**Title :** The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

**Researcher:**
Mohammed Abd El Razek Mohammed Sallam

University of Sadat city
Faculty of Education
Department of Curriculum &Instruction

# The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

## A Research
Submitted for the Fulfillment of the requirement of the Master degree in Education
(Curriculum & Instruction: EFL)

**Prepared By**
**Mohammed Abd El Razek Mohammed Sallam**
**An English Teacher**

**Supervised By**

**Dr . Hasnaa Sabry Abdel - Hamid Helwa**
professor at Department of
Curriculum, Instruction and Educational
Technology (TEFL)
Faculty of Education -Benha University

**Dr . Eman Ali A.Diyyab**
Assistant professor at Department
of Curriculum & instruction (TEFL)-
Faculty of Education -University of
Sadat city

**2024**

Title : The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

Researcher:
Mohammed Abd El Razek Mohammed Sallam

# Title: The Effectiveness of Using Mental Imagery Strategy in Developing EFL Reading Fluency Skills among Secondary School Students

**Researcher:** Mohammed Abdel Razek Mohammed Sallam

**Supervised By:** Dr. Hasnaa Sabry Abdel - Hamid Helwa   /   Dr. Eman Ali Diyyab

**Institution:** Faculty of Education -University of Sadat City, Egypt

**Year**: **2024**

## ABSTRACT

The current study aimed to investigate the effectiveness of using the mental imagery strategy in developing EFL reading fluency skills among the first -year secondary school students. The study participants consisted of 64 students from  Misr Elgadida Secondary School for Girls in Cairo Governorate , divided into two groups: an experimental group and a control group.  The study utilized an EFL creative reading fluency skills test accompanied with a rating scale as its primary instrument. The experimental group was taught through using mental imagery strategy, while the control group received regular instruction. The treatment took place during the second semester of the academic year 2022-2023.The results revealed that the EFL creative reading fluency skills of the first year secondary school students developed significantly as a result of the implementation of the mental imagery strategy. Thus, it can be concluded that using the mental imagery strategy is effective in developing creative reading fluency skills for first year secondary school students.

 Key words*: Mental Imagery Strategy, EFL  Reading fluency Skills*

**Title :** The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

**Researcher:**
Mohammed Abd El Razek Mohammed Sallam

## المستخلص باللغة العربية

### فاعلية استخدام استراتيجية التصور الذهني في تنمية بعض مهارات الطلاقة في القراءة الابداعية في اللغه الانجليزية كلغة اجنبية لدي طلاب المرحلة الثانوية

.

اعداد

**الباحث: محمد عبد الرازق محمد سلام**

ا.دا حسناء صبري عبد الحميد          ا.م. دا ايمان علي السيد دياب

هدفت الدراسة الحالية الي معرفة فاعلية استخدام استراتيجية التصور الذهني في تنمية مهارات الطلاقة في القراءة الابداعية في اللغة الانجليزية كلغة اجنبية لدي طلاب الصف الاول الثانوي .بلغ عدد المشاركين في الدراسه(٦٤) طالبه من مدرسه مصر الجديده الثانويه للبنات بمحافظه القاهره وتم تقسيم الطالبات الي مجموعتين: مجموعة تجريبية واخري ضابطة . تكونت ادوات الدراسة من اختبار مهارات الطلاقة في القراءة الابداعية مع مقياس تقييم . تم التدريس لطالبات المجموعة التجريبية باستخدام استراتيجية التصور الذهني بينما تلقت المجموعة الضابطة تعليما تقليديا .وتم تطبيق التجربة خلال الفصل الدراسي الثاني من العام الدراسي ٢٠٢٢-٢٠٢٣. اظهرت النتائج ان مهارات الطلاقة في القراءة الابداعية في اللغة الانجليزية لطالبات الصف الاول الثانوي قد تطورت بشكل ملحوظ نتيجة تطبيق استراتيجية التصور الذهني. وبالتالي , يمكن الاستنتاج ان استخدام استراتيجية التصور الذهني كان فعالا في تطوير مهارات الطلاقة في القراءة الابداعية لدي طلاب الصف الاول الثانوي .

**الكلمات المفتاحية:** *استراتيجية التصور الذهني , مهارات القراءة الابداعية*

## Introduction

English language is very importantin today's world. Language is our primary source of communication it is the method through which we share our ideas and thoughts others, some people even say that language is what separates us from animals and makes us human English is the international common tongue there are several factors that make the English language is essential to communication in our current time. First of all it is the most common foreign language .That is why everyone needs to learn the language in order to get in touch on an international level. Speaking English is necessary to communicate with people from countries all over the world.

English is a global language. It has the widest reach of any language spoken today. English is used in many fields, including, business, politics, science, technology and entertainment. English is the working language of many international organizations; it is also the most used language of the internet. A lot of people, learning English is away to get access to a broader range of information, connections and opportunities, in many contexts around the world, English has become a major means of daily communication and a language for research and technology (Al roomy &Alhowsawi, 2019)

According to Alyousef (2006), Reading is an interactive process between a reader and a text. The reader should interact dynamically with the text with the intention to understand its message. In order to understand the text, the reader needs to process two vital elements linguistic knowledge and background knowledge. Linguistic knowledge involves awareness about the language such as grammar or vocabulary structure.

Also according to ALobaydi (2011), reading is a process of interaction between the reader and the material in which all the schematic knowledge being interacted with all the reader's social and contextual factors. This process results from the unclear standing of the symbols to infer meaning. Further more as was observed that reading makes the text simple and easy to understand will go a long way to improve children's ability to read. According to Gumiran (2013), creative reading is an intelligent reading that involves ability the real definition of printed page. Give you to read beyond the reading between lines. So creative reading is not just an activity but ability as well.

