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> **Investigating Teachers' and Students' Attitudes towards Metacognitive Awareness of Reading Strategies Uses on EFL Students' Reading Comprehension: The Case of First-Year Master Students at the Department of Letters and English Language, University of 8 Mai 1945 – Guelma-**

A Dissertation Submitted to the Department of Letters and English Language in Partial Fulfillment of the Requirements for the Degree of Master in Language and Culture

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DEDICATION

With utmost gratitude and heartfelt appreciation, I express my sincerest gratitude to 'Allah', the

Merciful and the Most Sacred.

I am forever indebted, to whom I owe my existence, to my mother 'Aicha', my father

'Mouhamed Yazid', to my step mother 'Zahia', to my brothers 'Houcine' and 'Housseme', and to

my cherished family and cousins.

To my partner in this work 'Hena' who had to bear with my broken memory for months

This work is a testament to the profound bond shared with my sister and dear friend, 'Soundous

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measure.

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companionship and unwavering belief in me.

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express my sincerest gratitude. Our memories will always be alive in my heart.

I express my deep appreciation to my friends abroad, who have taught me to be a critical thinker.

Fear of failure is a strong reason to keep going. That is why I dedicate this work to poverty and

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Last but not least, I want to thank me

I want to send my deepest thanks to myself. I want to thank myself for all the hard work in my

academic years. I want to thank myself for all the searching, writing and rewriting of this work. I

want to thank myself for never letting anxiety get the best of me.

Donia AROUEL

DEDICATION

"The roots of all goodness lie in the soil of appreciation for goodness."

- Dalai Lama-

In the name of Allah, the most merciful, and the most compassionate

I dedicate this research endeavor to all those whose unwavering support, encouragement, and inspiration have propelled me forward on this intellectual journey.

To my mother 'Rabiaa', father 'Youcef', sister 'Imene', and brother 'Aissa', whose love and belief in me have been constant sources of strength. Your unwavering encouragement and sacrifices have paved the way for my success. This achievement would not have been possible without your constant support.

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Lastly, I dedicate this research to future generations of scholars and researchers. May this work serve as a stepping stone towards deeper understanding, new discoveries, and transformative progress. May it ignite a passion for exploration and a commitment to making a positive difference in the world.

With heartfelt gratitude,

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ABSTRACT

Reading comprehension is a fundamental skill in language teaching-learning in general and in English as a Foreign Language (EFL) context in particular. However, due to the complexity of cognitive processes involved, many EFL students encounter serious difficulties and challenges. This is why teachers need to raise their awareness towards using reading strategies. In this regard, the present dissertation seeks to investigate teachers' and students' attitudes towards metacognitive awareness of reading strategies uses on EFL students' reading comprehension. It is hypothesized that teachers' and students' have positive attitudes towards metacognitive awareness of reading strategies uses and EFL students' reading comprehension. In order to achieve research aims, answer questions and test hypothesis, the quantitative-descriptive method was used by employing two questionnaires. The students' questionnaire was provided to 110 First -Year Master students randomly chosen from the whole population; while the teachers' questionnaire was administered to 28 teachers from the Department of Letters and English Language at the University of 8 Mai 1945- Guelma. The analysis and interpretation of the collected data revealed positive attitudes among teachers and students towards metacognitive awareness of reading strategies uses and EFL students' reading comprehension. Accordingly, the results also reported good metacognitive awareness of reading strategies uses among students under investigation, though it was not systematically developed through explicit instruction. It is then highly suggested that teachers incorporate direct metacognitive awareness-based-instruction into their syllabi and course content. Therefore, by developing students' metacognitive abilities, they can become autonomous and self-reflective, not only as readers but also as language learners.

Keywords: EFL teaching/ learning, metacognitive awareness, reading comprehension, reading strategies.

LIST OF ACRONYMS AND ABBREVIATIONS

Chap: Chapter

DM: Descriptive Method

EFL: English as a Foreign Language

EFLL: English Foreign Language Learners

ESL: English as a Second Language

ESP: English for Specific Purposes

et al.: Latin for "and Others"

H: Hypothesis

LC: Language Comprehension

LL: Language Learning

LLS: Language Learning Strategies

M.A: Magister

MARS: Metacognitive Awareness of Reading Strategies

MARSI: Metacognitive Awareness of Reading Strategies Inventory

P: Page

Ph.D.: Doctoral Degree

PP: Page Range

Q: Question

R: Reading

RM: The Rasch Model

STM: Short-Term Memory

WM: Working Memory

WR: Word Recognition

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General Introduction

Reading comprehension is an essential skill in language learning and for academic achievement. It encompasses the ability to comprehend, interpret, and analyze written texts while extracting meaning and establishing connections between ideas. The development of strong reading comprehension skills, specifically for learners of English as a Foreign Language (EFL), assumes critical significance. It contributes to overall language proficiency and facilitates access to a vast array of academic and professional resources. The mastery of effective reading comprehension entails a range of cognitive processes, including word decoding, understanding sentence structures, activating prior knowledge, and monitoring comprehension. However, EFL learners encounter challenges throughout this process. Limited vocabulary, unfamiliar cultural contexts, and distinct linguistic structures, are all examples that can hinder their ability to comprehend texts accurately and efficiently.

In order to assist EFL students in surmounting these obstacles and improving their reading comprehension abilities, educators and researchers have explored diverse strategies and instructional approaches. These encompass explicit instruction on reading strategies, vocabulary development, and analysis of text structures, inference techniques, and metacognitive awareness. Notably, metacognitive awareness of reading strategies has gained significant attention within the field of EFL reading comprehension. It involves understanding and consciously applying strategies that enhance comprehension; such as self-questioning and reflection on comprehension difficulties. By cultivating metacognitive awareness, learners can transform into self-directed and strategic readers who actively engage with the reading process.

1. Statement of the Problem

In the realm of EFL education, reading comprehension stands as a pivotal skill, influencing language learning and academic success. Often, First-Year Master students at the Department of Letters and English Language at the University of 8 Mai 1945- Guelma face different challenges in comprehending texts due to language barriers, cultural differences, and limited exposure to authentic English materials. To navigate these obstacles, the implementation of effective reading strategies becomes paramount. Accordingly, metacognitive awareness of reading strategies (MARS) has emerged as a promising avenue that could enhance EFL reading comprehension. Metacognitive awareness could empower learners to regulate their cognitive processes, monitor comprehension, and employ strategic approaches during the reading task.

2. Research Questions

The current research seeks to investigate teachers' and students' attitudes towards metacognitive awareness of reading strategies uses and EFL students' reading comprehension at the Department of Letters and English Language at the University of 8 Mai 1945- Guelma. Thus, it addresses the following questions:

- Do teachers at the Department of Letters and English Language, at 8 Mai 1945 Guelma University, foster their students' reading comprehension?

- Do teachers raise their students' awareness towards the importance of reading strategies and their uses?

- Are EFL First-Year Master students at 8 Mai 1945 Guelma University metacognitively aware about reading strategies uses? If yes, do their teachers contribute in raising it?

- According to teachers' and students' viewpoints, to what extent does metacognitive awareness of reading strategies uses contribute in enhancing EFL students' reading comprehension?

3. Aims of the Study

This research aims at examining how metacognitive awareness of reading strategies uses affects EFL students' reading comprehension. Being metacognitively aware of reading strategies uses is a crucial element for fostering students' effective reading experiences. Therefore, the aim of this research is threefold:

- To investigate teachers' and students' attitudes towards the impact of metacognitive awareness of reading strategies uses on EFL students' reading comprehension.
- To figure out whether or not teachers raise learners' metacognitive awareness of reading strategies uses.
- To raise students' and teachers' awareness towards the usefulness of metacognitive awareness of reading strategies uses.

