair et al. (2012) found that teaching writing skills via the tree Diagram technique has developed students' writing skills, and suggested to conduct further studies to focus on applying "Tree Diagram" to develop students' essay writing.

The ' Tree Diagram' role is not restricted to a specific phase; it can be used in the phase of  " while writing " as a guide to direct the EFL learners to create a logic paragraphs with the help of the lines and arrows in a diagram. After writing (the post-writing), the tree diagram helps students  conduct self-check of their writing (Liu, 2018, pp. 140-141).

There are many writing techniques that can help students  write  acceptable and good paragraphs, among these writing techniques which are most suitable for the EFL students especially at the Pre-writing phase. It is used to organize learner's ideas; it is a writing tool that facilitates the writing task (Qudsiyah, 2014, p. 4).

The tree Diagram technique is a helpful technique that breaks the feel of being afraid of finding and generating ideas for a given topic. When a student writes a main idea, the supporting ideas that relate to it can be generated smoothly, and the outcome will be a well-organized paragraph (Fitria, 2017). The Tree Diagram technique enables EFL students to categorize the ideas by generating general ideas to more specific ideas. This  action  can  foster  EFL  students  to  organize  their  ideas  and  produce  a

comprehended text. The arrows in the tree diagrams help the students  be more active and their writing becomes more active (Qudsiyah, 2020, p. 5).


### Mind-Mapping Diagram

Mind – Mapping is a method that aids students in coming up with ideas for a given topic. This method aids the EFL learners in creating a visual-Map of their thoughts. EFL students use arrows, circles, squares, and lines to represent a spider network of links between concepts in mapping (Nunan, 2001, p. 271).

The mind-mapping technique helps EFL students  create a good atmosphere in a writing activity. Using mind mapping in the prewriting phase is an interesting method for the EFL students which may eliminate EFL student's boredom due to their ability to form images inside their minds and  use many shapes and colors in making an outline before they start writing a task. EFL students can do a chronological text because they ought to make their own draft before they start writing a text. Mind-mapping technique encourages the EFL students to be more active during a writing lesson and provides an opportunity to improve EFL students' writing ability (Salem, 2020, p. 149).

The mind-mapping technique was founded by Tony Buzan in 1974. His invention has helped most students arrange their ideas,  achieve their aims, and reach creativity in education. The concept "mapping" is a method that connecst the ideas in a diagram to construct a full map, a visual picture (Norak and Gowin, 1984: 24). Mind-map has different names; in 1984 Novak and Gowin (P.23) named it ''Concept Mapping'', and in 1996, Buzan and Buzan named it "Mapping" (P.18). Further,  in 2002, O'Donnell et al. named it "Knowledge Mapping" (P.11).

The mind-Map technique has been a center point of the University of Adelaide in (2014) which published a report to answer a major question concerning the writing process; the question is "How do I turn my mind-map into an academic essay?" The answer to this question is the main core of the article and considers a recommendation to apply the mind-map technique by the students. The answer is as follows:

Before you can begin to write your essay paper, you must first understand and determine what the 'main' idea of your writing will be. What is the central theme/main idea or controlling point that you are trying to convey to your reader? Whatever the topic, it is always a good idea to think about the issues that surround that topic and mind mapping is an excellent form of brainstorming. The information that comprises your paragraphs must have a relationship to that controlling point (p.4).

To apply mind-mapping inside the classroom, MCWhorter (1997) mentioned five steps to implement mind-map in learning the writing skill, as follows:

1- To write the main topic in a box in the middle of a landscape paper.

2- Think quickly of ideas that relate to the main topic. Then draw arrows to connect the ideas with the main topic (which is located in the middle of the paper).

3- Arrange the ideas logically, and then see the whole picture as a tree.

4- Add more ideas to support the main topic.

5- Start writing in the first draft by using the ideas that are located inside the diagram and shift them to a paragraph.

The mind-Map technique is the most useful writing technique that can help EFL students in the pre-writing stage; this motion is fostered by Saed's (2014) findings which show that using mind-map can do the following learning behaviors:

1- Motivate students' creative thinking and generate numerous thoughts.

2- Visualize an outline as a plan for writing a given topic.

3- Organize the ideas which help in writing an error-free text.

4- Motivate EFL students to think critically and enable them to infer, explain, self-organize, manage the time, and evaluate the written task.

5- Helps students  have positive perspectives toward writing in English language.

6- Reduce the anxiety of writing in the English language.

The Mind-Mapping has proved to be significant for the Arab students who learn the English writing skill. Jewels and Albon (2012) found that mind-mapping was useful to fulfill Arab students' need in learning writing skill. The students benefit from the mapping technique in the pre-writing phase and also in note-taking, and summarizing a given material.

In addition, Mohmood (2016) found that Iraqi sixth preparatory students have got benefits from using the mind-map technique; all students strongly agree that writing their ideas on a map-style promote to organize the text-paragraphs logically. Also, he concluded that using Mind-mapping has developed students' attitudes towards writing. In another study, Al-Naqbi (2011) found that using mind-mapping has helped EFL students in developing their knowledge. Figure 3 shows a diagram of designing Mind-Map.
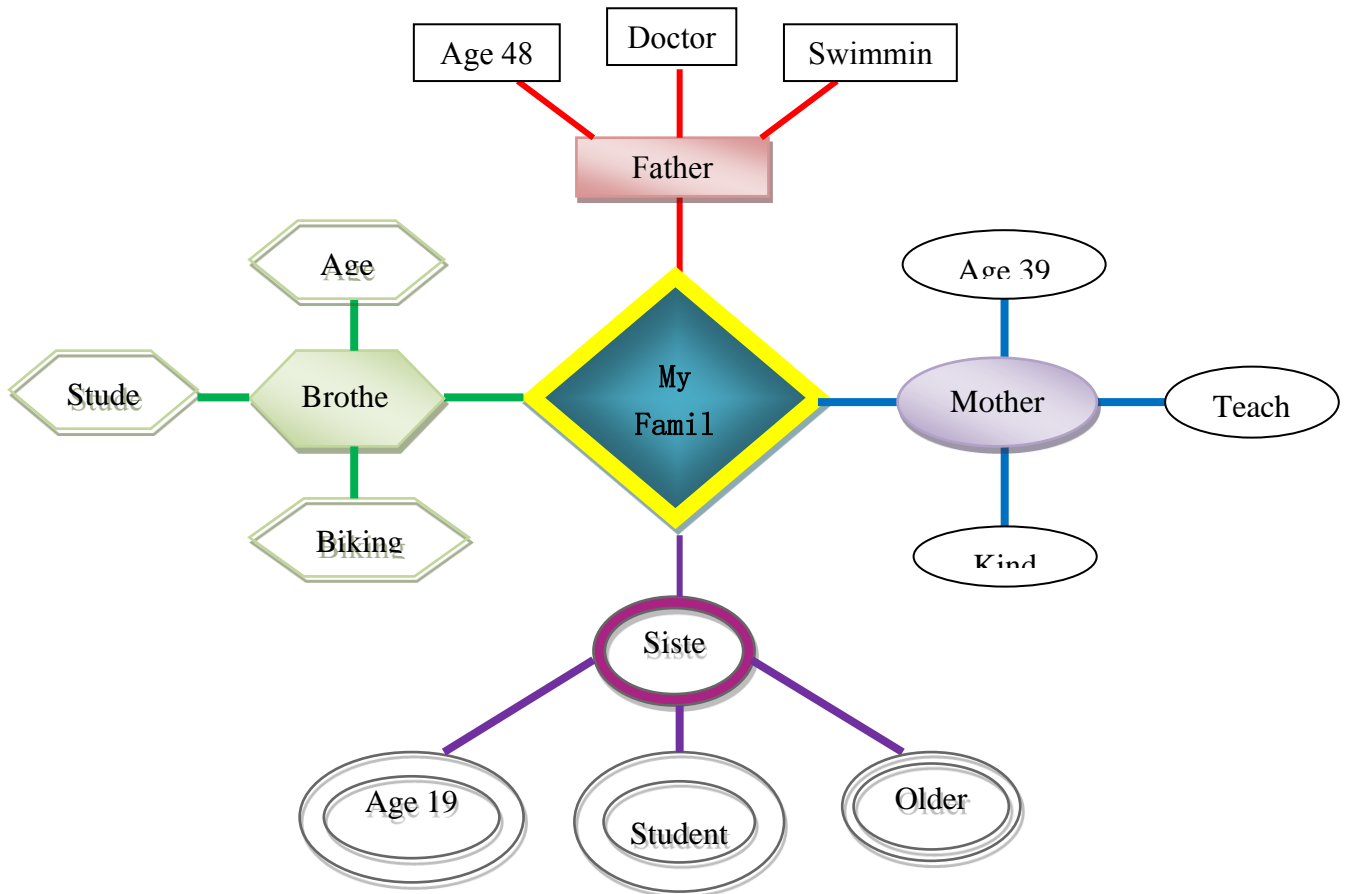


**Figure 3.** Mind Mapping Model

In brief, to apply a mind-map technique, a student needs to create the main idea located in the middle of the paper and add branches that relate to the main idea, followed by semi-branches which contain details. The number of the branches is not limited. Each of the main branches includes a key-idea. The semi-branches should include information or ideas that are closely related to the main idea of the specific branch. The branches are connected and associated with an organized network. It is recommended to highlight each main key branch to help the student's brain create

''mental short-cuts''. Color enables the students shed the light, analyze, and categorize the ideas to provide a comprehensive text.

**Analogy Graphic Organizer**

The researcher notices that the creative writing task includes some features that need to be followed to produce a creative text. One of these features is to use the similarities and differences technique. This task can be achieved easily by using the "Analogy Graphic Organizer " technique.

Clarke (1990) in his study defined graphic organizers as:

Words on paper, arranged to represent an individual's understanding of the relationship between words. Whereas conventions of sentence structure make most writing linear in form, graphic organizers take their form from the presumed structure of relationships among ideas (p. 30).

The analogy graph organizer technique helps the EFL students  compare and contrast things in an organized way. This technique increases students' comprehending of a topic they intend to write. It is a matter of revealing the features of "A" and the features of "B" and the common features between "A" and "B" that is called "C" as shown in Figure 4.
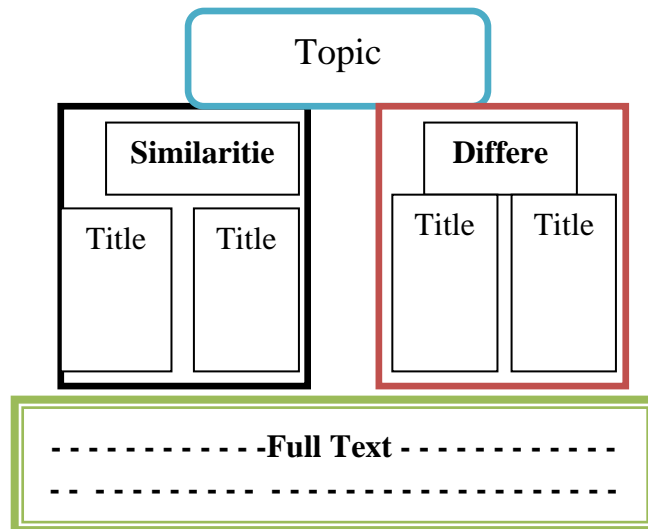


**Figure 4.** Analogy Graphic Organizer

Bulehl (2001) mentions "Analogy Graphic Organizer" that is used to enable the students to realize and distinguish the similarities and differences between two or more things that they are familiar and have good information about them.