EL Mahboub and Salah (2003).defined creative reading that emotional mental process the reader reach to discover new relations between things, facts and events in the text .According to ELghmdy (2011), creative reading is a number of mental skills related to creative that helps students to inter action with text Crater (2004), Mariliyn (2011) ,creative reading is a kind of reading that the reader is able to generate new meaning. It is thought that reading is a skill something to be learned and practiced reading also is considered a creative art capturing the imagination of the reader in ways that result in creative thought and expression.

According to Barashed (2019) , creative reading skill refers to sub skills, fluency, flexibility and originality ,the students are asked to give synonyms ,recommend alternatives and solutions for the ideas .Also students are asked to suggest endings to the topics .The student's abilities in the creative reading fluency

skill are tested on creative reading by a test was designed for this purpose  In the current study, there was a need to use modern approaches and strategies to develop creative reading fluency skill in English the mental imagery strategy is considered the latest proposed strategies for teaching and learning creative reading skills .This strategy is recognize by its ability to enhance student's creative reading skills by employing a list to generate ideas. Mental imagery strategy is considered a good strategy used in the developing of creative reading fluency skill.

**Title :** The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

**Researcher:**
Mohammed Abd El Razek Mohammed Sallam

Mental imagery refers to any image created in the mind without the presence of the real object or event, including images related to sight, sound, taste, touch, smell, sensation and feelings Jenkins (2009), also, mental imagery is used to help students create mental images while reading. Students will access prior knowledge and visual awareness. Mental images have been defined in various ways in the fields of education it is generally agreed to be the process of forming internal sensations of objects or events not physically present. Erickson( 2003) Sadoski (2005),mental imagery as the sensations and memories that people use to remember things and experience .Researchers such as Goetz, Sadoski, Fatemi and Bush (1994), claimed that mental imagery plays an important part with the complex task of reading, also the mental imagery strategy is considered one of the most important strategy for leaning reading

Abd EL naby (2004), mentioned that mental imagery is ability the individual has ability to join the representation together as mental images join with his previous experiments .Thomas (2007), believes that mental imagery is a quasi perceptual experience, it resembles perceptual experience ,but occurs in the absence of appropriate external stimuli .It is also generally understood to bear intentionality and thereby to function as a form of mental representations.

According to Mohammed (2021), mental imagery as a reading strategy that motivates learners to create mental images of the descriptive texts, they handle through using different senses. In addition to joining their new and background knowledge Mental imagery is experience during this process or this experiences the individual tries to rearrange his information which has been stored in his mind When students learn to use mental imagery, they improve their understanding of the text and increase their knowledge that they can remember what they have read. Readers use mental imagery when they form mental pictures of the information, setting, characters or events described in their reading. During learning, they use mental imagery, students can role play draw a picture of the subject discussed in reading or describe to appear what they reading.

Consequently this study aimed at providing more insights on mental imagery that can be used to develop some creative reading skills for secondary school student's .The current study is an effort to develop creative reading skills for secondary school students as well as determining the validation of a mental imagery strategy for secondary school student.

## 1.2. Context of the problem

As a teacher of English for more 20 years, it was observed that there was a lack of EFL creative reading skills among secondary school students and it was noticed that many students did not have many of EFL creative reading skills. Further they could not read efficiently, or creativity .Through reviewing previous studies that recommended developing the four skills of English languages ,in addition , reviewing previous studies related to EFL creative reading skills have emphasized serious problems in EFL creative reading skills such as (Masoud ,2014; Abdulrahman,2015; Othman ,2015; Mohammed,2017; Alqutunaui,2019; Makled, 2019;Yurdakal,2019) which confirmed that there is a weakness in students level of EFL creative reading fluency skill as a result of using traditional methods and techniques used by teachers in teaching creative reading skills and it must be done to develop these skills by using modern strategies and techniques reading skills.

To document the study problem, a pilot study was conducted to discover the difficulties which secondary school students face acquiring some of EFL creative reading skills. This study consisted of an EFL creative reading fluency test prepared by a researcher on a sample of first year secondary school stage students to measure some their creative fluency skills at Misr ELgadida secondary school.

## 1-3 Statement of the Problem

The problem addressed by this study lies in the deficiency of secondary school

students EFL creative reading fluency skills

## 1.4. Questions of the study

The current study was an attempt to answer the following questions:

1-What are the EFL reading fluency skills required for first- year secondary students?

2-What is the current level of EFL reading fluency skills required for first-year secondary students ?

3-What are the characteristics of the mental imagery strategy?

4What is the effectiveness of using mental imagery strategy in developing some EFL reading fluency skills?

## 1.5. Significance of the study

The current study is expected to contribute significantly to the following:

**1-For Secondary Stage Students:**

Title : The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

Researcher:
Mohammed Abd El Razek Mohammed Sallam

It helps students improve their creative reading skills through the mental imagery strategy .Encourage students to practice the method of the mental imagery to generate ideas. Assists in acquiring creative reading skills .

**2-For EFL Teachers:**

generating ideas  and drawing conclusions. Provides teachers with resources and techniques for   fostering creative reading skills. Assists teachers in lesson preparing and introduces them to new strategies for teaching creative reading .

**3-For EFL Curriculum Designers:**

Enriches the reading curriculum for secondary stage students incorporating innovate approaches.  Facilitates curriculum improvement  by integrating strategies to develop creative reading skills .

**4-For EFL Researchers:**

This study may open the field for other studies in the field of learning the English language using the mental imagery strategy. And the outcome of the study can serve as a guide for future research in creative reading skills development..

## 1.6. Delimitations of the study

The current study was delimited to the following:

. ASample of  secondary school students from Misr Elgadida Secondary School for Girls

. Some EFL creative reading Fluency skills.

. The second semester of the academic year (2022/2023)

 1.7. Study Variables

1. The independent variable: The mental imagery strategy.

2. Some EFL reading fluency skills.

1.7. Instruments and Materials of the study

The researcher prepared and used the following tools and materials

1- An EFL reading fluency skills checklist

2- An EFL reading fluency skills test with a rating scale to assess school students' performance.

