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The Effect of Creative Thinking on Developing Reading Skill of Iraqi EFL 4th Preparatory Students

A Thesis

Submitted to the Council of the College of Basic Education, University of
Babylon in Partial Fulfillment of the Requirements for the Degree of
Master of Education in Methods of Teaching English as a Foreign
Language

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
يَرْفَعُ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ
دَرَجَاتٍ ۗ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ ﴿١١﴾

صدق الله العلي العظيم

المجادلة/الآية 11

Dedication

To the Lamp of guidance...

To the ark of salvation...

To Al-Imam Al-Hussain, (BPUH)

Supervisors' Certificate

We certify that this thesis entitled "**The Effect of Creative Thinking on Developing Reading Skill of Iraqi EFL 4th Preparatory Students**" submitted by Halla Haider Muhi has been prepared under our supervision at the College of Basic Education, University of Babylon in partial fulfillment of the requirements for the degree of Master of Education in Methods of Teaching English.

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We certify that we have read this thesis entitled “**The Effect of Creative Thinking on Developing Reading Skill of Iraqi EFL 4th Preparatory Students**” and as the examining committee examined the student Halla Haider Muhi in its contents, and in our opinion, it is adequate as a thesis for the degree of Master of Education in Methods of Teaching English as a Foreign Language.

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Abstract

Creativity is an essential skill that is needed to achieve success in any field including EFL learning. Creative thinking is referred as the ability to conceive, implement or convey creative ideas and it has become a priority in Education. Reading, on the other, is a complex cognitive activity that is essential for obtaining information Craft (2005, p. 2). To achieve success in any academic field, students need to know how to learn from reading. Reading is an indispensable skill for learners in the EFL context, and foreign language reading comprehension is an interactive and complex process that requires creative thinking ability.

In line with this, the present study is set out to identify the effect of creative thinking on EFL reading comprehension. In order to achieve this aim, the researcher employs the descriptive analytical method through quantitative analysis. The study covers Iraqi EFL 4th preparatory students as its sample. Four secondary schools were randomly selected. Three instruments were utilized, namely, a creative thinking test, a reading comprehension test, and a teachers' questionnaire. The two tests were administered to fourth-year secondary school students, while the questionnaire was carried out with 24 Iraqi EFL teachers who are teaching in secondary schools. All the obtained answers were coded and statistically processed using the Statistical Package for Social Sciences (SPSS).

At the end of the study, it is found out that creative thinking has a positive effect on reading comprehension and that there is a positive correlation between creative thinking and reading comprehension. The study finds out that although EFL teachers are ready to teach creative thinking, they are not sure about whether it is possible to increase their

students' creative thinking ability. Finally, a number of recommendations for EFL teachers, EFL students and curriculum designers are set out.

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List of Abbreviations

EFL English as a Foreign language

MTELP Michigan Test of English Language Proficiency

N The Sample Size

Sig Level of Significance

SPSS Statistical Package for Social Science

Std Standard Deviation

Chapter One

Introduction

1.1 Preliminaries

English is the most widely spoken language in the world and it is the language of science and it has become increasingly important as a language of communication. With an ever-increasing number of students all over the world, English language has become increasingly important as a foreign language of communication. Reading is an important skill that allows students to obtain knowledge and construct their schema. Reading, according to Fleming and Steven's (2010, p. 76) is both a highly concentrated practice and one that is embedded in a very wide cultural sense, with the ability to take one or more of several different types. In other words, reading must go with a number of important factors such as cultural meaning and linguistic proficiency. Furthermore, Komiyama (2009, p. 32) defines reading as a vital skill for English language learners in today's world; it aids overall proficiency growth and provides access to critical knowledge at work and school.

Reading skill involves accessing previous experience, understanding vocabulary and definitions, drawing inferences, and connecting main ideas. All of these abilities are part of the active process of creating meaning from a text. Moreover, reading skill is the dynamic method of extracting important meaning from a text by linking the reader's prior information, understanding the meaning of language, drawing conclusions, and connecting key messages from the text, (Mikatama, 2019, p. 12). Reading skill, according to Wainwright (2007, p. 35), is a dynamic process that involves the effective or

ineffective application of a variety of abilities that influence whether or not readers grasp the meaning of the text.

One of the most crucial skills in the twenty-first century is creativity, which allows people to come with fresh ideas, see things from a different perspective, and generate and assess new solutions (Ferrari *et al.*, 2009, p. 1). Creative thinking is a way of thinking that results in new insights, approaches, perspectives, and ways of understanding and seeing things (Facione, 2011, p. 14).

Teachers play a vital part in the process of language acquisition and enhancing learners' language competence, which includes creative thinking skills. Teachers as well as students must understand and must be acknowledged of the importance of creative thinking in order to properly guide their responses. Creativity is not only a complex product; it is also a way of thinking. Teachers and curriculum designers face a difficulty in developing learning strategies and approaches that help learners expand their thinking skills and form new connections between experience and knowledge. Furthermore, teachers' abilities, attitudes, willingness to act as role models, understanding of students' needs, flexible course format, and certain sorts of classroom interaction are all important components in teaching in general and in teaching creativity as well (Davies *et al.*, 2014, p. 36). It is very much helpful to teachers to be aware that students need instruction not only in terms of the content but also in terms of how to access the material taught in their classrooms (Gose, 2018, p. 13).

Creativity has become a priority in education. It has been agreed upon that the relation between education and creativity is significantly important (Craft, 2005, p. 2). Creativity has been indicated as a means

for solving numerous amounts of social, economic and political problems. Such kinds of problems arose because of the existing gap between actual life requirements and educational outcomes. Thus, it is a vital issue to prepare individuals through promoting their creativity which would help in making them ready to challenge unexpected problems.

1.2 Statement of the Problem

Despite the fact that creativity is a crucial life skill that students should learn from a tender age, it has often been stated that creativity in EFL classrooms is weak (Baer, *et al.*, 2003, p. 569). Administrators, curriculum designers, and teachers all overlook the value of effective creative activities. Given the importance of the teacher and his/her prominent role in the teaching and learning process, it is critical to increase his/her ability, performance, and training on efficient ways for raising educational standards and developing learners' creative skills.

The teachers' role in implementing these strategies in the classroom is evident when they actively engage with their students to improve their actions and create an engaging study environment so that the learner transforms from a lone person and listener to an interactive and creative receiver. Furthermore, as Runco (2004, p. 30) points out, fostering a creative environment in the classroom benefits both language teaching and learning. Student's creativity is said to be considerably enhanced in an environment that fosters teamwork, positive motivation, and even inspiration. The ability to be creative is considered to be the most important skill that today's students will require to cope in an environment that is very unpredictable (Robinson, 2009, p. 16).

To the best of the researcher's knowledge the effect of EFL learners' creative thinking ability on their reading comprehension is not well identified specifically in Iraqi EFL context. Moreover, there is still a controversy upon the differences and/or similarities between male and female EFL learners in regard to their ability in thinking creatively. In addition, the exact level of creative thinking abilities of Iraqi EFL learners is not well specified and agreed upon.

In order to fill this gap, the current study tries to answer the following questions:

1. What is the current status of Iraqi EFL secondary school learners in regard to their creative thinking ability?
2. What is the current level of Iraqi EFL learners in reading comprehension?
3. Is there any statistically significant relation between Iraqi EFL learners' creative thinking ability and their achievement in reading comprehension tests?
4. Is there any statistically significant difference between male and female learners in regard to their creative thinking abilities?
5. Is creative thinking teachable?
6. What are the teachers' perspective towards the effectiveness of creative thinking on reading comprehension.

1.3 Aims

The current study aims at achieving the following points:

1. Identifying the level of creative thinking among fourth preparatory school students.
2. Examining the Iraqi EFL secondary school learners' level in reading skill.

3. Investigating the effect of creative thinking on Iraqi EFL secondary school learners' ability in reading comprehension.
4. Finding out whether male and female EFL learners are similar or different in regard to their level in creative thinking ability.
5. Identifying EFL teachers' attitudes toward teaching creative thinking and their attitudes towards teaching such kinds of strategies.
6. Finally, finding out the teachers' opinion about the effect of creative thinking on EFL learners' reading comprehension.

1.4 Value of the Study

Reading comprehension is of crucial importance in achieving success in any academic study. It is the first step in acquiring knowledge. Similarly, creative thinking is of vital critical importance in achieving success in general. Accordingly, the findings of the current study are supposed to be of a paramount value to both EFL teachers and learners as well as to syllabus designers to help reaching better results in the journey of learning a new language. Moreover, the current study may provide motivation for students to find ways for cultivating their creative thinking abilities in a way that helps improving language skills especially reading comprehension skills.

It is also supposed that the current study could be a kind of motivation for researchers to add knowledge about the importance of creativity and of reading comprehension skills and to investigate and find different ways and/or strategies that can be applied in schools. For schools, the present study is expected to contribute the idea of using creative thinking to provide maximum results in the learning process in general and in improving reading comprehension in specific.

1.5 Procedures

To achieve the aims of the study, the following procedures are followed:

1. Reviewing literature and previous studies related to creative thinking skills, reading skill and reading comprehension.
2. Choosing the sample of the study that includes 400 Iraqi EFL preparatory school learners and 30 EFL teachers, but only 24 have fully answered all the items in the questionnaire.
3. Collecting the data required for answering the questions of the current study by administering a universal standard creative thinking test and a reading comprehension test as well as developing a 16-item questionnaire that examines the Iraqi EFL teachers' perspectives about creative thinking and its effect on their students' reading comprehension.
4. Analyzing the collected data using SPSS software.
5. Discussing the results reaching to a number of conclusions, recommendations and suggestions for further studies.

1.6 Limits

The current study is limited to studying creative thinking skills and reading comprehension of EFL learners. Any other mental skill or other kind of thinking, such as critical thinking, analytical thinking and divergent thinking, is not included. Moreover, out of the four language skills, only reading skill is included with a concentration on reading comprehension.

Finally, the sample of the current study is restricted to Iraqi fourth preparatory school students and teachers. The study is accomplished in the holy province of Karbala during the academic year 2020-2021.

1.7 Definitions of the Basic Terms

Below are brief definitions of the main terms used in the current study. The notion of these terms is given as adopted in the present study:

1. Creative Thinking

The process of creative thinking entails the correlation and integration of various factors. The generative and adaptive nature of human mind includes the ability to observe, interpret, and develop new ideas from a problem, as well as the ability to transmit the results (Ward *et al.*, 1997, p. 1-27).

Creative thinking is characterized as a form of thinking that allows students to utilize their imaginations to produce ideas, questions, and hypotheses, to experiment with different approaches, and to assess their ideas, peer ideas, and final products and processes. Because the creative process necessitates time and collaboration, it is critical to establish time for creative thinking activities (Kampylis & Berki, 2014, p. 6). The researcher adopts it as an **operational definition**.

2. Reading Skill

Reading is a vital skill for English language learners in today's world; it aids overall proficiency growth and provides access to critical knowledge at work and school. It is an essential skill for language learners to master because it is essential for obtaining critical information for job applications and studying important subjects in school (Komiyama, 2009, p. 32). More importantly, reading, as stated by Willis (2008, p. 2), is not a normal part of human growth. It means

that the ability to read does not come naturally because it requires a lengthy procedure.

Reading is a verbal activity that contributes with thinking and other interactional abilities such as listening, speaking, and writing, and it involves the process of forming ideas and information using patterns and symbols printed on the page (Dallman *et al.*, 1982, p. 23). The researcher adopts it as an **operational definition**.

Chapter Two

Theoretical Background and Related Previous Studies

2.1 Introduction

The current chapter reviews the literature that is related to the main concern of the present study. It consists of two main sections in addition to a section concentrated on related previous studies. Section One presents some detailed definitions, explanations, theories and concepts that are related to reading skill.

Section Two sheds light upon creative thinking as a mental skill and surveys literature regarding its effect on EFL learners' ability to acquire a new language.

2.2 Reading Skill

Reading skill can be described as follows:

2.2.1 Definitions of Reading Skill

Reading, according to Fleming and Steven's (2010, p. 76) is both a highly concentrated practice and one that is embedded in a very wide cultural sense, with the ability to take one or more of several different types. In other words, reading must go with a number of important factors such as cultural meaning and linguistic proficiency. This goes with the definition of Tankersely (2003, p. 2) who states that reading is a dynamic process involving multiple interlocked skills and processes. Reading is the culmination of a process that comprises the combination of skills and processes. It is an important skill in English and students who make significant progress in it, can succeed in learning most academic areas. Mikatama (2019, p. 11) For that, EFL teachers must assist students in

learning to read in order to help them become more involved with the texts they read.

Furthermore, Komiyama (2009, p. 32) defines reading as a vital skill for English language learners in today's world; it aids overall proficiency growth and provides access to critical knowledge at work and school. Reading is also essential to master because it is important for obtaining critical information for job applications and studying important subjects in school. Willis (2008, p. 2) claims that reading is not a normal part of human growth. It means that reading ability does not come naturally because it requires a lengthy procedure.

Reading skill involves accessing previous experience, understanding vocabulary and definitions, drawing inferences, and connecting main ideas. All of these abilities are part of the active process of creating meaning from text, (Mikatama, 2019, p. 12). To put it another way, reading skill is the dynamic method of extracting important meaning from a text by linking the reader's prior information, understanding the meaning of language, drawing conclusions, and connecting key messages from the text. Furthermore, Dorn and Soffos (2005) see reading as a multi-faced mechanism influenced by cognitive, mental, perceptual, and social factors. Mikatama (2019, p. 13), on the other hand, believes that the ultimate aim of reading is to develop one's skills and that the reading process is effective if the readers can comprehend the text's key information. Furthermore, Blachowicz and Ogle (2008, p. 27) goes on to describe reading skill as an interest-driven process in which the object of reading can shift over time. He adds that reading ability can be developed through a continuous process that is motivated by interest.

Similarly, Snow (2002, p. 11) defines reading skill as the process of extracting and creating meaning from written language while interacting and engaging with it. In other words, it is the process of comprehensively shaping and determining meaning as a result of a progressive interaction between readers and the texts they read. Reading skill, according to Wainwright (2007, p. 35), is a dynamic process that involves the effective or ineffective application of a variety of abilities that influence whether or not readers grasp the meaning of the text. Furthermore, Tankersely (2003, p. 2) defines reading ability as one of the essential language skills that depends on three factors: the reader's knowledge of the text's linguistic structures, the reader's ability to exercise metacognitive control over the material being read, and the reader's adequate context in the content and vocabulary being presented. This means that reading ability necessitates command of the text's linguistic structures, drilling metacognitive influence over the material being read, and having a good background in the text's content and vocabulary.

Based on the above definitions of reading skill, it can be inferred that reading is a language skill that involves the reader's ability to react to and relate to the text's linguistic structures, to drill metacognitive control over the text's content, and to relate previous information about the text's content and vocabulary.

2.2.2 Theories of Reading

Three major theories have been proposed to understand the essence of reading acquisition. The first is the traditional (conventional) theory, also known as bottom-up processing, which concentrates on a text's written type. The second is the cognitive theory, also known as top-down processing, which increases the importance of context information in

addition to what is printed on the paper. The third is the metacognitive theory, which emphasizes the reader's thinking about what he is doing while reading and focuses on the influence and manipulation that a reader can have to comprehend a text (Paradede, 2010, p. 2).

2.2.2 Traditional (Bottom-up) Theory

The traditional bottom-up approach to reading is influenced by behaviorist psychology in the 1950s, which argues that learning is based on habit improvement, achieved by the repeated association of stimulus and response. It also sees language learning as a response technique that humans acquire during automatic processes. Some patterns of language are reinforced by the culture of language, (Omaggio,1993, p. 45-46). The audio-lingual process is based on behaviorism and aims to form second language habits through drilling, error correction and repetition. Reading, according to this viewpoint, is a linear method in which readers decipher a text word by word, then linking the words in phrases and sentences. Behaviorists, regard reading as a word-recognition that occurs in reaction to the stimulus of the printed words; they note that "no attempt was made to understand what went on inside the recesses of the mind that enabled the person to make sense of the printed page" (Samuel & Kamil (1988), cited in Pardede, 2010, p. 3).

Similarly, Anderson (1994) (cited in Pardede, 2010, p. 3) states that, textual comprehension entails combining word definitions to determine the meanings of clauses. These lower-levels skills are linked to visual or written stimuli, and are therefore concerned with recognition and recall. Phonics, on the other hand, emphasize repetition and exercises using the sounds that make up sentences, similar to the audio-lingual teaching process. The smallest sound units are received and processed first, then

letter blends, words, phrases, and sentences are processed. As a result, beginning readers develop a collection of hierarchically organized sub-skills that progressively increase comprehension performance. Readers who have learned these skills understand what they read and they are known as professionals. The bottom-up model portrays information flow as a sequence of stages that convert input and move it on to the next without any feedback or the possibility of later stages (Stanovich, 1980, p. 32-71). In other words, language is treated as a code, and the reader's primary role is to recognize graphemes and convert them to phonemes. As a result, readers are regarded as passive recipients of the textual material. The reader must replicate the meaning found in the text.

Since the bottom-up theory relies on the formal features of the language, specifically words and structure, it has almost always been criticized as incomplete and defective, while it is possible to accept this rejection as a result of this view's over-dependence on the structure, it must be admitted that comprehension requires knowledge of linguistic features as well. The cognitive view of reading was introduced to combat the conventional view of reading's over-reliance on type.

2.2.2.2 The Cognitive (Top-Down) Theory

The cognitive theory reflects the mind's inherent capacity for learning, which offered new explanatory power on how humans acquire their first language. This has a major effect on the field of EFL as psycholinguists describe how definite internal representations of the new language evolve within the mental process in the learner's mind. A useable distinguished substantive learning from rote learning. Simply memorizing lists of isolated words or rules in a foreign language are an example of rote learning, where the knowledge is fleeting and vulnerable to loss.

Meaningful learning, on the other hand, happens when new knowledge is introduced in a way that is important to what the learner already understands, allowing it to be easily incorporated into one's cognitive framework. Learning that is not meaningful will not persist with the learner. This focus on sense gradually influences the top-down approach to foreign language instruction, and there is an explosion in teaching approaches and practices in the 1960s and 1970s that heavily considers the learner's experience and expertise (Omaggio, 1993, p. 57).

The way students learn to read has been transformed by these cognitive and top-down processing methods. Reading, in this view, is a process of linking the information in the text with the awareness the reader brings to the act of reading, rather than just extracting meaning from the text. Reading is not a mindless mechanical task; it is based on the reader's prior awareness and expectations. It is not just a matter of translating print to speech; it is also a matter of comprehending written language. In short, reading is a psycholinguistic guessing game in which readers sample the text, form hypotheses, affirm or deny them, and form new hypotheses (Smith, 1994, p. 2).

2.2.2.3 The Metacognitive Theory

Metacognition in the sense of reading entails thinking about what one is doing while reading. There is no longer any question over "whether reading is a bottom-up, language-based process or a top-down, information-based process," (Block, 1992, p. 319-343). Accepting the impact of context information on readers is no longer a challenging issue. Scholars have gone much further in their research to describe the power that readers use in their attempt to comprehend a text. Block has coined the term "metacognition" to describe this power.

While reading, strategic readers do more than just sampling the text, making hypotheses, confirming or rejecting them, and making new hypotheses during reading; but they also have a number of activities during the reading period, which can be separated into three stages: before, during, and after reading. Identifying the intent of the reading and determining the form or style of the text are two tasks that readers engage in before beginning to read (before reading). They think about the general character and features of the text's form or style in the second stage (during reading), such as finding a topic sentence and following supporting details toward a conclusion, projecting the author's intent for writing the text, selecting, searching, or reading in depth, making continuous assumptions about what will happen next based on information gathered earlier, prior knowledge and so on. Finally, readers seek to summarize, deduce, or infer what they have read.