The analogy technique helps the writers practice critical thinking and then create a piece of comparison between things. In fact, when the students use the analogy technique, they are dealing with "relationships and relationships" (Marzano et al., 2001, p. 26). Using analogy graphic organizer technique gives the EFL students a good opportunity to establish long-term learning (Jensen,1998).

To apply the analogy graphic technique in learning the writing skill, students should be prepared to learn by a visual technique which help them  make the conceptual relationship between what they previously know (as previous knowledge) and what they are learning inside or outside the classroom (James, 2002). Using the analogy map enables the students realize what they already know and be familiar with. The analogy map is an interesting teaching method that motivates EFL students to investigate their knowledge and create a well-organized written task in a given topic. To visualize the students' knowledge is considered an unrecognizable technique by EFL teachers. The poor use of visualization in teaching writing skill can lead to the feeling of losing interest in learning the writing skill and the writing task becomes a heavy duty for the EFL students. Thus, in the educational context, it is important to build a strong relationship between the motivation and the mental, cognitive, components (Cleaves, 2007, p. 52). Students can enhance their abilities to show the similarities and the differences and also make a comparison between things by using the visual graphic that they have done. Also, using analogy Map technique can develop students' vocabulary knowledge, and students can direct themselves during the pre-writing phase. Using the analogy graphic organizer has created a safe mood atmosphere inside the classroom and also the students feel free from writing anxiety (Guerra-Ramos, 2011, p. 30).

Guerra-Romos (2011: 29) stated that we use Analogies in our daily-life in communication to compare between things. The notion of using analogy technique in the educational context facilitates the communication learning process, especially in teaching the writing skills.

Learning a language by using the analogy technique is similar to the learning language by using "Inquiry technique". In both techniques, the students learn by making visualized connections between their previous knowledge and the new information they expose to (Aubusson et al., 2006, p. 12). The analogy technique is served as a communicative tool. Analogy represents certain concepts, thoughts, ideas, notions and also can represent a model, so it works as a mean of communication in the classroom. This information supports the educators who call for using analogy graphic diagram in teaching the writing skill, especially in the Pre-writing phase (Ibid, p. 41).

The psychologists emphasize that using analogy graphics can be a supportive way to reduce students' learning fear because of the features that this technique provides.

The students' self-confidence is raised when S/he feels that the task can be done immediately after listing the similar and different features in a visual table or diagram (Aubusson, 2006, p. 42).

The analogy graphic technique motivates and attracts students' interests in writing whereby if the learners are not attracted to the topic, the learning process will be limited. When students have interest, they are encouraged to engage in the writing, and their self-efficacy is high. These things are emerged when the students feel confident to do the task, (Pintrich et al., 1993, p. 98).

**Story Map**

A story map graphic organizer is an educational tool that helps students organize their ideas to write a story; it is based on five WH-questions, namely who, what, when, where, and why as shown in Figure 5. Also for more details, the students can use the story map diagram as shown in Figure 6.
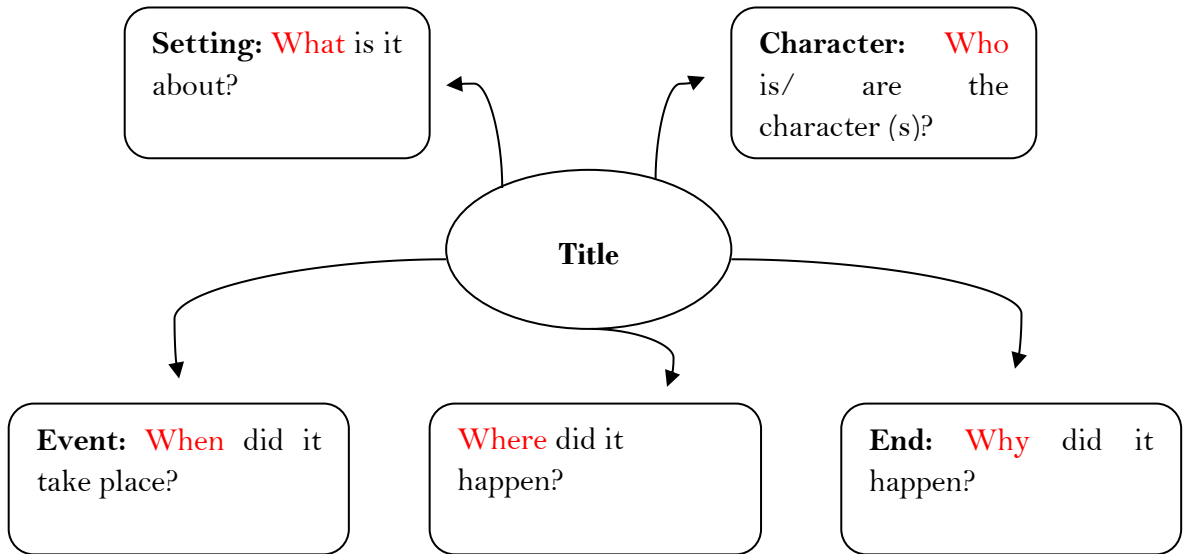
**Figure 5.** Story Map Graphic
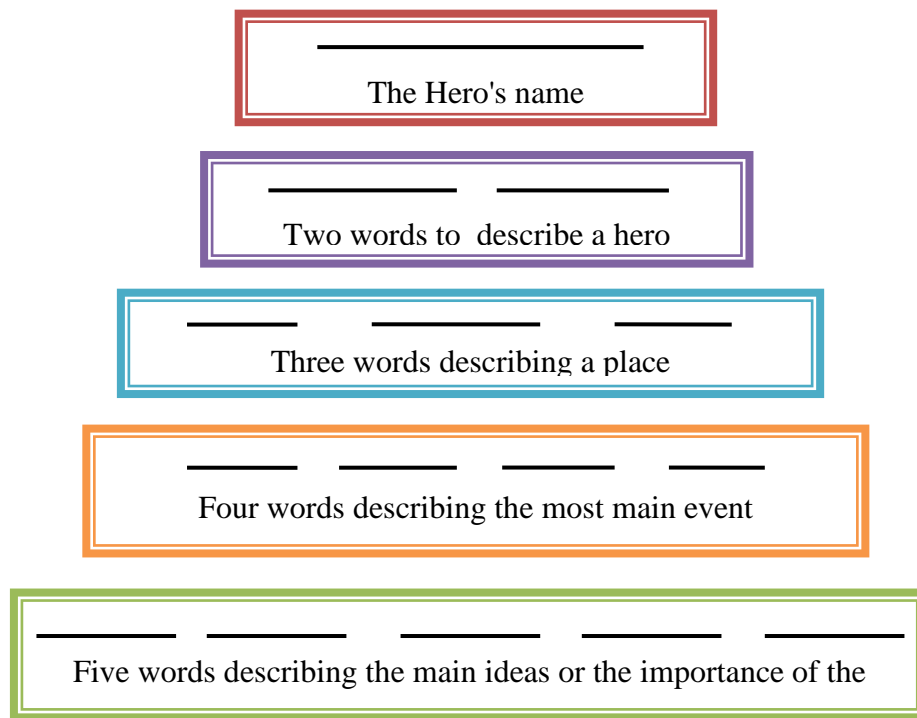


**Figure 6.** Beginners' Story Map Diagram

A Story Map technique is a graphic organizer diagram that helps the students write a story. Writing a story including even a very short story is not an easy task. So, a student needs instructional aids that helps him/her write a good story. The use of a story Map technique is considered good visual aids which present the characters, the plot, the setting, the problem, and the end of the story. This visual aid helps the

students  write the details of a story in an organized way to overcome the overlap in the characters and  and the events and the relationships between the elements of the story (Daai, 2000, p. 48).

Story mapping is based on teaching writing; it also based on understanding a story. It is considered as an approach that helps the students  overcome writing difficulties (Englert & Raphael, 1998). The story map technique focuses on training students to organize the sentences' structures (Ibid, p. 34). There is a strong relationship between the Psycholinguistics term "schema" and the story mapping. Schema refers to the concepts that are existed in the students' memory, namelythe students' previous knowledge. Schema works as a connection between the stored information and the new information to produce new organized information (Daqi, 2000, p. 56).

EFL teachers present a graphic organizer tool which aids the EFL students organize the elements of the story correctly, and produce a coherent text (Sriyana et al., 2018).

The story map graphic technique is a story structure technique. The visual elements of a story that a writer students did before writing and made some modification during the writing process is a significant action that leads to polish the students' skills (Nurlaila, 2013, p. 11). In their study, Allo et al. (2020: 114) stated that EFL students face difficulties in writing a short story or a narrative essay because they face difficulties in getting ideas and  join them. By using a low grammar level which leads to poor story writing, it is recommended to use a story mapping diagram which helps the EFL students generate ideas and connect the elements of the story in a organized manner.

Besides, Daqi (2000) investigated the impact of story mapping and story map questions on the disabilities of students' story fluency  writing performance. The participants were four disable students from 4th grades of the elementary schools at state of Texas, USA. A pre-test and a post-test were used to collect the data of the study. The results revealed that the story mapping technique has no significant impact on students' fluency story writing performance.

In their study, Latifah and Rahmawati (2019) found that EFL teachers encounter some obstacles in teaching students to write a narrative text in English via a

story mapping technique. For instance, there are some difficulties in introducing the story map diagram and giving instructions to use the diagram in writing a narrative text and a short story in English language, in addition to the big number of the students inside the classroom and the limited time of the English lesson. The students also face difficulties in using a story mapping technique due to the vocabulary shortage, writing techniques such as using poor punctuation, many grammatical error and/or mistake, word order and spelling in addition to the short-time.

Story map graphic organizer has several advantages; these features were mentioned by Zygouris and Glass (2004 as cited in latifah & Rahmawati, 2010) as follows:

> The students can sue a story mapping as a pre-writing.Then, the teacher can introduce a book through a complete story map. By deleting some events, students can make predictions about what they think will happen in the story. After that, the students can use their story mapping as notes for oral book reports, in preparing the visualizing presentation their own stories. And the last, the teacher can also use story mapping in writing conferences as a way to help students revise their story writing (P.85).Chamot (1999, pp. 2-3)

Steps for implementing the story map graphic organizer inside the classroom are as follows:

1- Preparing students to plan for a topic.

2- Explaining the writing phases, which are pre-writing, composing, revising, editing, and writing.

3- Introducing the story map graphic organizer and brainstorming with the students to generate ideas.

4- Arranging the students in groups to share their ideas and exchange information.

5- After finishing planning the story map graphic fields, each group begins to write its story using the story mapping graphic organizer as a guide.

6- Finally, the role of the teachers is to review each group story and provides feedback.

7- After training the students to write in groups, gradually ask the students to use story mapping individually

### 2.10. Previous Studies

### 2.10.1. Clustering Technique

Dewi and Ayunisa (2020) investigated the significant effect of the clustering technique on students' descriptive writing performance. The respondents were 91 eight grade students of SMP Cerdas Murni in Tembung. A pre-test and a post-test were used to collect the data of the study. The results revealed that there was a significant effect of using clustering technique on improving EFL students' descriptive writing performance.

In another study, Hanafiawi et al. (2020) investigated the effect of the clustering technique on improving EFL students' writing skill of descriptive texts. The researcher conducted action research on 3 students from the seventh grade students of SMPN 11 Cimahi during the Academic Year of 2018 – 2019. The instructional clustering program with a pre-test and a post-test were used to collect the data of the study. The results revealed that using the clustering technique in teaching descriptive texts has improved EFL students' writing performance.

Further, Wahyuni (2016) investigated the impact of the "Clustering Technique" on students' exposition writing ability. The participants were 5 students from the tenth grade of MAN1 Tanggamus, lampung. A pre-test and a post-test were used to collect the data of the study. The results revealed that there was a positive impact of clustering technique on students' exposition writing ability.