3- A teacher's guide

1.8. Definitions of terms

**The present study handled the following definition:**

### 1.9.1. EFL Creative Reading fluency Skills:

According to Khalaf Allah , (2005)p.98 Creative reading is defined as a process in which the reader interacts with the text so that the reader is famikiar with the aspects of the topic and possible generates relationships and new compositions relying on the information provided to him in the text and his previous experiences. and imagine it , and this enables him to ask questionsabout the ambiguities in the text to complete missing information to be active and sensitive to problems that may arise in the text. , also, Gumiran ( 2013), defined creative reading as an intelligent reading the reader can read between the lines .Creative reading is not just activity but ability as well . Creative reading is defined as a creative art that captures the imagination of the reader in ways to produce creative thoughts and ideas (Small & Arone ,2011).

EFL Creative reading fluency skills are operationally defined as first year secondary school students' abilities to interact with the text in depth way this makes them be able to deduct , create new ideas between things and facts ,to generate new variety ideas , to discover new solutions ,analysis them and joined them with other

### 1.9.2. Mental Imagery Strategy

According to Basma elsayed ( 2021)mental imagery defined as a reading strategy that motivates learners to create mental images of the descriptive texts and narrative stories , they handle through using different senses in addition to joining their new and back ground knowledge. According to Borrega (2012), mental imagery strategy refers to a reading strategy that encourages students to create mental pictures, rich in sensory content sight, smell, sound, taste ,touch and emotions of the content of reading selections to make the words on a page real and concrete .This reading strategy includes imaginations a scene depicted in creative reading .

. Mental imagery is operationally defined in the present study as it is a strategy pointed out the number of mental procedures which the group secondary school students follow during interaction with the text these procedures involved forming a group of mental images help them on depth understand for comprehension text.

## Review of Literature

### 2.1.1. EFL creative reading fluency

EFL creative reading is an interactive process that fosters understanding between the reader and the text, eventually leading to automaticity. The text comprises letters, words, phrases, and paragraphs that convey meaning. Determining this meaning requires the reader to employ their knowledge, skills, and strategies. Finding meaning in a text cavalry from answering questions to exploring ideas imaginatively. To enhance learners' skills, it's crucial to focus not only on comprehension but also on imaginative reading, which involves creatively interpreting ideas sparked by the text. While cognitive studies have long explored reading, there remains a gap in theories that adequately explain how individuals fully engage in creative reading of real-world texts (Al Yousef, 2006; Wani, 2009). Creative reading in EFL contexts represents the highest level of perceptive skills. It involves creating, reintegrating, and expanding ideas. This type of reading motivates students' mental activities and reveals itself in various classroom tasks. It involves producing new insights by leveraging past experiences and analytical thinking processes. Furthermore, creative reading encourages students to move beyond surface-level understanding, using imagination and contextual knowledge to interpret the text, fill in gaps, and develop conclusions (Abdullatif, 2006; Helwa, 2010; Yardakul, 2019).

As a process, creative reading enables readers to grasp all aspects and details of a text, transcending mere legibility. It helps them generate new ideas, enhancing their linguistic resources and critical thinking. Isiklan (2018) highlighted that creative reading empowers learners to follow their self-management strategies, apply a range of techniques, and synthesize, integrate, and expand on concepts. Additionally, creative reading allows for flexibility in interpreting natural phenomena by personalizing information and generating fresh perspectives. For example, readers can develop alternative story endings or introduce new characters by imagining themselves within the narrative, enriching their engagement and creativity (Ibrahim, 2017).

Creative reading skills also encompass the ability to understand both explicit and implicit meanings while critically evaluating the text. These skills encourage readers to go beyond the printed material, fostering deeper involvement and generating novel ideas. By engaging with the text, learners can pose questions and create meaningful insights (Holden, 2009; Phyllis, 2012; Mohamed, 2013).

Lastly, creative reading is a cognitive process that builds on students' higher-order thinking skills. It transcends basic comprehension, allowing learners to connect prior experiences with new content. This approach encourages the exploration of relationships within the text, the development of innovative solutions, and the creation of valuable, original outputs (Al-Ruwaili, 2019).

## 2.1.2. EFL Creative Reading skills

EFL creative reading skills are varied and each skill .These skills include :a) Skiing questions about the points the text does not embody. Using applicable questions associated with the subject, text Adding new Concepts to the Content of the text through questions. b) Predicting events from appropriated topic and generating new ideas. Reporting possible reasons For events probable Introducing various results for decreased story. c) Creating skills which in the text, creating new concepts or ideas for the introducing several solutions for the problem Several .changing the topic into a story .Changing the topic into a poem . Also, creative reading skills are thinking throughout reading. characterizing between facts and opinions communicating with the author through written text / transcription and choosing the Important ideas / necessary concepts trying guessing what would happen during reading a text .perception deeply to solve problems  (Guniran&Moorman,2013) .

According to Rababah, Bin Mohamed& Bani Melhm (2013 )  , EFL creative reading skills refer to fluency ,flexibility and originality as follow ;

1- Fluency refers to the number of different ideas one can produce which implies word fluency: - associational fluency expressional fluency - ideational fluency

2- Flexibility refers to the variety of idea one produce, which implies

a- Spontaneous flexibility b: adaptive flexibility

3- Originality refers to how unusual are the ideas one produces including remote associations.

Also various creative reading skills have been suggested by several researchers

Abstracting the passage. Implying or expecting the ending of the passage.

4- Detail literacy: The ability to suggest more details on the readable text, Creating endings for the readable text.

## 2.1.3. Significance of EFL Creative Reading

Creative reading encourages students to read about any topic of their own choice .These activities help the students to improve comprehension   and encourage cooperation among students ( Ruth 8 Marilyn, 2011).