2.2.3 Types of Reading

There are different types of reading as explained below:

2.2.3.1 Intensive and Extensive Reading

Intensive reading entails approaching a text with the help of an instructor or completing a challenge that forces students to concentrate on the text. The purpose is to comprehend not just what the text means, but also how that meaning is formed. The "how" is just as critical as the "what", because the intensive lesson is designed to teach students techniques that they can apply to other texts. Nutall (1996) (cited in Yazar, 2013, p. 36)

In extensive reading, it is commonly believed that in order to comprehend the whole (e.g., a book), students must first comprehend the

parts, i.e. the sentences, paragraphs, and chapters that make it up. Longer texts are often more likely to be missed in the classroom, since short texts that can be learned in one or two lessons are easier to manage. The ability to distinguish relationships between the different sections of a longer text, their contributions to the plot or argument, the accumulating proof of a writer's point of view, and so on, are more significant. These topics are related to all types of reading. They cannot be overlooked if students are to develop reading skills. Nutall (1996) (cited in Yazar, 2013, 36).

2.2.3.2 Search Reading

Search reading varies from skimming in that the aim, like in selective reading for writing, is to find knowledge on certain topic. It is a time-honored method of completing written assignments. Skimming is a quick and selective method, and once the essential material is located, it will almost certainly require attentive reading. Scanning, on the other hand, allows the reader to pay attention to the text more frequently and for longer periods of time. More information on skimming and scanning can be found in the following two sections:

2.2.3.2.1 Skimming

It includes selectively reviewing a text to extract the core idea(s) as well as the subject of discussion as soon as possible, which can require both easy and careful reading. The emphasis may be global or local, and the reading speed will almost certainly be quick, but with caution. The text is quickly scanned for essential material, which is then carefully read. This technique can be used for a variety of reasons, including:

- 1) Establishing a general meaning of the document.

- 2) Constructing a macro propositional framework as an overview description in a short period of time.
- 3) Teaching readers to be independent (autonomous), (Urquhart & Cyril,1996, 17).

2.2.3.2.2 Scanning

It entails quickly scanning a text for a particular symbol or group of symbols, such as a specific word, expression, name, figure, or date. The emphasis would be on local comprehension, with the majority of the text being overlooked. Reading takes place at a fast pace, with no concern for sequencing. It is mostly reader-driven processing that is done at the surface level rather than at the deep level. A quick scan of the text is followed by a more thorough review. Finding a connection between what is sought and what is provided in a text requires only a small amount of information to be processed for long-term memory or even rapid comprehension, Yazar (2013, p. 37).

Scanning usually extends beyond simple word matching found in scanning activities, and may include the following operations:

- 1) Being on the lookout for words that are similar or in the same semantic field. (Unlike scanning, the exact meaning of these terms is unknown.)
- 2) Finding details by employing systematic knowledge of the document structure.
- 3) Making use of subtitles and titles.
- 4) Reading abstracts when possible.

5) Taking a quick look at words and phrases. (Urquhart & Cyril,1996, p. 17)

2.2.3.3 Critical Reading

Making assumptions on how a text is argued and what critical reading it entails. This is a highly analytical ability that requires the reader to take a step back from the text that s/he reads. (The reader will need to read a text once to get a clear understanding of the material before diving into a critical reading.). Moreover, he will need to do the following:

- 1) avoid reading just for the sake of getting facts
- 2) read to find new perspectives on the topic
- 3) avoid extracting and compiling lists of proofs, facts, and examples while reading, highlighting, or taking notes. (Yazar, 2013, p. 38).

2.2.3.4 Reading for Meaning

The majority of reading courses focus on this form of reading. However, since reading is a solitary activity, it may be the most difficult type of reading in teaching, (Chastain, p. 1976, 565-566). It is believed that in the reading process, attention is needed for meaning, and that students should be encouraged to read for the quality of the material. It should be made clear to students that they must concentrate on the main elements that express significance. Clarke (1979, p. 55) elaborates on the principle of reading for meaning by saying that reading for comprehension entails mastering the writer's entire letter, including both key points and supporting information. It is the stage of comprehension where the reader can paraphrase the author's ideas but has not yet given them a critical assessment.

Chastain (1976, p. 565-566) recommends speed reading, which allows students to read without looking up individual words, as a way to inspire students to read for meaning. Short passages are given to students to read in two or three minutes. When the time is up, students summarize the content. In this way, Chastain shows that the class reads the whole passage together in a short amount of time, as well as, learning to read for the general sense of content without using a dictionary.

Since skilled readers read for meaning, they do not read individual words and they often predict what will come next in the text. Reading for meaning as a technique is considered as one of the most valuable skills for readers to learn because it is critical to comprehend the message the writer is attempting to convey. As a result, readers should not be required to understand each aspect at the sentence or paragraph level. But they should be taught to read for both sense and pleasure. Clearly, the instructor bears a significant amount of responsibility for the preparation of such reading tasks. However, students must be mindful of the fact that they are reading for fun and appreciation before these tasks are presented. They should be reminded, if possible, that using a dictionary is unnecessary, and that before looking up any words at first sight, they should read the entire passage two or three times to get a sense of the overall context (Myers, 1987, p.133).

2.2.3.5 Prediction

Reading, according to Goodman (1971, p. 455-462), is a “psychological guessing game.” He claims that fluent readers do not process a text by recognizing and reading each message. Instead, they examine a portion of the text and use their previous knowledge of the topic to predict the context of a larger portion of it. They then check another

section of the text to see if their predictions are correct. Predictions, according to Smith (1971, p. 65), are “the previous removal of impossible alternatives.” He claims that the less options in front of the eyes there are, the more difficult to comprehend the document it is.

Accordingly, the ability to anticipate what the writer will say helps the reader understand the text and ensures the reader’s active participation. Prediction will begin as soon as the reader reads the title and shapes expectations about the content of the written material. This form of action allows the reader to guess the story’s subject, sequence of events, or even the writer’s goal for the proposed claim. Readers' forecasts are not always accurate, and they might not be verified during the reading process. Even false predictions, however, may help the reader think about the subject and the quality of the material. As a result, the reader takes an active role in the reading process, (Nuttall,1982, cited in Yazar, 2013, p. 39).

2.2.3.6 Redundancy

Fluent reading necessitates the use of redundancy, or knowledge obtained from several sources, in addition to prediction abilities. Almost every written text contains some redundancy, which fluent readers utilize when reading for comprehension. The fluent reader, according to Smith (1971, p. 239), is one who can maximize redundancy. He declares that “if the same options can be discarded in several ways, there is redundancy. The removal of alternatives by redundancy is one of the fundamental reading skills.”

Furthermore, as Yazar (2013, p. 40) points out, an EFL teacher when teaching reading might remove redundancy by using media other than the linguistic medium. Nonlinguistic (images or real things) and paralinguistic (gestures or facial expressions) media, for example, could be used to

achieve this end. Finally, novice readers rely more on visual details presented in the text than fluent readers. The reading instructor will guide international or second language students through a text and help them become better readers.

2.2.4 The Teacher's Role during Reading

First and foremost, the teacher has the choice of including reading on the agenda. This can be accomplished by motivating students to read, assisting them in selecting appropriate books, and scheduling time for reading at school. If teachers are motivated, they will undoubtedly find a variety of ways to encourage students to learn. Aside from putting reading on the agenda, the teacher also serves as a role model. Krashen (2004, p. 84) notes that when students see other people reading, they may learn more. This ensures that when the teacher reads aloud to his students, he sends a positive message to them. They will be inspired to read if they see others do.

Teachers in secondary content classes should use reading comprehension techniques that concentrate on ensuring content access through self-monitored comprehension of read information. Teachers should also be explicit in their teaching and use of the strategies they choose to enhance comprehension. That is, merely providing students with materials to fill out or complete, such as graphic organizers, are insufficient.

Teachers must also teach students why the strategy is necessary and how it can aid their understanding of the content. Students must be told why they are doing what they are doing by their teachers. Students would be able to use the techniques more independently in subsequent encounters with content-specific texts if they understand how they function. As a

result, teachers should engage their students in discussions about the hints of the content they are reading, allowing them to ask questions. Providing students with the ability to explore content-specific material in conversation helps them gain familiarity with the subject matter, resulting in greater understanding of content-specific material. Teachers must be aware that students need instruction not only in terms of the content but also in terms of how to access the material taught in their classrooms Gose (2018, p. 13).

2.2.5 Reading Comprehension

Many definitions have been proposed by different scholars over the last decades concerning EFL reading comprehension. A number of these definitions are given below:

2.2.5.1 Definitions of Reading Comprehension

Reading comprehension is described as the process of obtaining, comprehending, and retaining information from a text. Reading is a method of comprehending a written text by extracting as much details as possible. It is a creative and productive practice with four distinct and essential characteristics: it is purposeful, selective, anticipatory, and comprehension-based, all of which require the reader to explicitly exert control. Reading comprehension encompasses a wide range of topics. It does not just understand the context of individual words in a letter. It is a process of making logical interpretations in order to comprehend a text that has four characteristics: meaning, selection, anticipation, and comprehension. One of the characteristics of reading is the ability to talk about comprehension (Smith, 2004, p.3).

Similarly, Mikulecky and Jeffries (2004, p. 74) assert that comprehension entails making sense of what one reads and relating the

texts' ideas to what one already knows. It can be described as the process of connecting elements of the world around us with what we read. The importance of reading in the learning process is undeniable.

According to Richards and Schmidt (2002, p. 99), comprehension is the process of determining the intended sense of a piece of written or spoken communication. Moreover, they note that comprehension is a dynamic process that relies on both message information (bottom-up processing), background awareness, context information, and information from the listener's and speaker's objectives or goals (top-down processing). Readers acquire meaning by making sense of terms in context and using what they already know to comprehend and learn the unknown.

Making sense of words is fundamentally linked to vocabulary mastery, according to Smith (2004, p. 41), who goes on to say that vocabulary offers a permanent foundation of understanding for deciding the likely context and pronunciation of new words. If readers are aware of both the context of a new word, they will have no difficulty understanding it. In other words, reading comprehension is the method of applying the reader's prior knowledge to the details in the document in order to understand the text's message. Reading comprehension is more than just understanding and recalling the meanings of all words in a book; it is also about students constructing and building meaning from the text.

2.2.5.2 Strategies of Reading Comprehension

A good reader can also read for complete comprehension. This means that they learn in order to comprehend the entire meaning of a passage. This is common in academic and other environments where full comprehension is needed. According to Baker (2002, p. 79), there are

several methods for teaching reading comprehension. The most well-known ones are explained below:

2.2.5.2.1 Scaffolding

Scaffolding text strategy is one of the strategies used to deliver instructions that would make a difference in the content literacy of all learners, particularly students from diverse backgrounds. According to Gasong (2007) (cited in Ranggi, 2019, p. 14), scaffolding is a strategy in which students are given some assistance during the early stages of learning, then the help is reduced and students are given opportunities. It helps teachers assist a variety of learners in negotiating context and overcoming challenges in text-based learning situations. Scaffolding is a method of assisting a student in solving a problem that is beyond his or her developmental capacity with the assistance of an instructor or another individual of greater abilities.

According to the concept given above, scaffolding is a type of support provided by teachers (or by other learners with higher developmental capacities) to students in order to help them improve their learning abilities so that they can demonstrate a higher level of mastery of the material by completing more difficult problems.

2.2.5.2.2 Think-aloud

Think-aloud is a strategy that aids students in their learning practices by allowing them to remember more significant details from the teacher's texts. Teacher's ability to impart creativity to his/her students and guide them in completing each phase of the think-aloud in understanding reading texts, helps them think clearly by verbalize their thoughts while reading.

When using think-aloud, Davey (1983, p. 44-47) recommends five simple measures. First is choosing passages to read aloud that have difficult points, ambiguities, inconsistencies, or unfamiliar words. Second is making students follow up passively as the teacher read think-aloud and listen to how trouble spots are resolved. Third is having students practice think-aloud with partners by reading short, carefully-planned passages and sharing their thoughts. Fourth is making students train individually, using a check list to ensure that all students are involved and that the protocols are followed. Fifth is combining practice with other lessons and demonstrate how, why, and when to use think aloud on a regular basis to ensure transition.

The following are five observations that can be made during think-aloud. 1) Making assumptions to form hypotheses, 2) Creating images by explaining the images that come up in reader's mind as a result of the knowledge being read, 3) Using analogies to connect new information with prior knowledge, 4) Checking for understanding by stating a point that is unclear 5) Demonstrating techniques for controlling comprehension. Rangi (2019, p. 14-15)

2.2.5.2.3 Reciprocal Teaching

Reciprocal teaching is a strategy in which teachers ask their students to share the position of teacher by encouraging them to lead a discussion about a particular reading. Predicting, question generation, summarizing, and clarifying are four techniques used in reciprocal teaching to direct the discussion. Reciprocal teaching is an excellent way to teach students how to illustrate key ideas from a reading while sharing vocabulary, generating ideas and questions, and summarizing content. It can be used in a variety

of content fields, but it fits best for textbooks and non-fiction material. Rangi (2019, p. 16-17)

Reciprocal teaching, as stated by Palinscar and Brown (1984, p.119) is a directed reading comprehension approach that allows students to acquire the skills that good readers and learners naturally possess (i.e. summarizing, questioning, clarifying, predicting, and responding to what they are reading). Students work in pairs or small groups to apply these five comprehension skills to a common text. Reciprocal teaching is applicable to fiction, non-fiction, prose, and poetry.

The students then take turns acting as the teacher. Adjusting the mission demand to help the students work out the challenging situations is critical to the strategy's effectiveness. That is, if students are having trouble, the teacher can help them by lowering the task's requirements. The teacher gradually withdraws support as the process progresses, allowing students to continue learning. Reciprocal instruction is a combination of five comprehension techniques in several respects: predicting, questioning, clarifying, summarizing, questioning-answering Relationship (Pearson & Johnson, 1978, p. 223).

2.2.5.3 Models of Reading Comprehension

There are three main reading comprehension models that play an important role in managing and promoting the comprehension process, as well as assisting readers in better understanding written passages and overcoming their reading comprehension challenges while reading. These are the bottom-up model, top-down model, and interactive model (Ahmadi *et al.*, 2013, p. 235). Eskey (2005, p.536) adds that these three models vary in their focus on the form readers use to deduce meaning from a written

passage. For example, in order to obtain meaning, the bottom-up model requires readers to decode each word in the text.

The top-down model, stresses the importance of the reader's prior knowledge and familiarity with the subject in order to derive meaning from a text. While the interactive model views reading as an operation that necessitates two interactions; the first interaction takes place between the written text and the reader's prior knowledge of the subject, while the second takes place between the reader's various reading strategies.

2.2.5.3.1 The Bottom-Up Reading Comprehension Model

The bottom-up model proposes that readers begin the reading process by decoding each letter, then vocabulary words, and finally sentences, in order to deduce meaning from a written passage. To put it another way, this model views the whole reading process through the lens of letters and vocabulary. As a result, in order to extract meaning from a text, readers must be able to identify and understand each letter and vocabulary word as they read. Since this model stresses the importance of understanding each and every word for comprehension, rapid word comprehension is a must for the bottom-up approach (Ahmadi *et al.*, 2013, p.235).

The bottom-up model has been criticized for many reasons, including the fact that the ability to quickly decode is critical for improving reading comprehension. First, the bottom-up model assumes that the process of reading follows a mechanical trend in which the reader creates a piece-by-piece mental translation of the details in the text, with little intervention from the reader's context knowledge (Grabe & Stoller, 2002, cited in Al-mutairi, 2018, p. 22). Second, this model allows readers to understand new vocabulary through the vocabulary decoding process,

which is a time-consuming process that requires the reader to devote a significant amount of time and effort in order to comprehend a text. Attempting to decode each word in the text demands the readers to use their short-term memory; as a result, the reader is more likely to forget what they have read by the time they have finished. As a consequence, rather than having an inclusive comprehension of the written passage, the reader can only be able to comprehend individual words. The students would be unable to engage in reading and activate their critical thinking skills if they do not have a thorough understanding of the text, which will affect their ability to learn on a regular basis. Next, this model has been criticized for failing to take into account the importance of readers' previous experience in promoting reading comprehension. Moreover, the construction of a bottom-up model (letters, words, sentence) will restrict readers' ability to note practices that occur during the reading process. The shortcomings of the bottom-up reading comprehension model influence the creation of the top-down reading comprehension model (Eskey, 2005, p. 563 and Grabe, 2004, p. 44).

2.2.5.3.2 The Top-Down Reading Comprehension Model

In comparison to the bottom-up reading comprehension model, the top-down model uses readers' previous knowledge, experience, and expectations about a subject to help them understand a written passage. As a result, according to Eskey (2005, p. 563), the top-down model views reading comprehension as a mechanism that starts "from the brain to the text". According to the top-down model, readers must begin the reading comprehension process by forming specific expectations about the text. These standards should be focused on the reader's prior knowledge of the subject. After establishing some assumptions, the reader moves on to a new task in which they use their prior knowledge of the environment to decipher

language within the text in order to either confirm or change their preconceived notions. As a result, the top-down comprehension model regards the text as irrelevant, with the readers acquire meaning by incorporating it into their prior knowledge (Ahmadi, *et al.*, 2013, p. 239).

Al-mutairi (2018, p. 26) proposes the top-down reading comprehension model, which posits that reading comprehension is a “psycholinguistic guessing game” in which readers must apply prior information to predict context. She adds that the top- down model stresses the critical role of the teacher in interpreting a written text into meaning by drawing on prior knowledge of the reading topic and the reader’s experiences to either confirm or change pre-established expectations.

Despite the fact that the top-down reading comprehension model was created to overcome the shortcomings of the bottom-up model, it has been criticized for its strong reliance on readers’ prior expectations, information, and background knowledge, as well as its disregard for the text’s significance. The top-down model has also been criticized for ignoring potential issues that readers may face when forming expectations or predictions about a specific passage, especially when the topic is unfamiliar to them. As a result of the shortcomings and weaknesses of both the bottom-up and top-down reading models in elucidating the reading comprehension process, the interactive reading model was produced (Ahmadi *et al.*, 2013, p. 235)

2.2.5.3.3 Interactive Model

Since the interactive model was created to overcome the flaws and shortcomings of both the bottom-up and top-down reading comprehension models, it appears to combine elements from both. The interactive model is the most commonly accepted model for understanding the mechanism of

reading comprehension and confirming the significance of the reader-text interaction (Ahmadi & Gilakjani, 2012, p. 2053-2054). The interactive model is based on the idea that neither the bottom-up nor the top-down models can be used to describe the entire reading comprehension process in isolation. As a result, it was necessary to create an association between these two models (Ahmadi, *et al.*, 2013, p. 235).

Furthermore, according to Eskey (2005, p. 563), the reading process is the product of simultaneous mutual application of both information sources. The entire reading process is not an either/or option between the bottom-up and top-down models, but requires the interaction of both approaches. The interactive reading comprehension model emphasizes the importance of both lower-level thinking skills like word recognition and higher-level inference and reasoning skills like text explanation in comprehending a text. Grabe (1991, p. 375) notes that instead of seeing reading comprehension as a simple transmission of textual passages and knowledge to the reader's brain, the interactive model views it as a product that is evolved as a result of acquiring meaning through interaction between both readers and written passages.

Similarly, Stanovich (1980, p. 32-71) clarifies the interactive model's view of compensation, he does so by arguing that in the reading comprehension phase, both the bottom-up and top-down reading processes complete each other. When readers lose the requisite cognitive skills needed to comprehend a passage, they rely on bottom-up processes to compensate for the necessary prior context information. When a reader lacks the necessary bottom-up skills to comprehend a passage, she/he can substitute by employing high-level processes (top-down skills).

2.3 Creative Thinking

Creative thinking is an essential skill that is needed to achieve success in any field including EFL learning. Thus, it was studied through the history of EFL teaching and learning and a number of definitions were proposed by different scholars. A number of these definitions are sited below:

2.3.1 Definitions of Creative Thinking

According to existing literature, creativity refers to the advent of something that did not exist previously. Feldman (1994) (cited in Alsaou, 2015, p. 45) describes creativity as "the achievement of something remarkable and new, something which transforms and changes a field of endeavor in a significant way". This means that the concept of creativity means having something new, novel and useful. This novel "something" sometimes can be a process, product, or person. Creativity is examined using three main elements: process, person, and product (Gough, 1979; 1398). However, Kaufman and Beghetto (2009, p. 6) mentions a fourth model which denotes creativity as an environment.