### 2.10.2 Tree Diagram

Liu (2018) investigated the effect of Tree-Diagram technique in fostering EFL students to develop their English thinking patterns and promote their writing in the English language. The respondents were 81 students from the second grade at the Department of English, Honder college of Inner Mongolia Normal University.

A pre-questionnaire and a post-questionnaire in addition to students' writing samples were used to collect the data of the study. The results of the study revealed that using the "Tree Analysis Diagram " was proved to be a good technique to aid the EFL learners to a void the impact of the "Chinese thinking Pattern" in writing a text in English language. Also, the "Tree Diagram" technique improved students' writing

performance and helped them write in English thinking pattern and promote students' writing quality.

Further, Chintya (2018) investigated the effect of the tree Diagram Technique in developing EFL learners' descriptive writing. The respondents were 232 8th grade students from MTs Negeri 1 Bandar Lampung. A pre-test and a post-test were used to collect the data for the study. The result revealed that there is a significant effect of tree diagram technique or students' descriptive writing.

In addition, Lestari (2018) investigated the influence of the Tree Diagram Technique on improving students' descriptive writing performance. The participants were 32 students from the eighth grade of MTs Negeri 1 Bandar Lampung during the academic year 2017-2018. A pre-test and a descriptive writing post-test were used to collect the data of the study. The result revealed that using a Tree-Diagram Technique has a positive influence on students' descriptive wiring achievement.

Further, Istifaiza (2014) investigated the effect of the "Tree Diagram" Technique in developing writing skill. The participants were 40 students from the first grade at SMK Telkom Pekanbaru University during the academic year 2013-2014. A "Tree Diagram" Technique was used to teach the experimental group, while "Picture Technique" was used to teach the control group, whereby a pre-test and a post-test were used to collect the data of the study. The result revealed that using a "Tree-Diagram " Technique in teaching writing (Descriptive writing) has a significant effect on students' wiring achievement more than the use of picture Technique.

Nair et al. (2012) investigated the impact of the Tree Diagram technique in developing students' writing skills. The participants were 60 students from grade six at SMK Rantau Panjang, Malaysia. A questionnaire of a pre-test and a post-test were used to collect the data of the study. The results of the study revealed that the Tree Diagram as a writing strategy has improved students' writing performance, and motivated students' to write in the English language.

### 2.10.3. Analogy Graphic Organizer

Rahman (2014) investigated the effect of the Word Analogy Technique in improving students' English vocabulary in writing in terms of "Noun" and "Adjective".

The participants of the study were 60 students from the 11<sup>th</sup> grade of Senior High School 8 Pinarang/ Indonesia. A pre-test and a post-test were used as an instrument to collect the data of the study. The results showed that the use of "Word Analogy Technique" has positive effects on improving students' English vocabulary writing in terms of nouns and adjectives.

In another study, Cleaves (2007) examined the effects of using metaphors, analogies, and graphic organizers in vocabulary development and comprehension on fourth-grade students' reading and writing scores. The respondents were 149 fourth-grade students, and 7 fourth grade teachers in a suburban West Tennessee school. STAR Reading Version 22 computer-adaptive test, Item response theory (IRT), and Adaptive Branching ™ process were used to collect the data of the study. The results revealed that the use of metaphors, analogies and graphic organizers in teaching vocabulary and comprehension lessons have significant and positive effects on students' reading and writing achievements.

## 2.10.4 Story Mapping Graphic Technique

In their study, Usman et al. (2020) investigated the impact of the story mapping technique on improving the writing skills. The respondents were 64 students of Grade X of SMK Negeri 3 Palu. A pre-test and a post-test were used to collect the data of the study. The results revealed that there was a significant effect of using story mapping technique on students at the experimental group's writing achievement.

In another study, Allo et al. (2020) investigated the effect of "Story Mapping" technique on improving students' writing recount text in English language. The respondents were 60 students divided into (experimental and control groups) from the first grade of SMAN 1 Palopo. A pre-test and a post-test were used to collect the data of the study. The results revealed that the use of story mapping technique in teaching writing recount text is effective and students have developed their recount writing performance.

Further, Annisa and Oktavia (2020) investigated the effect of 'Story Mapping' technique on improving EFL students' comprehension a narrative English text during the reading process. The participants were 25 junior high school students. A narrative

description was used to collect the data of the study. The results revealed that the story mapping technique has enabled EFL students to comprehend the English written text.

Besides, Latifah and Rahmawati (2019) described the procedures of teaching and learning "narrative writing" by using a story mapping diagram technique and the EFL teacher and learners' problems in delivering instructions on narrative writing via a story mapping technique. The participants were the English teachers and the students of the ninth grade in SMPN 3 Pringsewu in Indonesia. As the research is a descriptive qualitative research method, an observation checklist, an interview, and a questionnaire were used to collect the data of the study. The findings of the study revealed that the teachers did not follow the procedure of implementing the story mapping well and they skipped some steps. Also, the teachers faced some obstacles in teaching story writing by using a story mapping technique, and they also faced difficulties in controlling the class due to the huge number of students. The results of the questionnaire revealed that students faced some obstacles in learning narrative writing via story mapping technique, such as grammar mistakes, lack of vocabulary, limited ideas, and a lack of structure organizing.

Also, Sundar et al. (2019) investigated the effect of story map technique on improving EFL students' story reading comprehension. The participants were 71 tenth-grade students of MA Subulussalam OKU Timur, Indonesia. A pre-test and a post-test were used to collect the data of the study from the control and experimental groups. The results revealed that the story map technique has a positive effect as a teaching method on teaching reading comprehension.

In another study, Bala (2017) investigated the effect of a story map graphic organizer on fostering the writing a short story. The participants were 18 EFL students from the foundation year at English Language Teaching Department from Ishik University, Erbil, Iraq. Students' story writing products were compared to measure students' narrative story writing progress due to the use of the story mapping technique. The results revealed that using a story mapping graphic organizer has a significant role to understand the elements of the story and help students foster their story writing performance.

However, the current study aims to investigate the effect of graphic organizers on developing sixth preparatory Iraqi students' writing performance. The graphic

organizers are namely the cluster diagram, Mind Mapping, Tree diagram, analogy graphic organizer, and story Mapping Techniques. Another aim is to reveal if there are any differences between students' writing achievements that can be attributed to the type of graphic organizers used in writing. The participants of the study are (58) from the Sixth preparatory school for girls in Ramadi City in Anbar province- Iraq. The instruments of the study included the followings:

1- Mind Mapping instructional training program.

2- Tree Diagram instructional training program.

3- Story mapping instructional training program.

4- A pre-test and an achievement post-test.

# 3. METHODOLOGY

## 3.1. Introduction

This chapter presents the methodology adopted in this study including the population and the sample of the study, participants, equalization of both groups, students' age, instruments of the study, instructional materials, test method, the pilot administration of the post-test, item analysis, difficulty level, discrimination power of the post-test, the procedures, data collection, data analysis, and statistical methods.

## 3.2. Population and Sample of the Study

The population of the study was all the students in the sixth grade in the Directorate of Education in Anbar Province-Iraq, namely the students from a sixth grade preparetory school students in Ramadi City. The respondents were devided into an experimental group and a control group. The target sample study included (58) from the sixth –grade students of Shuaa Al-Muraffa for girls in the city of Ramadi. The study was conducted during the academic year (2021/2022). The researcher used a random sample method which represents two groups: the experimental group (group A), and the control group (Group B). There are (29) students for the group (A) and (29) students for group (B). The total number of the involved sample is (58) students.

## 3.3. Participants

The respondents in this study are sixth-grade preparatory school students at Shuaa' AL-Muraffa for Girls School. The ages of the students ranged from 18 to 19 years. First, the students were divided into two groups, a control group and an experimental group, whereby the sample included 58 students. The students were informed of this analysis and they decided to participate formally. The students' levels in the English language were variable; the levels of the students were different that the current study was mainly concerned with exploring the skills that the students use in writing constructions and articles. The researcher in this chapter used the test formula

in the form of writing descriptive texts, as the researcher asked the students to write the descriptive text, and then tested the written form.

## 3.4. Equalization of both groups

### 3.4.1. Parents' Education Level

The academic achievement of students' parents is one of the variables that need to be controlled. It is arranged as follows:

1-Illiteracy

2-Primary

3-Secondary

4-Diploma

5-Bachelor

6-Higher studies (MA and phD)

### 3.4.2. Fathers' Academic Achievement

The fathers' academic level was calculated to reveal the equalization of the two groups. The data of the fathers' academic achievement were collected by the school card. The calculated (Ca2) value was (0.317) which is found to be lower than the tabular value (5.991), at the degree of freedom (2) and also level of significance (0.05). This indicates that there is no significant difference between the two groups in fathers' educational level (table shows the results).

**Table 1.** The Results of Fathers' Academic level

| The groups | Repetitions of collecting Fathers | | | Df | Calculated chi-square value | Tabular chi-square value | S.g |
| | Illiteracy /Primary | Secondary/ Diploma | Bachelor/higher studies(masters and doctors) | | | | |
|---|---|---|---|---|---|---|---|
| Control | 7 | 9 | 13 | | | | |
| Experimental | 6 | 11 | 12 | 2 | 0.317 | 5.991 | 0.05 |
| The total | 13 | 20 | 25 | | | | |

### 3.4.3. Mothers' Academic Achievement

The chi-square calculation was used to examine if there was a statistically significant difference in mothers' academic achievement between the two groups. The educational levels of the mothers were found to be equal in both groups. The calculated (Ca2) value was (1,504), which is lower than the tabular value of (5,991), as well as the degree of freedom (2) and the significance level (0.05). As demonstrated in Table 2, there is no substantial difference between the two groups when it comes to mothers' academic achievement .Table (2) shows the results:

**Table 2.** The Results of the Chi-square Test for Mothers' Achievement

| The groups | Repetitions of collecting mothers | | | D.F | Calculated chi-square value | Tabular chi-square value | Sg. |
|---|---|---|---|---|---|---|---|
| | Illiteracy /primary | Secondary /diploma | Bachelor/higher studies(masters and doctors) | | | | |
| Control | 7 | 11 | 11 | 2 | 1.504 | 5.991 | 0.05 |
| Experimental | 7 | 15 | 7 | | | | |
| total | 14 | 26 | 18 | | | | |

### 3.4.4. Students' Scores in the Previous Year

The final English subject exam performance of students during the preceding academic year (2020-2021) was determined. The experimental group's mean scores were (67,75), whereas the control group's were (68,069), with standard deviations of (8,144) and (7,540), respectively. At the degree of freedom (56) and the (0.05) level of significance, the estimated t-value is (0,151), which is less than the tabular value (2.00). This result implies that there was no significant difference in past achievements between the two groups, as shown in Table 3.