4. Research Hypothesis

Among EFL First-Year Master students, the ability to comprehend reading materials effectively is often contingent upon their level of metacognitive awareness regarding reading strategies employed during the reading process. Insufficient awareness or inappropriate utilization of these strategies can have a detrimental impact on students' reading comprehension skills. Accordingly, it is hypothesized that:

Teachers' and students' have positive attitudes towards metacognitive awareness of reading strategies uses on EFL students' reading comprehension

5. Research Methodology Design

5.1. Research Method

The present research adopts the quantitative-descriptive method in order to gather in-depth information about the impact of metacognitive awareness of reading strategies uses on EFL First-Year Master students' reading comprehension. It aims to test the research hypothesis and provide valuable insights about the effectiveness of MARS in enhancing reading comprehension abilities. The choice of the method is based on the nature of research tools used to extract information about teachers' and students' attitudes towards the importance of reading strategies uses, in addition to students' metacognitive awareness about them.

5.2. Research Population and Sampling

The research sample was carefully chosen from a specific group of First-Year Master students at the Department of Letters and English Language, University of 8 Mai 1945, Guelma, for the academic year 2022/2023. The decision to focus on First-Year Master students stems from their advanced reading skills. They received instruction on a reading module during their initial year of studies curriculum, and it was further taught to them in the first semester of their current academic year. Additionally, these students are actively engaged in delivering comprehensive oral presentations, requiring them to continuously practice their reading abilities and gather information from various sources. With their cognitive capacities expected to be well-developed at this advanced level, they present an ideal group for evaluating their MARS. To ensure the sample's representativeness, a random sampling method was employed. This results in the selection of 110 students from a total of 134 participants, in accordance with the established methodology proposed by Krejcie and Morgan (1970) for determining sample size.

In addition, this study has addressed teachers at the Department of Letters and English Language, at 8 Mai 1945 University of Guelma. To ensure a diverse representation and avoid any bias in the selection process, the sample of teachers has been chosen randomly without any predetermined criteria or standards. Out of a total of 55 teachers employed by the Department, a subset of 28 teachers agreed to participate in the questionnaire. This random selection includes teachers of various modules and levels, allowing for a comprehensive understanding of the subject under investigation.

5.3. Data Gathering Tools

The current study employed the questionnaire as a data gathering tool, carefully chosen as the most suitable technique to effectively address the research questions and fulfill the study's objectives. Two distinct questionnaires were administered; one targeted First-Year Master students and another targeted the teachers at the Department of Letters and English Language, at 8 Mai 1945 University of Guelma. On the one hand, the students' questionnaire aimed to assess their implementation of reading strategies and their metacognitive awareness level. Additionally, it seeks to investigate their attitudes towards the influence of MARS uses on their overall reading comprehension abilities. The teachers' questionnaire, on the second hand, aimed to explore the instructional practices employed by them in teaching MARS and to uncover their opinions about its potential connections with students' reading comprehension outcomes. Through these comprehensive questionnaires, the study sought to provide valuable insights into the relationship between the research variables.

6. Structure of the Dissertation

This dissertation starts with a 'General Introduction' section that sets the context for the research topic. This section addresses the research's problem and questions. Additionally, the aims,

the hypothesis, the methodology, design, and data collection tools of the study are all outlined within the general introduction. The structure of the dissertation is briefly mentioned, indicating the subsequent chapters' organization and content.

It is basically divided into two main parts, one theoretical and another practical. The first chapter entitled "Reading Comprehension" provides a comprehensive framework of reading skill and reading comprehension. It explores the factors contributing to poor reading comprehension and highlights essential elements that teachers should cultivate to enhance effective reading comprehension instruction. Meanwhile, the second chapter "Metacognitive Awareness of Reading Strategies Uses" delves into literacy techniques and presents various strategies that can be used to enhance students' reading proficiency. Additionally, it thoroughly examines metacognitive awareness in relation to reading strategies, emphasizing its importance and effects on the reading process; particularly in reading comprehension.

The third chapter serves as a crucial component in the study as it stands for "Field Investigation". It entails a thorough description and analysis of both teachers' and students' questionnaires at the Department of Letters and English Language, at 8 Mai 1945 University of Guelma. Through meticulous examination of the gathered data, the chapter sheds light on the research questions and hypothesis. It carefully interprets and evaluates the results, drawing meaningful conclusions and insights. In the "General Conclusion" section, the study goes beyond the findings and presents valuable pedagogical implications and recommendations for educators. Additionally, it outlines potential avenues for further research, while acknowledging the limitations encountered during the study. This comprehensive section enhances the overall understanding of the research topic and offers valuable insights for both the academic community and practitioners in the field.

CHAPTER ONE

Reading and Reading Comprehension

Content

Introduction

EFL students often implement all available means when reading in order to increase their knowledge, expand their vocabulary, and, most importantly, be able to quickly and effectively understand the text at hand. Accordingly, reading can be described as an intricate activity that calls for the synchronization, evaluation, and comprehension of several information sources.

This chapter attempts, therefore, to provide a comprehensive framework about reading skill and reading comprehension process. It briefly examines different views and definitions of reading, reading comprehension, levels, and components of comprehension. Then, it discusses the schema theory of cognition and how it was adopted to analyze the reading comprehension process. Additionally, this chapter highlights some causes of poor reading comprehension. Furthermore, it tackles elements that every teacher should develop for effective reading comprehension instruction. The chapter concludes with an overview about how reading comprehension can be measured and evaluated within the teaching-learning process.

1.1. Basic Definitions

1.1.1. Reading Skill

Reading is one of language receptive skills. It is a mental process where the reader interacts with the text to create meaning. Reading is also regarded as a core element in enhancing other skills: speaking and writing; the fact that led many scholars and linguists to define it. However, its cognitive nature created a sense of disagreement between them. For example, Thompson et al. (1993) offered a quite comprehensive definition highlighting the complexity of cognitive processes that reading necessitates. He regarded it as "a complex organization of patterns of higher mental processes…[that]...can and should embrace all types of thinking, evaluating, judging, imagining, reasoning, and problem-solving" (p.1).

Similarly, Pang et al. (2003), as advocates of the complex nature of reading, claimed that reading is a multifaceted task that encompasses the ability to perceive and understand written texts. It involves two interconnected processes: recognizing individual words and comprehending the meaning conveyed by those words, as well as, the sentences and passages they form. On the one hand, word recognition pertains to the act of perceiving how written symbols correspond to spoken language. On the other hand, comprehension refers to the cognitive process of interpreting and making sense of words, sentences, and overall coherent text (p. 6). Accordingly, reading can further be seen as a mental process in which readers reflect on what they are reading and make inferences about the intended meaning.

Nevertheless, Grabe and Stoller (2011) defined reading as the ability to derive meaning from written content and effectively comprehend and interpret the information it conveys (p. 3). In other words, reading is the activity of grasping meaning through interpreting linguistic signs. It involves not only decoding the words in the texts but also understanding their significance, making connections, and deriving the intended message or purpose of the text.