Creative reading is meant to inspire students, to animate their imaginative ideas and generate alertness in their minds. Also, it should help students to concentrate on how grammar and style help the writers submit their message to the reader. Creative reading means active reading. Creative reading also includes critical reading and critical thinking. It has the ability to distinguish between real and Fictional points ( Katheen, 2012) .

Creative reading activities influence the empowerment of EFL learners. Independent reflection of motivation and higher order thought. Also, creative reading skills help students to explore and understand the content in a better manner ( Rodriguez, 2012 ). The importance of creative reading is related to the methods and strategies process. As for the development of these skills, we should use modern technology to contribute greatly to acquitting them because of their aspects of interaction processes and knowledge beyond the apparent text of the English language ( Al Ruwaili ,2019 )

Creative reading helps learners better understand the subject matter and words, incorporating past interactions with Concepts to discover hidden meanings and associations through symbols, to create new ideas and apply them to new fields(Hizir, 2014 ), creative reading is an efficient method of enhancing students attitudes towards reading (Yurdakal , 2018). In the  reading process, imaginative reading eliminates reading anxieties increases comprehension, teaches multidimensional thinking, generates creativity, and creates a culture of reading(Yilmaz, 2009 ) .So creativity in the foreign language is important because creative memory requires cognitive and behavioral abilities and visual skills. An analogy is the relationship between two: distinct ideas if there is another idea that would ground the analogy, there would be frivolous analogy. An issue is treated in a new way. Therefore, individuals who have achieved creative comprehension will be able to

I- Use language is a creative act, students should be given creative exercises.

2-IF some students are not allowed to be creative, they can't learn at all. 3-If students create something value, they become more motivated, challenged and inspired.

4-Creativity improves Self-esteem as students will check up on their own solutions to issues, and their own products and see what they able to come through / ready to succeed.

5- Creative work Can lead to Co-operation and enrich classroom work ( Fesher, 2007 ).

Creativity refers to the ability to connect with the text and generate new ideas, as well as the product of innovative creative concepts that are transformed    into    reality . ( Norman, 2018 & Qudah ,2019) . According to Diyyab (2018), creativity is a major driver of economic growth and prosperity .Reading is regarded as a creative process in and of itself , and readers must posses advanced skills to succeed in both the work market and in gaining the most cultural and social opportunities . Several definitions of creativity have been proposed, and one such definition is an act with a product. In several respects, creativity is mysterious and intensely personal ; an individual might generate something novel from a variety of situations and inputs, recognize unfamiliar words. Say whether or not the text they read is interesting. Develop and create a relationship of cause and effect based on the personal acceptance and beliefs of the characters in the text, and draw a conclusions by associating the action states in the text throughout reading

**Title :  The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students**

**Researcher:**
**Mohammed Abd El Razek Mohammed Sallam**

## 2.1.4. Levels of creative reading skills

There are various levels that are include in creative reading: discrimination, identification, understanding, comprehension, retention and recalling .These six levels are illustrated by Shephered & Mitechel ( 2006) as follows :

1. Discrimination. It is learner's knowledge of visual data symbols through the eye.

2- Identification the letters and words.

3. Understanding by associating the read vocabulary with the overall meaning of the read text.

4- Comprehension by linking read information to the learners cognitive inventory.

5-Retention is the ability to properly story information in the memory.

6-Recall That information and use it in communication. In this level EFL learners should be able to bring and add something new to the reading level. Accordingly, it is considered the highest level of reading ( Helwa,2010 ; Olajide ,2008 ). According to Isiksalan (2018)   , the levels of creative reading are fostered and acquired within three stages ( creative memory , comparison and substantial analogy )

## 2.1.5. Aspect and Stages of Creative Reading:

> Aspects and Stages of Creative Reading
According to Scaife (2015), the creative reading process can be divided into four distinct stages:
1. Descriptive Stage:
At this initial stage, the reader focuses on understanding the content of the text.

The instructor introduces and explains new content while addressing questions related to the text.
2. Personal Interpretation Stage:
At this stage, the reader connects the content of the text with personal experiences.
Questions are framed to facilitate dialogue and encourage deeper understanding.
3. Critical Reflection Stage:
The reader engages in critical thinking to analyze and evaluate the text.
Questions at this stage explore the implications of the situations described in the text, such as identifying who benefits or is affected.
4. Creative Stage:
In this stage, the reader takes action inspired by the text.
Questions such as "What would you do in a similar situation?" or "How would you behave differently now?" are explored, encouraging innovative and practical applications of the text's ideas.

Title : The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

Researcher:
Mohammed Abd El Razek Mohammed Sallam

## 2.1.6. Teacher's Role in Teaching EFL Creative Reading Skills

The role of EFL instructors is pivotal in enhancing students creative reading skills and overall outcomes .Teachers act as the cornerstone of effective education ,fulfilling various roles that                                                 include                                                 :

1.Facilitators of knowledge Constracion:
   Teachers are not merely providers of information but guide students in constructing their own knowledge through active engagement and exploration .

3-Problem Solvers :

   Instructors address the challenges students face in reading classes by introducing innovative teaching strategies and fostering a supportive learning environment .

   3- Encouragers of Critical Thinking :

Teachers inspire students to engage with texts critically , prompting them to analyze, evaluate, and generate new ideas
   4-Motivators:

By promoting a love for reading and creativity , teachers encourage students to develop a deeper connection with the material and enhance their reading habits

As not all students are interested in reading classes, teachers will not force students to like reading. Thus, by presenting interesting and familiar text, they can do their best to inspire students to read creativity ( Rayri, 2013) .