**Table 3.** Mean Scores, Standard Deviations, and T-Values of Students' Scores in the Previous Academic Year

| The groups | The number | Mean scores | standard deviations | Degree of the freedom | Calculated T-value | Table T-value | Sg. |
|---|---|---|---|---|---|---|---|
| Control | 29 | 68.0690 | 7.54004 | 56 | 0.151 | 2.000 | 0.05 |
| Experimental | 29 | 67.7586 | 8,14448 | | | | |

### 3.4.5. Students' Age

The chronological age of the students in months was gathered from the school cards. To reveal if there is a significant differences between students' ages, a t-test equation for two independent samples was used. The results revealed that there were no statistically significant differences, calculated in months, in the chronological age between the arithmetic mean of the ages of the female students in the control group which was (207,517) with a standard deviation (6,15642 ), and the arithmetic mean of the ages of the female students in the experimental group was (206,4483) with a standard deviation (6,86391 ) in the level of significance (0,05). The calculated t-value was (0,680 ), which was lower than the tabulated t-value which was (2,005). This result indicated that the two groups were equivalent in the chronological age variable calculated in months, as shown in Table 4:

**Table 4.** The Results of T-test for Student's Age by Months

| The groups | The number | Mean scores | standard deviations | Df | Calculated T-value | Table T-value | Sg. |
|---|---|---|---|---|---|---|---|
| Control | 29 | 207.5172 | 6.15642 | 56 | 0.624 | 2.005 | 0.05 |
| Experimental | 29 | 206.4483 | 6,86391 | | | | |

### 3.4.6. Students' Scores in the Pre-test

The respondents of the two groups were set for the pre-test. The results of students' scores showed that the mean scores of the experimental group were (7.6552)

with a standard deviation (0,81), whereas the mean scores of the control group were (7,45) withe a standard deviation (0,90). The calculated t-value was (0,913), which was lower than the tabulated value (2.005), at the degree of freedom (56), and at (0.05) level of significance. This result indicated that there was no significant difference between the two groups in this variable. Table 5 shows the results.

**Table 5.** Mean Scores, Standard Deviations, and T-Test Values of the Two Groups in the Pre-test

| Groups | Number | Mean scores | Standard Deviations | Degree of the freedom | Calculated T-value | Table T-value | Statistical significance |
|---|---|---|---|---|---|---|---|
| Control | 29 | 7.4483 | 0.90972 | 56 | 0.913 | 2.005 | 0.05 |
| Experimental | 29 | 7.6552 | 0.81398 | | | | |

### 3.5. Instruments of the Study

To achieve the aims of the study, and to verify the hypotheses, an instructional program, a pre-test , and a post-test were used.

### 3.5.1. The Instructional Program

The instructional program consisted of four sub-instructional programs as follows:

1-mind mapping program,

2-Tree-diagram program,

3-Analogy program,

4-Story-mapping program,

The followings are the details of the instructional program duration:

**Table 6.** The Time

| Females | |
|---|---|
| **Sunday** | **Monday** |
| 7 Nomber | 8Nonmber |
| 14Novmber | 15Novmber |
| 21Novmber | 22 Novmber |
| 28Novmber | 29 Novmber |
| 5December | 6 December |
| 12December | 13 December |
| 19December | 20 December |
| 26December | 27 December |

### 3.5.2. Females' Schedule

The introduction and brainstorming strategy starts from the 7th of Nov. to the 27th of December. The Mind mapping strategy starts from the 7st of March to the 15th of December. The tree diagram strategy started from the 21 of November to the 29th of December. The story mapping strategy started from the 5th of December to the 13th of December. The Analogy strategy started from the 19th of December to the 27th of December.

The target material was taught to the control group of students in (student's book, English for Iraq). The researcher taught the two groups, the experimental group control group. The experimental group was taught according to the graphic organizer, whereas the control group was taught according to the prescribed method of the text book.The experiment of this study was taught during the first semester of the academic year (2021-2022) . It started on the 7th of Novmber /2021 and it lasted for 8 weeks.

### 3.5.3. Instructional Materials

The instructional materials were writing activities in the student's English Textbook entitled "English for Iraq". In addition, the experimental group writing activities were designed based on the four organizers. The theoretical background and previous studies that deal with composition writing techniques, strategies, and

activities in teaching EFL learners to write in a creative method are studied deeply. The researcher used the following steps in constructing the writing program:

1.      Planning the program theoretically.

2.      Designing the program operationally.

### 3.5.4. Planning the Instructional Program

The purpose of the writing program was to see how advance organizers affected EFL students' English writing ability. It follows cluster diagram, mind mapping, tree diagram, analogy graphic organizer, and story mapping techniques in its design.

The program provides a theoretical framework for teaching the four planned advance organizer programs to the experimental groups. Lesson plans are used to carry out the program. The tools and strategies used by advanced organizers were organized into activities. There were four lessons in the program; each session includes the following elements: an introduction to a method (organizer), practice themes in a technique (organizer), a process, a classroom activity, and lastly the project: homework to be provided to students after practicing a technique (organizer). Each lesson's goals were as follows:

The program lessons plans consist of:

1- Enabling Objectives.

2- Materials.

3- Instruction of the lesson.

The lesson plan is designed to help students  become independent learners in writing a composition. The details of each lesson are given below:

### 3.5.5.  Enabling Objectives

It gives information about what the learners are going to achieve at the end of the lesson (the outcomes of the lesson). The lesson lasted for 40 minutes. Each technique (organizer) may take several lessons  due to  the students' comprehension of

the given technique (organizer), and their abilities to implement it independently or in groups.

### 3.5.6. Materials

Most of the materials are fixed inside the classroom, such as White board, A4 sheet papers, and the overhead projector. In addition, in each lesson, the researcher distributed information about the technique (organizer) being taught and instructions on how to apply it by the students.

### 3.5.7. Instruction

The researcher follows the same procedures for all lessons. The instructions help the students acquire new information about a given technique (organizer).

### 3.5.8. Designing the Program Operationally

To design the program, the following steps are followed:

1. Rationale of the study.

2. The objectives

3. Duration of the Program

4. Methods, strategies, and techniques for teaching

5. Program evaluation

### 3.5.9. Rationale of the Study

After choosing the school for girls, the researcher conducted a need analysis process before designing the writing program. The researcher constructed open questions to elicit which skill they need to develop. The question is: "Write down (in Arabic or English language) which skills do you feel that you need to develop, and why"? After collecting the students' responses, the researcher analyzed the answers and found out that the writing skill was the most demanded skill to be developed. The

students need to learn how they can write an organized composition to express their ideas. Most of the students' answers were: "they cannot write more than one idea, and they even cannot vary their ideas when they write composition". Based on the students' answers, the researcher suggested a writing training program to train students how to generate ideas and vary their styles. After reviewing the literature and the studies which were conducted in the given field, the researcher concluded that generating ideas is one of the creativity tools. Thus, the researcher suggested the "Graphic Organizers" techniques which are considered a basic component of writing. After diagnosing students' problems, and determining the writing techniques to treat the problem, the researcher suggested an instructional training program to train students to develop generating several ideas and vary their style while writing a composition.

### 3.5.10. Objectives of the Program

The general objectives of the program are as follows:

1. To train the students to generate new ideas.

2. To train the students to list many ideas about a given subject.

3. To train the students to arrange the ideas in the family (main idea supported by sub-ideas with the same field).

4. To train the students to write coherent and cohesive paragraphs smoothly.

5. To train the students to treat a given subject as a problem that needs a solution in a coherent and cohesive manner.

6. To train the students to revise their composition writing and evaluate it.

### 3.5.11. Duration of the Program

The duration of the program was eight weeks. The program started on the 7th of Nov., 2021and ended on the 27th of December, 2021. The lectures were 16; two lectures are given each week.

The first lesson is dedicated to presenting the program (introduction of the program, the divergent and convergent process, the creative strategies, and the procedures of their implementation).

The second lesson deals with presenting the Mind Mapping strategy.

The Third lesson is dedicated to presenting Problem Solving strategy.

The Fourth lesson is concerned with revising and applying the program's strategies in peer and group work. The role of the teacher during this period is just to monitor the classroom activities.

The last lesson seeks for summative evaluation, and after the written post-test, the researcher distributed the attitudinal questionnaire to the experimental groups.

**1. Steps for Applying the Program:**

**A- Introduction and Brainstorming Strategy:**

The first and second lessons are dedicated to presenting and explaining the steps of the program. Then from the third lesson to the eighth, the researcher presented the Brainstorming strategy.

**B- Mind-Mapping Strategy:**

The lessons from tenth to thirteen are dedicated to presenting the  mind mapping strategy

**C- Creative Problem Solving Strategy:**

 The lessons from the fourteen to the sixteen are dedicated for presenting **a** creative problem solving strategy

**D- Revising and practicing:**

The lesson on the 3$^{rd}$ of November is a revision lesson for previous strategies (it lasted for 45 minutes) and the students were submitted for a summative evaluation.

### 3.5.12. Program Evaluation

The program is evaluated in two stages:

1. Formative evaluation: the students are asked oral and written questions which are intended to increase the learner's experience and verify the objectives of each strategy.

2. Summative evaluation: the post-test is submitted to students at the end of the program (lesson sixteen).

### 3.5.13. The Program Validity

The jury members are shown the creative writing program to ensure its face validity. The jurors agree on most of the strategies, activities, and techniques  and disagree on the lengthy explanation of the divergent and convergent processes. The jurors justify their disagreement because they are not suitable to the learners' levels, knowledge and educational background as being appropriate for a creative thinking program. Thus, modifications have been done according to their suggestions.

### 3.6. Post-Achievement Test

### 3.6.1. Test Method

The test method  covers both the way in which the students will be required to respond to the material (Title of a composition) and how their responses will be rated or scored (McNamara, 2000, p.26).

### 3.6.2. Responding format

The way in which the students will be required to respond to the title of a composition can be illustrated as follows.  The students will write a composition that consists of at least three paragraphs. Each paragraph should contain an idea (a major idea) which will be the major sentence. The students must support the major sentence with minor sentences. What is requested from students is to write as many ideas as possible and vary the types of the paragraphs. The aim is to generate ideas without concentrating on accurate grammar, spelling, and punctuation. In other words, the aim is to write as many ideas as possible and vary in the style of the paragraphs with

acceptable errors of grammar and vocabulary. The same previous procedures will be followed in the post-test.

### 3.6.3. Scoring Scheme

To ensure the objectivity and reliability, the researcher adopted analytical scoring schemes for scoring students' responses.The commite who graded was with me two from the same school. The scoring scheme allotted (5) marks for each correct idea with a variety in the paragraph and minimum mistakes of grammar and vocabulary, from (1-5). Thus, the highest score the student could record is (20) whereas the lowest score is (5) as shown below:

**Table 7.** Suggested Criteria of Marking the Pre and Post-Test

| 1. **Marks** | 0-5 | 6-10 | 11-15 | 16-20 |
|---|---|---|---|---|
| 2. **Scoring Guide** | Not good | Fairly good | good | Very good |

**Constructing a Proposed Writing Program for Teaching Writing**

### 3.6.4. Validity

The tests were presented to a committee of experts and specialists in linguistics and teaching methods, and then all the instructions they mentioned were confirmed.

### 3.7. The Pilot Administration of the Post-test

The purpose of the procedures of the pilot study are as follows:

1- To validate  the suitability of the items of the test.

2- To analyze the items, the difficulty level, and the discrimination power of the items.

3- To evaluate the clarity of the test instructions.

4- To measure the average time that students required to answer the questions.

To fulfill the above points, the test was given to a sample of eight students who were purposefully chosen. The pilot study was excluded after equalizing them

## 3.8. Item Analysis

The test items were examined to evaluate the level of difficulty and discrimination power.