Furthermore, Oakhill et al. (2015) specified that according to the Simple View of Reading which was originally proposed by Gough and Tunmer in 1986, reading has two basic components: word reading (decoding) and language comprehension. They claimed that Reading= Word Reading $\times$ Language Comprehension (R = WR$\times$LC); as a result, if one of the components (either word reading or language comprehension) is zero, the overall reading ability will be zero (p. 3). This equation implies that both word reading and language comprehension are essential for successful reading. If either of these components is zero or severely impaired, the overall reading ability would be compromised, resulting in near-zero reading ability. In other words, a person who cannot decode

words accurately or comprehend language effectively would struggle to develop proficient reading skills.
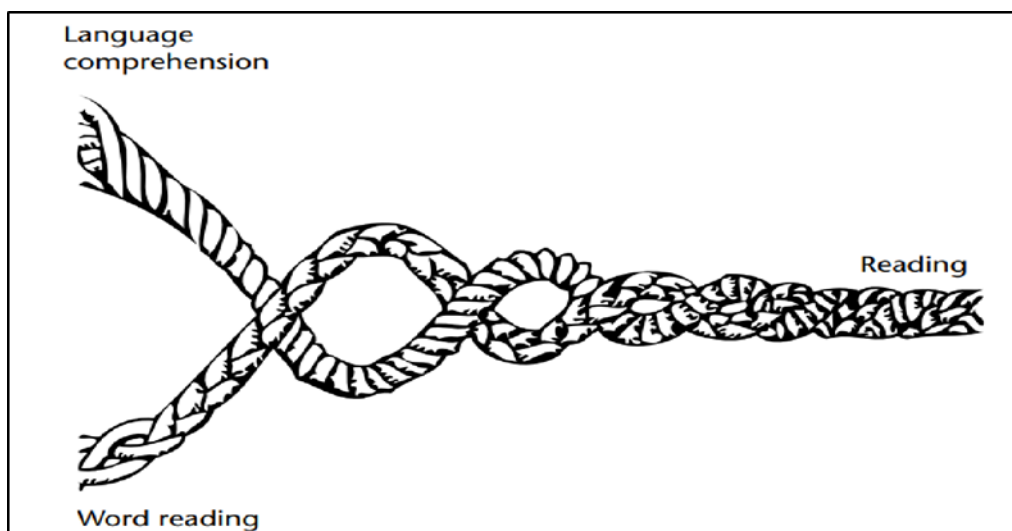
Figure 1.1. Skilled Reading

(Oakhill et al., 2015, p. 3)

According to the aforementioned definitions, it can be concluded that reading is a multifaceted active process that surpasses the mere decoding of written language. This intricate mental activity necessitates the application of complex cognitive abilities. These latter enable readers to draw the appropriate inferences about the author's message and; therefore, comprehend the intended meaning of the written material.

1.1.2. Reading Comprehension

In order to fully understand reading comprehension, it is necessary to clarify the meaning of the term "comprehension" first. Richards and Schmidt (2002) believed that comprehension involves deciphering the meaning of written or spoken communication. It requires actively combining the information within the message itself with one's background knowledge, contextual

cues, and the intentions of the listener and speaker (p. 99). That is to say, the identification of a message intended meaning in verbal or written form is known as "comprehension".

Crystal (2008) referred to the concept as "the ability to understand and interpret spoken and written language" (p. 97). In other words, comprehension is a cognitive act that results in making a clear meaning of thoughts and situations. Modern theories regarding this concept emphasise that this process includes the use of cognition and relies on the content of the message, in addition to background knowledge. Correspondingly, comprehension is an abstract process that is highly related to the use of cognition to make sense of the surroundings. It is affected by both the content and previous information about it.

According to the literature, the definition of 'reading comprehension', as a concept, is not far from the definition of comprehension as a term. Durkin (1979) argued that reading comprehension is "at the heart of reading" (p. vii). This means that, without comprehension, reading will be reduced to uttering phrases without capturing the meaning. Snow (2002) stated that reading comprehension is the act of actively engaging with written language and concurrently deriving and building meaning. This view demonstrates that reading comprehension is a process by which readers give meaning to the text they are reading while acquiring new information. Furthermore, Snow suggested that the process of reading comprehension is made up through three elements (the reader, the text, and the activity or the purpose of reading) functioning in socio-cultural context (p. 11). Therefore, this definition does not only emphasise the role of cognition in this process but also sheds light on the existence of certain components and elements which affect the quality of the reading comprehension.
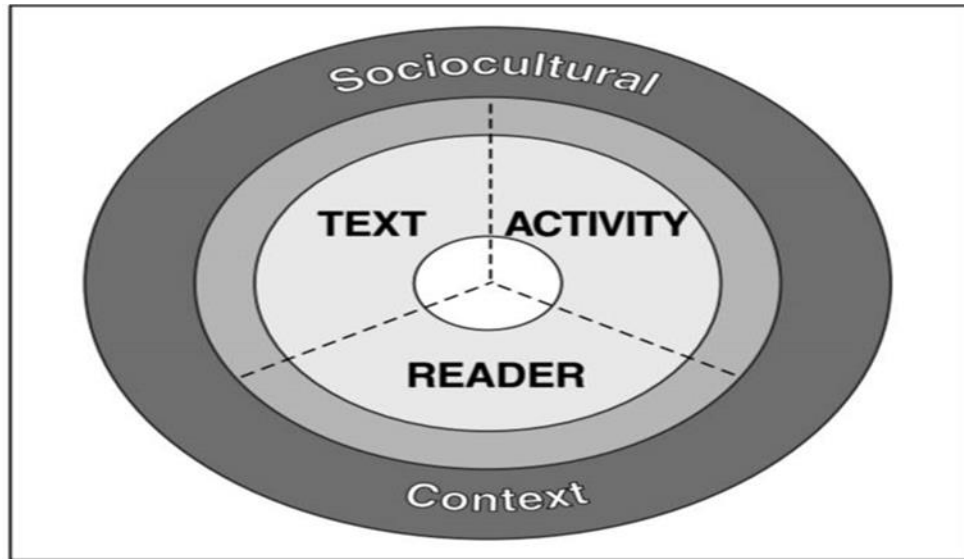
Figure 1.2. A Heuristic for Thinking about Reading Comprehension

(Snow, 2002, p. 12)

In addition, Pang et al. (2003) further provided a simple definition stating that "[Reading] Comprehension is the process of deriving meaning from connected text". In short, the term 'reading comprehension' is specific to the understanding of data from written material (p. 14).

To conclude, the literature mentioned above highlights the main aspects related to reading comprehension. The term tends to be used to refer to a cognitive process that occurs in the brain. In addition, reading comprehension has multiple components and elements that affect its quality. Furthermore, this process aims to capture the meaning of written materials and form new one when possible.

1.2. Levels of Reading Comprehension

Reading comprehension is the process of constructing meaning from written materials. However, this meaning construction cannot be reached at once. Instead, it can typically be achieved through three systematic levels of comprehension. To explain, Scanlon et al. (2010) provided one

of the most used divisions for reading comprehension levels: the literal, inferential, and the critical levels (p. 278).

First, literal comprehension is regarded by Manzo and Manzo (1993) as "the process of decoding the words in order to reconstruct the author's basic message" (p. 5). Alderson (2000) called it "reading the lines" and considered it as being the lower and the simpler level compared to other levels (p. 8). However, King (2007) referred to it as "shallow comprehension" and claimed that this level of processing offers a mental representation that only includes the meaning expressed explicitly in the text (p. 268); that is to say, the what, who, where, and when of the passage. In brief, the literal level of comprehension is what the author is actually saying. It involves only surface, direct, and explicit meanings that are stated in the text.

Second, inferential comprehension or "reading between the lines", as Alderson (2000) termed it, refers to the inferred meanings of the text (p. 8). At this level, the reader is able to deduce information beyond what is written on the page; such as the main character's emotions from his/her actions and words. King (2007) claimed that "such inferences go beyond the explicit text to link material within the text to relevant prior knowledge of the world to arrive at the central message of the passage" (p. 269).

Correspondently, according to Westwood (2008), in order to function at the inferential level, the reader must be able to utilize information effectively to determine cause and effect relations in the text and to predict what could happen next (p. 32). Concisely, at the inferential level, the emphasis switches to interpreting implicit messages in the material being read. Readers must put different pieces of information together to draw conclusions about the author's purpose and message.