## 2.1.7. Roles of Students in EFL Creative Reading Classes:

To become creative readers with advanced reading skills, students should:
1. Explore and question the ideas and details presented in the reading materials.
2. Draw connections and recognize interactions, thinking from different perspectives and identifying relationships between previously related concepts.
3. Experiment with concepts, test solutions, and analyze ideas, reshaping their thinking to produce innovative outcomes.
4. Assess their progress and development, invite constructive criticism, and objectively reflect on concepts, behaviors, and performance (Crater, 2004). Creative readers must remain aware of the writer's intentions while simultaneously building implicit connections between ideas, events, and settings. These connections, formed through creative reading, are not explicitly stated by writers but emerge as readers explore the implications of the content (Kenneth, 2004). Reading aloud to children may feel like a performance, but it is a form of creative reading, as readers

adapt their voices for different characters and use expressive tones to clarify meaning (Tuzlukova & Gilhooly, 2013). Creative readers actively focus on building links between ideas, which are not directly established by the author. These connections enable them to reinterpret ideas in meaningful ways. By engaging in creative reading and responding to texts, readers transform the act of reading into a creative process. This approach encourages them to explore new ways of thinking, reacting, and understanding (Masoud, 2014). To master creative reading, Holden (2004) outlined several effective steps:
1. Identify the problem or issue in the text and determine how the required information is presented.
2. Pose various questions about the text to clarify and define the information accurately.
3. Link the information in the text with other sources or past knowledge to generate new ideas and solutions.
4. Broaden their understanding by exploring the topic through additional sources and organizing their thoughts effectively.

## 2.2 .1.Mental Imagery

## 2.2.2. Theoretical and background of Mental Imagery

Throughout history, mental imagery has played a significant role in literacy. All perception, according to ancient philosophers, was based on imagery. As a result, they prioritized imagery in the development and comprehension of discourse in the loci method of ancient and mediaeval rhetoricians. Mental imagery was crucial to composition. It was also central to reading in the medieval scholastics ruminative activities. Renaissance thinkers and educators, for their part, claimed that creativity played an important role in their world view. They also incorporated pictorial imagery and stressed the importance of concreteness in literacy learning . Modern educators and scientists have believed that imagery is an important factor in

Title : The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

Researcher:
Mohammed Abd El Razek Mohammed Sallam

cognition literacy. It was also noticed that literacy scholars throughout history have regarded imagery as crucial to both the composition of literature and the response of readers to literature ( Sadoski & Pavivio ,2001 ).

## 2.2.3. Definition of Mental Imagery

The mental imagery strategy in teaching and learning depends mainly on cognitive psychology theories such as the theory of dual coding the theory of organization (system) , the theory of mental schemas , the theory of role playing and the realist image theory which emphasizes the effectiveness of the role of the learner in receiving new knowledge while activating his previous knowledge on the subject of learning ( Solso ,2000) .

According to Rockelein (2004) and Borrega (2012). All those quasi sensory or quasi perceptual experiences of which we are self aware and which exist for us in the absence of those stimulus conditions known to produce their genuine sensory or perceptual counterparts, and which may be expected to have different consequences from their sensory or perceptual counterparts. Imagery entails a series of processes with their own properties that can be stimulated as various levels of cognitive activity.

Richardson (2013) , Sadoski (2014) , Atom & Rezuq (2018) . Mental imagery is one of the most essential mechanisms dependent on knowledge processing in the cognitive system and is a common feature of the daily experience of most individuals. An imagery strategy is a method that uses mental imagination to improve your ability to memories and create relationships with what you want to remember.  Mental imagery is defined as a process or event where individuals have a specific item, event , or environment while the object event and atmosphere are actually not present at the time of the mental imagery process and relate to the brain . It originated from the process of visual object retrieval  past events and past experiences .

According to Thomas  (2003) & Jenkins  (2009) . Mental imagery reflects the individuals awareness when situations are very close to the interpretation of events or scenes, but the distinction between them is that in mental imagery ,objects don't exist before senses .  Mental imagery refers to any image produced in the mind, including images related to sight, sound, taste, touch, smell, perceptions and emotions, without the presence of the actual object or event.

### Mental Imagery is classified into two types;
Internal and external images are famously referred to as mental imagery that readers build in their minds away from the building process. The images they have in their minds are intangible; we just can't see them as they do internal images. We can analyze their comprehension of the reading passage being read by encouraging them to think aloud so that they can communicate with others what they have already learned, but still the mental imagery they generate is invisible to make the internal images not noticeable. Readers should draw a visual representation to reflect their internal imagery and to represent the essence of the context . This is what we call external imagery ( Cohen & Hegarty ,2007 ) .

## 2.2.4. Significance of Mental Imagery

Burmark ( 2002 ) clarified  that the basic knowledge of reading and writing in twenty first century will be visual and that our students must learn how to process both words and images, they need to learn strategies for thinking in pictures that go beyond reading comprehension and identify words and vocabulary to what is deeper and more comprehensive good, talented readers are spontaneous images, relying more on visual images, and 50% more than normal readers .

In addition  EL Bassuoony etal ., (2011 ; ELghamdi & Mar ,2011) . have assured that mental imagery Mental imagery  helps the learners to create pictures related to specific vocabulary items from the prescribed text and store them in one's mind. Changing vocabulary items into pictures makes it easy for the mind to recognize and recall them later .Mental imagery is a typical human ability which underlines complex activities, such as creativity and art work production .Also since mental imagery often influences the understanding of various situations , encounters and events, since it is a key part of the mechanism of cognition, this  affects the reading comprehension process related to the ability to comprehend texts and appreciate the different relationships between events .Readers use mental imagery to assess what is in the mind of the characters to anticipate and describe ,metalizing their actions and feelings, which contributes to the mental models as well as .

In this regard ( Kosslyn and Pearson, 2013) ,the formation of mental representations in the absence of perceived inputs is known as generation inspection is the investigation of a mental image, while reactivation allows you to interpret the images object based qualities or spatial properties . In other words mental imagery is one of the fundamental abilities that allow individuals successfully to plan, run dress rehearsals of future events, reanalyze the past and even simulate or fantasies events that may never happen. The real function of mental imagery is to prepare the individual to run external cognitive stimulants and perform actions in the outside world, so mental imagery helps the individual to prepare to face the actual situation around which the process of mental imagery was going on  ( Anderson, 2007).