In the same vain, Baer *et al.* (2003, p. 569) sees that any activity can be examined from four angles: the person who does it, the thing that is done, the process or action that is accomplished, and the environment or circumstances that impact the three previous positions. Taylor (1995) (cited in Al-Sahou, 2015, p. 46) states that these four dimensions are connected to one another and interact with each other.

Other researchers and theorists view creativity differently which causes the emergence of two general model, namely: historical creativity (known as big C creativity) and psychological creativity (known as little c

creativity). Later on, some theorists propose new models of creativity, such as professional creativity and mini creativity.

2.3.1.1 The big-C level of creativity: Those at this level will be remembered in the history books. It includes an evaluation of one's entire career and entire body of work and then evaluates the entire body of work against other great contributions and decides where one fits in.

2.3.1.2 Little -c level: Reflects an aspect of growth from the mini-c level. With appropriate feedback, advancements are made and what was created might be of value to others.

2.3.1.3 The pro-c level: At this level, one has the ability to be creative at a professional level. At this point, one would have had many years of deliberate practice and training.

2.3.1.4 Mini-c level: C is inherent in learning at the mini-c level what one creates might not be revolutionary but it is new and meaningful to them.

2.3.2 Elements of Creativity

As mentioned in section 2.3.1 above, creativity is examined in accordance to three elements: person, product and process. All are explained below in details:

2.3.2.1 Person Element of Creativity

Oldham and Cummings (1996, p. 609) correlate creativity with creative behaviors. Feist (1998, p. 290) states that many studies have led to convincing evidence that creative people behave in different situations in ways that distinguish them from others. He asserts that personality dispositions have regular and predictable relation to creative achievement.

Other researchers (e.g., Torrance, 2004, p.9) highlight various characteristics which are seen to be features of a creative person. Among these features are: intelligence, originality, imagination, curiosity, energetic nature, artistic nature, risk taking ability, and open-mindedness.

Similarly, Taylor (1995) (cited in Alsaou, 2015, p. 47) defines creative person in accordance to the nature of abilities and traits; he proposes six talent traits associated to creativity: originality which means the ability to produce novel satisfactory thoughts; sensitivity to problems, which means the ability to identify and discover problems; redefinition, meaning being able to perceive one specific problem from different angles; fluency, meaning the ability to generate a number of ideas in a period of time; flexibility, which means capability to modify thought in mind with no difficulty; and elaboration, meaning the aptitude to develop the dedicated area and its solutions.

2.3.2.2 Product Element of Creativity

Lynch and Harries (2001) (cited in Alsaou, 2015, p. 48) believe that creativity is a substance phenomenon or a product. This is mostly because creativity entails the creation of something new. The sorts of products are defined as a product which could be a physical object or a theoretical system. It may be an equation or new technique.

Accordingly, the majority of research studies on creative product focusses on products regardless of the process or producer. The product, as discussed by Alsaou (2015, p. 48) is measured according to an original criterion which is the most important criterion. Other criterion is usefulness criterion which refers to the feasibility of the product both for the society and the individual.

Finally, Russ (1998, p. 57) states that it is important that a product must be innovative and purposeful and that creations are usually precious products and unique. He adds that a creative product, whether an object, an act, or an idea, should make novel change in the current situation and move it to a new context.

2.3.2.3 Process Element of Creativity

According to Boden (1994, p. 104) creative process occurs when “the conceptual spaces are explored and transformed”. The term “conceptual space” means the system of knowledge which comprises structured group of knowledge collections that is bonded to one another by logical links. He adds that the investigation of a conceptual space means reviewing and revising these groups of knowledge collections. At the same time, the conversion of a “conceptual space” refers to appearance of a new set of knowledge collection. Ward *et al.*, (1997, p. 309) put forth a similar view, stating that the creative process is essentially based on connecting the already existing knowledge and at the same time generating new bonds among it.

An early model proposed by Csikszentmihalyi (1996, p.107) identifies creative process in accordance to four stages:

1. The preparation stage: This stage is concerned with collecting information and gathering data regarding the problem area, then coming up with the most proper thoughts.
2. The incubation stage: In this stage, the individual consciously uses cognitive skills to work on a problem.
3. The illumination stage: Unlike the incubation stage, here the person consciously deals with the new ideas in order to reach some unexpected insights where the novel thoughts are fitted together.

4. The verification stage: In this stage, the solution is confirmed in a practical way; and at the same time, it can be modified when necessary.

2.3.2.4 Environment Element of Creativity

Creativity needs specific context that permits for the emergence of creativity; this context includes people's social interactions, their attitudes, their perspectives, and their cultural stance.

According to, Russ (1998, p. 57) significant creations are virtually always based on a convoluted relationship. Another study by Csikszentmihalyi (1996, 107) concentrates on creative individuals. This study finds that interactive works strongly influence individuals' creative ideas. Cropley (2006, p. 125) adds that imagery is obvious as a mechanism for self-awareness, personal appearance and self fulfilment. He suggests another manner to explore creative settings stating that creativity is centered on the social interactions. He highlights that creativity is fostered by social networks and that it is not reinforced separately as isolated labors but as groups work cooperatively.

2.3.3 Types of Creative Thinking:

Human beings have special innovative competencies in keeping with their intellectual or chronological age. Abo Tailakh (2015, p. 39) determines five types of creativity:

- 1. Expressive Creativity:** It shows unfastened and unbiased thinking and attempts to expand specific thoughts despite of their quality, such as graphics impulse for children.

- 2. Productive Creativity:** It is the outcome of the development of expressive abilities and skills that leads to the creation of complete works. It is distinguished by the restriction and control of free activities. This ability appears to be evident in creative activities such as drawing and music.
- 3. Inventive Creativity:** Flexibility is required in establishing new relationships between different elements and demonstrating innovation in inventing new uses on individual basis.
- 4. Innovative Creativity:** It necessitates a high level of abstract vision skills as well as the ability to develop and adapt the principles and foundations that govern a science or an art. Both individual figurative talents, as well as the coupling of two systems are improved.
- 5. Emerge Creativity:** It consists of imaging a brand-new principle, that is the maximum abstract one. It means developing a brand new imaginative.

From the preceding types, the researcher can say that human beings have diverse creative thinking abilities. These types are appropriate for cultivating creativity. After those types, there is the imaginative creativity in which individuals produce new ideas.

2.3.4 Factors that Affect Creative Thinking

Tshikuku (2001, p. 3) proposes a context for innovative conduct and shows how it interplays among individual and contextual elements. He says that contextual elements (education, social environment, family, financial and bodily conditions) have interaction with private elements (personality, intelligence, expertise and experience). Most people agree that a person's or a group's context, which also known as the background

environment or framework, plays a significant impact in defining human behavior. Individuals' thinking and conduct are influenced by the society in which they grow up. The development of a society is determined by its ideas.

Similarly, a rich environment and experience help motivate and stimulate creative thinking. Pressure, social constraints, politics, mimicry, hatred, jealousy, and the environment, as well as fear of asking questions and lack of clarity in answering questions, are all factors that affect creativity, (Coiro *et al.*, 2008, p. 1-2).

2.3.5 Creativity in Education

Creativity in education, as stated by Alsahou (2015, p. 64), is a mixture of capabilities, skills, perspectives, stimulation, and other factors. Accordingly, in order to understand creativity in education, it is important to distinguish among these concepts. Teaching creatively as well as teaching for creativity are recognized through separate orientation, such as teaching students whereas the student's orientation spotlights teaching for creativity or teacher's orientation focusing on creative thinking.

Cremin (2009, p. 36) adds that creative teaching is seen to involve teachers in making learning more interesting and effective and using imaginative approaches in the classroom. Teaching for creativity by contrast is seen to involve teachers to identify children's creative strengths and foster their creativity.

Teaching creatively is defined as using imaginative approaches to make learning more interesting and effective. While teaching for creativity is defined as ways of teaching that focus on nurturing individuals' creative abilities. Teaching creatively is associated with effective teaching while

teaching for creativity is associated with strengthening the creative ability of students. It can also be said that teaching for creativity involves teaching creatively. Moreover, students' creative ability is more obvious when the teachers make use of their creative abilities in the classes (Craft, 2005, p. 2). Although a distinction is made between teaching creatively and teaching for creativity, it is noticed that the two are integrated in classroom practices (Jeffrey & Craft, 2004, p. 77-87). The students' correspondence with creative for teaching and creative teaching reflect the concept of creative learning. Jeffrey (2006, 11) states that the importance of creative learning lays on how creative teaching is adapted, experienced, and accepted or rejected by the students.

Creativity is somehow a complex notion. Lin (2011, p. 149) states that the importance of creativity can be seen educationally through three theoretical scopes, namely: teaching creativity, creative learning and teaching for creativity as shown in

Figure 0-1 Three Elements of Creative Pedagogy below:

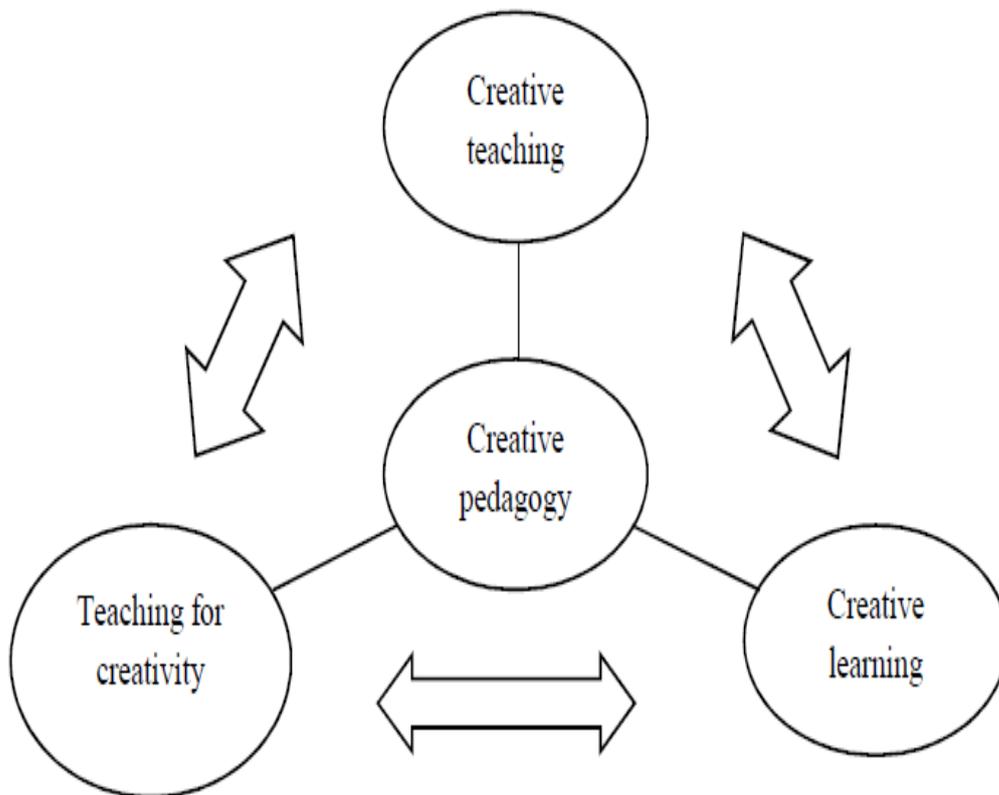


Figure 0-1 Three Elements of Creative Pedagogy (Lin, 2011, 151)

2.3.5.1 Importance of Creativity in Education

Creativity has become a priority in education. It has been agreed upon that the relation between education and creativity is significantly important Craft (2005, p. 2). Creativity has been indicated as a means for solving numerous amounts of social, economic and political problems. Such kinds of problems arise because of the existing gap between actual life requirements and educational outcomes. Thus, it is a vital issue to prepare individuals through promoting their creativity which would help make them ready to challenge unexpected problems.

Moreover, it is argued that educational instructions limit the individuals' skills and ability to transmit knowledge. Such skills and knowledge are not expectable and predictable, at the same time, they are needed for the future. Thus, Cropley (2001, p. 2) argues for the importance of nurturing creativity which can be achieved through promoting flexibility, the ability to adopt unusual ways of doing things, openness to new ideas and ability to take risk when working out with unexpected problems not just transmitting knowledge and skills.

This argument points to the educational practices and goals which, in most of the cases, emphasis only knowledge, while skills acquisition might lead to insufficiency in dealing with problems in future. Those problems have not been predicted nor transmitted to learners during the education age.

Consequently, there was a strong need for finding ways to solve such kinds of problems. Therefore, Jeffrey (2006, p. 11) proposes three main drivers that reinforce the relationship between education and creativity. These drivers are social, economic and technological.

Regarding the social driver, it is concerned with personal choices being of a fundamental importance for social interaction and engagement among people. Students should be able to distinguish and identify the possibilities and make sense of the choices that face them in future.

In contrast, the economic driver, there is a universal tendency to upgrade educational levels having the aim to benefit future economic development. This can be achieved through developing and generating skills to fit the requirements of future economic field. The value of creativity in education has significantly increased because of the speed of economic development. This is due to the fact that creativity can produce

new and variant forms of work and employment which are not existing when the workers and employees are at school. Jeffrey (2006, p. 11)

Lastly, the technological driver offers a chance for people to establish creative levels in dealing with digital technology. Students, being current user as well as future users of technology, need to make use of their creative and imaginative thoughts, else they will not be able to deal with digital devices and the resources obtained through it. Jeffrey (2006, p. 11)

2.3.5.2 Major Aspects to Foster Creativity in Education

2.3.5.2.1 Educational Environment

Regarding the environment, the pedagogical practices have been designed with an appreciation of students' commands and interests, so teachers' practices must create an atmosphere wherein students can have interaction freely with the activities. Offering a space for students to behave freely and take part is one of the central factors of fostering creativity due to the fact that this offering such a space increases the chances for students to signify their pursuits and sources of strength. According to Gibson (2010) (cited in Alsaou, 2015, p. 69), creativity in classrooms is primarily and totally based on students' response after they actively interact within classroom activities, demonstrating opportunities for inquiry-based learning, collaborative learning, and constructivism. Thus, cooperation and negotiation between the instructor and his/her students should result in the promoting creativity (Sawyer, 2004; cited in Alsaou, 2015, p. 69). Consequently, fostering creativity in the classroom appears to require addressing the students' dispositions and interests to permit the emergence of such negotiation and cooperation among the teacher and students. Sternberg (2006) (cited in Alsaou, 2015, p. 69)

declares that, when students are taught in a way that suits how they think, they do better in school. Students with creative or practical abilities, can be at a downside in course after course, year after year. Therefore, drawing attention to fostering creativity would possibly remodel students from passive receivers to socially active individuals who, in turn, expand their gaining knowledge of and private effectiveness. As Cropley (2001, p. 2) says, creativity offers classroom approaches which might be thrilling and accordingly appear to be a greater efficient way of fostering learning and personal increase in the young. Creativity enables students learn and develop.

2.3.5.2.2 Teaching Process

During the teaching process, a number of practices can be used to cultivate creative thinking. Cropley (2001, p. 2) notes that a number of those practices are based on idea-generating techniques, which include, innovative problem solving, brainstorming, mind mapping, hierarchical method, morphological method, and imagery training, in addition to the academic strategies including flex study, buzz groups, bridge building, lateral thinking and idea production. Moreover, he (2001, p. 2) says that, despite the fact that those strategies are properly provided and can practically be applied in teaching in general, they faced criticism regarding their feasibility and workability claims. Examples of these drawbacks are: treating assumptions and suppositions as essential facts, viewing correlations as cause and effect connections, making generalizations without supporting empirical findings, and claiming workability irrespective of the traits of the people taking part in the activity. Accordingly, Cropley (2001, p. 2) requests researchers not to forget all elements and provide a holistic method that focuses on cognitive

components of the students, their motivation and personality, and their interplay with the environment.

Cropley (2001, p. 2) was criticized for not trying and assisting the strategies with evidence based on research. Conversely, as stated by Ashahou (2015, p. 67), “there was an increased concern to foster students’ possibility thinking, which could be seen as the heart of everyday creativity”. Possibility thinking is an essential constituent of cultivating creativity which can be seen from three levels (e.g., domain, process and agents). In 2006, the central factors of possibility thinking have been empirically documented by Burnard *et al.*, (2006, p. 4), which include seven aspects: posing questions, being imaginative, demonstrating innovation, taking-risk, showing self-determination, impressing and making connections.

Teaching approaches are numerous and different; however, they could include comparable teaching principles or comparable factors that have to be fostered. These teaching approaches are also related with the instructor principals and the context wherein the activities occur.

2.3.5.2.2 Teachers’ Principles

Concerning the third point, teachers’ principles, teachers need to have high quality mindset closer to innovative efforts and flexibility in addition to individual thinking inspiration. For example, Haring-Smith (2006) (cited in Al-Sahou, 2015, p. 69) argues that encouraging students to take risks and to be independent and free in their work are important elements of creative education. Ewing and Gibson (2007, p. 161) agree with those factors and add: openness to experience, open-mindedness, and spontaneity as teaching necessities for creativity. Classroom activities that foster students’ creativity are much more likely to provide enough time for

creative thinking, rewarding uncommon thoughts, promoting students' risk-taking desire, facilitating questioning and accepting mistakes (Sternberg & Williams, 1996; cited in Alsahou, 2015, p. 69).

The teacher additionally takes into consideration students' problems and interests, producing diverse and various assumptions, highlighting the holistic view of the ideas and inspiring students to consider their thinking (Starko, 1995, p. 4). Meanwhile, the classroom activities have to be kept away from some factors that demolish creativity, such as limiting opportunities, competition, stresses on students, and evaluation (Amabile, 1989, p. 4). These factors deliver the impact that they depend closely on the teachers' role and responsibilities. Teachers who create a good relationship with their students and are eager to fulfill students' necessities and interests are much more likely to be creative teachers and supporters of fostering students' innovative potential. Such teachers can set up innovative connections among the learners themselves through developing classroom activities and teaching techniques that foster their innovative endeavors (Sternberg & Williams, 1996; cited in Alsahou, 2015, p. 70).

Therefore, teachers need to include students' involvement as an essential part of the learning process. This can be achieved by supporting students' role in the classroom activities and in addition to the teaching methods (Davis & Rimm, 1998; cited in Alsahou, 2015, p. 70). In addition, teachers are required to facilitate long-term responsibilities and encourage students to take risks with the process of learning (Sternberg & Lubart, 1991; cited in Alsahou, 2015, p. 70). Moreover, Cropley (1997, p. 83) believes that teachers need to recollect information, unique ways of considering it, inventiveness in locating answers, ability to assess ideas,

ability and willingness to communicate solutions to others, and assessment of solutions in the context of the real world.

2.4 Related Previous Studies

2.4.1 Al-Harbi (2002)

The study aimed to estimate the effect of improving critical thinking and of using brainstorming on the educational success. The sample of the study consists of 63 students from the secondary first grade in biology in the kingdom of Saudi Arabia. The participants have been divided into two groups; experimental and control group. The outcomes of the study confirmed the presence of statistically significance differences between the educational success achieved by the experimental group who studied through the use of brainstorming and critical thinking and the achievement of the control group who studied according to the traditional teacher-centered approach.

2.4.2 Al-Bliwi (2006)

The study examined the effectiveness of brainstorming in improving creative thinking and measuring the thinking occurred amongst technology steam students. The sample consisted of (100) male and female students selected from Tabouk Public schools; one school for males and the other for females. Two classes were selected in each school, every class contained (25) students.

The findings of the study confirmed that there were statistically significant differences between the study groups in regard to teaching creative thinking. There were no extensive statistical variations among the

manner of males' and females' overall performance and interplay among the method and gender.

2.4.3 De Caroli and Sagone (2007)

De Caroli and Sagone (2007) test the relations of creative thinking with five of the elements of personality: energy, consciousness, agreeableness, openness to experiences, emotional instability, and difference by age and gender on creativity. The methodology of this study is a survey, a sample of Italian school youngsters 56 boys and 56 girls, among 8-10 years of age, participated in the study answering a test of creative thinking questionnaire. Analysis of the outcomes indicated that there were statistically significant differences between the scores achieved by older kids and the younger ones in favor of the older kids. Girls received considerably better rankings than boys on originality and elaboration.