Third, critical comprehension is defined by Manzo and Manzo (1993) as "the process of judging the significance of the author's message, and constructively applying it to other areas of knowledge and experience. This process often extends beyond the author's original intent" (p. 5). Westwood (2008) clarified that, at this level, readers will evaluate what they are reading; through, recognizing the author's good writing style and detecting biases and errors in some statements in the text. They also assess the author's opinion and compare and contrast information (p. 32). Therefore, critical comprehending is about why the author is saying something. It involves a critical reading whereby the reader can develop his/her own critical judgment through evaluating, assessing, and synthesizing the text information.

To summarize, the three stages of comprehension depicted in Figure (1.3) (literal, inferential, and critical) are required for good text comprehension. It is essential that these stages occur in a systematic manner, with each level having its own importance. That is to say, the reader must first understand what is directly said in the text in order to infer meanings from it, and then s/he must understand both literal and inferential meanings in order to make a constructive judgment of that text.
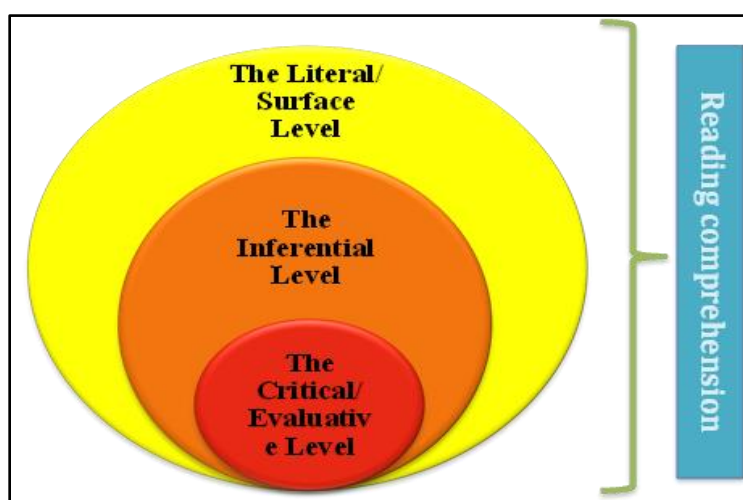
Figure 1.3. Levels of Reading Comprehension according to

Scanlon et al. (2010)

1.3. Components of Reading Comprehension

Different theorists have various ways of conceptualising reading comprehension. As a result, the components of this concept vary depending on the theory. In order to analyse the components of reading comprehension, it is necessary to refer to Wyse et al.'s (2013) theoretical framework. They described comprehension on two levels: literal, where an understanding of the text is gained at a surface level and inferential, that calls for the reader's close attention to understand the hinted subtleties. This latter framework was used by Tennent (2014) to create a detailed illustration of the components of the reading comprehension clarified in figure (1.4).
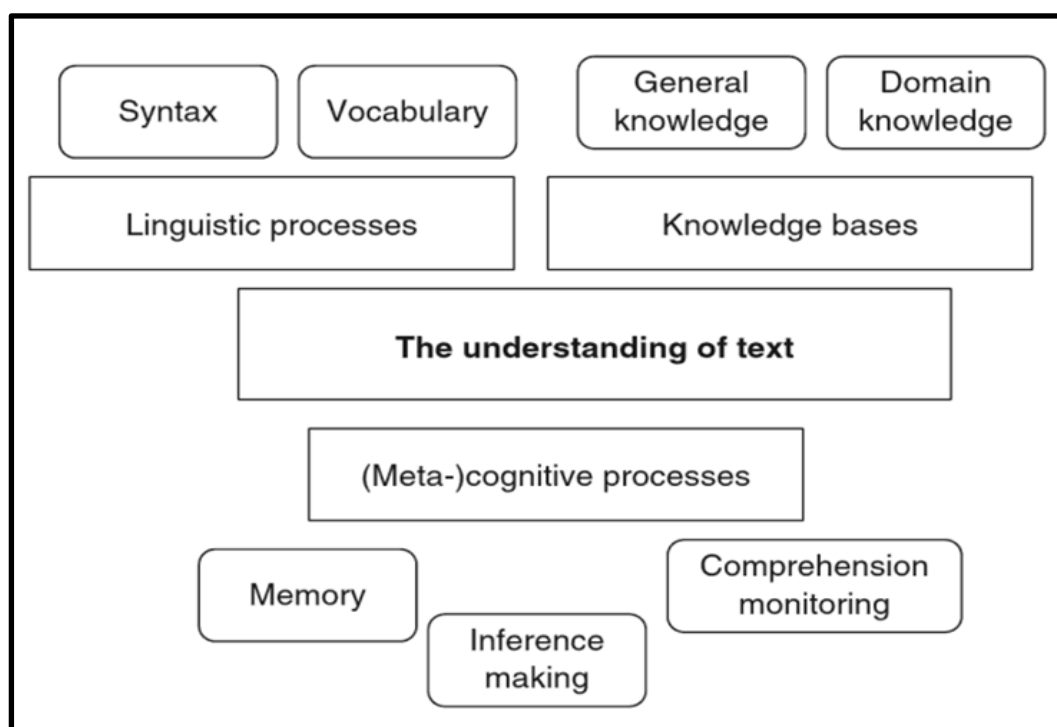
Figure 1.4. Components of Comprehension in Three Broad Domain Areas

(Tennent, 2014, p. 32).

When viewed collectively, the figure points out a number of important components that might give readers and reading instructors useful information. The figure mentions each component and all the aspects contributing to each one. The outcome of comprehension, which might be

referred to as the understanding of text, is depicted in the figure's center. The reader must have access to a variety of elements in three key domain areas: language bases, linguistic processes, and meta-cognitive processes. Each of these large domain categories can contain specific components. For instance, domain knowledge and general knowledge are components related to knowledge factors, while memory, comprehension monitoring, and inference making are components related to meta-cognitive processes. Vocabulary and Syntax are components related to linguistic processing.

1.3.1. Knowledge Basis

The background knowledge is the basis the reader uses to build new information. Smith et al. (2021) stated that "readers who have a strong knowledge of a particular topic, both in terms of quantity and quality of knowledge, are more able to comprehend a text than a similarly cohesive text for which they lack background knowledge" (p. 218). In other words, readers are able to comprehend a text better if they have a strong understanding of the topic, in terms of both amount and quality of information than a text with no previous knowledge about. The two types of knowledge are: first the general knowledge, also known as world knowledge, which is information shared by the population and not limited to scholars of any field. Second, domain knowledge, which is information related to a domain and specific to specialists in a field of study.

1.3.2. Linguistic Processes

Linguistic processes are complex cognitive processes that involve the use of 'syntax' and 'vocabulary'. Text comprehension heavily relies on the critical role played by vocabulary. This latter does, in fact, act as a link between the cognitive operations involved in reading comprehension and the processes involved in decoding. The former includes the use of memory bases, checking reading comprehension as the reader goes along to make sure it makes sense and

drawing inferences. The latter encompasses combining sounds to create recognizable sight words. Morvay (2012) demonstrated in her study that the skill to process complex syntactic structure sentences does play a role in enhancing EFL learners' reading comprehension proficiency (p.1). A skilled reader has a broad vocabulary, particularly words relating to his/ her field of study. Furthermore, a good reader must understand the structure and word arrangement of the language read as the comprehension of word order and sentence structure holds a part of the meaning.

1.3.3. Metacognitive Processes

As previously mentioned in the chapter, memory, inference making, and comprehension monitoring are the three aspects of the metacognitive processes. Firstly, regarding memory, Baddeley Model (1986) was the first to claim that working memory capacity is a significant predictor of a variety of cognitive functions such as language learning. In a more recent literature, Baddeley (2003) clarified that the level of working memory has a major impact on the level of reading comprehension. He further specified that long-term memory is necessary to restore the knowledge after it has been processed in short-term working memory (p. 202).