## 3.9. Difficulty Level (DL)

The order of the students' scores was based on the total number of the students (fifty-eight), and then the students were divided into two groups. Then, the scores of the students were divided based on those who passed the test correctly in the two groups from top to bottom. The aim of this was to measure the level of difficulty for each of them. Table 7 shows the results:

**Table 7.** The Difficulty Level and Discrimination Power of The Test Items

| Sequence of Student | Lower group | Higher group |
|---|---|---|
| 1 | 5 | 18 |
| 2 | 5 | 18 |
| 3 | 4 | 17 |
| 4 | 4 | 17 |
| 5 | 4 | 17 |
| 6 | 4 | 16 |
| 7 | 4 | 16 |
| 8 | 4 | 16 |
| 9 | 4 | 16 |
| 10 | 4 | 16 |
| 11 | 3 | 15 |
| 12 | 3 | 15 |
| 13 | 3 | 15 |
| 14 | 3 | 15 |
| 15 | 3 | 15 |
| 16 | 3 | 15 |
| 17 | 3 | 15 |
| 18 | 3 | 14 |
| 19 | 3 | 14 |
| 20 | 3 | 14 |
| 21 | 3 | 14 |
| 22 | 3 | 14 |
| 23 | 3 | 14 |
| 24 | 3 | 14 |
| 25 | 3 | 14 |
| 26 | 3 | 14 |
| 27 | 3 | 14 |

| 28 | 3 | 13 |
|---|---|---|
| 29 | 2 | 13 |
| 30 | 2 | 13 |
| 31 | 2 | 13 |
| 32 | 2 | 13 |
| 33 | 2 | 13 |
| 34 | 2 | 13 |
| 35 | 2 | 12 |
| 36 | 2 | 12 |
| 37 | 2 | 12 |
| 38 | 2 | 12 |
| 39 | 2 | 12 |
| 40 | 2 | 12 |
| 41 | 2 | 11 |
| 42 | 2 | 11 |
| 43 | 2 | 11 |
| 44 | 1 | 11 |
| 45 | 1 | 11 |
| 46 | 1 | 11 |
| 47 | 1 | 11 |
| 48 | 1 | 9 |
| 49 | 1 | 9 |
| 50 | 1 | 9 |
| 51 | 1 | 9 |
| 52 | 1 | 9 |
| 53 | 1 | 9 |
| 54 | 1 | 9 |
| 55 | 1 | 9 |
| 56 | 1 | 9 |
| 57 | 1 | 9 |
| 58 | 1 | 9 |
| The total | 141 | 751 |

## 3.10. The Posttest's discrimination power (DP)

Brown (1981, p. 104) states that a test is good if it has a discriminatory power of 0.20 or above. The discrimination power in this study was 0.58, which is considered adequate discrimination power.

## 3.11. Experimental Group

On the first of  November 2021, the researcher began to make the necessary arrangements. These arrangements lasted for two days. The researcher met twice with

the students. The study time is in the morning from 9 am to 12 pm, and the duration of each lesson was 45 minutes. In the beginning, the researcher gave an explanation about the experiment  and the benefit, which the students may get at the end of the experience, especially as the  students were in the last stage of school and they are about to be accepted at universities. The researcher gave the participating students an idea about the graphic organizers and their usefulness in developing the English writing skill. The discussion was held with the participants and their questions were recorded and answered. The researcher collected some surveys and inquiries about the participants' opinions on the use of graphic organizers. In the beginning, the researcher conducted a pre-test on the female students requiring them to write a short story and gaving them  enough time.

The researcher started the experiment by using the technique of graphic organizers to develop their writing skills. At the beginning, the researcher used Mind mapping, which consists of a main idea and subdivides into several ideas, and next collects the ideas in the form of coherent paragraphs. The researcher asked each student to write about his/her family by applying graphs and mind mapping experience. The graphing experiment found that students were creative in writing and it had a positive effect and helped them develop their English writing skills and keep their writing in order. The research approach adopted in this study is a quantitative research design.

In the second week, the researcher began to apply an analogy graphic organizer experiment by explaining to the students how to write a main title, and then expanding the topic by writing different sub-ideas. Each branch is related to each other with coherent ideas; all of which belong to the main idea. In writing, therefore, the experimental group used graphic organizer method of writing, whereas the control group used the traditional method in writing by testing the students in writing a title about the difference between the city and the village. It is consistent and coherent and has a meaning that goes back to the main idea. After that, the researcher began evaluating the writing, as he found that the eperimental group they wrote  the correct paragraph .They wrote ideas that are consistent, coherent and linked to meaning; all of which go back to the main idea. This test aims to measure and reveal the students' skills in writing in English for the sixth year middle school students.  This test was

conducted on both the experimental and control groups using analogy graphic organizer.

In the following lecture, the researcher began a lesson about the definition of a tree diagram, what is a tree diagram, how we use it, and what is its benefit and importance. The students have problems in writing the descriptive text, so the teacher needs a lot of strategies and methods to address this problem, so he emphasized the use of the tree diagram model in writing. The goal of using this technique is that knowing this technique is useful for students in writing. Writing a text was conducted by dividing the students into experimental and control groups, so that the writer started to give the students enough time to write. The researcher began evaluating the students' writing, and it was found that the experimental group had better performance in writing. Therefore, this technique has improved the students' writing performance in writing coherent and consistent sentences in meaning and has encouraged students to continue writing, so it had a positive role.

The researcher gave the students a lesson on the use of cartography in writing the short story for the primary grade. Then, the researcher gave the students an idea about how to write a short story, through the use of cartography, as it consists of the main character and that writing the short story helps students improve their writing and expression and develop their writing skills in a better way. Then, the researcher divided the students into two groups, a control group and an experimental group, and asked them to write about a specific personality.  For example, they were required to write about the personality of the poet, Al-Mutanabbi, by mentioning his poems, books, and writings. Mapping in writing by writing coherent and emerging texts and ideas in meaning and their number expands to multiple ideas. As for the experimental group, it used the graphic organizer in writing by writing coherent sentences after evaluating the writings, as it was found that drawing the tree has a positive role in developing students' writing skills.

As for the cluster diagram, the researcher explained that it is a set of ideas or elements separated from some of them and goes back to the main idea, as the researcher in the lesson provided the students with an idea and details about it and its usefulness and importance in developing the students' writing skill in the English language. He started explaining to the students how to write about a specific topic,

such as sports, whereby the researcher divided the students into two groups: a control group and an experimental group, as he asked them to write about sports. After that, the researcher gave the students a time of 40 minutes to write about sports, details, types of sports, the number of players in each type of sports, and the number of runs. It was found that the experimental group used coherent paragraphs in meaning and coherent ideas; all of which go back to the main idea, and this indicates that the graphic organizers have a positive impact.

## 3.12. Control Group

The control group consisted of 29 female students, whereby the researcher taught them the composition exercises via the prescribed method mentioned in the "English for Iraq 6th  secondary" textbook. A whiteboard was used as a helping tool to explain and display examples.

## 3.13. Data Collection

The data collection lasted for eight weeks at the level of the students, the basic primary grade in Iraq, whereby the researcher decided to write an article on a specific topic, then the researcher conducted a test on the students in the lesson and then asked the students to write a story about a specific topic using the graphic organizers. The respondents were 58 students in the sixth grade of the preparatory school. The researcher used quantitative research to explore the effect of graphic organizer on students' writing skill, and the researcher used the test to collect students' writing data.

## 3.14. Data Analysis

In this study, a quantitative approach of data analysis was used. It was carried out through the use of the statistical package and through the use of the SPSS program: the mean, standard deviation, computed t-value, degree of freedom, and tabular t-value were used for the experimental group as well as the control group. The researcher collected the data by conducting a test on the students of the experimental research in the classroom of the school. The researcher needs to analyze these data obtained in

conducting the test on the students in writing. The researcher used quantitative research in writing, following accurate procedures in analyzing. The data, in writing in terms of grammar and vocabulary, were analyzed using the program SPSS to reveal and identify  the students' writing scores. The graphic technique had higher scores compared with the group that used the traditional methods of writing.

## 3.15. Summary

This chapter  covered the procedures and methods used to implement this study. The data were analyzed through the use of the program SPSS and a pre and post-tests were conducted on the students.

# 4. FINDING OF THE STUDY

## 4.1. Introduction

This chapter presents the findings and discussions of the hypotheses of the study. To verify the hypotheses, a t-test for two independent samples' mean scores, standard deviations, a degree of freedom, calculated and tabulated T-values, and statistical significance at 0,05 were used to analyze the data.

## 4.2. Results of the First Hypothesis

The first hypothesis states "There is no significant difference at ($\alpha$= 0.05) in the mean scores of the writing achievement of the sixth preparatory grade EFL students on the experimental group and the control group that can be attributed to the teaching strategy".  Mean scores, a standard deviation, and a T-test were used to verify the hypothesis, as shown in Table 8.

**Table 8.**  Mean scores, standard deviations and T-test of the two groups in the post-test scores

| The groups | The number | Mean scores | standard deviations | Degree of the freedom | Calculated T-value | Table T-value | Statistical significance at 0.05 |
|---|---|---|---|---|---|---|---|
| Control | 29 | 12.3448 | 1.11085 | | | | The two groups are not equivalent |
| Experimental | 29 | 15.069 | 1.38696 | 56 | 8.256 | 2.005 | |

Table 8 shows that the mean scores of the experimental group were (15,069) with a standard deviation (1,38696), whereas the mean scores of the control group were (12,3448),  and a standard deviation was (1,11085) on (56) degrees of freedom. The calculated t- value was (8,256) which is more than the tabulated t- value (2,005) on significance (0,05). This result indicates that the two groups are not equivalent in the pre-test.

### 4.3. The Results of the Second Hypothesis

The second hypothesis states "There are no significant differences in the experimental group students' writing achievement that can be attributed to the type of graphic organizer". Mean scores and standard deviations were used to verify the hypothesis. Table 9 shows the results.

**Table 9.** The mean scores, and standard deviation of T – the test

| Techniques | The groups | The number | Mean scores | standard deviations | degree of freedom | Calculated T-value | Table T-value | Statistical significance at 0.05 |
|---|---|---|---|---|---|---|---|---|
| Mind mapping | Experimental | 29 | 4.482 | 0.508 | 56 | 9.672 | 2.005 | Statistically significant |
| | Control | 29 | 3.034 | 0.625 | | | | |
| Tree diagram | Experimental | 29 | 3.689 | 0.660 | 56 | 2.529 | 2.005 | Statistically significant |
| | Control | 29 | 3.241 | 0.689 | | | | |
| Story map | Experimental | 29 | 3.724 | 0.921 | 56 | 2.826 | 2.005 | Statistically significant |
| | Control | 29 | 3.069 | 0.842 | | | | |
| Analogy | Experimental | 29 | 3.172 | 0.889 | 56 | 0.740 | 2.005 | Insignificant |
| | Control | 29 | 3 | 0.886 | | | | |

Table 9 shows that the mean score of the mind mapping technique is (4.48) with a standard deviation of (0.50), and the mean score of the Tree diagram is (3.68), with a standard deviation of (0,66). The mean scores of the story mapping technique is (3.72) with a standard deviation (0.92), and the mean scores of the analogy technique are (3.17), with a standard deviation of ( 0.88). The results of the mean scores of the four techniques show that the higher used technique which comes in the first rank is mind mapping with a mean score of 4.48. In the second rank is the story mapping technique with mean scores (3.72), then in the third rank, the tree diagram technique comes with mean scores (3.68), and finally comes the analogy technique with a mean score (3.17).

Concerning the significance degree, the mind mapping calculated T-value is (9.67) which is higher than the tabulated t-value which is (2.00); this indicates that there is statistical significance at (0.05). The tree diagram calculated T-value is (2.52) which is higher than the tabulated T-value ( 2.00);  this indicates that there is statistical significance at ( 0.05). Further, the story mapping calculated T-value is (2.82) which is higher than the tabulated T-value (2.00); this indicates that there is statistical significance at ( 0.05). Besides, the analogy calculated T-value is (0.74) which is lower

than the Tabulated T-value; this indicates that there is no statistical significance at (0.05).

**Concerning the research questions which can be recalled here:**

1-Do the graphic organizers affect the Second language learners' writing?

2-In what sense and context do they affect?