The findings showed a negative and a modest relation of flexibility regarding participants creative thinking abilities. These findings propose a kind of clarification of the relationship between creativity and personality in developmental age. This study is taken into consideration as being of great importance because it offers some insights about creative thinking abilities and the tools used in cultivating it.

2.4.4 Al-Olimat (2008)

The study investigated the impact of brainstorming and discovery strategies on improving creative thinking abilities amongst eight graders in science in Jordan. The researcher used qualitative research. The sample turned into a total of 85 participants who were purposefully selected to participate in the study. The participants were divided into an experimental group and a control group. The findings of the study confirmed that there was an evident impact of brainstorming and discovery strategies in cultivating creative thinking skills. Moreover, there were variations between both strategies in the favor of brainstorming.

2.5 Discussion and Comparison of the Previous Studies

The previous studies have been discussed as shown below:

1. The sample of all previous studies are students which vary in number and selecting the method. The sample of this study is (400) students and (24) Iraqi EFL 4th preparatory school teachers. De Caroli and Sagone (2007) selected (56) girls. Al-Harbi (2002) selected (63) students. Al-Bliwi (2006) selected (100) students. Al-Olimat (2008) selected (85) students.
2. The current study uses quantitative research the same as De Caroli and Sagone (2007). Al-Harbi (2002) used qualitative research. Al-Bliwi (2006) used qualitative research. Al-Olimat (2008) used qualitative research.
3. Regarding to the use of instrument and statistical tools, the current study uses a questionnaire, as the same with Di Caroli and Sagone (2007) Al-Harbi (2002) used A test. Al-Bliwi (2006) used a test. Al-Olimat (2008) used a test.

Chapter Three

Research Methods

3.1 Introductory Notes

This chapter explains the methods used in the current study, including the research design and procedures used to meet the study's aims. It also includes the study population and data collection instruments. The statistical analysis techniques used in this study are reported in this chapter as well.

3.2 Research Design

In order to achieve the aims of the current study, the researcher employs the descriptive analytical method. The descriptive analytical method means “any research that describes a setting or events in numerical terms” (Brown & Rogers, 2002, p.118). This method is chosen because it helps finding out to what extent the creative thinking abilities are helpful in improving reading comprehension for EFL students.

Research approaches are actually the procedures and plans used for research that help identifying the steps from general assumptions to clear identified and detailed methods for the sake of data collection, data analysis and interpretation of the results obtained. This plan involves some decisions. The most important thing is to decide which approach should be used in accordance to the topic covered in a specific study.

3.3 Population of the Study

A population is any set of items, individuals, etc. that share some common and observable characteristics and from which a sample can be

taken. A sample, on the other hand, is any group of individuals that is selected to represent a population (Witzel & Mercer, 2003, 90).

The study population is defined as the wider group of individuals about which the researcher wants to make statements (Lodico *et al.*, 2006, p. 140). Thus, the population of the current study includes EFL fourth-year preparatory school students as well as EFL teachers who are teaching in secondary schools. All the schools are in the city of Karbala during the academic year 2020-2021. The population includes mainly EFL students of secondary school. For further assurance of the results, a number of EFL teachers were included as well.

3.4 Sample of the Study

A sample is a smaller group selected from a larger population that is representative of the larger population (Lodico *et al.*, 2006, p. 143). As for the current study, four secondary schools (two for girls and two for boys) were randomly selected to participate in the current study. The schools for girls are: Al-Mustansiriya Secondary School for Girls and Al-Madaen Secondary School for Girls. While the schools for boys are: Al-Hindia Preparatory School for boys and Al-Furat Preparatory School for boys. The students and the EFL teachers in those schools were asked to participate in the current study.

As for the sample of the students, each of the four schools includes 2 classes with an average number of 50 students. The total number of female students in the schools for girls is 202 in the two classes with an average of 51 female students. As for the schools for boys, the total number of male students in schools for boys is 198 in the two classes with an average of 49 male students.

Table 3-1 Demographic Features of the Participants

Schools		Female	Male
Girls' Schools	Al-Mustansirya School	102	0
	Al-Madaen School	100	0
Boys' Schools	Al-Hindia School	0	98
	Al-Furat School	0	100
Total		202	198
Total		400	

3.5 Instruments

In order to achieve the objectives of the current study, the researcher used two different types of tools: two tests and a questionnaire. The first test is a creativity test and the second one is a reading comprehension test. Below is a detailed description of the research tools:

3.5.1 The Creativity Test

Creative thinking test can be described as follows:

3.5.1.1 Description of the Test

Baqer Mehdi's test of creativity was chosen to be used to estimate the creative thinking ability of the participants. According to Baqer Mehdi, students' creativity is represented by their scores on various factors of verbal and non-verbal creativity including fluency, originality, flexibility and elaboration. (Sarsani, 1999,94). Baqer Mehdi's Test (1985 a) of creative thinking, verbal test was adapted for the present study. The verbal test of creativity includes four sub-tests, which are: the consequence test (takes 15 minutes), the unusual (or novel) uses test (12 minutes), the new relationships (similarity) test (15 minutes), and the product improvement test (6 minutes). The total time required for the whole parts of the test is 48 minutes (see Appendix: B1).

Part One: Consequences Test: This part is based on Torrance's "just suppose" activity; it is presented in the form of a hypothetical situation. The tasks challenge the students with a situation where there are a large number of possible hypothetical responses, this implies cause and effect thinking. The more relevant responses proposed by the participants yields a measure of his ideational fluency, while the number of shifts in thinking styles of the answers gives an indication of the verbal flexibility and the frequency of departure from the common place actually measures originality. The participants are encouraged to think of as many possibilities of the given situation as they can, and to write them in the space provided under the description of each situation. The effect of experience is minimum because the situations are hypothetical. The situations given provide an opportunity for the participants' imagination

and originality. Examples are given in the test prior to each described situation to acquaint them with the nature of the test.

Part Two: Unusual Uses: In this part, common things like water, a piece of stone and a wooden stick are used to stimulate the participants thinking. This part leads the participants to yield as much novel responses as possible. As for the evaluation of the responses, the number of relevant responses measures the ideational fluency, the number of the categories of thinking measures the verbal flexibility while the number of the uncommon responses measures the originality. In this part of the test, the names of three common subjects, e.g., a piece of stone, water and a wooden stick are given and the participants are asked to write as many novel, unusual and interesting uses of these subjects as possible. This part of the test measures whether the subject can make a shift in his frame of reference to make unusual use of the environment in an original manner.

Part Three: New Relationships: In this part of the test, the participants are asked to think naturally about the relationships between two apparently dissimilar objects. Answers for this part help scoring responses for fluency, originality, and flexibility in a way similar to part two of the test (the unusual uses). In this part of the test, there are three different pairs of words, such as tree and house, air and water, and chair and ladder. The participants are asked to think of all possible relationships between the two words in each pair. From the answers in this part, the imagination of the participants is indicated.

Part Four: Product Improvement: In this part of the test the participants are asked to imagine a figure of a toy horse and asked to suggest ideas to make it a more interesting and unusual toy. This task stimulates the participants and encourages divergent thinking. This part of

the test measures flexibility and originality in addition to ideational fluency.

3.5.1.1 The Scoring Procedure for the Test

In regard to scoring the answers for the test, there are no right or wrong responses. Each item is scored for fluency, flexibility and originality as explained below:

- 1- Fluency: In order to score the participants' sheets for fluency, the researcher goes through the responses and strikes off the irrelevant and repeated answers. The remaining number is the fluency score.
- 2- Flexibility: Flexibility refers to the individuals' ability to produce variances in trend of thought. The ideas that differ in trend of approach are treated as one for flexibility scoring. Thus, if three given ideas belong to only one approach of thought trend, flexibility will be scored as one. On the other hand, if all the three ideas are based on three different approaches, flexibility will be scored as 3.
- 3- Originality: Originality is understood by the uncommonness of the given ideas or responses. Thus, if less than 5% of the respondents give analogous responses, these responses are given different weights. Consequently, a response that is given by 0.1% - 0.99 of the participant will be given the score 5; a response that is given by 1% - 1.99% of the respondents will be given 4; a response given by 2% - 2.99% of the respondents will be given 3; the response given by 3% - 3.99% of the participants will be given 2; a response given by 4% - 4.99% of the respondents will be given 1; finally, a responses given by 5% or more will be given zero.

3.5.2 Reading Comprehension Test

A considerable number of tests are established to assess EFL learners' reading comprehension. As for the current study the researcher decided to use a standard test to evaluate the participants' reading comprehension. Therefore, the reading comprehension part of Michigan Test of English Language Proficiency (MTELP) is chosen. It is chosen because it is a well-established standardized test of English language proficiency that was developed to assess students at different proficiency levels. The test goes in line with universal applicable regulations. Another reason for choosing this specific test is that it has been assured by a number of assessment specialists that this test fulfills the following points, as stated by Lai (2009, p. 67):

1. Absence of bias in items.
2. Appropriate for all levels.
3. Each question of the test was carefully reviewed by EFL teachers and only the questions that were judged as being acceptable and fair for students all over the world were included.
4. It has a very sufficient validity and acceptable reliability.
5. It is economic in term of time.

The MTELP is a multiple-choice test targeting abilities in grammar, vocabulary and reading comprehension (only the part of reading comprehension is used in the current study). The items of the test represent a complete range of difficulty ranging from very simple ones aiming at learners with limited ability in English to difficult items aiming at learners with advanced ability. The reading comprehension part of the MTELP test consists of twenty items. It comprises four passages ranging from 100 to 350 words. Each passage is followed by five questions. The testees are

required to read the passages carefully and answer the five multiple-choice items about the passages.

Regarding the scoring of the test, five points are given to each item. So, the total mark is 100 for the reading comprehension part of the test. The scores are interpreted as follows:

1. Level 1 (beginners) = 0-30
2. Level 2 (post-beginners): 31-49
3. Level 3 (pre-advanced): 50-69
4. Level 4 (advanced): 70-100

3.5.3 Teachers' Questionnaire

In order to validate the findings obtained from the tests adopted in the study, the researcher uses another instrument that is a questionnaire administered to a number of EFL teachers who are teaching in secondary schools. The “questionnaire” is an appropriate tool for achieving the aims of a study, because it is one of the most popular and widely used tests for creativity. Wilson and McLean (1994, p. 33) state that the questionnaire is a widely useful tool for collecting survey information, providing structured and numerical data.

The researcher carries out the questionnaire with 24 EFL teachers who are teaching in the fourth secondary years schools. She consults seven experts who are teachers in the university of Babylon (see Appendix B) and they have made some modifications of some statements in the questionnaire. The researcher asks 30 EFL teachers in Babil governorate to fill in the questionnaire but only 24 have fully answered all the items in the questionnaire.

The main aim of the questionnaire is to detect the EFL teachers' view concerning creative thinking. The questionnaire helps finding out the teachers view regarding the importance of creative thinking in the process of learning a foreign language. The items of the questionnaire focus on the benefit of creative thinking in improving reading comprehension skills of EFL students.

The questionnaire consists of two parts: The first part is devoted to figure out the teachers view about the possibility to teach creative thinking. Part two is devoted to investigate the teachers' view about the relation between creative thinking and reading comprehension.

The responses to these items are measured through a five-point Likert scale, starting with the degree of strong approval (strongly agree) which is given (5) marks, then approval (agree) given (4) marks, then neutrality (neutral) given (3) marks, then disapproval (disagree) given (2) marks, and it ends with strong disapproval (strongly disagree) which is given only (1) mark.

The researcher chooses the questionnaires which are adopted from Hana (2017, p. 355), Alsahou (2015) and Aldujayn and Alsubhi (2020) (see Appendix B).

3.5.4 Validity of the Questionnaire

Validity is one of the traits to consider when selecting or creating a research tool. Validity means testing what it is supposed to test and nothing else (Jupp, 2006, 311). Various types of validity indicated by scholars; face validity is judged by the scientific community that the indicator actually measures construction. To ensure the correctness of the questionnaire, the

researcher presented its items to a jury of seven experts in the field of English as a foreign language and linguistics.

3.6 Data Analyses

After collecting the required data, the whole data were interred into the SPSS software. Two files were created, one collective file for the results of the creative thinking test and the reading comprehension test. The other file is for the results of the questionnaire.

3.6.1 Assessing Normality of Distribution of the Scores

In order to reach accurate results out of the collected data, it is important to check the data for the assumptions required for the statistical used in analyzing the data. The majority techniques that are going to be of the statistical techniques assume a normal distribution of the scores obtained for any dependent variable. This means that the scores should have the greatest frequency of scores in the middle.

In order to test the normality of the distribution of data for both the creative thinking test and the reading comprehension test, descriptive statistics were employed, as summarized below:

1. The normality of the distribution of scores for the creative thinking test was tested using descriptive statistics and the reliability of this instrument was proved as shown in figure below:

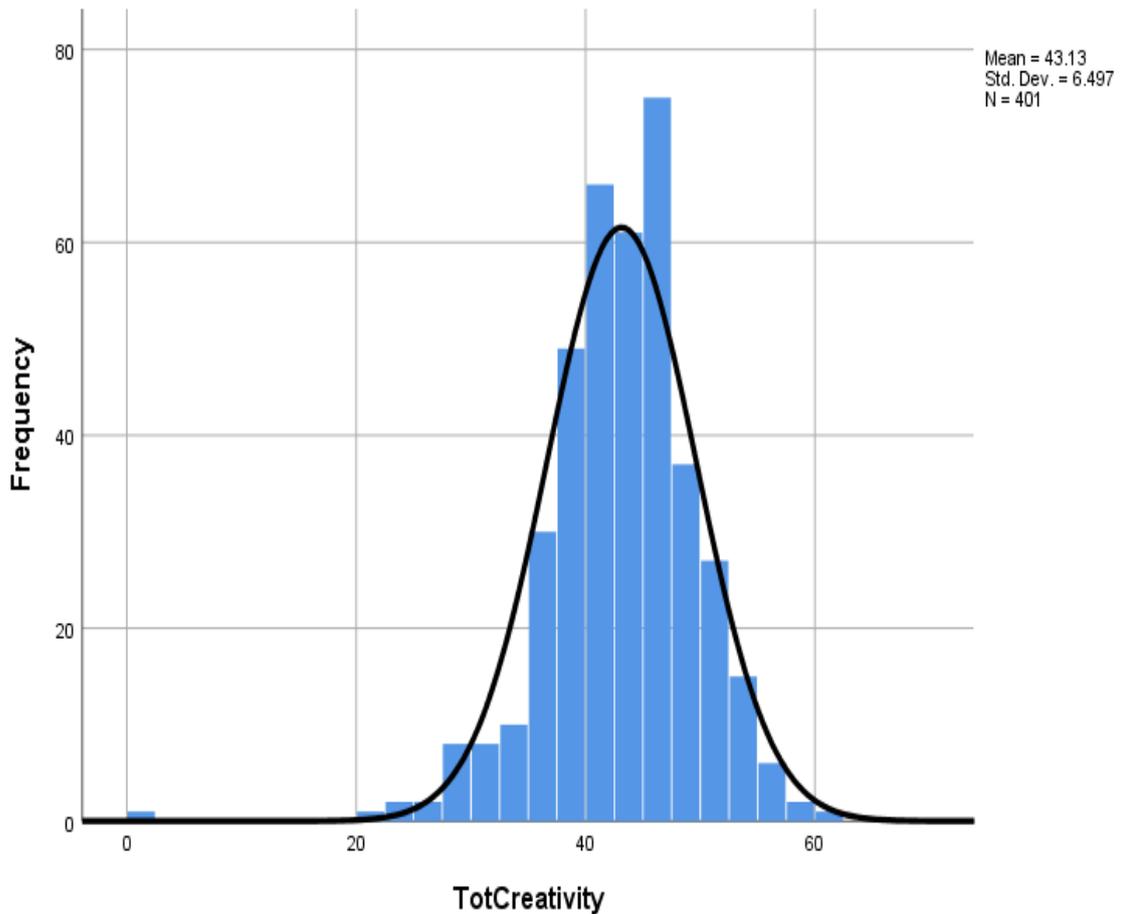


Figure 0-1 Normal Distribution of Creative Thinking Test

2. The normality of distribution of scores for the reading comprehension test was also checked using the same procedures followed in examining the normality of distribution of the creative thinking test, i.e., descriptive statistics was run and the normal distribution of scores was approved as shown in Figure 3.2 below:

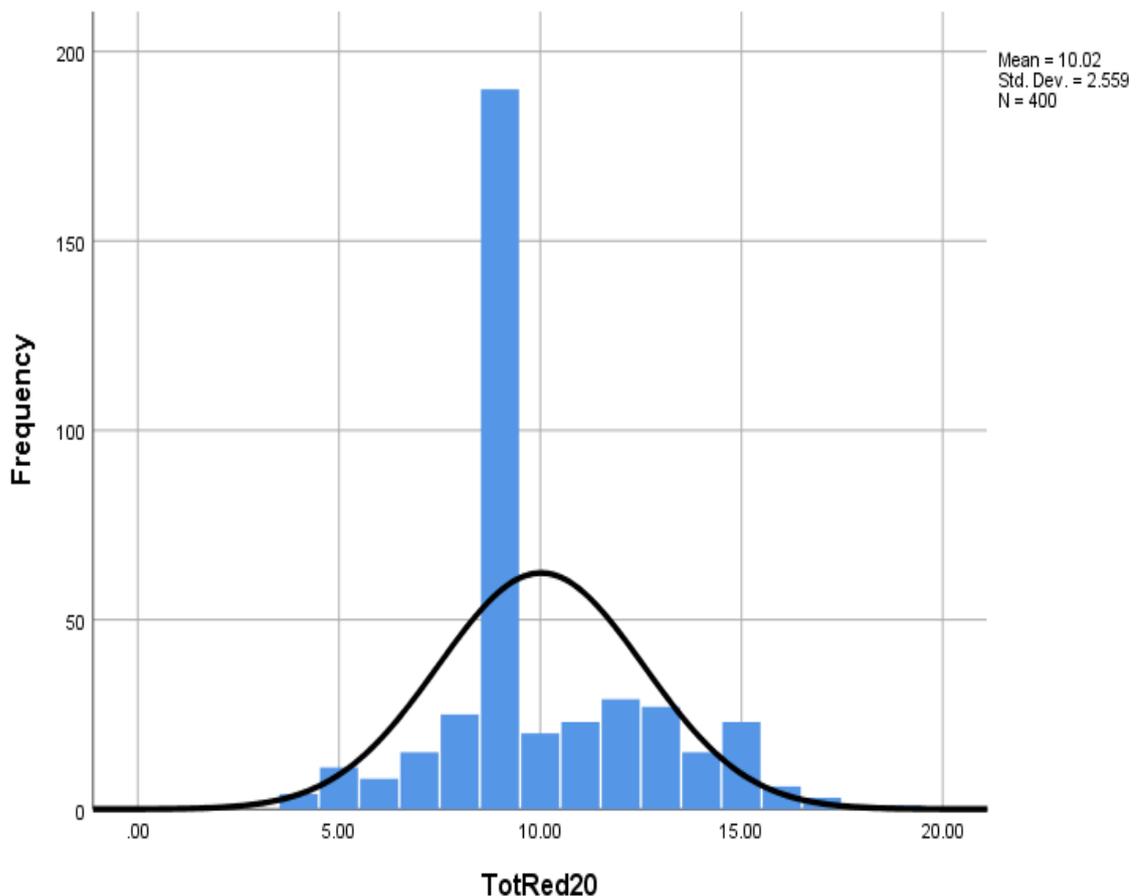


Figure 0-2 Normal Distribution of the Reading Comprehension Test

3.6.2 The Statistical Techniques Used

In order to answer the research questions a number of statistical techniques were conducted as explained below:

1. Seeking an answer for the first question which asks about the current status of the Iraqi EFL secondary schools learners' ability in creative thinking, descriptive statistics were run for the creative thinking test.
2. Similarly in answering the second question which deals with reading comprehension ability of the participant, descriptive

statistics was run for the scores obtained in the reading comprehension test.