Secondly, inference making is a critical thinking skill which is highly related to memory. Kintsch and Rawson (2005) demonstrated the process as: inferences are built by activating prior knowledge stored in the long-term memory. They are used to analyse, as well as, to conclude the various implicit meanings in a given written material (pp. 219-221). Thus, inferences are fundamental in constructing comprehension. Thirdly, referring to the views of Baker (1979), comprehension monitoring means to evaluate and regulate the comprehension process (p. 365). Readers can use this skill to determine whether or not they understood the meaning of a written material.

In conclusion, working memory, inference making, and comprehension monitoring play significant roles in the process of constructing meaning from written materials. The provided claims by the researchers above highlight the importance of using prior knowledge and experiences to construct and monitor meaning. Furthermore, a deep understanding of these factors can help readers improve their reading comprehension abilities, and ultimately become more effective communicators and critical thinkers.

1.4. Schema Theory for Reading Comprehension

The term "schema" or "schemata" was first used in the initial work published by Bartlett (1932), in the field of Psychology, as "an active organisation of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response" (p. 215). One can conclude from this definition that schemata are used to direct present comprehension or behaviour based on prior experience stored in the brain.

Richards and Schmidt (2013) defined the term "schema" in linguistics and discourse analysis, as the manner in which the topics, propositions, and other materials are connected together to form a unit to distinguish different types of texts and speech (pp. 468-469). . In other words, by employing schemas, individuals are able to navigate through complex linguistic and discourse structures more efficiently. Schemata allow us to make sense of the relationships between different parts of a text or speech, facilitating comprehension and enabling us to extract meaning from the information presented. One can conclude that schemata are not limited to a single type of text or speech. They exist across different genres and forms of communication, helping us distinguish between various types of discourse, such as narratives, expository texts, or persuasive speeches. Each genre typically has its own specific schema, reflecting the conventions and expectations associated with that particular type of communication.

Schema theory is a branch of cognitive science that emerged in the field of education and created a massive impact on language learning and teaching. Pankin (2013) stated that it is mainly "concerned with how the brain structures knowledge" (p. 1). In other words, this theory is concerned with how various processes in the brain are used to build knowledge. For example, cognition and memory are two of many cognitive functions responsible for thinking, acquiring, storing, and retrieving knowledge. Richards and Schmidt (2013) explained that schema theory is significant in second language reading and listening comprehension theories. They further explained that schemata function as references store from which a person can access relevant existing knowledge and incorporate new information. In addition, when reading a topic, the reader activates the schema for that topic and uses it to anticipate, infer, and make various judgments and decisions about it (p. 469).

One can conclude that the relationship between the schema theory and the reading comprehension. As it was mentioned previously, this theory confirms that the more familiar the reader is with any aspect of the reading skill, the more competent s/he is to achieve a high level of comprehension. To illustrate that, **s**chemata in the brain include any type of knowledge regarding the reading skill, such as the syntax of the language (word order, passive and active voice), text type and structure, vocabulary, general and domain knowledge. All the information about these components are stored in the memory.

1.4.1. Characteristics of Schemata

According to Pankin (2013), schemata are characterised primarily by their dynamic nature. This implies that they can adapt to and grow as new information are learned. He stated that "schemas are dynamic – they develop and change based on new information and experiences and thereby support the notion of plasticity in development" (p. 1). One can conclude that the human

brain can expand the knowledge stored in it by adding new information about the subject. Thus, restoring new pieces of information can lead to a change or deletion of previous ones. Pankin (2013) further provided another crucial characteristic about how schemata guide the way readers decode new information (p. 1). In other words, the way the human brain understands new presented information is through the lenses of the background knowledge about it. This can explain why the same text can be interpreted differently by different readers. Unfortunately, the reader may fall into false interpretations if the background knowledge consists of false data.

In addition, schemata can answer 'What' and 'How' questions as mentioned by Hampson and Morris (1996) who clarified that declarative knowledge is what is known as "the What Knowledge" and procedural knowledge is "the How Knowledge". They further claimed that declarative knowledge refers to the understanding of factual information, knowing specific details or concepts, and recognizing that certain things are true. Procedural knowledge pertains to the ability to apply strategies and skills to effectively comprehend and interpret situations, thoughts, or emotions (p. 130). One can conclude that, in reading comprehension, declarative knowledge enables readers to grasp and retain information from the text, such as identifying key details, understanding main ideas, or recognizing cause-and-effect relationships. In addition, procedural knowledge empowers readers with the necessary techniques and approaches to comprehend the text, such as activating prior knowledge, making inferences, or employing contextual clues.

1.4.2. Types of Schemata

The schema theory is divided into four (4) types; each type is concerned with an aspect that affects the background knowledge stored in the brain. The first type is **formal schema**. It is defined by Carrell and Eisterhold (1988) as the underlying knowledge regarding variances in rhetorical structures, encompassing disparities in genres, the structures of fables, simple stories, scientific

texts, newspaper articles, poetry, and other similar compositions (p. 560)**.** In other words, each type of text holds a different type of structure. During the process of reading, the reader will encounter one or more text types. Thus, the more the reader understands the structure of the type of the text he is exposed to, the easier it is for him to grasp the information provided.

The second type is **content schema**. It is concerned with background knowledge about the content of the text as mentioned by Richards and Schmidt (2013) "content schemata deal with general background knowledge related to the topic" (p. 469). One can conclude that if the reader lacks knowledge about the topic of the text, the ability to comprehend it is low. Thus, working on enhancing the content schema is crucial for a good reader to increase his/ her ability to comprehend written materials.

The third type is **cultural schema**. This type is defined by Rentsch et al. (2009) as "a schema for understanding culture is culture - general – that is, it reflects knowledge that applies to all cultures" (p. 1). This means that the cultural schema consists of concepts that are applicable to any culture. They went further to explain how these concepts are used in their statement saying that "interpretation may involve a comparison of cultural information with cultural knowledge contained in the schema for cultural understanding and regional expertise" (p. 1). The abstract schema used in creating and upgrading the cultural schemata in the brain is explained in figure (1.5).
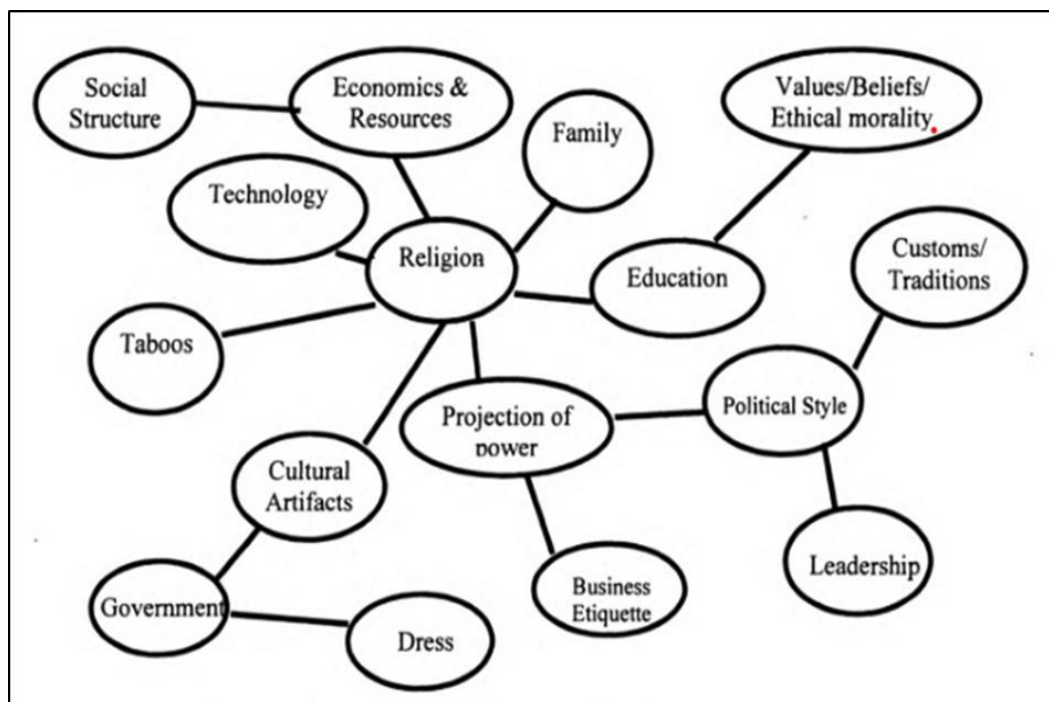
Figure 1.5. Illustration of a Schema for Cultural Understanding

(Rentsch et al., 2009, p.7)

These concepts are used when being exposed to a written text to understand its cultural aspects, which can be done by comparing the new information with previous ones.