3-Is there any relation between the $2^{nd}$ L learners' performance and their use of these organizers?

The results indicated that there has been an outstanding effect of the graphic organizers on writing skills. This significant impact can be assigned to the significant difference in the mean score shown in Table (8)which are shown Table T value of the tree diagram ,mind map ,story map and analogy. Thus, such findings answer the research question (1) that the graphic organizers are indeed effective in academic and general writing. As for the research question (2), the graphic organizers have made the Iraqi EFL learners' writing more developed and more cohesive. The research question (3) was answered by revealing the relationship between the writing aids and the students' performance in terms of showing their weak and strong points in writing. In addition, the graphic organizers have encouraged the participating learners to take their responsibility of writing on their own.

## 4.4. Summary

It has been shown in the results that the higher used technique which comes in the first rank is mind mapping.  In other words, mind mapping has been shown to be the first and the common used strategy by the Iraqi EFL learners. They have been particularly used to think and organize their ideas in a mind mapping way. The highest percentage of mind mapping indicates that the learners have done brainstorming by which they could attain their goals in writing. It is clear based on the table above that the difference between the percentages though not significant, shows a direct connection between mind mapping and other techniques when writing emails or a composition.

# DISCUSSION, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEACHE

### Introduction

The fifth chapter of the present study discusses  the discussion, conclusions, and suggestions for further research, as well as  the limitation of the study.

### Discussion

The results of the study revealed that the students of the experimental group had scored higher than the students of the control group. This indicated that learning writing skills via graphic organizers have positive effects on the students' writing achievement. The use of mind mapping, tree diagrams, analogy, and story mapping has motivated  and encouraged students to write compositions creatively. The writing task has become easier and more organized.

The results revealed that the most used technique was mind mapping with mean scores ( 4,482), then the tree diagram with mean scores (3,684), followed by story mapping with mean scores (3,72), and finally the analogy technique with mean scores (3,17). The results showed that the students were more comfortable with using mind mapping techniques which have familiar characteristics that enable students to use it more than others.

The results of students' writing texts showed that the students who use story mapping and analogy techniques were more creative than the students who used only mind mapping and tree diagram techniques. Some written texts combined all the four techniques, thus the texts were formed in a creative and smooth way, and such texts got higher marks than other texts.

The results of the study are in line with the results of mind mapping, whereby Mohmood (2016)  found that Iraqi sixth preparatory students have got benefits from using mind-map technique. All the students strongly agree that writing ideas via a map-style promotes to organize the text-paragraphs logically. Also, he concluded that using Mind-mapping has developed students' attitudes towards writing. In another

study, Al-Naqbi (2011) found that using mind-mapping has helped EFL students in developing their knowledge.

Also, the results of the study are in line with the results of tree diagram. In this context, Nair et al., (2012) stated that the EFL learners feel comfortable when they use 'Tree-diagram' in a pre-writing phase. They consider it as an aid instrument to manage their task, and it is an easy simple strategy that leads to a well-organized text. However, the students of the control group did not succeed in writing a well-organized text and their composition contains no more than two ideas. The paragraphs lack word order, and the students were far from controlling their time and efforts. Further, the students consider the writing task as a complicated one and they even do not use a pre-writing strategy.

The results of the study are in line with the results of story mapping, whereby Daai (Daai, 2000: 48) found that using story map has a significant effect on students' writing achievement. Story Map technique is a graphic organizer diagram that helps the students write a story. Writing a story including even a very short story is not an easy task. So, a student needs instructional aids that help him/her write a good story. The use of story Map technique is considered a good visual aid that presents the characters, the plot, the setting, the problem, and the end of the story. This visual aid helps the students write the details of a story in an organized way to overcome the overlap in the characters, the events, and the relationships between the elements of the story.

Also, the results of the study are in line with the results of analogy conducted by James (2006) who found that using analogy has a significant effect on students' writing achievement. Using analogy map enables the students to realize what they already know and familiar with. Thus, the analogy map is an interesting teaching method that motivates EFL students to investigate their knowledge and create a well-organized written task in a given topic. Visualizing the students' knowledge is considered as unrecognizable technique by EFL teachers, whereby the poor utilizing of visualization in teaching writing skill can lead to the feeling of losing interest in learning the writing skill and the writing task becomes a heavy duty for the EFL students. Also, the graphic organizers techniques promote learners' creative thinking

abilities as writers. These findings provide the English language teachers with insights into learners' strategies, and activities that make writing both useful and interesting.

The results revealed that the graphic organizers are effective tools for introducing students to the process of quantitative research and introducing students to how to apply the scientific method, as well as introducing them to statistical concepts. It also allowed the participants to describe their experiences in detail through the lesson plan of how to use experimental designs. Therefore, the use of graphic organizers in the classroom has an effective and important role. It helped the students write successfully and exchange opinions and ideas between them through interaction among them to gain more experience and encourage them to write in a high skill and generate ideas and planning how to complete the writing process with a high skill.

When the researcher applied mind mapping, he realized that the technique helped the students how to write interconnected ideas through the use of arrows and circles graphics to represent a spider web. Thus, it was interesting for the students and English language learners since it made it easier for them to write in a good way and how to generate ideas and form images inside their minds, and it encouraged them to continue writing and they became more active. After that, when the researcher explained to the students how to use the tree diagram, how to form ideas and their interrelationship with each other, and how to form a main idea and then sub-ideas, he realized that it was useful for the students, and they felt comfortable when practicing it, and it revealed an easy technique to teach writing in English language because it leads to the organization of ideas as well.

Further, the results revealed that the students were interested in practicing story mapping as it is an educational tool that helped the students organize their ideas to write a short story and that it depends on the questions: when, where, how, what , and how often, and so on. Writing the short story is not easy, so the student needs educational means to help him write the story well. The use of story map technique is an important and good way to introduce the characters, the setting, and the end of the story. It also helped the students overcome difficulties in writing, and it is an effective tool and has a positive impact to improve the writing skill.

Concerning the analogy technique, the results revealed that in spite of its benefit in showing the similarity and the differences, the students did not use it as the

other techniques. The researcher realized that the students during the experiment lacked knowledge in showing similarity and differences between things. They do their best with the help and feedback from the researcher to achieve the goal. For this reason, the students did not use analogy graphic technique so much.

To sum up, the followings are the researcher's justification and realization of the student's achievements:

Mind mapping: This technique helped the students create a visual map of their thoughts, so the students used this technique of drawings, circles, and lines to represent a spider web. In addition, it helped them reduce fear and anxiety in writing in English language, as well as helped them organize the ideas that helped them write without mistakes.

Tree diagram: It is a convenient technique for the student, as it helped develop ideas. The students can create interconnected ideas. Therefore, when the students used the tree diagram technique, they found pleasure in developing and expanding their ideas, as this technique helped them expand and develop and build ideas.

Story mapping: It is an educational tool that helped the students organize their ideas in writing a short story and it helped the students how to write a short story so they relied on this technique to teach writing. The students also learned how to arrange groups to exchange opinions and ideas and they used it to exchange opinions and ideas among themselves. The students in this technique had difficulty in obtaining and organizing ideas and linking the elements of the short story in an organized way.

Analogy: The advantages of this technique are similarity, differences, and both, as the students used this technique in writing to develop their skills of students. In addition, the weakness of using visualization in developing the writing skill led to a loss of interest in teaching the writing skill, as the students faced difficulty in thinking and imaging in writing. It can be a tool for communication and measurement.

### Conclusion

After analyzing the data through the use of SPSSa program in analysis and through the influence of graphic organizers in teaching writing skill in the English language, it was found that the effect of the graphs was positive on the students and

encouraged them to continue writing. After obtaining the results of the post-test, it was found that the experimental group had obtained higher scores than the control group in the test, and this indicates that the graphs have a positive effect on teaching

There is no significant difference at (α= 0.05) in the mean scores of the writing achievement of the sixth preparatory grade EFL students in the experimental group and the control group that can be attributed to the teaching strategy. There are no significant differences in the experimental group students' writing achievement that can be attributed to the type of graphic organizer. Therefore, the experimental group used graphs in teaching, such as mind mapping, tree diagram, story map, and analogy. These models enabled the students' writing skills as well as the speed in acquiring information and exchanging opinions and ideas among themselves to develop their writing skills in a better way, and it made them obtain higher grades in this group. As for the control group, it used the traditional methods of teaching, such as the book in the classroom and the use of the white board in teaching, so this group obtained lower results than the experimental group.

This study proved, in the post-test of the two groups, for the experimental group and the control group, that the graphs have a positive effect in strengthening and developing the students' skills in writing the English language. In developing their writing skills by writing coherent paragraphs in understanding and meaning, we can argue that these graphs have the ability to encourage students and learners to write better. Therefore, the students of the experimental group who used graphs in writing had better writing skills than the students of the control group, and this indicates that the use of graphs had a positive effect on developing students' performance and the pleasure of using them in writing.

### Suggestions for Future Research

Through the results obtained by the researcher, some pedagogical implications in developing and teaching writing skill through graphic organizers are presented.

1- The teacher

The teacher, through the application of graphs in writing, should give instructions to students by guiding and facilitating them on how to use graphs in

writing through the problems that they will face.  It is recommended to use the graphs in writing since they have a positive effect on students' performance.

2- Students

Students should exchange opinions and ideas with each other to facilitate the process of using diagrams better, and they should practice using them and develop themselves and be creative in using them in writing the English language.

**Limitations of the Study**

Despite its impact, the researcher should acknowledge any challenges and limitations encountered in the present study to show that he is aware of them and explain how they might affect conclusions that can be drawn from the thesis. However, the present study has encountered a few limitations. These include:

1-Research sample and selection: It has been shown in the methodological approach that a large number of the respondents provide valid data and reliable results. The present study selected (58)  girls. The selection of a small number can be assigned to the breakout of the Covid-19. This number seems to be fair due to its effect in terms of reflecting an image of the case study on certain learners. The study has also focused on girls since there was a very small number of male participating.  The researcher believes that choosing either male or female does not affect the results of the study because this study is not related to gender-based research nor does it aim to show the difference between their writing performance.

2-Space and Time: The study was conducted in a preparatory school in Al-Khaldia City in the Anbar Province in West of Iraq.This limitation can be attributed to the breakout of the Covid-19

**Summary**

This chapter reviews the discussion of the study, conclusions, suggestions for further research, limitations,  and a summary of the chapter.