3. As for the third question, i.e., the effect of creative thinking skills on the reading comprehension skills of the participants, a Pearson product moment correlation was run for the variable that represents the scores obtained from the creative thinking test.
4. Regarding the fourth question which investigate the relation between gender and creative thinking abilities, chi-square formula was run.
5. In answering the fifth question that examines the possibility to teach creative thinking, descriptive statistics was for the data collected from the questionnaire.
6. As for the last question which investigates the teacher' perspective about the effect of creative thinking on EFL reading comprehension, descriptive statistics was run.

CHAPTER FOUR

Data Analyses and Results

4.1 Introductory Notes

The current chapter presents an overview of the results of the analyses operated for the data collected throughout the current study. The analyses are presented in accordance to the questions raised in the study.

4.2 The Current status in Creative Thinking

In order to find out the current status of the participants in regard to their ability in creative thinking, descriptive statistics was run for the variable that represents the participants' scores in creative thinking test. The results are shown in Table 4.1 below:

Table 0-1 Descriptive Statistics for Creative Thinking Test

	N	Minimum	Maximum	Mean	Std. Deviation
Fluency	400	4	30	19.16	4.171
Flexibility	400	12	33	21.39	3.858
Originality	400	0	13	2.69	2.333
Total Creativity	400	2	60	43.13	6.497
Valid N (listwise)	400				

As shown in the Table 4.1 above the mean score in the first component of creativity which is fluency is 19.16, and in the second component is 21.30 while in the third component is 2.69, with a mean score for creativity as a whole of 43.13. These scores are interpreted according to Table 2 below:

Table 0-2 Interpretation of the Scores of the Participants in Creative Thinking Test

	Range score	No of student	Percentage%
Very poor	10 – 40	56	0.14
Poor scoring	41- 65	279	0.70
Good scoring	66 – 75	61	0.15
Very good scoring	76 and more	4	0.01

The mean score of participants in creativity as a whole is 43.13 which means that the creative thinking ability of the participants is poor. It is also found that the less ability is in originality which appears with a mean score of 2.69 then the fluency which is 19.16 and the highest one is flexibility which is 21.39. So, the current status of creativity is poor.

illustrates the distribution of participants into groups of very poor, poor, good, and very good. It further shows that the majority of the students are poor.

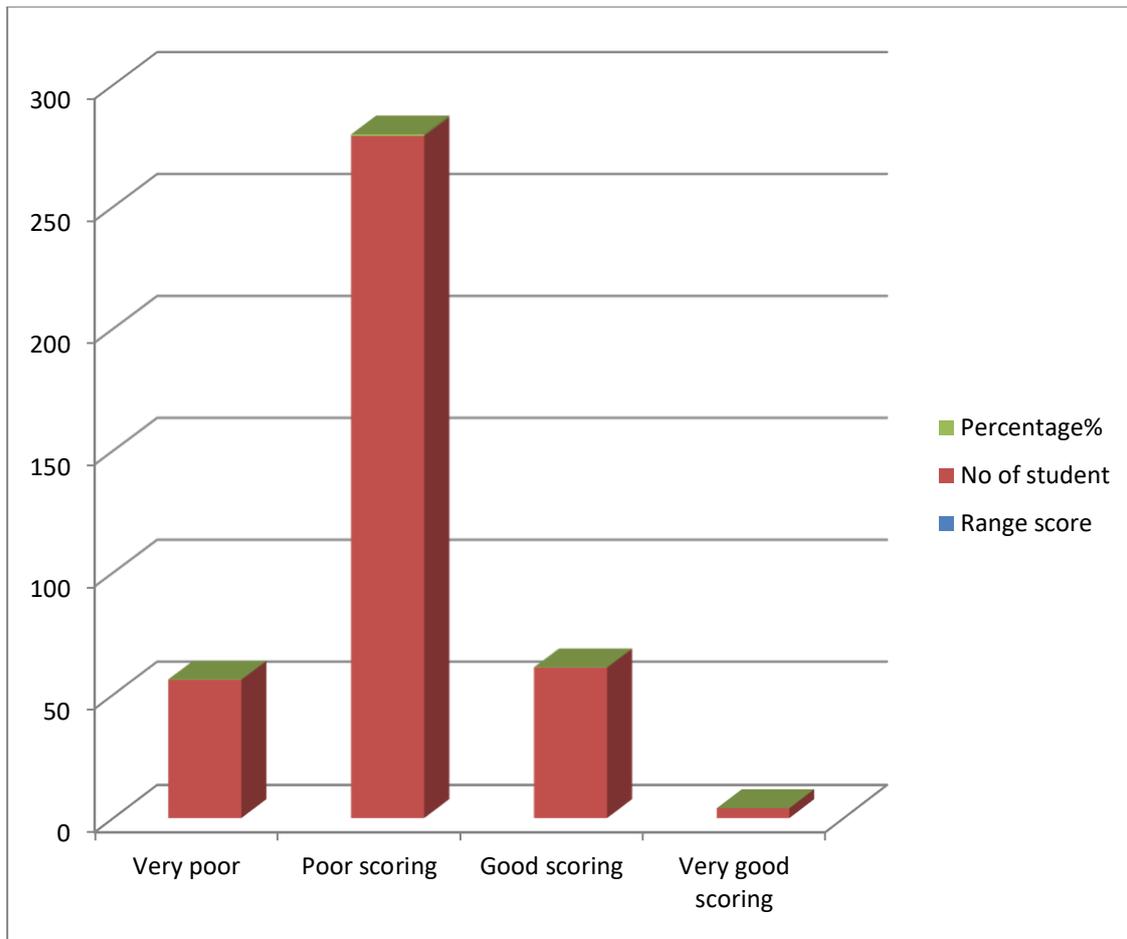


Figure 0-1 Interpretation of Participants' Creative Thinking

4.3 The Current Status in Reading Comprehension

In order to answer the second research question which deals with the current status of the participants in regard to their reading comprehension. Statistical descriptive analysis was run. The results of the analysis are presented in Table 4.3 below:

Table 0-3 Descriptive Statistics of the Scores in Reading Comprehension Test

	N	Minimum	Maximum	Mean	Std. Deviation
Total scores of Reading Comprehension Test	400	20.00	95.00	50.0875	12.79508
Valid (listwise)	N 400				

As shown in Table 4.3 above, the minimum score obtained is 20 out of 100 and the maximum is 95 with a mean score of 50.0875. These figures are interpreted according to the following table:

Table 0-4 Distribution of the Level of the Reading Comprehension

	Range score	No of students	Percentage%
Poor	10 – 49	253	0.6325
Average	50 – 69	114	0.105
good	70 and more	33	0.0825

This means that the level of the participants is average. The results are shown in Figure 4.2 below:

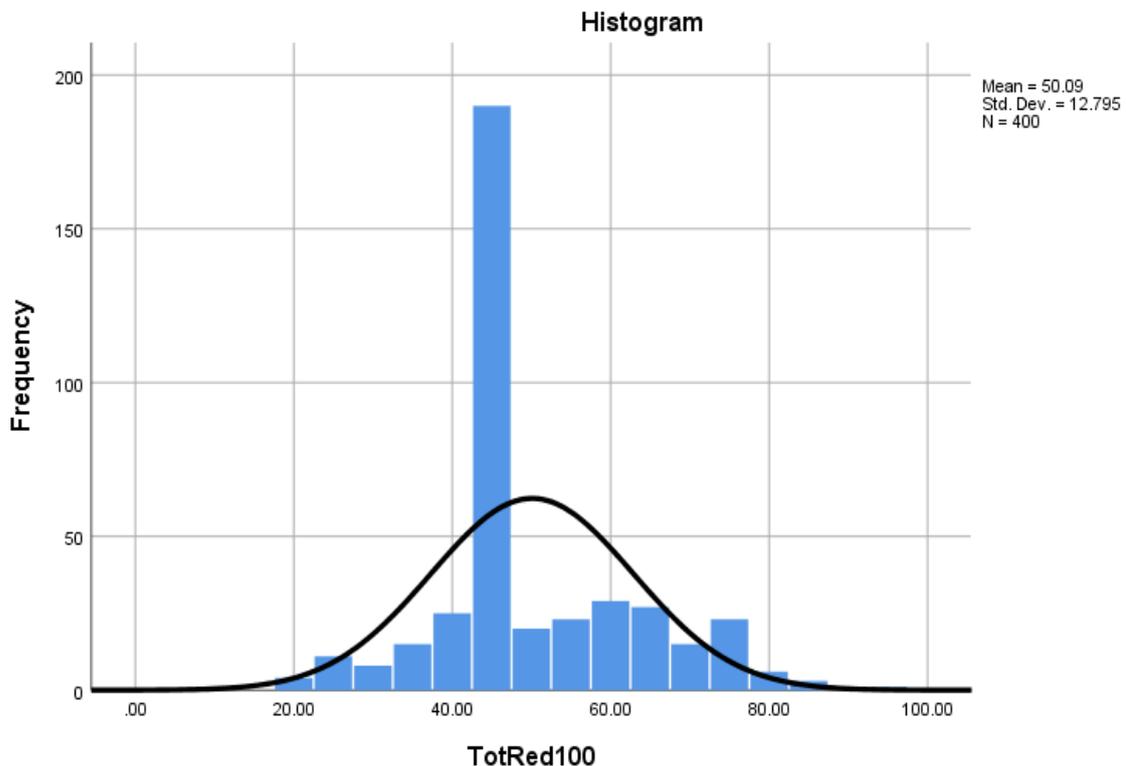


Figure 0-2 The Distribution of the Participants Reading Scores

4.4 The Relation between Creative Thinking and Reading Comprehension

In order to find out whether there is any relation between the participants' creative thinking abilities and their performance in reading comprehension tests, Pearson Product Moment Correlation was used. The results show that there is a positive correlation between the two. As for the strength of the relation, different interpretations are suggested by different satiations. For example, Cohen (1988) as stated by (Pallant, 2005, p.126) suggested the following:

$r = .10$ to $.29$ or $r = -.10$ to $-.29$ small

$r=.30$ to $.49$ or $r=-.30$ to $-.49$ medium

$r=.50$ to 1.0 or $r=-.50$ to -1.0 large

The negative sign refers to the direction of the relationship; the existence of a negative sign means that the relation is negative correlation i.e. high scores on one variable are associated with low scores on the other. As shown in Table 4.5 below the Pearson Correlation value is 0.114. This means that there is a small positive relation between the creative thinking abilities and reading comprehension performance for the participants.

Table 0-5 Pearson Correlation for the Creative Thinking vs. Reading Comprehension Tests

		Total Scores of reading Comprehension Test	Total Scores of Creative Thinking Test
Total Scores of reading Comprehension Test	Pearson Correlation	1	.114*
	Sig. (2-tailed)		.022
	N	400	400
Total	Pearson Correlation	.114*	1
	Sig. (2-tailed)	.022	
	N	400	401
*. Correlation is significant at the 0.05 level (2-tailed).			

In order to get a clearer picture of the relation between creative thinking and reading comprehension, scatterplot was run.

Figure 0-1 below shows this relation

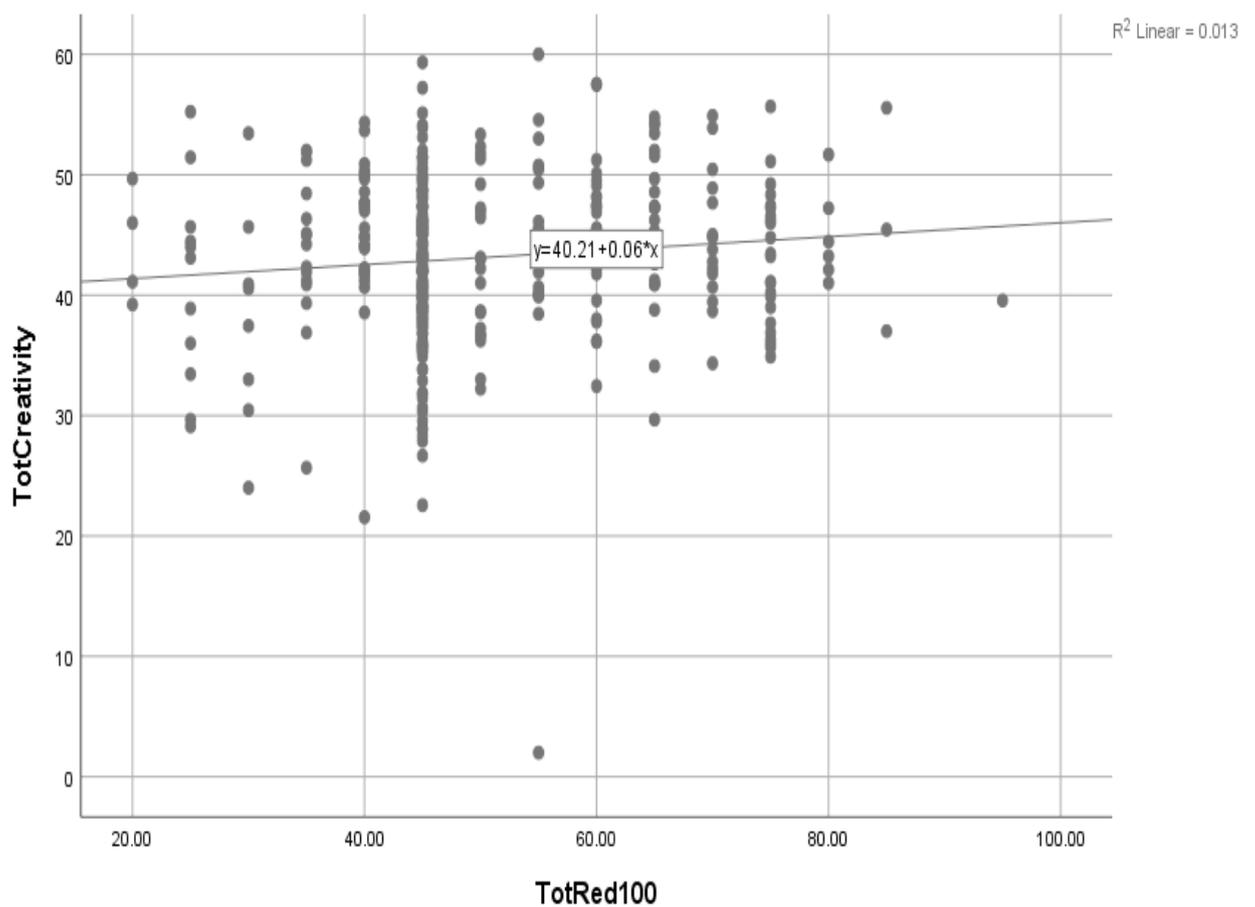


Figure 0-1 Scatterplot for the Relation Between Creative Thinking and Reading Comprehension

The line in Figure 4.1 is going upward indicating that there is a positive relation between creative thinking and reading comprehension.

Even though, the raising is not that much big which means that the relation is small.

4.5 Gender and Creative Thinking

Chi-square was run to go to the investigation of the relation between gender and creative thinking, that is to find out whether there is any difference between male and female students in regard to their creative thinking ability. The results are shown in Table 4.6 below:

Table 0-6 Chi-Square Test of Gender vs. Creative Thinking

Chi-Square Test

	Value	Df	Asymptotic Significance (2- sided)
Pearson Chi-Square	5.182 ^a	2	.05
Likelihood Ratio	5.196	2	.074
Linear-by-Linear Association	4.875	1	.027
N of Valid Cases	400		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 64.68.

Since we have two categories (male and female), the Person Chi-Square value is used. In Table 4.6 above this value is 5.182 with an associated significance level of 0.05. Since this value is larger than 0.05, it is concluded that the result is not significant. This means that males are not significantly different from females in regard to their ability in creative thinking.

4.6 Teaching Creative Thinking

In seeking an answer for the question that deals with the possibility to teach creative thinking from the teachers' perspectives and their readiness to teach it, descriptive statistics was run for the results obtained from the teachers' questionnaire. The results are presented separately for each item in part two of the questionnaire, because part two is devoted to ask about the possibility to teach creative thinking. The items included in the analyses are those that ask directly about the possibility to teach creative thinking and its benefit. Tables 4.7 to 4.12 below are parallel to these items:

Table 0-7 Teachers' Questionnaire - Item One

creative thinking aids active and independent learning

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	0	0	0	0
Disagree	0	0	0	0
Valid Neutral	2	8.3	8.3	8.3
Agree	14	58.3	58.3	66.6
strongly agree	8	33.3	33.3	99.9
Total	24	100.0	100.0	

As shown in

Table 0-7 above, the majority of the teachers (about 58.3) agree that creative thinking aids active and independent learning. **Error! Reference source not found.** below shows this result:

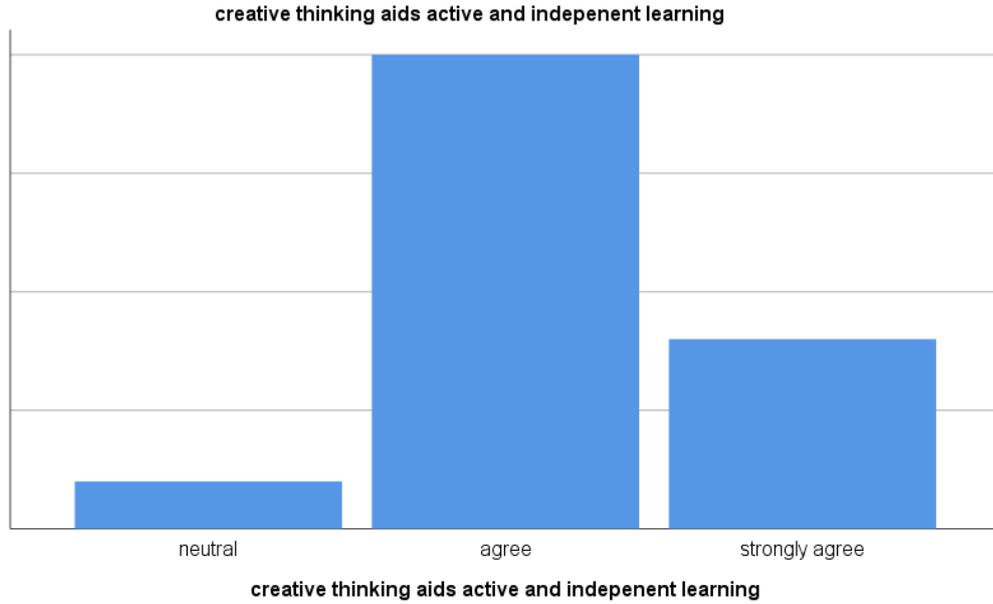


Figure 4-3 Teachers' Questionnaire- Item One

Table 0-8 Teaches' Questionnaire - Item Two

Encouraging students to use creative thinking is one of the responsibilities of EFL teachers

	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	0	0	0	0
Valid Disagree	1	4.1	4.1	4.1
Neutral	8	33.3	33.3	37.4
Agree	13	54.1	54.1	91.5
strongly agree	2	8.3	8.3	99.8
Total	24	99.8	99.8	

In regard to the teachers' readiness to teach again the majority of the respondents (54.1) agree about the responsibility of teachers to teach creative thinking. This same result is shown clearer in figure 4.4:

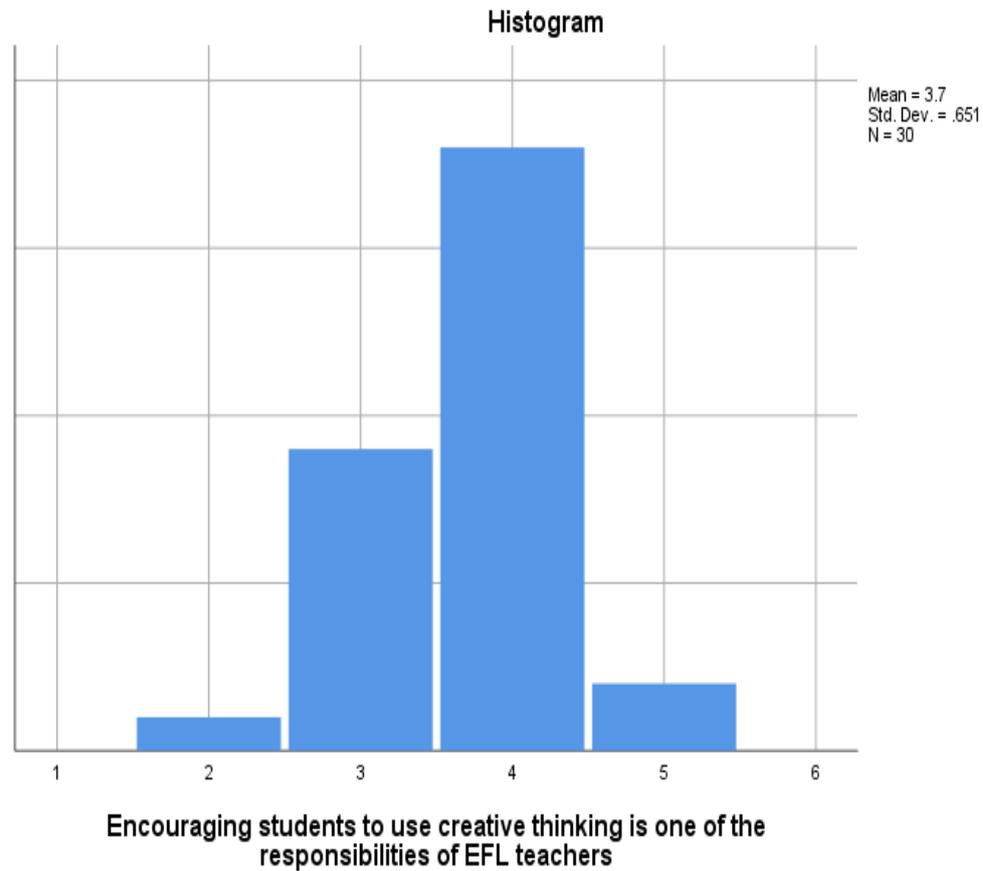


Figure 0-3 Teaches' Questionnaire - Item Two

Table 0-9 Teachers' Questionnaire - Item Three

It is essential for EFL teacher to ask creative thinking questions

	Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree	0	0	0	0
Disagree	0	0	0	0
Valid Neutral	3	13.3	13.3	13.3
Agree	15	63.4	63.4	76.7
strongly agree	6	23.3	23.3	100
Total	24	100.0	100.0	100.0

The percent of the teachers who agree about the importance to ask creative thinking questions by EFL teachers is 63.3% which also exceeds half of the respondents' number. This means that there is a general agreement about the importance of the role of teachers in teaching creative thinking. This result is figured out in Figure 0-4 below:

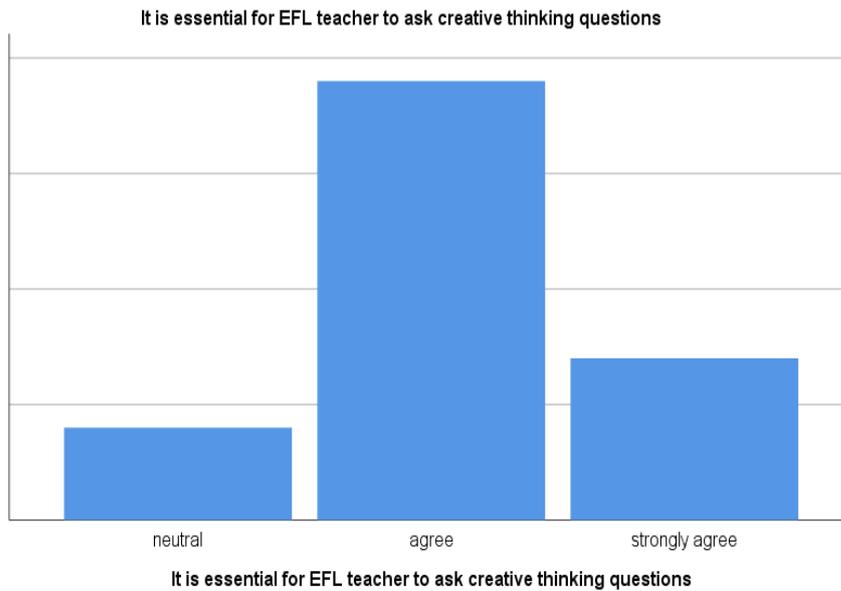


Figure 0-4 Teachers Questionnaire - Item Three

Table 0-10 Teachers' Questionnaire - Item Four

I believe that students face obstacles that prevent them from being creative thinkers.

		Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree		0			
Disagree		0			
Valid	Neutral	12	50	50	50
	Agree	9	37.5	37.5	87.5
	Strongly Agree	3	12.5	12.5	100.0
Total		24	100.0	100.0	

As shown in Table 0-10 9 teachers, forming 37.5% of the total number of the participants, agreed (9 agreed and 3 totally agreed) that students face obstacle preventing them from being creative thinkers. While 12 teachers, forming 50% of the total number of the participants, were neutral about that. This result is further shown in Figure 0-5 below

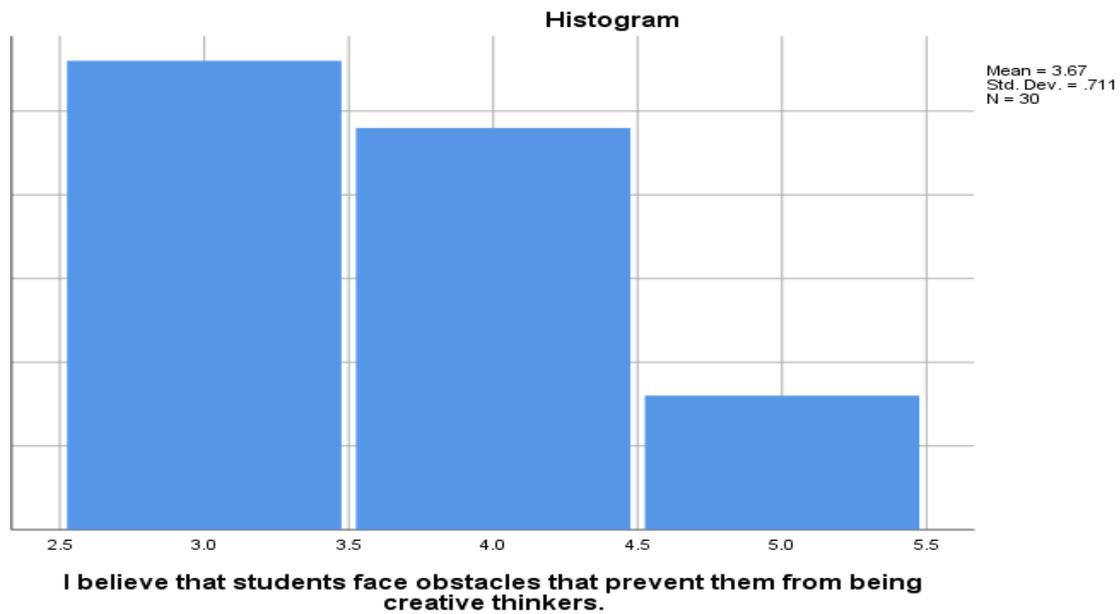


Figure 0-5 Teachers' Questionnaire - Item Four

Regarding item five of the teachers' questionnaire, the results of descriptive analysis shows that 15 teachers (8 agree and 7 strongly agree) do permit their students to apply strategies that help in increasing creative thinking. That is 62.5 (33.3% + 29.2%) their students in using strategies for increasing creative thinking. While 9 teachers – forming 37.5% were neutral which means that they only sometimes allow their students to use helpful strategies for creative thinking. (see Table 0-11 and below):

Table 0-11 Teachers' Questionnaire - Item Five

I permit my students to apply strategies that increase their creative thinking.

Frequency		Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0
Disagree		0	0	0
Valid	Neutral	9	37.5	37.5
	Agree	8	33.3	70.8
	Strongly Agree	7	29.2	100
Total		24	100.0	100

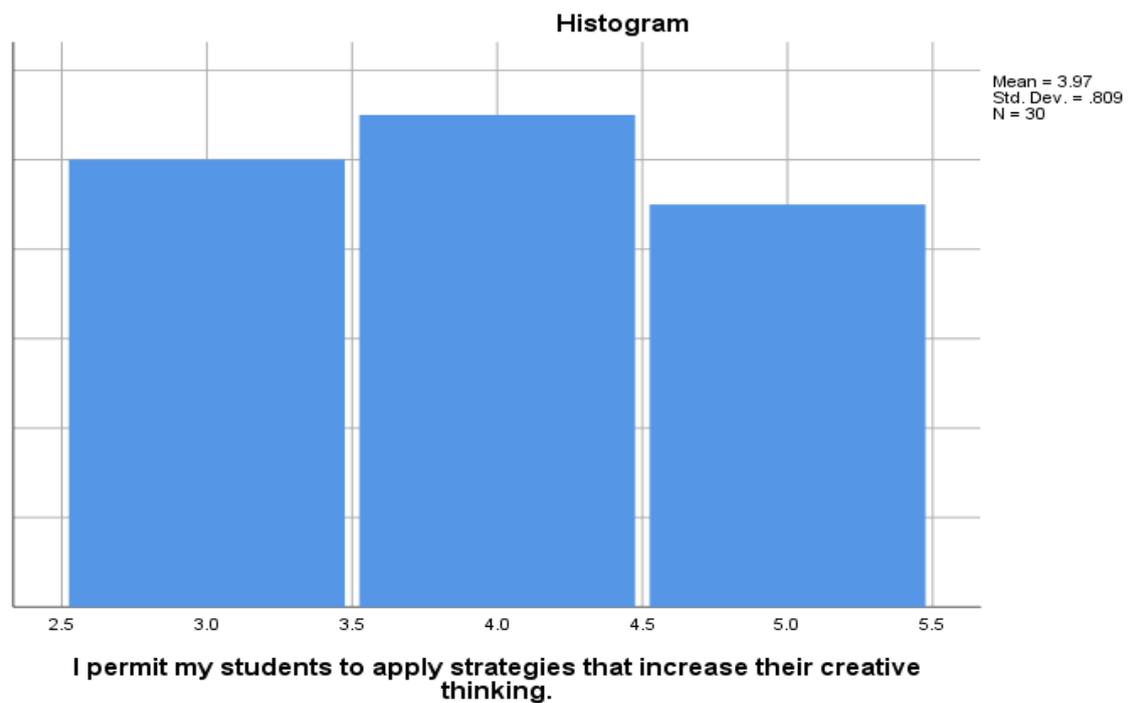


Figure 0-6 Teaches' Questionnaire - Item Five

Table 0-12 below shows the responses of the participants in regard to the possibility to enrich creativity within language classroom. Unlike the answers for other items the majority of the respondents were not sure about that. That is 62.5% of them neither agreed nor disagreed about this item:

Table 0-12 Teaches' Questionnaire - Item Six

students' creativity can be enriched in language classrooms.

Frequency		Percent	Valid percent	Cumulative percent
Strongly disagree	0	0	0	0
Valid Disagree	2	6.7	6.7	6.7
Neutral	15	62.5	62.5	69.2
Agree	5	20.8	20.8	90
strongly agree	2	8.3	8.3	98.3
Total	24	98.3	98.3	

These results are clearer shown in Figure 0-7 below

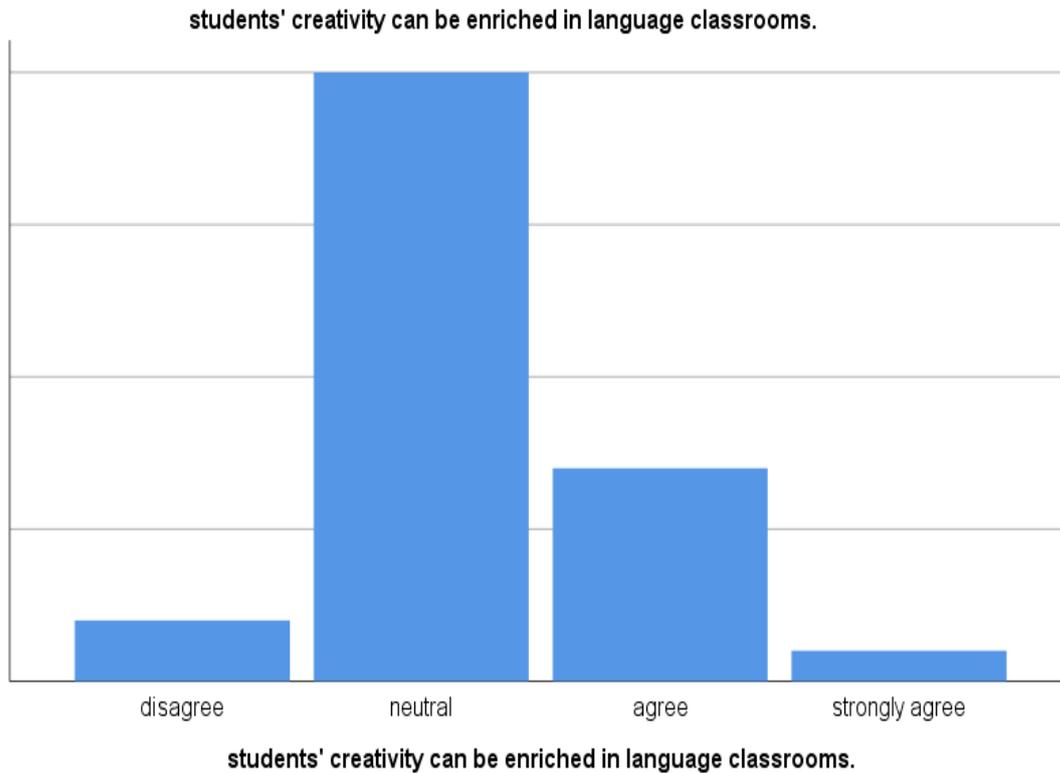


Figure 0-7 Teachers' Questionnaire - Item Six

4.7 EFL Teachers' Perspective about Creativity vs. Reading Comprehension

Regarding the last question which investigates the teachers' perspective about the effect of creative thinking on reading comprehension, part two which consists of eight items is utilized. Descriptive Statistics was run. The results are put below in accordance to eight items.

The results of the answers for item nine show that 12 teachers (forming 50%) were neutral and 7 teachers (forming 29.2%) agreed that creative thinking directs students to make benefit of their experience to search for specific information which is really helpful in understanding a written text. See Table 4.15 and Figure 4.9 below:

Table 0-13 Teachers' Questionnaire – Item Seven

creative thinking directs students to use their experience to search for a specific information

Frequency		Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0
Disagree		0	0	0
Valid	Neutral	12	50	50
Valid	Agree	7	29.2	79.2
	Strongly agree	5	20.8	100
	Total	24	100	100

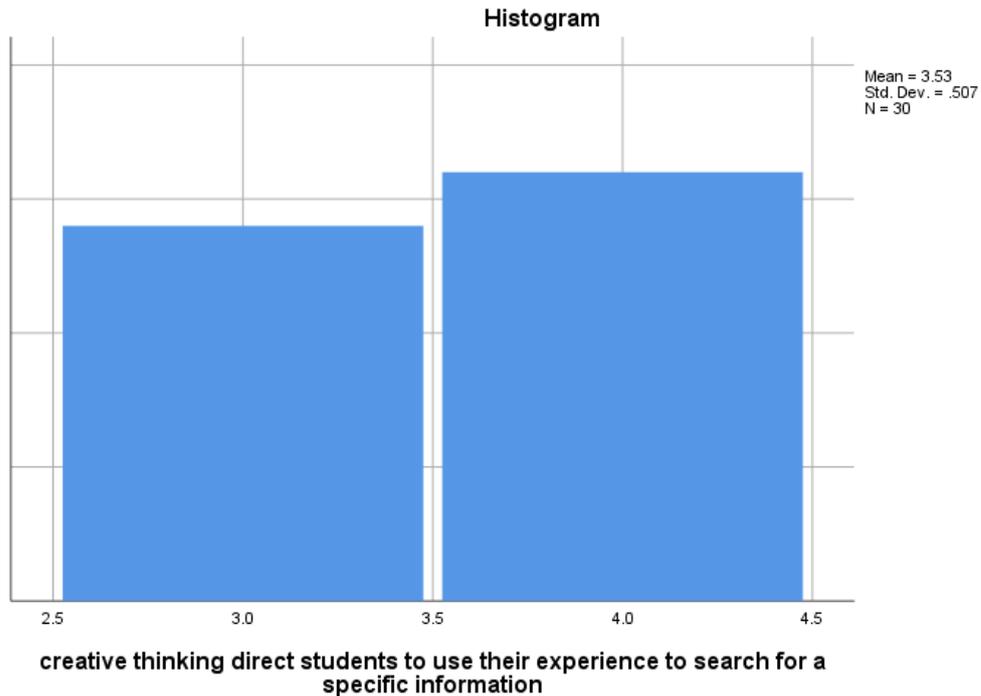


Figure 0-9 Teachers' Questionnaire – Item Seven

The eighth item in the teachers' questionnaire asks about teachers whether they have noticed that students with high creative thinking abilities are better in reading comprehension or not. The results of their answers support a positive effect of high creative thinking in the learners' reading comprehension. (See Table 4.16 and Figure 4.10)

Table 0-14 Teachers' Questionnaire – Item Eight

students with high creative thinking abilities are better in reading comprehension

	Frequency	Percent	Valid percent	Cumulative Percent
Strongly disagree	0	0	0	0
Disagree	0	0	0	0
Valid Neutral	12	50	50	50
Agree	10	41.6	41.6	91.6
Strongly Agree	2	8.3	8.3	99.9
Total	24	99.9	99.9	

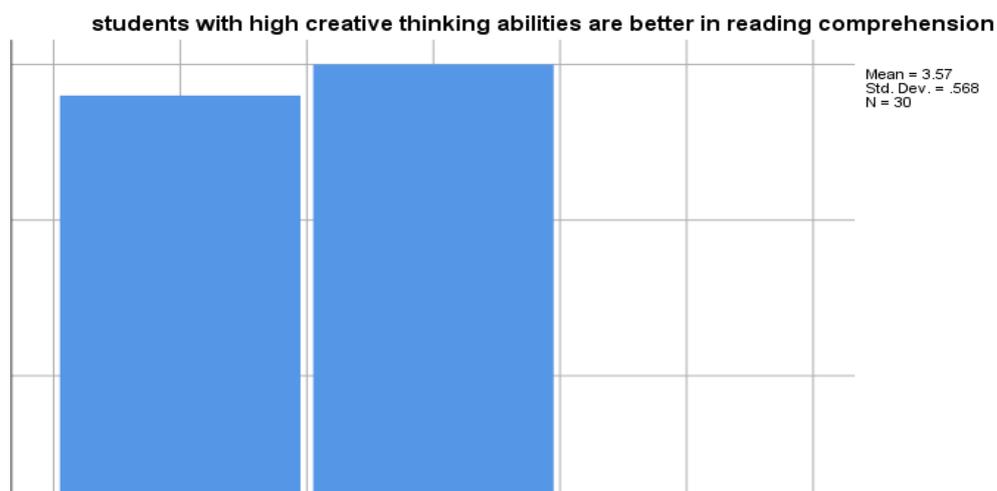


Figure 0-10 Teachers' Questionnaire – Item Eight

Item nine of the questionnaire also investigates the relation between creative thinking and reading comprehension. The results are given in Table 4.17 and Figure 4.11

Table 0-15 Teachers' Questionnaire Nine

**reading comprehension is really difficult for students with low
creative thinking abilities**

Frequency		Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0
Disagree		0	0	0
Valid	Neutral	12	50	50
	Agree	7	29.2	79.2
	Strongly agree	5	20.8	100
	Total	24	100	100

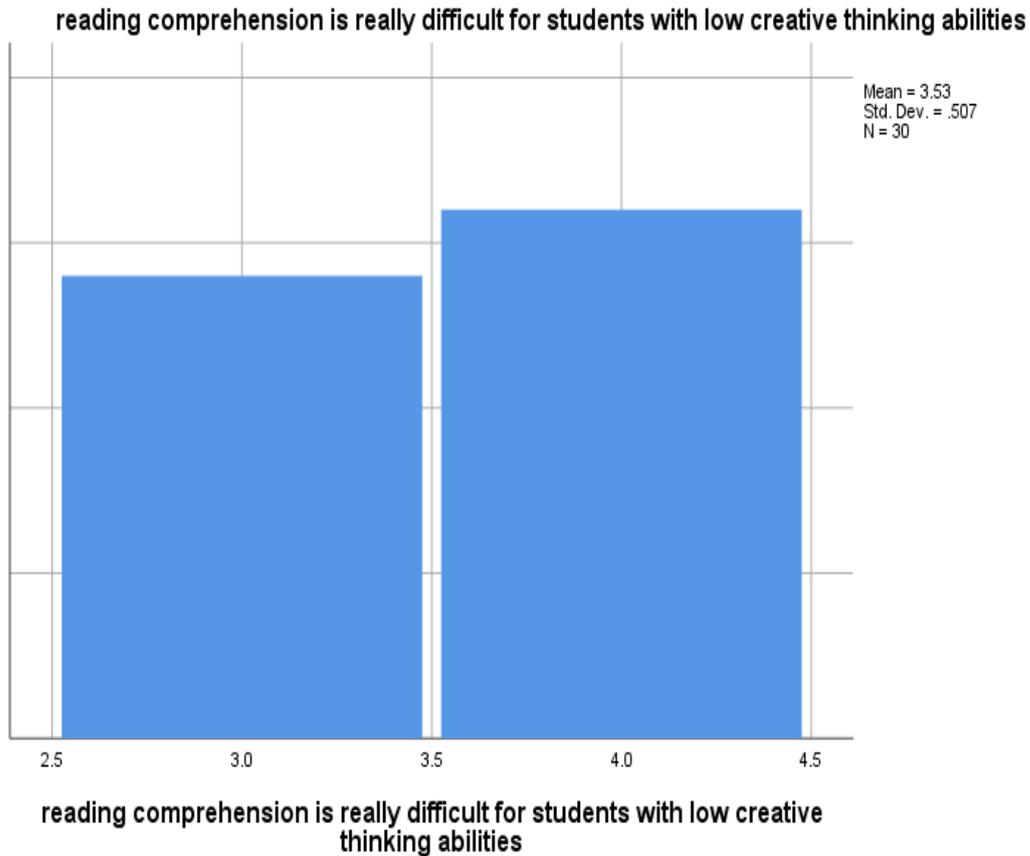


Figure 0-11 Teaches' Questionnaire – Item Nine

Item ten asks if students with creative thinking abilities are able to derive a number of sub-ideas from a written text, which helps in improving their reading comprehension, the results show that the majority of the teachers, about 9 forming 37.5% agree about that. While the rest are neutral and that no teacher disagreed about this point (see Table 4.18 and Figure 4.12)

Table 0.18 Teaches' Questionnaire – Item Ten

creative thinking directs students to derive a number of sub-ideas form that text.