The last type is **linguistic schema** which is directly related to the understanding of the linguistic units in addition to the grammar and the vocabulary by which the text is written. According to An (2013), linguistic schema encompasses understanding of vocabulary and grammar, and it plays a fundamental role in comprehending written texts. It is crucial for achieving a thorough grasp of the material (p. 131). In other words, this type refers to the reader's knowledge of the language system, including its rules and conventions for sounds, words, grammar, and discourse. This knowledge is developed through exposure to a language over time and is stored in the brain as mental representations or schemata.

1.4.3. The Schema Theory and Reading Comprehension

Based on the literature mentioned previously in the chapter, many main points can be concluded. First, schema theory is a cognitive theory which suggests that our prior knowledge and experiences influence how we perceive and interpret new information. Thus, when it comes to reading comprehension, this theory posits that readers use their existing knowledge and mental frameworks to make sense of what they are reading. These frameworks help readers to fill in gaps, make predictions, and connect new information to what they already know. For example, if a reader is reading a text about a topic s/he is familiar with, this schema contains knowledge regarding that topic. As the reader encounters new information in the text, he will use his schema to make connections and understand the text more easily. However, if a reader encounters a text about a topic s/he is unfamiliar with, he may not have a pre-existing schema to draw on. In this case, the reader may struggle to understand the text and may need to actively construct a new schema based on the information they are reading.

Overall, schema theory highlights the importance of prior knowledge and experience in reading comprehension. By activating and using relevant schemata, readers are able to better understand and make meaning of what they are reading

1.5. Causes of Poor Reading Comprehension

Most educators would agree that learning to read with a sufficient level of proficiency has always been one of the most essential learning goals. Cain (2016) argued that the fact that a good portion of students fail to accomplish this fundamental objective is, therefore, unexpected, despite all the knowledge, abilities, skills, methods, and resources that are currently available to schools (p. 11). Cain's claim raises pertinent questions about the underlying causes contributing to this issue. Certainly, there are potential intrinsic and extrinsic causes for why learners may struggle in

achieving good reading comprehension. In this regard, Westwood (2008) listed eight major problems that readers face when reading (pp. 33-37).

1.5.1. Limited Vocabulary Knowledge

The improvement of students' reading comprehension might be severely impacted by limited vocabulary knowledge. Since there is a strong correlation between vocabulary knowledge and reading comprehension, understanding the meanings of texts' key words is necessary for them to foster comprehension.

In a study conducted by Manihuruk (2020), the relationship between students' vocabulary mastery and their reading comprehension performance was examined. Vocabulary mastery and reading comprehension tests were administered to students enrolled in the English Education Department at Kristen University, Indonesia. The findings of the study underscore the importance of developing both general and specific vocabulary for enhancing reading comprehension in educational contexts (p. 86). This indicates that readers cannot comprehend what they are reading unless they understand the meaning of the majority of words, which can be done only by enhancing their depth and breadth vocabulary repertoire. In fact, the relationship between reading comprehension and vocabulary knowledge has been termed by Ricketts et al. (2007) as 'reciprocal relationship' (p. 24). This is because engaging in an effective reading experience would also help learners acquire new words.

1.5.2. Lack of Fluency

Another major factor that negatively influences students' reading comprehension is lack of fluency. Chard et al. (2002) defined reading fluency as an important aspect of reading. It relates to a reader's ability to read a written piece properly, automatically, and quickly with adequate comprehension (p. 402). This suggests that proficient reading fluency significantly contributes to

the effective processing of information. Accordingly, readers with poor reading abilities often struggle with comprehension due to their exceedingly slow reading fluency.

Following this advocacy, Pallathadka et al. (2022) conducted an experiment to investigate the impact of lack of word recognition and fluency-building activities on Iranian EFL students' reading comprehension. Results showed that poor reading fluency impeded readers' word recognition and decoding which forced readers to use more cognitive resources for meaning formation (p. 7). That is to say, when individuals possess the ability to read fluently, they can efficiently process textual information. This leads to faster comprehension and requires less mental exertion.

1.5.3. Lack of Familiarity with the Subject Matter

Lack of familiarity with the subject matter is also a notable reason behind poor comprehension. It was suggested that material familiarity and prior knowledge about the topic had a big impact on how well students at various levels did with understanding (Al-Shumaimeri, 2006, p. 19; Abdelaal & Sase, 2014, p. 125).

In this regard, Jian (2022) used an eye tracker to examine the effects of prior knowledge on reading comprehension processes at the Department of Educational Psychology, Taiwan. The findings demonstrated that students possessing extensive preexisting knowledge on the subject showcased quick proficient comprehension of the text, whereas those with limited prior knowledge experienced considerable delays in grasping the content (p. 17). Therefore, reading habits have an impact on what readers grasp and do not understand about the subject matter. Readers can readily comprehend the text and its precise elements if they already have some schemata about the subject under study. Accordingly, in creating and executing reading programs, educators must take relevant topics into account.

1.5.4. Difficulty Level of the Text (Readability)

Text readability simply refers to how much the text is easy or difficult to read and understand. Readers find it difficult to comprehend a text that is complicated in terms of topics, vocabulary, sentence length, and structure. In light of this, Niazifar and Shakibaei (2019) conducted a study to examine the impact of different text difficulty levels on Iranian EFL students' reading comprehension. Forty participants were selected based on a placement test and divided into two groups. The first group received reading passages beyond their current level, while the second group received passages with adequate difficulty levels. Pre and post-tests were conducted, and the data were analyzed using t-tests (statistical test that is used to compare the means of two groups).

The results showed a significant difference between the two groups, with the second group outperforming the first one (p. 15). This study suggests that the difficulty level of the text significantly influences EFL students' reading comprehension. Accordingly, complex reading materials can hinder reading comprehension as it presents challenges in understanding and interpreting the content, leading to decreased comprehension levels. Simplifying text complexity can aid in improving reading comprehension.

1.5.5. Inadequate Use of Effective Reading Strategies

The inadequate use of effective reading strategies can indeed be one of the main reasons behind poor reading comprehension. Wang (2016) argued that less skilled readers can refine their abilities and improve their overall comprehension performance by using reading strategies. He stated that these strategies focus on developing cognitive, metacognitive, and interactive reading skills among language learners (p. 1807). They aid readers in effectively understanding the text and help them establish relevant connections and inferences. As a result, they will be able to comprehend the material accurately.

Pertaining to this issue, Banditvilai (2020) carried out a research to determine the effectiveness of reading strategies on the reading comprehension of students enrolled in English Reading at Kasetsart University. Data were collected through questionnaires, reading tasks, and interviews. Statistical techniques and qualitative analysis were also used. The findings revealed that reading strategies had a positive impact on students' reading comprehension (p. 46). Correspondingly, when readers do not employ appropriate strategies, they may lack a clear framework to organize and assimilate information. They may face difficulties in understanding and interpreting the content, ultimately resulting in decreased comprehension levels.