Boreggah (2012) described imagery as a method that involves recalling information through visual or auditory cues. She highlighted that using imagery entails "linking new verbal information to memory concepts via meaningful visual imagery, either mentally or in a real-world scenario." This could involve visualizing an object, a sequence of locations for memorizing phrases or words, or mentally representing a letter or word.

Sadoski (2008) emphasized that mental imagery during reading significantly enhances understanding of the text. Imagery, as a psychological concept, relates to the memory of perceptions that persist even after the text disappears. Mental imagery involves perceiving through the "mind's eye" and is a fundamental cognitive process for representing information. It plays a pivotal role in people's daily lives, especially concerning visual and verbal images. Despite this, the specific meaning of mental imagery can be challenging to define (Atoum & Resiq, 2014). Combining verbal knowledge with mental imagery proves particularly effective in learning and remembering idiomatic expressions, as it offers an additional tool for recalling verbal information (Aydin, 2017).

The mental imagery strategy focuses on creating visually enriched mental images to help learners grasp information more effectively. This approach aligns with the theory of binary

Title : The Effectiveness of Using Mental Imagery
Strategy in Developing Some EFL Creative
Reading Fluency Skills among Secondary School Students

Researcher:
Mohammed Abd El Razek Mohammed Sallam

mental encryption, combining visual and verbal cues to form an integrated system. Using this dual approach improves the retrieval and diversification of knowledge, ultimately boosting students' learning and success (Mccable, J.A, 2014).

Mental imagery must be included in education for its positive role in solving the problem, attracting creativity, developing self-awareness and employing the visualization method that helps the teacher attract students attention to lessons, retrieve information and improve the various skills they have. It also helps students understand abstract concepts that are difficult to learn through words alone  and thus enables them to achieve a comprehensive and broader understanding of what they are learning. In addition to the fact that it helps to improve the environment, it is a powerful tool that has many used ( leitner, 2011).

## 4.1. Results of the Study Hypothesis

## 4.1.1. Verifying of the First Main Hypothesis

The study hypothesis stated that "There is a statistically significant difference at the 0.01 level between the mean scores of control and the experimental groups on the post administration of the overall Creative Reading Skills Test in favor the experimental group.

By applying t-test to compare the mean scores of the participants of two independent and homogeneous groups (experimental and control) in the post administration of the overall Creative Reading Skills Test and determining the statistical significance of the difference between them, the results were as shown in the following tab

Table (٧): t- test differences between the participants' mean scores in the post administration of the overall Creative Reading Skills Test.

| Group | No | Mean | S. D | D. F | t-value | Sig | Level of sig . |
|---|---|---|---|---|---|---|---|
| Control | 32 | 9.88 | 2.04 | 62 | 13.52 | sig. | 0.01 |
| Experimental | 32 | 17.65 | 2.53 | | | | |

**tabular value of t-test at the level of (0.01) and 62 D.F is (2.62)**. The

   In light of the results of the previous table, it is clear that the calculated t-value of is 13.52, exceeding its tabular value of 2.62 at a degree of freedom 62 at a level of statistical significance (0.01), these results indicate that there is a real difference between the mean scores of the research participants in the experimental and control groups, in the post administration of the overall Creative Reading Skills Test in favor of the experimental group. This finding of the research can be clarified using the following statistical representation:
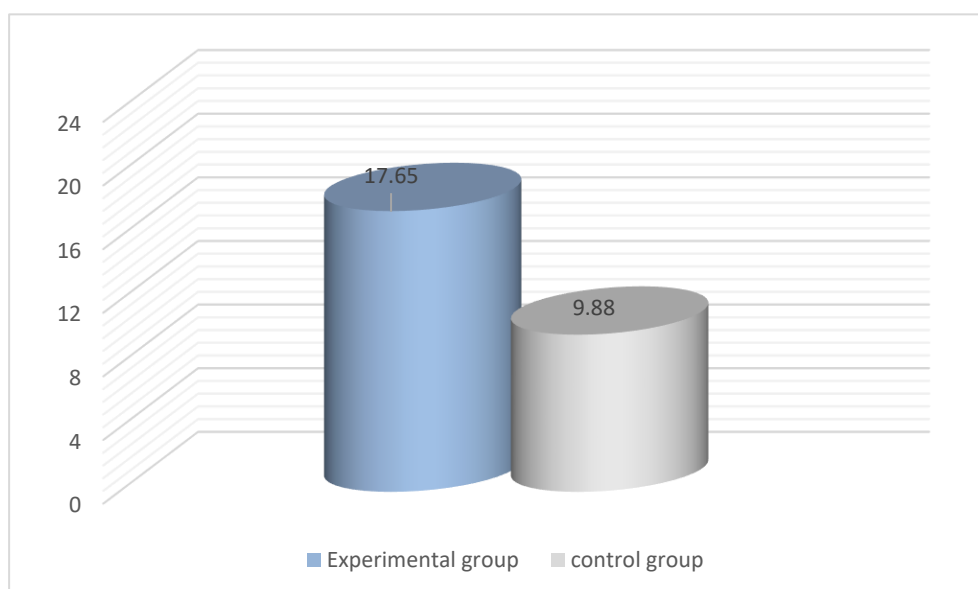


): The statistical representation of the research participants' mean scores on the post-١Figure ( administration of the overall Creative Reading Skills Test

## 4.1.2 Verifying of the Second Hypothesis

   The second hypothesis stated that "There is a statistically significant difference at the 0.01 level between the mean scores of control and the experimental groups on the post measurement of the Fluency skills Test in favor the experimental group. By applying t-test to compare the mean scores of the participants of two independent and homogeneous groups (experimental and control) in the post administration of the Fluency skills Test and determining the statistical significance of the difference between them, the results were as shown in the following table ():

Table (2): t- test differences between the participants' mean scores in the post administration of the Fluency skills Test.