Frequency		Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0
Disagree		0	0	0
Valid	Neutral	8	33.3	33.3
	Agree	9	37.5	70.8
	Strongly Agree	7	29.2	100
	Total	24	100	100

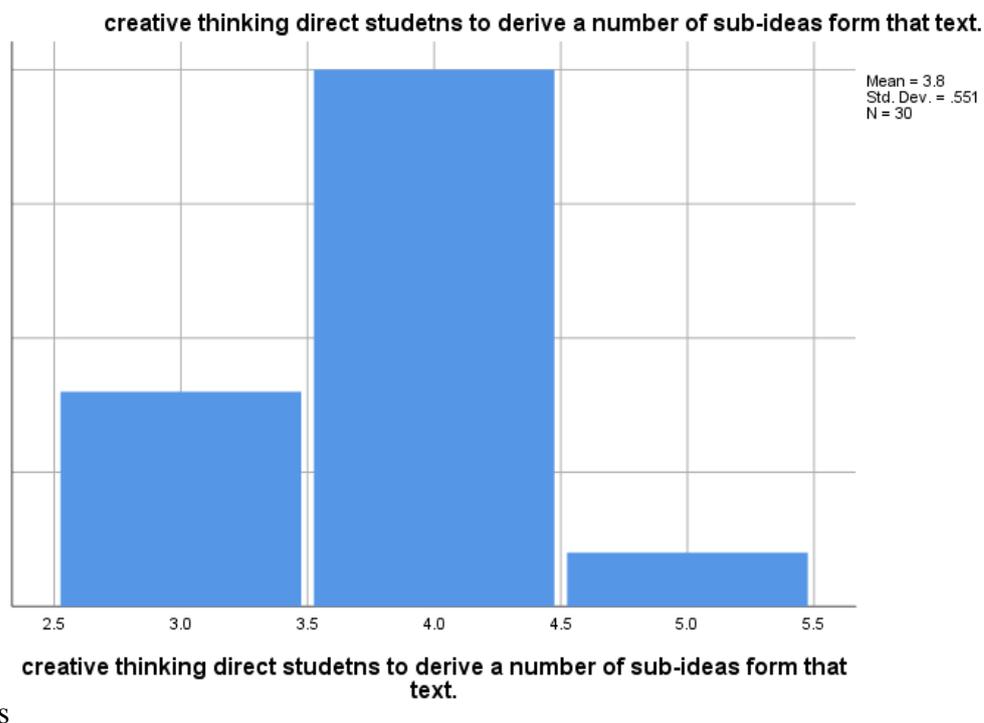


Figure 0-8 Teachers' Questionnaire - Item Ten

Item eleven also deals with the meaning of words; it asks about the effect of creative thinking of enabling the students to interpret different shades of the meaning of the words. The results show that the participants either agreed or were neutral about this point. Only one teacher strongly agreed. (See Table 4.19 and Figure 4.13)

Table 0-16 Teachers' Questionnaire – Item Eleven

creative thinking enables students to create many different shades of the meaning of the words

		Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0	0
Disagree		0	0	0	0
Valid	Neutral	14	58.3	58.3	58.3
	Agree	6	25	25	83.3
	Strongly Agree	4	16.6	16.6	99.9
	Total	24	99.9	99.9	

creative thinking enables students to create many different shades of the meaning of the words

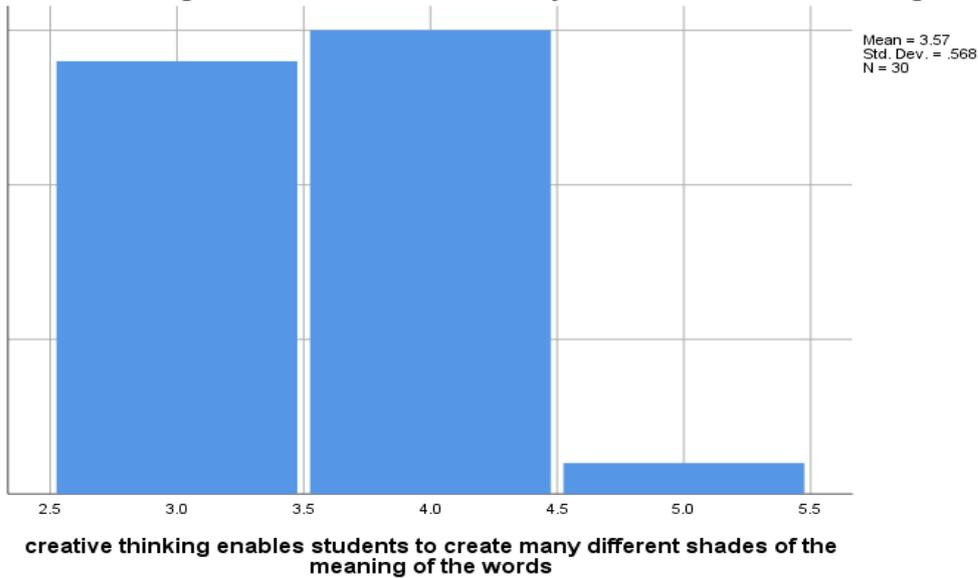


Figure 0-13 Teachers' Questionnaire – Item Eleven

Item Twelve of the questionnaire inquire about the effect of creative thinking in helping students to infer the meaning of new words. The results were almost similar to the results of the previous item. That is only 5 teachers strongly agreed about this point and 7 agreed and 12 were neutral as shown in Table 4.20 and Figure 4.14:

Table 0-17 Teachers' Questionnaire – Item Twelve

creative thinking helps students to guess the meaning of new words in the text

Frequency		Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0
Disagree		0	0	0
Valid	Neutral	12	50	50
	Agree	7	29.2	79.2
	Strongly Agree	5	20.8	100
	Agree			

Total	24	100	100
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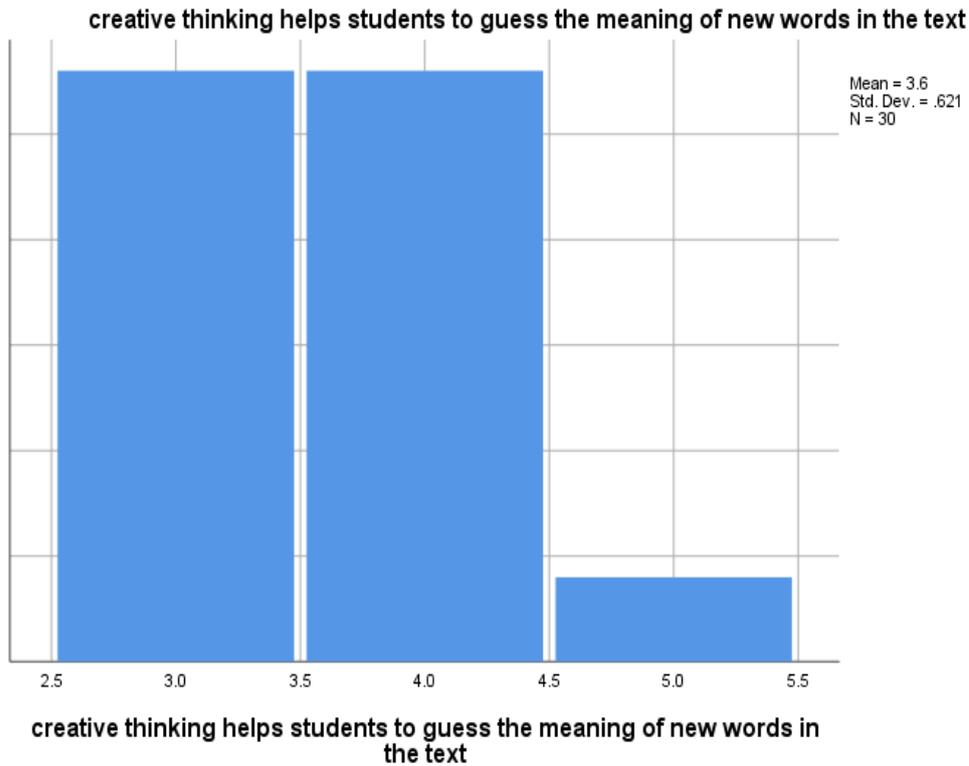


Figure 0-14 Teachers' Questionnaire – Item Twelve

Item thirteen also deals with the words' meaning, but it asks about the effect of creative thinking in helping students to interpret new words and their opposites. The results show that a considerable number (12 forming 50%) of the teachers were neutral about this point, and 7 teachers (forming 29.2%) agreed, and 5 teachers strongly agreed. (See Table 4.21 and Figure 4.15)

Table 0-18 Teachers' Questionnaire – Item Thirteen

creative thinking helps students to interpret a large number of new words and their opposites not existing in the text.

		Frequency	Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0	0
			0	0	0
Valid	Neutral	12	50	50	50
	Agree	7	29.2	29.2	79.2
	Strongly Agree	5	20.8	20.8	100
	Total	24	100	100	

Figure 0-15 Teachers' Questionnaire – Item Thirteen

Finally, the last item in the teachers' questionnaire asks about the effect of creative thinking to help motivating students to cite various usages of words and ideas. The answers were 12 neutral and 7 agreed, as shown in Table 4.22 and Figure 4.16:

Table 0-19 Teachers' Questionnaire – Item Fourteen

creative thinking motivates students to cite various usages of words/ideas.

		Percent	Valid percent	Cumulative percent
Strongly disagree		0	0	0

Disagree		0	0	0
Valid	Neutral	12	50	50
	Agree	7	29.2	29.2
	Strongly agree	5	20.8	20.8
	Total	24	100	100

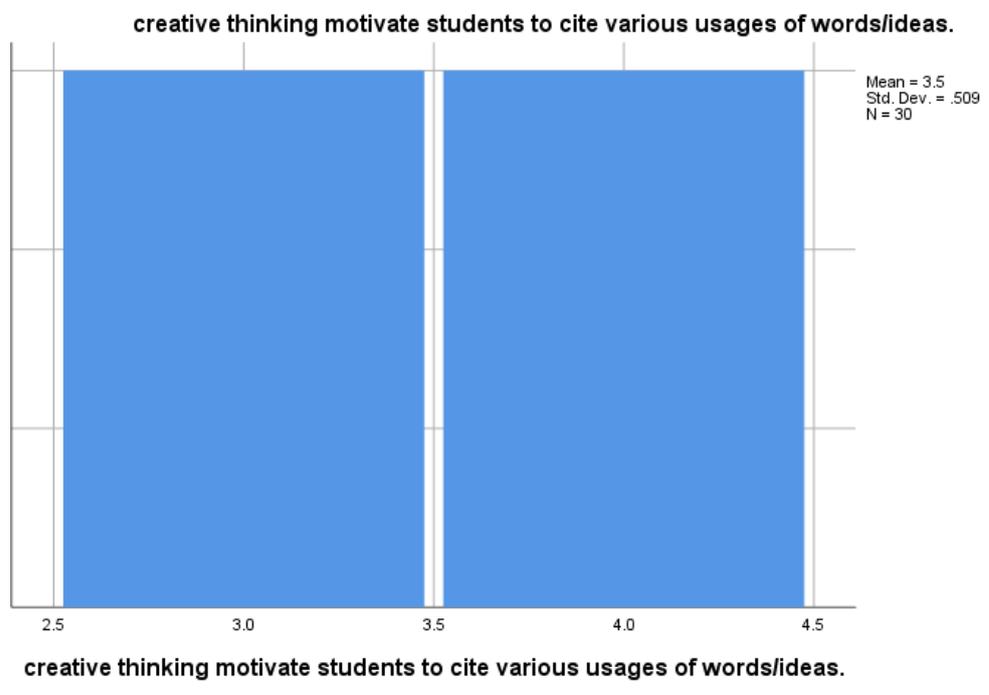


Figure 0-16 Teachers' Questionnaire – Item Fourteen

Chapter Five

Conclusions, Recommendations and Suggestions for Further Studies

5.1 Introductory Notes

This closing chapter is intended to provide conclusions, recommendations and suggestions for further studies. It is initiated with providing conclusions based on the findings of the study. The next section is devoted for presenting some recommendations for teachers, students and curriculum-designers. The chapter is closed by offering some recommendations and suggestions for further studies.

5.2 Conclusions

Creativity has become a priority in education. It has been agreed upon that the relation between education and creativity is significantly important. Creative thinking has been indicated as a means for solving numerous amounts of social, economic and political problems. Reading skill, on the other hand, involves accessing previous experience, understanding vocabulary and definitions, drawing inferences, and connecting main ideas. All of these abilities are part of the active process of creating meaning from a text. Consequently, the effect of creative thinking on reading comprehension is worthwhile being investigated.

The findings of the current study lead to the conclusion that creative thinking has a positive effect on reading comprehension. Although the statistical operation shows that the correlation between creative thinking ability and reading comprehension is small but this result could be because of the participants' level in creative thinking ability. It could also be because of the participants' poor level in reading comprehension as well.

Moreover, it is concluded that male and female students are almost similar in regard to their level in creativity. That is the scores of the male participants in the creativity test are very much similar to the scores of the female participants. So, there is no statistically significant differences between males and females in this regard.

Besides, the results obtained from the tests are approved by the results obtained from the teachers' questionnaire. From the teachers' perspectives, the students who are better in creativity have a better ability in reading comprehension. This is because creative ability helps students to derive a number of sub-ideas from that text. Also, as stated by the teachers-participants, creative thinking enables students to create many different shades of the meaning of the words.

It is also concluded that creative thinking helps students to interpret a large number of new words and their opposites not existing in the text. Finally, creative thinking motivates students to cite various usages of words/ideas.

5.3 Recommendations

Based on the findings and the conclusions reached, the following recommendations can be put forward for EFL teacher, EFL students and curriculum designers:

5.3.1 Recommendations for EFL Teachers

1. It is strongly recommended that EFL teachers' pay great attention for cultivating creative thinking ability for their students to help them better comprehend different written texts.

2. It is also recommended that EFL teachers insert varying activities that are directed to increase creative thinking abilities for their students.
3. It is suggested for EFL teachers to motivate their students to think creatively through showing them the importance of creativity and its role in achieving success in different subjects in general and in reading comprehension in specific.
4. Finally, it is recommended for teachers to motivate their colleague teachers to make benefit of creativity and to draw their attention to the importance of this mental skill for students.

5.3.2 Recommendations for EFL Students

- 1- EFL students are highly recommended to do their best to increase their different mental abilities, especially creativity.
- 2- They are also encouraged to participate in any activity that helps improving their creative thinking ability
- 3- Finally, EFL learners are encouraged to elaborate their knowledge about creativity, its benefit, and its importance in achieving success in general.

5.3.3 Recommendations for Curriculum Designers

1. Not only EFL teachers and students should pay attention to the importance of creativity, curriculum designers are recommended to do so as well.
2. They are recommended to insert texts and activities that help cultivating creativity.
3. It is also recommended to insert question, problems and even puzzles within the EFL text books.

5.4 Suggestions for Further Studies

No study is ever capable of covering all aspects of a topic and fulfills all the gaps related to a problem fully 100%; the present study is no exception. Accordingly, the following studies are suggested to be administered:

1. An experimental study is recommended to be done through making an experience to increase creative thinking ability for EFL learners and finding the effect of increasing creative thinking ability on the students' reading comprehension.
2. The effect of creative thinking on other skills (writing, listening and speaking) can also be investigated.
3. The effect of other kind of mental abilities, e.g., critical thinking, intelligence, cognitive abilities can also be investigated.
4. A similar study can be conducted covering a sample of learners of different age, to find whether creativity increases or decreases in accordance with age.
5. The effect of or the relation between different cultural back-ground (could be measured by academic certificate) creativity and reading comprehension can also be studies.
6. Also, a study that includes participants of different native language, or different linguistic background can be done to find whether there is any relation between cultural background and creative thinking.
7. Finally, a comparison can be made between bilingual EFL learners and monolingual ones in reading comprehension and in creativity as well.

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Appendices

Appendix (A) The Jury Members

The Jury Members arranged according to their scientific title and then the alphabetical order.

No.	Title	Expert's Name	Degree	Specialty	Place of Work
1.	Prof.	Abd Ali Nayif	Ph.D.	Linguistics	College of Basic Education/ University of Babylon
2.	Prof.	Salih Mahdi Adday	Ph.D.	Linguistics	College of Education for Human Science/ University of Babylon
3.	Asst. Prof.	Muna Mohammed Abbas	Ph.D.	TEFL	College of Basic Education/ University of Babylon
4.	Asst. Prof.	Wafaa Mokhlos	Ph.D.	TEFL	College of Education for Human Science/ University of Babylon
5.	Asst. Prof.	Muneer Ali Khudhayer	M.A	TEFL	College of Education for Human Science/ University of Babylon
6.	Asst. Prof.	Hasanain Hassan Shaheed	M.A	Linguistics	College of Basic Education/ University of Babylon
7.	Lect.	Ahmed Rawdhan Salman	Ph.D.	TEFL	College of Basic Education/ University of Babylon

Appendix (B)

The Teachers' Questionnaire

Dear Teachers

This questionnaire is a data collection tool that aims at exploring the status of creativity in the EFL context and its effect on EFL students' performance in reading comprehension tests. You are kindly requested to respond to the following questions as accurately as possible. Your collaboration will be of a great help to make the research work achieves its objectives.