1.5.6. Weak Verbal Reasoning

The improvement of students' reading comprehension might be severely impacted by weak verbal reasoning. Epler (2019) defined verbal reasoning as the cognitive ability to effectively grasp and scrutinize information conveyed through written or spoken means. It entails the capacity to comprehend and assess written texts, employ logical deductions, derive inferences, and resolve problems based on the information provided (p. 617). That is to say, by employing this cognitive function, readers can effectively navigate complex linguistic constructs. As a result, they can improve their overall comprehension performance.

Trassi et al. (2019) examined the relationship between reading comprehension, learning strategies, and verbal reasoning of 470 students of different levels using the cloze test. The analysis revealed significant and positive correlations among the constructs. Additionally, it was determined that verbal reasoning could predict the other variables under investigation (p. 615). Consequently, the demonstration of weak ability to reason and to make connections between background and new knowledge leads to poor reading comprehension.

1.5.7. Problems in Information Processing

According to Westwood (2008), to uphold the intended meaning of a text as it develops, a reader must retain relevant information and establish meaningful connections between ideas. This requires the reader's ability to effectively hold essential details in working memory (WM) and forge necessary links between concepts (p. 37). This indicates that WM is what permits readers to retain and combine information to understand the whole text. Therefore, text comprehension can be influenced by processing capacity. In this regard, Huang et al. (2022) combined both eye-tracking and reading comprehension test measures to investigate the relationships among word processing and WM on forty-eight Chinese students' reading comprehension performance. Results revealed positive correlation among the variables and highlighted the importance of efficient word processing and WM capacity in comprehending unfamiliar words (p. 102). Accordingly, any problems in readers' WM can significantly impact the way information is processed, ultimately resulting in ineffective reading comprehension.

1.5.8. Problems in Recalling Information after Reading (Memory)

The inability to recall information from texts and make connections with previous knowledge is another notable reason behind struggling to achieve good text comprehension. Westwood (2008) defined recalling information as the process of retrieving previously learned knowledge or experiences from memory. It involves accessing and retrieving this information into conscious awareness. By doing so, readers create meaningful associations that facilitate better retention of the text (p. 37). As a result, lack of information recalling after reading inhibits learners' overall grasp of the text and makes it difficult to fully comprehend and synthesize the ideas presented in texts.

Following this advocacy, Talwar et al. (2018) conducted a research to investigate the relationship between reading comprehension and two memory capacities (short-term memory (STM) and working memory). Correlations were computed among the measures and hierarchical regression and commonality analyses were employed to assess the impact of memory on reading comprehension. Results showed that reading comprehension can be influenced by both STM and WM (p. 1). This implies that effective reading comprehension can be associated with strong recalling memory. Consequently, when readers struggle to recall important details or concepts, it hinders their ability to connect the information together and form a coherent understanding of the text.

In summary, reading comprehension is a complex process that requires the integration of various cognitive abilities. It involves not only decoding words but also understanding the meaning behind them, making connections between different pieces of information, and drawing inferences. While many students are able to read and comprehend texts effortlessly, there are those who struggle with this skill. Difficulties in reading comprehension can arise for a variety of reasons. Factors such as limited vocabulary, poor information processing, insufficient use of reading strategies, and lack of background knowledge can contribute to difficulties in comprehension. However, appropriate and effective comprehension instruction can be of great assistance in mitigating various sources of poor understanding.

1.6. Teaching Reading Comprehension

Teaching reading comprehension is an essential aspect of education that focuses on developing students' ability to understand and interpret written texts effectively. According to Pearson (2009), the roots of reading comprehension instruction dates back as long as there have been schools, students wanting to read, and teachers willing to enhance and evaluate their students'

comprehension (p. 3). Every task a teacher assigned, text, article, story, or book review, had been a potential to enhance comprehension in classrooms. However, Duke et al. (2011) assumed that teachers play a major role in providing an effective reading comprehension instruction and developing high-quality readers (p. 51). Accordingly, he asserted that there are 10 crucial components of successful reading comprehension teaching that every teacher should use to develop and teach reading comprehension (p. 52).

First, **build disciplinary and world knowledge**. It has been shown over many years that a reader's understanding of a text is strongly influenced by the amount of related domain or the general knowledge s/he carries to the text (Duke et al., 2011, p. 56). This indicates that the more students construct general knowledge about the world and in-depth content knowledge about their study subjects, the easier they will understand different written materials. In this regard, Kearns et al. (2020) recommended incorporating the practice of building disciplinary and world knowledge into educational curricula at all levels. Accordingly, by actively constructing general knowledge about the world, students can enhance their overall comprehension abilities.

Second, **provide exposure to a volume and range of texts** as effective and engaged readers tend to read more than their less successful peers. Therefore, studies like Huynh (2022) and Phuoc (2022) claimed that the amount of experiences that involve the student(s)-text interaction, in particular, have significant influence on their overall reading success. Accordingly, to enhance reading comprehension instruction, teachers should strive to provide students with a range of texts and create opportunities to actively engage them with the material at hand.

Third, **provide motivating texts and contexts for reading**. Bakkaloğlu and Pilten (2023) stressed the importance of reading motivation in increasing learners' reading comprehension. They stated that it is critical for students to be able to read and comprehend texts quickly and efficiently

(p. 153). As a result, teachers must enhance their learners' reading motivation in order to gain a better grasp of written materials. This can be achieved by creating settings, resources, and activities that capture their interest (Ahmadi, 2017, p. 5; Alghonaim, 2020, p. 23). Thus, engaging in real-life reading and interacting with concrete and authentic texts is connected with motivated engagement and ultimately improves reading comprehension.

Another required element for effective reading comprehension instruction is **teaching strategies for comprehension**. According to Valizadeh (2021), effective EFL reading comprehension instructors are those who encourage their students to be good readers. Mainly, through teaching them when, how, why, and what strategy to use from within a set of effective strategies evidenced to be used by effective readers (p. 77). In other words, encouraging students to become successful and proficient readers involves equipping them with the necessary tools and strategies to understand and engage with text effectively.

Besides teaching strategies, teachers should also **teach text structure,** which has demonstrated considerable value in enhancing students' ability to retain and comprehend written materials. According to Jittisukpong and Kosashunhanan (2022), exposing students to a range of genres contributes in developing their knowledge about diverse text structures. However, direct education of the structures would also assist students, particularly those who have difficulty in reading (p. 27). Consequently, implementing strategies to teach text structures can empower students to approach various genres and written materials with confidence and competence.

Moreover, **fostering student engagement through meaningful discussions** is an essential component. According to Langer (2001), comprehension should be perceived as an active and often collaborative process of constructing meaning. Therefore, effective teachers of reading comprehension should encourage classroom conversations that enable students to collaborate and

derive meaning from the texts they are reading. (p. 872). Yet, according to Wilkinson and Nelson (2019), classroom discussions are regarded as effective means of increasing students' understanding of the texts they read and strengthening their general comprehension abilities (p. 231). That is to say, implementing discussions about texts within classroom activities is of a potential benefit for students. It gives them the opportunity to share and exchange ideas; consequently gaining a good understanding of the text.

Moreover, **building vocabulary and language knowledge** through classroom instructions is of great assistance in boosting students' reading comprehension. Therefore, it is recommended by Yunusovna (2022) that in classroom settings, teachers should provide students with basic vocabulary skills to help students acquire the meanings of new terms on their own for better reading comprehension (p. 147). Additionally, many studies stressed the **integration of reading with writing skills**, as it was proved that they share some cognitive processes and reinforce one another's learning (Fitzgerald & Shanahan, 2000; Shanahan, 2006; Kuehner & Hurley, 2019). On that account, studies such as Graham and Hebert (2010) and Cooney et al. (2018) confirmed that effective readers tend to receive instruction that incorporates both reading and writing. By integrating reading with writing into their teaching practices, educators can empower students to become proficient readers, enabling them to actively construct meaning and enhance their comprehension skills.