**Title :** **The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students**

**Researcher:**
**Mohammed Abd El Razek Mohammed Sallam**

| Group | No | Mean | S. D | D. F | t-value | Sig | Level of sig. |
|-------|-----|------|------|------|---------|------|---------------|
| Control | 32 | 3.69 | 1.09 | 62 | 10.02 | sig. | 0.01 |
| Experimental | 32 | 6.25 | 0.95 | | | | |

**The tabular value of t-test at the level of (0.01) and 62 D.F is (2.62).**

   In light of the results of the previous table, it is clear that the calculated t-value of is 10.02, exceeding its tabular value of 2.62 at a degree of freedom 62 at a level of statistical significance (0.01), these results indicate that there is a real difference between the mean scores of the research participants in the experimental and control groups, in the post administration of the Fluency skills Test in favor of the experimental group. This finding of the research can be clarified using the following statistical representation:
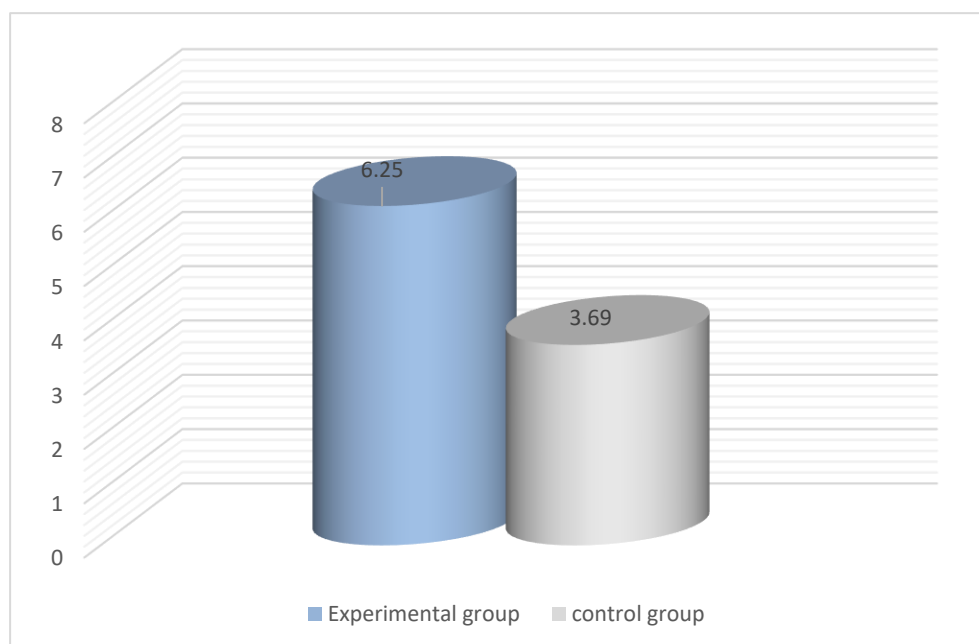


**٢): The statistical representation of the research participants' mean scores on the post-administration of the Fluency skills Text**

**Title :  The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students**

**Researcher:**
**Mohammed Abd El Razek Mohammed Sallam**

## 4.2. Discussion of Results

The primary objective of this study was to examine the effectiveness of the mental imagery strategy in enhancing EFL creative reading skills among secondary school students. The results demonstrated a significant positive impact of the mental imagery strategy on the development of these skills in secondary stage student.
> The positive outcomes achieved by the experimental group can be attributed to the structured steps of the mental imagery strategy. These steps allowed students to think creatively by generating new ideas, substituting outdated concepts with innovative ones, and addressing problems with alternative solutions. By following the steps of the mental imagery strategy, students were able to establish various types of connections and relationships between ideas, enhancing their ability to recall and apply both literal and imaginative                                   images                                   effectively.
> Furthermore, the mental imagery strategy empowered students to create their own mental representations, combining their prior knowledge with newly acquired understanding. This process facilitated the generation of original and creative ideas in a structured and efficient manner, highlighting the strategy's role in fostering deeper engagement with the text

## Recommendations

In the light of the findings and conclusions of this research. Some recommendations are presented to meet the concerns of teachers, students and supervisors.

1. Teachers should prioritize the development of students' creative reading skills from early education stages, ensuring these skills progress through subsequent stages to avoid potential difficulties.
2. English teachers should instruct students on how to apply the mental imagery strategy when reading texts to help them overcome challenges.
3. Teachers should incorporate memory-enhancing activities into their lessons using diverse strategies.
4. Students should engage in extensive reading of books and stories to improve their reading skills and expand their background knowledge.

# The References

Abdu Latif, O. (2006). The impact of training first-year English majors at the Faculty of Education on integrating creative reading and writing skills and their performance in these areas. Unpublished M.A. thesis, Minia University.

Abd Al Maseeh, M. (2019). A cognitive thinking-integrated strategy for enhancing EFL students' creative reading skills at the secondary stage. *Cognitive Journal*, *Faculty of Education, Banha University, 30, 118.*

Al-Mutairi, M. Y. S. (2021). The effectiveness of a mobile learning-based program in developing certain creative reading skills among EFL high school students in Kuwait. Faculty of Education, University of Sadat City.

Alqatnani, A. (2017). The effect of a program based on thinking maps and multiple intelligences on improving critical and creative reading skills among Jordanian tenth-grade students. *Retrieved from http://search.mandumah.com/Record/870491*

Barashed, M. (2019). The impact of a graphic organizer-based instructional program on Saudi EFL students' critical and creative reading skills. Retrieved from *http://search.mandumah.com/record/1015408*

Borega, A. (2012). The effectiveness of a proposed ELT program incorporating mental imagery strategies in developing secondary-level students' reading skills.