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## Supplements

| variable | Groups | number | mean | standard deviation | variance | skewness | Standard error of torsion | kurtosis | standard error of kurtosis |
|---|---|---|---|---|---|---|---|---|---|
| last year | experimental | 29 | 67,75 | 8,144 | 66,333 | -0,072 | 0,434 | -1,238 | 0,845 |
| | control | 29 | 68,06 | 7,540 | 56,852 | -0,376 | 0,434 | -0,587 | 0,845 |
| posttest | experimental | 29 | 7,65 | 0,813 | 0,663 | -0,115 | 0,434 | -0,313 | 0,845 |
| | control | 29 | 7,44 | 0,909 | 0,828 | -0,141 | 0,434 | -0,709 | 0,845 |
| Age by month | experimental | 29 | 206,44 | 6,863 | 47,113 | 0,474 | 0,434 | -1,283 | 0,845 |
| | control | 29 | 207,51 | 6,156 | 37,901 | 0,083 | 0,434 | -1,455 | 0,845 |
| Pre-test | experimental | 29 | 15,06 | 1,386 | 1,924 | 0,645 | 0,434 | -0,431 | 0,845 |
| | control | 29 | 12,34 | 1,110 | 1,234 | 0,59 | 0,434 | -0,331 | 0,845 |

| variable | groups | variance | q value | Statistical significance at 0.05 |
|---|---|---|---|---|
| Previous year | experimental | 66,333 | 1,17 | insignificant |
| | control | 56,852 | | |
| posttest | Experimental | 0,663 | 1,25 | insignificant |
| | control | 0,828 | | |
| Age by month | experimental | 47,113 | 1,24 | insignificant |
| | control | 37,901 | | |
| Pre-test | experimental | 1,924 | 1,56 | insignificant |
| | control | 1,234 | | |

**English grades for the previous year**

| sequence | control | experimental |
|---|---|---|
| 1- | 73 | 77 |
| 2- | 68 | 60 |
| 3- | 64 | 68 |
| 4- | 77 | 81 |
| 5- | 65 | 58 |
| 6- | 77 | 70 |
| 7- | 65 | 73 |
| 8- | 68 | 78 |
| 9- | 60 | 72 |
| 10 | 81 | 62 |
| 11- | 75 | 64 |
| 12- | 60 | 71 |
| 13- | 68 | 60 |
| 14- | 69 | 55 |
| 15- | 72 | 69 |
| 16- | 52 | 60 |
| 17- | 72 | 75 |
| 18- | 77 | 80 |
| 19- | 76 | 73 |
| 20- | 62 | 65 |
| 21- | 60 | 57 |
| 22- | 62 | 60 |
| 23- | 74 | 77 |
| 24- | 76 | 79 |
| 25- | 70 | 56 |
| 26- | 53 | 55 |
| 27- | 59 | 69 |
| 28- | 65 | 71 |
| 29- | 74 | 70 |

**Pre-test scores**

| sequence | control | experimental |
|----------|---------|--------------|
| 1- | 7 | 8 |
| 2- | 6 | 8 |
| 3- | 7 | 6 |
| 4- | 7 | 9 |
| 5- | 8 | 8 |
| 6- | 6 | 8 |
| 7- | 8 | 7 |
| 8- | 7 | 9 |
| 9- | 6 | 8 |
| 10 | 8 | 7 |
| 11- | 7 | 8 |
| 12- | 7 | 8 |
| 13- | 8 | 6 |
| 14- | 6 | 7 |
| 15- | 9 | 8 |
| 16- | 8 | 7 |
| 17- | 8 | 9 |
| 18- | 6 | 7 |
| 19- | 8 | 8 |
| 20- | 8 | 7 |
| 21- | 8 | 8 |
| 22- | 9 | 7 |
| 23- | 7 | 9 |
| 24- | 8 | 7 |
| 25- | 9 | 8 |
| 26- | 8 | 8 |
| 27- | 7 | 7 |
| 28- | 8 | 7 |
| 29- | 7 | 8 |

| Sequence | Father levels | | Mother levels | |
| --- | --- | --- | --- | --- |
| | experimental | control | experimental | control |
| 1- | 1 | 1 | 1 | 1 |
| 2- | 1 | 1 | 1 | 1 |
| 3- | 2 | 1 | 1 | 1 |
| 4- | 2 | 2 | 2 | 1 |
| 5- | 2 | 2 | 2 | 2 |
| 6- | 2 | 2 | 2 | 2 |
| 7- | 3 | 2 | 2 | 2 |
| 8- | 3 | 3 | 3 | 3 |
| 9- | 3 | 3 | 3 | 3 |
| 10- | 3 | 3 | 3 | 3 |
| 11- | 3 | 3 | 3 | 3 |
| 12- | 3 | 3 | 3 | 3 |
| 13- | 4 | 4 | 3 | 3 |
| 14- | 4 | 4 | 3 | 3 |
| 15- | 4 | 4 | 4 | 3 |
| 16- | 4 | 4 | 4 | 3 |
| 17- | 4 | 5 | 4 | 4 |
| 18- | 5 | 5 | 4 | 4 |
| 19- | 5 | 5 | 4 | 5 |
| 20- | 5 | 5 | 4 | 5 |
| 21- | 5 | 5 | 4 | 5 |
| 22- | 5 | 5 | 4 | 5 |
| 23- | 5 | 5 | 5 | 5 |
| 24- | 5 | 5 | 5 | 5 |
| 25- | 5 | 5 | 5 | 5 |
| 26- | 6 | 5 | 5 | 5 |
| 27- | 6 | 5 | 5 | 5 |
| 28- | 6 | 6 | 6 | 5 |
| 29- | 6 | 6 | 6 | 6 |

**Illiterarcy=1…primary=2…secondary=3..diploma=4..bachelor=5..higher studies=6**

**age by month**

| sequence | control | experimental |
|---|---|---|
| 1- | 200 | 215 |
| 2- | 208 | 200 |
| 3- | 215 | 199 |
| 4- | 204 | 218 |
| 5- | 201 | 210 |
| 6- | 200 | 200 |
| 7- | 207 | 201 |
| 8- | 215 | 207 |
| 9- | 199 | 205 |
| 10 | 208 | 200 |
| 11- | 214 | 199 |
| 12- | 204 | 215 |
| 13- | 201 | 216 |
| 14- | 200 | 207 |
| 15- | 216 | 209 |
| 16- | 211 | 218 |
| 17- | 200 | 200 |
| 18- | 208 | 212 |
| 19- | 210 | 198 |
| 20- | 204 | 202 |
| 21- | 201 | 201 |
| 22- | 213 | 200 |
| 23- | 218 | 208 |
| 24- | 215 | 209 |
| 25- | 214 | 204 |
| 26- | 208 | 201 |
| 27- | 209 | 200 |
| 28- | 215 | 218 |
| 29- | 200 | 215 |

,

| sequence | Experimental | control | experimental | | | | control | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Mind mapping | Tree diagram | Story mop | Analogy | Mind mapping | Tree diagram | Story map | Analogy |
| 1 | 14 | 12 | 5 | 4 | 3 | 2 | 3 | 2 | 4 | 3 |
| 2 | 15 | 13 | 4 | 3 | 5 | 3 | 4 | 3 | 2 | 4 |
| 3 | 15 | 12 | 5 | 4 | 3 | 3 | 4 | 3 | 3 | 2 |
| 4 | 17 | 14 | 4 | 5 | 4 | 4 | 3 | 4 | 2 | 5 |
| 5 | 14 | 11 | 5 | 4 | 2 | 3 | 3 | 3 | 2 | 3 |
| 6 | 17 | 14 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 |
| 7 | 18 | 15 | 5 | 4 | 5 | 4 | 3 | 4 | 5 | 3 |
| 8 | 14 | 11 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 3 |
| 9 | 18 | 12 | 5 | 4 | 4 | 5 | 4 | 4 | 2 | 2 |
| 10 | 14 | 12 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 2 |
| 11 | 14 | 11 | 5 | 3 | 4 | 2 | 2 | 2 | 3 | 4 |
| 12 | 16 | 13 | 4 | 4 | 5 | 3 | 3 | 4 | 4 | 2 |
| 13 | 17 | 14 | 5 | 3 | 4 | 5 | 3 | 3 | 4 | 4 |
| 14 | 13 | 11 | 4 | 3 | 4 | 2 | 3 | 2 | 3 | 3 |
| 15 | 15 | 12 | 5 | 5 | 3 | 2 | 2 | 4 | 3 | 3 |
| 16 | 14 | 13 | 4 | 3 | 5 | 2 | 3 | 3 | 3 | 4 |
| 17 | 16 | 12 | 5 | 4 | 3 | 4 | 4 | 3 | 3 | 2 |
| 18 | 14 | 11 | 4 | 3 | 4 | 3 | 2 | 4 | 2 | 3 |
| 19 | 14 | 12 | 5 | 4 | 3 | 2 | 3 | 3 | 2 | 4 |
| 20 | 13 | 11 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 2 |
| 21 | 14 | 12 | 5 | 4 | 2 | 3 | 3 | 3 | 4 | 2 |
| 22 | 16 | 14 | 4 | 3 | 5 | 4 | 3 | 4 | 3 | 4 |
| 23 | 14 | 12 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 2 |
| 24 | 16 | 13 | 5 | 4 | 4 | 3 | 3 | 3 | 3 | 4 |
| 25 | 15 | 12 | 4 | 3 | 5 | 3 | 3 | 3 | 4 | 2 |
| 26 | 15 | 13 | 5 | 4 | 3 | 3 | 2 | 4 | 3 | 4 |
| 27 | 16 | 13 | 4 | 3 | 5 | 4 | 3 | 3 | 4 | 3 |
| 28 | 14 | 11 | 5 | 4 | 3 | 2 | 3 | 2 | 4 | 2 |
| 29 | 15 | 12 | 4 | 3 | 4 | 4 | 2 | 3 | 4 | 3 |

**The first exploratory sample to calculate the time**

| Nu | time taken | Nu | time taken |
|----|------------|----|------------|
| 1 | 22 minutes | 17 | 44 minutes |
| 2 | 24 minutes | 18 | 45 minutes |
| 3 | 24 minutes | 19 | 45 minutes |
| 4 | 25 minutes | 20 | 45 minutes |
| 5 | 29 minutes | 21 | time taken |
| 6 | 35 minutes | 22 | 44 minutes |
| 7 | 37 minutes | 23 | 45 minutes |
| 8 | 36 minutes | 24 | |
| 9 | 36 minutes | 25 | |
| 10 | 38 minutes | 26 | |
| 11 | 39 minutes | 27 | |
| 12 | 40 minutes | 28 | |
| 13 | 42 minutes | 29 | |
| 14 | 43 minutes | 30 | |
| 15 | 43 minutes | | |

**The scores of the second exploratory experiment are in descending order**

| seq | The score | seq | The score | seq | The score | seq | The score | seq | The score |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 41 | 11 | 61 | 7 | 81 | 5 | 121 | 3 |
| - | 18 | - | 11 | - | 7 | - | 5 | - | 3 |
| - | 17 | - | 11 | - | 7 | - | 5 | - | 3 |
| - | 17 | - | 11 | - | 7 | - | 5 | - | 3 |
| - | 17 | - | 11 | - | 7 | - | 5 | - | 3 |
| - | 16 | - | 11 | - | 7 | - | 5 | - | 3 |
| - | 16 | - | 11 | - | 7 | - | 5 | - | 3 |
| - | 16 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 16 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 16 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 15 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 15 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 15 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 15 | - | 9 | - | 7 | - | 5 | - | 3 |
| - | 15 | - | 8 | - | 7 | - | 5 | - | 2 |
| - | 15 | - | 8 | - | 7 | - | 5 | - | 2 |
| - | 15 | - | 8 | - | 7 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 7 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 14 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 13 | - | 8 | - | 6 | - | 5 | - | 2 |
| - | 13 | - | 8 | - | 6 | - | 4 | - | 2 |
| - | 13 | - | 8 | - | 6 | - | 4 | - | 1 |
| - | 13 | - | 8 | - | 6 | - | 4 | - | 1 |
| - | 13 | - | 8 | - | 6 | - | 4 | - | 1 |
| - | 13 | - | 8 | - | 6 | - | 4 | - | 1 |
| - | 13 | - | 8 | - | 6 | - | 4 | - | 1 |
| - | 12 | - | 8 | - | 5 | - | 4 | - | 1 |
| - | 12 | - | 8 | - | 5 | - | 4 | - | 1 |
| - | 12 | - | 8 | - | 5 | - | 3 | - | 1 |
| - | 12 | - | 8 | - | 5 | - | 3 | - | 1 |
| -- | 12 | - | 8 | - | 5 | - | 3 | - | 1 |
| 40- | 12 | 60 | 7 | 80 | 5 | 120 | 3 | 200 | 1 |