Part One: Teaching Creative Thinking

	The Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Creative thinking aids active and independent learning					
2	Encouraging students to use creative thinking is one of the responsibilities of EFL teachers					
3	It is essential for EFL teacher to ask creative thinking questions					
4	I believe that students face obstacles that prevent them from being creative thinkers.					
5	I permit my students to apply strategies that increase their creative thinking.					
6	Students' creativity can be enriched in language classrooms.					
	Part Two: Creativity vs. Reading Comprehension					
	The statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Creative thinking directs students to use their					

	experience to search for a specific information					
2	Students with high creative thinking abilities are better in reading comprehension					
3	Reading comprehension is really difficult for students with low creative thinking abilities					
4	Creative thinking directs students to derive a number of sub-ideas form that text.					
5	Creative thinking enables students to create many different shades of the meaning of the words					
6	Creative thinking helps students to guess the meaning of new words in the text					
7	Creative thinking helps students to interpret a large number of new words and their opposites not existing in the text.					
8	Creative thinking motivates students to cite various usages of words/ideas.					

Appendix-B1

Confidential



Dr. BAQER MEHDI

M. A. (Columbia), Ph. D. (Aligarh)

Professor of Education

N. C. E. R. T., New Delhi-110016

TCW^a

T. M. No. 458715

Name—

Age—

Class—

School/College—

Father's/Guardian's name

Occupation—

Home address—

Date—

GENERAL INSTRUCTIONS

In this booklet you will find mentioned some interesting problems which will require the use of your thinking ability and imagination to solve them. The purpose is to see how quickly and imaginatively you can think under situations which require novel ways of dealing with them. Read each problem carefully and apply your best thinking in giving the responses. Write your responses either in English or in your mother tongue. Responses have to be given briefly but clearly in the space provided under each problem. Give a serial number to each of your responses. There are no right or wrong responses to any of these problems. Give a serial number to each of your responses. There are no right or wrong responses to any of these problems. Therefore use your imagination to think of as many responses as you can.

The problems are divided into *Four Activities*. Each Activity is separately timed. Within the time-limit for each Activity, you may work on the different problems according to your speed. When you finish one problem, go to the next. If necessary, you may return to the previous one again for any addition you would like to make. Remember that you have not to go the next Activity until the time for the first Activity is over and you are told to proceed further.

At the end you will be given *5 minutes extra* time, which you may use at any problem of any Activity in which you want to do additional work.

Please do not omit any problem.

Estd. : 1971

Phone : 63551

National
 PSYCHOLOGICAL CORPORATION
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[2]

Activity : 1 What will happen, if.....**DIRECTIONS :**

1. On this and the next page, you have been given some situations which will appear to you impossible. You have to think what would happen if such situations actually arise.
2. Give as many ideas as may come to your mind but try to think as many novel ideas as you possible can. Ideas which you think no one else might have thought of what would be the best. Write your responses in the space provided for.
3. You will be given to 15 MINUTES for this activity. After every five minutes you will be told the time so that you may move on to the next problem in the activity.
An example has been given which will help you to to know what you have to do.

EXAMPLE :

Question : What will happen if birds and animals start speaking like man ?

- Responses :** (i) This world will change into a different kind of society.
 (ii) New leaders will emerge from amongst the animals.
 (iii) It is possible that a donkey will become our leader.
 (iv) It is also possible that he becomes our prime minister.
 (v) Men may confide their secrets to their animal friends, etc.

PROMBLEMS :-

1. What will happen if man flies like birds ?

(3)

2. What will happen if your school is put on wheels ?

3. What will happen if man does not require any food to eat?

[4]

Activity : 2 **NOVEL USES OF THINGS****DIRECTIONS**

1. On this and the next page, you have been given names of certain things which could be used in many different ways. You have to think in how many different and new ways the things may be used.
2. Write as many uses as you can, but do try to think also those which are novel, that is, those which you think no one else might have thought of.
3. You will be given 12 MINUTES for this activity. After every four minutes you will be told the time so that you may move on to the next item in the activity.

Below is given an example which will help you to know what you have to do.

Example : News-paper.

- Uses :*
- (i) To read the news.
 - (ii) To make paper toys.
 - (iii) To get protection from the sun.
 - (iv) To wrap something.
 - (v) To cover a dirty place; etc.

PROBLEMS :—

1. Piece of stone

[5]

2. Wooden stick

3. Water

[6]

Activity : 3**SIMILARITIES****DIRECTIONS :**

1. On this and the next page, you have been given pairs of world which can be related to each other in many different ways. You have to think in how many different and new ways are they related.
2. Write as many relationships as you can, but also try to think those which are novel, that is, those which you think no one else might have thought of.
3. You will be given 15 MINUTES for this activity. After every 5 minutes you will be told the time so that you may move on to the next problem in the activity.

Below is given an example which will help you to know what you have to do.

Example : Man and animal

Relationship : (i) Both have life.
(ii) Both need food and water.
(iii) Both can fall ill.
(iv) Both are afraid of enemy.
(v) Both have the experience of feeling cold and hot, etc.

PROBLEMS :—

1. Tree and House

[7]

2. Chair and Ladder

3. Air and Water

[8]

Activity : 4 Making Things More Interesting and Useful*DIRECTIONS*

Just keep in mind a simple model of a horse. You have to imagine in what ways you can change this simple model into an interesting and novel one for children to play with. You may think of adding any number of parts or accessories in order to make it really interesting and fascinating for children. Do not bother about the cost of the new parts or accessories that you would like to use in order to make the toy model interesting and fascinating for children.

Write all the ideas which come to your mind in a serial order in the space given below.

You will be given 6 minutes for this activity.

SCORING SHEET**T C W****ACTIVITY I**

	Fluency	Flexibility	Originality
Item 1.
Item 2.
Item 3.
Total			

ACTIVITY II

	Fluency	Flexibility	Originality
Item 1.
Item 2.
Item 3.
Total			

ACTIVITY III

	Fluency	Flexibility	Originality
Item 1.
Item 2.
Item 3.
Total			

ACTIVITY IV

	Fluency	Flexibility	Originality
Item 1.

SCORE SUMMARY

	Fluency	Flexibility	Originality
Activity I
Activity II
Activity III
Activity IV
Grand Total

● See back page for further instructions regarding originality scorings.

ORIGINALITY SCORING FOR RESPONSES NOT MENTIONED IN THE RESPONSE LIST

For any novel response not mentioned in the response list given in the manual, first of all briefly note it down in the space provided below giving the number of the activity and the item to which it belongs. Then, after you have scored all the test scripts, give it a score according to the scheme given in the manual and note the score in the appropriate column in the Scoring Sheet. In all probability, there will be very few such responses.

Activity	Item	Response	Originality Score

Appendix (C)

Reading Comprehension Test

This is a test to show how well you read English. There are several readings passages each followed by some questions about the passage. You should read each passage carefully and then try to answer the questions following that passage. If you do not know the answer at first, you may read the passage again, but do not spend too much time on the passage or you will not have enough time to finish.

EXAMPLE:

While I was getting ready to go to town one morning last week, my wife handed me a little piece of red cloth and asked if I would have time during the day to buy her two yards of cloth like that, I told her I would be glad to do it. And putting the piece of cloth into my pocket, I took the train for town.

D. the person telling the story is.....

- a) a married lady.
- b) unmarried lady.
- c) a married man.
- d) an unmarried man.

You know that the person telling this story is a married man because he says, "...my wife handed me....). because c, a married man is the correct answer, a

cross has been made in the space next to c for example D on the answer sheet.

E. when was the author given a piece of red cloth?

- a) in the morning.
- b) at noon.
- c) in the afternoon.
- d) in the evening.

The passage says, "...one morning last week, my wife handed me a little piece of red cloth....". To show that a) in the morning is the correct answer, a cross has

been made in the space next to a for Example E on the answer sheet.

Answer all questions of below:

Mark only one answer for each problem.

Passage (1)

Until recently there has been little evidence about how the brain functions in cognition and precisely how and which of the 12 billion cells within the brain store memory. One noted explorer in this field is Dr. Wilder Penfield who in 1951 began to produce exciting evidence to confirm theoretical concepts which had been formulated about memory functioning. During the course of brain surgery, in treating patients suffering from focal epilepsy, Penfield conducted a series of experiments during which he touched the temporal cortex of the brain of the patient with a weak electric current transmitted through a galvanic probe. In each case, the patient under local anesthesia was fully conscious during the exploration of the cerebral cortex and was able to talk with Penfield.

Penfield found that the stimulating electrode could force recollections clearly derived from the patient's memory. Penfield reported that such recollections stop when the electrode is removed and may re-occur when the electrode is applied again. One of Penfield's significant conclusions was that the electrode evoked a single recollection, not a mixture of memories or a generalization. Secondly, the response to the electrode was found to be totally involuntary, but perhaps the most important discovery was that not only past events are recorded in detail but also the feelings that were associated with these events. An event and the feeling which was produced by the event are inextricably locked together in the brain so that one cannot be evoked without the other.

1. One conclusion reached by Penfield was that
 - a) the response to the electrode was involuntary.
 - b) electrical stimulation caused loss of consciousness.
 - c) electrical stimulation caused a lasting improvement in memory.

- d) electrical stimulation can evoke events but not feelings.
- 2. The passage states that events and feelings.....
 - a) can be remembered independently of each other under normal conditions.
 - b) are inextricably linked.
 - c) are stored in different places in the brain.
 - d) can be remembered independently of each other only under experimental conditions.
- 3. The original purpose of the brain surgery performed by Penfield was to.....
 - a) treat epilepsy.
 - b) treat memory problems.
 - c) test memory functioning in the patients.
 - d) enable patients to speak normally.
- 4. When the electrode was removed
 - a) the memory that had been elicited stopped.
 - b) the elicited memory became stronger.
 - c) the patient's memory problem was cured.
 - d) the patient suffered a problem loss of memory.
- 5. As a result of his experiments, Penfield found that.....
 - a) the electrode improved but did not cure epilepsy.
 - b) a surgical approach to memory problems is effective.
 - c) an electrode can force a patient to remember past experiences.
 - d) the electrode had no effect on memory recall.

Passage (2)

Jelly Roll Morton was born Ferdinand Joseph LaMenthe in Gulfport, Louisiana in 1885 or 1886, and raised in New Orleans. From the age of seventeen he began to learn his living as a jazz pianist, beginning his publishing and recording activities, as a soloist and as a band leader, in the city where most of the best jazz musicians of the time were playing. When the center of jazz activity moved to New York, Morton did too, in 1928. The expiration of his recording contract in 1930, along with the Depression, changing jazz styles and the increasing ability of white jazz musicians brought him hard times which were compounded by his uncompromising attitude toward music, Morton moved to Washington, D.C. to manage and play in a small night club before returning to New York in 1938, he described his own and jazz'

history to Alan Lomax in a lengthy set of interviews recorded for that Library of Congress. This brought about his “rediscovery”; however, he was viewed more as a radio and publishing. Poor health and prevailing tastes in jazz limited his success, and he died in 1941 in Los Angeles, just before the historical revival movement which later benefited many of his slightly younger contemporaries could rescue him, and before public recognition such as that which came to Louis Armstrong could be of help to him.

1. What was Morton’s attitude toward music?
 - a) He preferred to write and play the kind of music the public liked.
 - b) He preferred talking about the history of jazz to writing jazz.
 - c) He preferred playing music to writing it.
 - d) He preferred to write and play what he felt was good music.
2. Why did Morton move to New York?
 - a) He got a job there managing a night club.
 - b) Most of the best jazz musicians were there.
 - c) He lost his job in Chicago.
 - d) He wanted to begin publishing his music.
3. When Morton was “rediscovered”, the public felt he was.....
 - a) Important mainly as a historical figure in music.
 - b) Important as both a historical figure and a vital musician.
 - c) Too modest about his abilities.
 - d) The greatest band leader of the day.
4. The author believes that Morton, in his last years.....
 - a) Benefited from the historical revival movement in jazz.
 - b) Was still a vital musician.
 - c) Was too modest about his abilities.
 - d) Change prevailing tastes in jazz.
5. What does the author believe would have happened in Morton had lived longer?
 - a) Morton would have changed the prevailing taste in jazz.
 - b) Morton would have enjoyed greater public recognition.
 - c) Morton would have helped his slightly younger contemporaries.
 - d) Morton would have been rescued by slightly younger contemporaries.

Passage (3)

The Giant's Causeway has attracted the curiosity of travellers for centuries. It is composed of thousands of strangely symmetrical basalt columns which jut out to sea, Legend has it that this Causeway was built by the Irish giant, Finn MacCull, so as to travel dry-shod across the sea to Scotland. Generations of guides have embroidered the tale until it is hard to disentangle modern invention from ancient folklore. In fact, the Causeway is a product of the volcanic activity which altered the face of Ireland, Scotland, Iceland and Greenland many millions of years ago.

Between Run Kerry and Causeway Head three caves, Runkerry, Rock Pigeon, and Portcoon, pierce the cliffs. Portcoon is the sole one accessible from the land, but a visit is only for the agile and care is needed at high tide. A sole passage gives access to the main cave. The entrances to the others may be seen from the cliffs with some difficulty but access is only possible from the sea. Runkerry cave is over 700 feet long. These caves were formed by marine erosion along lines of weakness in the basalt. In the old days these caves were very much a part of the Causeway attractions and local boatmen rowed visitors, twenty in each boat, into them when the seas were moderate.

1. The basalt columns were formed by.....
 - a) glacial action
 - b) violence
 - c) Finn MarCult.
 - d) marine erosion
2. the guides who told the Finn MacCult tale.....
 - a) Disagreed among temeselves.
 - b) Learned it in Scotland.
 - c) Kept adding to it.
3. The passage implied that nowadays the caves.....
 - a) Are more popular than in the past.
 - b) Are less popular than in the past.
 - c) Are more easily reached than in the past.
 - d) Have been closed to tourists.
4. Runkerry and Rock Pigeon differ from Portcoon in that they

- a) Have more than one entrance.
 - b) Were formed by marine erosion.
 - c) Cannot be seen from the land.
 - d) Cannot be entered on foot.
5. According to the story, Finn MacCault built the Causeway because he.....
- a) Had no other way to get to Scotland.
 - b) Wanted his Scottish friends to be able to visit him.
 - c) Didn't want to get his feet wet.
 - d) Wanted to prove his strength.

Passage (4)

Accounting, whatever its pretensions to creativity, was and is an honorable profession although, as one of the most dismal corners of what Carlyle called the dismal science of economics, it is seldom scrutinized by reformers or legislators. Like a skunk, it possesses a repellency that gives it immunity from attack. But it is of the utmost importance in an economy of affluence. It began long ago – with a Franciscan monk of Renaissance Italy, Fra Luca Pacioli whose invention of double

– entry bookkeeping was later acclaimed by Goethe as “one of the finest discoveries of the human intellect”. Accounting did not become important to substantial numbers of people until the nineteenth century, when public ownership of private companies grew common. Then it rose to eminence as an aristocratic occupation, calling for the qualities usually associated with judges: wisdom, learning, unassailable integrity. Turn-of-the-century American accountants viewed themselves as crusaders and evangelists for the cause of accurate and honest business relationships. The new professions’ first fall from grace came during the boom of the 1920’s, when many accountants found devious and misleading ways of writing up companies’ book values to inflate stockmarket prices. (Not earnings; accountants took little interest in earnings in those days, and indeed many companies did not bother to report their earnings at all). Then came the great crash, and a new wave of high-mindedness and reform.

1. According to the passage, in the 1920’s, some accountants tried to.....
- a) Write literary works.
 - b) Avoid reporting their earnings.
 - c) Raise the market value of stocks.

- d) Buy stocks in private companies.
2. According to the passage, how did the accountants of the 1920's differ from their turn-of-the-century counterparts? They were.....
 - a) Morel earned.
 - b) Less learned.
 - c) More honest.
 - d) Less honest.
 3. Accountancy is like a skunk because they are both.....
 - a) Misunderstood.
 - b) Quiet and unobtrusive
 - c) Intelligent.
 - d) Repugnant.
 4. According to the passage, before the 19th century, accounting was.....
 - a) Important to only a few people.
 - b) Important only in Europe.
 - c) Unnecessary.
 - d) Unknown.
 5. What caused accounting as a profession to become important?
 - a) The great crash.
 - b) Public ownership of companies.
 - c) The regulation of companies by the government.
 - d) The economic boom of the 1920's.

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التاريخ / ٢٠٢١ / ٧ / ١



الى / إدارات المدارس الإعدادية في المحافظة كافة

م / تسهيل مهمة

يرجى تسهيل مهمة طالبة الدراسات العليا / الماجستير (هالة حيدر محي عبد) في جامعة بابل / كلية التربية الأساسية / طرائق تدريس اللغة الإنكليزية لإنجاز متطلبات بحثها الموسوم (the effect of challenging strategy on developing reading skill of Iraq EFL 4th preparatory students) خدمة للعلم والمعرفة

مع التقدير

سليم احمد عبد الكريم
معاون المدير العام للشؤون الادارية

٢ / ١

نسخه منه الى :-

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هـ - (٣١٠٠٢٩ - ٣١٠٠٢٧)

المستخلص

الإبداع هو مهارة أساسية لازمة لتحقيق النجاح في أي مجال بما في ذلك تعلم اللغة الإنجليزية ك لغة أجنبية. يشار إلى التفكير الإبداعي على أنه القدرة على تصور الأفكار الإبداعية أو تنفيذها أو نقلها وقد أصبح له أولوية في التعليم. القراءة، من ناحية أخرى، هي نشاط إدراكي معقد ضروري للحصول على المعلومات. لتحقيق النجاح في أي مجال أكاديمي، يحتاج الطلاب إلى معرفة كيفية التعلم من القراءة. القراءة مهارة لا غنى عنها للمتعلمين في سياق اللغة الإنجليزية لغة أجنبية، القراءة الاستيعابية للغة الأجنبية هو عملية تفاعلية ومعقدة تتطلب القدرة على التفكير الإبداعي.

تماشياً مع هذا، تم إعداد الدراسة الحالية لتحديد تأثير التفكير الإبداعي على فهم قراءة اللغة الإنجليزية. ولتحقيق هذا الهدف استخدم الباحث المنهج الوصفي التحليلي من خلال التحليلات الكمية. تغطي الدراسة متعلمي اللغة الإنجليزية لغة أجنبية كعينة لها. تم اختيار أربع مدارس ثانوية بشكل عشوائي. تم استخدام ثلاث أدوات وهي اختبار التفكير الإبداعي واختبار القراءة الاستيعابية واستبيان مقدم لمدرسي اللغة الانكليزية. تم إجراء الاختبارين لطلاب الصف الرابع الثانوي، بينما تم إجراء الاستبيان لـ 24 مدرساً عراقياً للغة الإنجليزية لغة أجنبية يقومون بالتدريس في المدارس الثانوية. تم ترميز جميع الإجابات التي تم الحصول عليها ومعالجتها إحصائياً باستخدام الحقيبة الإحصائية للعلوم الاجتماعية (SPSS).

في نهاية الدراسة وجد أن التفكير الإبداعي له تأثير إيجابي على القراءة الاستيعابية وأن هناك علاقة إيجابية بين التفكير الإبداعي والقراءة الاستيعابية. من ناحية أخرى، وجدت الدراسة أنه على الرغم من أن مدرسي اللغة الإنجليزية لغة أجنبية مستعدون لتعليم التفكير الإبداعي، إلا أنهم غير متأكدين مما إذا كان من الممكن زيادة قدرة طلابهم على التفكير الإبداعي. أخيراً، تم تحديد عدد من التوصيات لمدرسي اللغة الإنجليزية لغة أجنبية وطلاب اللغة الإنجليزية لغة أجنبية ومصممي النصوص الدراسية.



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
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قسم اللغة الانكليزية

اثر استراتيجية التحدي على تطوير مهارة القراءة لدى طلبة الصف الرابع الاعدادي دارس اللغة الانكليزية لغة اجنبية

رسالة ماجستير مقدمة الى مجلس كلية التربية الاساسية / جامعة بابل / وهي جزء
من متطلبات نيل درجة الماجستير في التربية طرائق تدريس اللغة الانكليزية

تقدمت بها الطالبة

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