Chou, P. (2011). The effects of vocabulary knowledge and background knowledge on reading comprehension among Taiwanese EFL students. *Electronic Journal of Foreign Language Teaching, 1.*

Cohen, M. T., & Johnson, H. L. (2011). *Enhancing vocabulary acquisition through imagery interventions. Early Childhood Education Journal, 38(5), 357-366.*

David, P. (2008). *Dual coding theory. In W. Donshach (Ed.), The International Encyclopedia of Communication. Retrieved October 2, 2009, from http://www.blackwellreference.com*

Divyab, E. A. (2018). The impact of a mobile learning-based program on middle school students' ability to comprehend science expository texts and its role in developing creative reading skills and motivation among EFL sophomores. Ph.D. Thesis, Faculty of Education, Sadat City University.

Ebrahim, A. (2017). The use of a meta-memory-based program to develop EFL secondary school students' creative reading skills. Educational and Psychological Studies Journal, Faculty of Education, Zagazig University.

Elghamdi, A. S. (2019). The effectiveness of a mental imagery strategy in developing reading comprehension skills and attitudes among sixth-grade female students. Retrieved from *https://search.mandumah.com*

**Title : The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students**

**Researcher:**
**Mohammed Abd El Razek Mohammed Sallam**

Fisher, R. (2007). The impact of guided mental imagery on reading motivation among fourth- and fifth-grade students. Unpublished master's thesis, Widener University, Chester, Pennsylvania.

Fleckenstein, et al. (2002). *Language and imagery in reading and writing instruction. New Jersey: Lawrence Erlbaum Associates.*

Gambrell, L., & Koskinen, P. S. (2002). Imagery as a strategy for enhancing reading comprehension instruction. Research-Based Best Practices, New York: Guilford Publications.

Grabe, W. (2002). *Reading in a second language. In R. B. Kaplan (Ed.), The Oxford Handbook of Applied Linguistics (pp. 49-59). New York: Oxford University Press.*

Helwa, H. (2010). The impact of using the annotation strategy on enhancing reading comprehension skills among EFL college students. Unpublished MA thesis, Faculty of Education, Benha University.

Helwa, H. (2020). Implementing a mobile computer-supported collaboration learning program and social media applications to enhance EFL student teachers' creative reading skills and cultural awareness. *Journal of Education (75).*

Isiksalan, S. N. (2018). The *effects of intertextual reading on developing creative reading skills. Traditional Online Journal of Educational Sciences, (104).*

Janya, A., & Elena, A. (2007). The role of mental imagery in comprehending unfamiliar idioms. Department of Cognitive Science, New Bulgarian University, Montevideo St., Sofia, Bulgaria, 2007.

Jenkins, M. H. (2009). Investigating the effects of mental imagery as a comprehension strategy for middle school students in reading science expository texts. (Doctoral dissertation).

Kassem, L. A. (2022). Utilizing drama techniques in English language instruction to foster creative reading skills among preparatory students. Faculty of Education, Assiut University.

Kocaarslan, M. (2015). The influence of teaching mental imagery on the reading comprehension skills of fourth-grade students. (Doctoral dissertation, Gazi University, Ankara, Turkey). Retrieved from *Leitner, D. (2011). Power.*

Mohamed, M. F. (2013). Enhancing students' creative writing and reading skills through their native culture: A study on experimental language preparatory school students. *Reading and Knowledge Journal, (146).*

Mohamed, B. E. (2021). Applying mental imagery strategies to develop EFL reading comprehension skills among primary school pupils in language schools and boost their motivation for reading. Mansoura University, Faculty of Education.

Nasser, R. Y. (2017). Integrating cognitive thinking strategies to enhance EFL creative reading skills among secondary school students. Zagazig University.

Title : The Effectiveness of Using Mental Imagery Strategy in Developing Some EFL Creative Reading Fluency Skills among Secondary School Students

Researcher:
Mohammed Abd El Razek Mohammed Sallam

Oliver, E. (2002). Mental imagery ability in high- and low-performing collegiate basketball players. Unpublished PhD dissertation, Boston University.

Park, J. Y. (2012). A novel approach to reading instruction: Using visualization to connect reading comprehension and critical literacy. *Journal of Adolescent & Adult Literacy, 55(7), 629-640.*

Qudah, E. M. (2019). The impact of the Double Entry Journal on ninth-grade students' performance in creative reading and their attitudes toward it. Retrieved from *http://search.mandumah.com*

Rabbah, L. B., Mohammed, & Buni Melhem, N. Z. (2013). Exploring creativity levels in English writing among Jordanian secondary school students. Arts and Design Studies, 10, 10157-139.

Sadoski, M., & Paivio, A. (2004). A dual coding theoretical model of reading. In R. J. Ruddell & N. J. Unrau (Eds.), Theoretical models and processes of reading (5th ed.). *New York, NY: International Reading Association, pp. 1329-1362.*

Takala, M. (2006). Investigating the impact of cognitive thinking strategies on children's reading comprehension. Scandinavian Journal of Educational Research, Vol. 50, No. 5, Finland.

Tuzlukova & Eltayb (2013). Promoting creative reading in EFL classrooms. Sultan Qaboos University, Oman. Litu tu ac. th / FIIT 2013 / www.fllt.

Vasilijevic, Z. (2015). The role of imagery and idiom instruction: Examining the effects of learner-generated illustrations and etymology. International Journal of Arts & Sciences, 8(1), 2.

Wang and Lawson (2015). Assessing the influence of image quality training on EFL students' reading comprehension using the keyword method. *ERIC Language Teaching Research*.

Watkins, C. (2007). Effective learning in the classroom. Publisher: Paul Chapman.

Zhang, L. & Wu, A. (2009). Metacognitive awareness and reading strategy application among Chinese senior high school EFL students. Reading in a Foreign Language, 21(1), 37–59.