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**pre-test scores**

| control | experimental | sequence |
|---------|--------------|----------|
| 7 | 8 | 1 |
| 6 | 8 | 2 |
| 7 | 6 | 3 |
| 7 | 9 | 4 |
| 8 | 8 | 5 |
| 6 | 8 | 6 |
| 8 | 7 | 7 |
| 7 | 9 | 8 |
| 6 | 8 | 9 |
| 8 | 7 | 10 |
| 7 | 8 | 11 |
| 7 | 8 | 12 |
| 8 | 6 | 13 |
| 6 | 7 | 14 |
| 9 | 8 | 15 |
| 8 | 7 | 16 |
| 8 | 9 | 17 |
| 6 | 7 | 18 |
| 8 | 8 | 19 |
| 8 | 7 | 20 |
| 8 | 8 | 21 |
| 9 | 7 | 22 |
| 7 | 9 | 23 |
| 8 | 7 | 24 |
| 9 | 8 | 25 |
| 8 | 8 | 26 |
| 7 | 7 | 27 |
| 8 | 7 | 28 |
| 7 | 8 | 29 |

**The educational level of fathers and mothers**

| Mothers levels | | parents level | | sequence |
|---|---|---|---|---|
| control | experimental | control | experimental | |
| 1 | 1 | 1 | 1 | 1 |
| 1 | 1 | 1 | 1 | 2 |
| 1 | 1 | 1 | 2 | 3 |
| 1 | 2 | 2 | 2 | 4 |
| 2 | 2 | 2 | 2 | 5 |
| 2 | 2 | 2 | 2 | 6 |
| 2 | 2 | 2 | 3 | 7 |
| 3 | 3 | 3 | 3 | 8 |
| 3 | 3 | 3 | 3 | 9 |
| 3 | 3 | 3 | 3 | 10 |
| 3 | 3 | 3 | 3 | 11 |
| 3 | 3 | 3 | 3 | 12 |
| 3 | 3 | 4 | 4 | 13 |
| 3 | 3 | 4 | 4 | 14 |
| 3 | 4 | 4 | 4 | 15 |
| 3 | 4 | 4 | 4 | 16 |
| 4 | 4 | 5 | 4 | 17 |
| 4 | 4 | 5 | 5 | 18 |
| 5 | 4 | 5 | 5 | 19 |
| 5 | 4 | 5 | 5 | 20 |
| 5 | 4 | 5 | 5 | 21 |
| 5 | 4 | 5 | 5 | 22 |
| 5 | 5 | 5 | 5 | 23 |
| 5 | 5 | 5 | 5 | 24 |
| 5 | 5 | 5 | 5 | 25 |
| 5 | 5 | 5 | 6 | 26 |
| 5 | 5 | 5 | 6 | 27 |
| 5 | 6 | 6 | 6 | 28 |
| 6 | 6 | 6 | 6 | 29 |

**Illiterarcy=1…primary=2…secondary=3..diploma=4..bachelor=5..higher studies=6**

**Post-test scores by levels**

| control | | | | Experimental | | | | control | experimental | Sequence |
|---|---|---|---|---|---|---|---|---|---|---|
| Analogy | Story mop | Tree diagram | Mind mapping | Analogy | Story map | Tree diagram | Mind mapping | | | |
| 3 | 4 | 2 | 3 | 2 | 3 | 4 | 5 | 12 | 14 | 1 |
| 4 | 2 | 3 | 4 | 3 | 5 | 3 | 4 | 13 | 15 | 2 |
| 2 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 12 | 15 | 3 |
| 5 | 2 | 4 | 3 | 4 | 4 | 5 | 4 | 14 | 17 | 4 |
| 3 | 2 | 3 | 3 | 3 | 2 | 4 | 5 | 11 | 14 | 5 |
| 3 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 14 | 17 | 6 |
| 3 | 5 | 4 | 3 | 4 | 5 | 4 | 5 | 15 | 18 | 7 |
| 3 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 11 | 14 | 8 |
| 2 | 2 | 4 | 4 | 5 | 4 | 4 | 5 | 12 | 18 | 9 |
| 2 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 12 | 14 | 10 |
| 4 | 3 | 2 | 2 | 2 | 4 | 3 | 5 | 11 | 14 | 11 |
| 2 | 4 | 4 | 3 | 3 | 5 | 4 | 4 | 13 | 16 | 12 |
| 4 | 4 | 3 | 3 | 5 | 4 | 3 | 5 | 14 | 17 | 13 |
| 3 | 3 | 2 | 3 | 2 | 4 | 3 | 4 | 11 | 13 | 14 |
| 3 | 3 | 4 | 2 | 2 | 3 | 5 | 5 | 12 | 15 | 15 |
| 4 | 3 | 3 | 3 | 2 | 5 | 3 | 4 | 13 | 14 | 16 |
| 2 | 3 | 3 | 4 | 4 | 3 | 4 | 5 | 12 | 16 | 17 |
| 3 | 2 | 4 | 2 | 3 | 4 | 3 | 4 | 11 | 14 | 18 |
| 4 | 2 | 3 | 3 | 2 | 3 | 4 | 5 | 12 | 14 | 19 |
| 2 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 11 | 13 | 20 |
| 2 | 4 | 3 | 3 | 3 | 2 | 4 | 5 | 12 | 14 | 21 |
| 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 14 | 16 | 22 |
| 2 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 12 | 14 | 23 |
| 4 | 3 | 3 | 3 | 3 | 4 | 4 | 5 | 13 | 16 | 24 |
| 2 | 4 | 3 | 3 | 3 | 5 | 3 | 4 | 12 | 15 | 25 |
| 4 | 3 | 4 | 2 | 3 | 3 | 4 | 5 | 13 | 15 | 26 |
| 3 | 4 | 3 | 3 | 4 | 5 | 3 | 4 | 13 | 16 | 27 |
| 2 | 4 | 2 | 3 | 2 | 3 | 4 | 5 | 11 | 14 | 28 |
| 3 | 4 | 3 | 2 | 4 | 4 | 3 | 4 | 12 | 15 | 29 |

**The first exploratory sample to calculate the time**

| time taken | ت | ت | time taken |
|---|---|---|---|
| 44 minutes | 16 | 1 | 22 minutes |
| 45 minutes | 17 | 2 | 24 minutes |
| 45 minutes | 18 | 3 | 24 minutes |
| 45 minutes | 19 | 4 | 25 minutes |
| | 20 | 5 | 29 minutes |
| | 21 | 6 | 35 minutes |
| | 22 | 7 | 37 minutes |
| | 23 | 8 | 36 minutes |
| | 24 | 9 | 36 minutes |
| | 25 | 10 | 38 minutes |
| | 26 | 11 | 39 minutes |
| | 27 | 12 | 40 minutes |
| | 28 | 13 | 42 minutes |
| | 29 | 14 | 43 minutes |
| | | 15 | 43 minutes |

**The time of the first student + the time of the second student + the time of the third student....etc**

**Average time taken** _____ **=**

**The total number of students**

**20÷692 =**

**34,6 =**

= **35 minutes exam time**

**The scores of the second exploratory experiment are in descending order**

| The score | ت | The score | ت | The score | ت | The score | ت | The score | ت |
|---|---|---|---|---|---|---|---|---|---|
| 3 | **121** | 5 | **81** | 7 | **61** | 11 | **41** | 18 | **1** |
| 3 | - | 5 | - | 7 | - | 11 | - | 18 | - |
| 3 | - | 5 | - | 7 | - | 11 | - | 17 | - |
| 3 | - | 5 | - | 7 | - | 11 | - | 17 | - |
| 3 | - | 5 | - | 7 | - | 11 | - | 17 | - |
| 3 | - | 5 | - | 7 | - | 11 | - | 16 | - |
| 3 | - | 5 | - | 7 | - | 11 | - | 16 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 16 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 16 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 16 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 15 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 15 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 15 | - |
| 3 | - | 5 | - | 7 | - | 9 | - | 15 | - |
| 2 | - | 5 | - | 7 | - | 8 | - | 15 | - |
| 2 | - | 5 | - | 7 | - | 8 | - | 15 | - |
| 2 | - | 5 | - | 7 | - | 8 | - | 15 | - |
| 2 | - | 5 | - | 7 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 5 | - | 6 | - | 8 | - | 14 | - |
| 2 | - | 4 | - | 6 | - | 8 | - | 13 | - |
| 1 | - | 4 | - | 6 | - | 8 | - | 13 | - |
| 1 | - | 4 | - | 6 | - | 8 | - | 13 | - |
| 1 | - | 4 | - | 6 | - | 8 | - | 13 | - |
| 1 | - | 4 | - | 6 | - | 8 | - | 13 | - |
| 1 | - | 4 | - | 6 | - | 8 | - | 13 | - |
| 1 | - | 4 | - | 5 | - | 8 | - | 12 | - |
| 1 | - | 4 | - | 5 | - | 8 | - | 12 | - |
| 1 | - | 3 | - | 5 | - | 8 | - | 12 | - |
| 1 | - | 3 | - | 5 | - | 8 | - | 12 | - |
| 1 | - | 3 | - | 5 | - | 8 | - | 12 | - |
| 1 | **200** | 3 | **120** | 5 | **80** | 7 | **60** | 12 | **40** |

**The scores of the two extreme groups (27%)(**

| Lower group | Higher group | Sequence the student |
|---|---|---|
| 5 | 18 | 1 |
| 5 | 18 | 2 |
| 4 | 17 | 3 |
| 4 | 17 | 4 |
| 4 | 17 | 5 |
| 4 | 16 | 6 |
| 4 | 16 | 7 |
| 4 | 16 | 8 |
| 4 | 16 | 9 |
| 4 | 16 | 10 |
| 3 | 15 | 11 |
| 3 | 15 | 12 |
| 3 | 15 | 13 |
| 3 | 15 | 14 |
| 3 | 15 | 15 |
| 3 | 15 | 16 |
| 3 | 15 | 17 |
| 3 | 14 | 18 |
| 3 | 14 | 19 |
| 3 | 14 | 20 |
| 3 | 14 | 21 |
| 3 | 14 | 22 |
| 3 | 14 | 23 |
| 3 | 14 | 24 |
| 3 | 14 | 25 |
| 3 | 14 | 26 |
| 3 | 14 | 27 |
| 3 | 13 | 28 |
| 2 | 13 | 29 |
| 2 | 13 | 30 |
| 2 | 13 | 31 |
| 2 | 13 | 32 |
| 2 | 13 | 33 |
| 2 | 13 | 34 |
| 2 | 12 | 35 |
| 2 | 12 | 36 |
| 2 | 12 | 37 |
| 2 | 12 | 38 |
| 2 | 12 | 39 |
| 2 | 12 | 40 |
| 2 | 11 | 41 |
| 2 | 11 | 42 |

| | | |
|---|---|---|
| 2 | 11 | 43 |
| 1 | 11 | 44 |
| 1 | 11 | 45 |
| 1 | 11 | 46 |
| 1 | 11 | 47 |
| 1 | 9 | 48 |
| 1 | 9 | 49 |
| 1 | 9 | 50 |
| 1 | 9 | 51 |
| 1 | 9 | 52 |
| 1 | 9 | 53 |
| 1 | 9 | 54 |
| 1 | 9 | 55 |
| 1 | 9 | 56 |
| 1 | 9 | 57 |
| 1 | 9 | 58 |
| 141 | 751 | The total |

# CURRICULUM VITAE

Raad Ali IBRAHIM is an Iraqi citizen. He completed his bachelor at Al-Anbar University. He is interested in English language and literature. He has been working as an English teacher for five years in Al-Anbar city in the west of Iraq. He moved to Turkey to complete his masters' degree at Karabuk University.