Observation and assessment are integral elements within the classroom, serving as invaluable tools for teachers to effectively tailor their instruction and optimize their time. Duke et al. (2011) argued that teachers should adopt a meticulous approach in observing and evaluating their students' aptitudes and limitations in reading comprehension. They stressed the significance of conducting comprehensive and perceptive analyses of various aspects related to comprehension,

with the ultimate goal of refining instruction and promoting a deeper understanding among students (p. 80). By employing these detailed and insightful examination techniques, teachers can proactively enhance their reading comprehension pedagogy. Consequently, they will empower their students' overall comprehension abilities.

Finally, for effective reading comprehension teaching, it is recommended by Davidsen (2018) that teachers have to **differentiate their instruction** (p. 92). Different learners have different learning styles, various abilities, and cognitive capacities, and demonstrate distinct comprehension levels. Therefore, Suson et al. (2020) suggested that teachers should design reading comprehension instructions and implement different techniques to accommodate their students' needs and to develop good readers (p. 3814). In other words, by differentiating instruction, teachers can adapt their teaching methods, materials, and assessments to help their students develop strong reading comprehension skills.

To conclude, if improving one's reading comprehension requires a journey towards ever-greater grasp of texts, then teachers are the tour guides. Accordingly, effective instructors of reading comprehension should implement and integrate a variety of elements to foster their students' literacy comprehension. This can be accomplished through treating learners' knowledge inadequacies by building their disciplinary and world knowledge, language vocabulary, and the various text types and structures. Another important factor that should be given attention by teachers is engaging students in classroom discussions that would, indeed, help them collaborate to better understand the material at hand. In addition to that, teaching comprehension strategies with their appropriate use in distinct contexts is crucial for effective reading comprehension instruction. Last but not least, observation and assessment are critical components that should be

applied appropriately and frequently by all teachers to evaluate their students' comprehension strengths and weaknesses to easily determine how to treat them.

1.7. Measurement of Reading Comprehension

The word "measurement" according to Stenner (1996) is "the process of converting observations into quantities through theory" (p. 67). In other words, the process of measurement yields a "quantity" as the end result of it. Frequently, the "observation" is a raw score or the right count on the specific group of items. In addition to that, Stenner (1996) explained that theory is the framework within which the observation may be interpreted as a measure's estimate. When applied to reading comprehension, the "quantity" refers to a person's level of it as measured by some measures. The convention of the observation to the quantity is made by The Rasch Model (RM) (1980) which specifies a need for the way that theory and observations interact in a probability model to create measures (p.67).

The RM is one of the most used models connected to Item Response Theory. The model is named after Georg Rasch and was first published in 1960. There is a strong emphasis on producing data that fit the model, as the RM establishes the criteria for successful measurement. Bond (2010) emphasised that tests and questionnaires must be designed according to the model in order for it to serve its aim properly (p.1). In his model, Rasch (1980) stated that a person's likelihood of properly answering a question depends on the item's level of difficulty and his aptitude for the latent feature (as cited in Santos et al., 2016, p.2). The two parameters of this model are the difficulty parameter of each item of the test, and the ability of the person parameter.

The test-designer may face many difficulties and issues when designing a reading comprehension test. These issues are regarded to each of the three factors (the reader, the text, and the reading tasks) and the relation between them mentioned by Santos et al. and illustrated in figure (1.6), below:
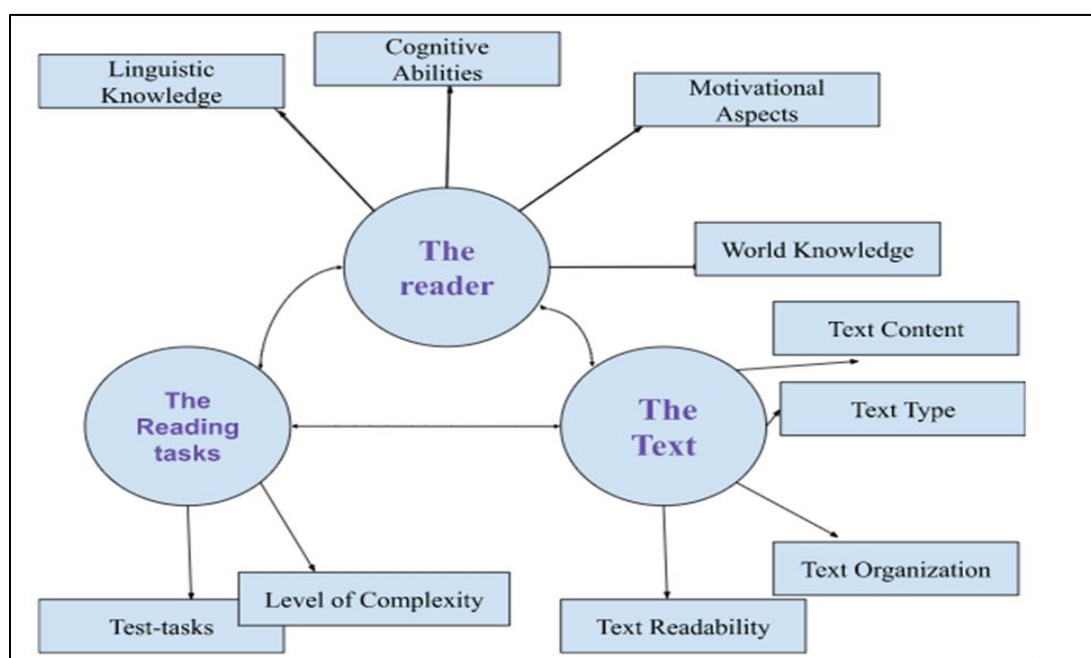
Figure 1.6. The Three Factors Affecting Reading Comprehension according to Santos et al. (2016)

Santos et al. (2016) explained that when designing the reading comprehension test, the test-maker takes into consideration factors related to the reader, the text, and the reading tasks. The reader variables consist of his/her knowledge about the text-topic, world knowledge, and discipline knowledge as mentioned in the schema theory. In addition to the motivation of the reader, his/her linguistic knowledge and cognitive abilities. Whereas, the text variables consist of the type of the text used (either narrative or expository text or both), text organisation, the content of the text, and the readability of the text. Finally, the reading tasks consist of the level of complexity and the nature of the test-tasks (e.g. multiple choices, true or false) (p. 2).

Santos et al. (2016) had provided a suggestion for designing a measurement of reading comprehension regarding text type using the Rasch Model. He clarified that it is better for the measurement designer to use different types of text in the test or to design multiple tests with the use of different types (p. 2). This is for each test to avoid any difference in achievement caused by the type of the text used. Additionally, Alderson (2000) clarified that it is best if the test assesses all levels of reading comprehension (p. 202). Thus, as guidelines, the construction of reading comprehension tests should include different text types and tackle all levels of reading comprehension with taking into consideration the reader, the text, and the reading tasks. Lastly, in reading comprehension measurement, the usual format involves providing a passage or text to the test-taker, followed by a set of questions that are related to the content of the passage. The test-taker is expected to read and understand the passage thoroughly in order to answer the questions correctly as illustrated in figure (1.7).

Read the passage. There are several questions about this passage.

The author was a Yankton Sioux Indian and one of the first American Indian women to write about her culture. She became a leading spokesperson for American Indian concerns. In this passage, she tells about her life on an Indian reservation in South Dakota where she lived until the age of eight. She has just received a lesson from her mother in the art of beadwork.

from **Impressions of an Indian Childhood**

1   Always after these confining lessons I was wild with surplus spirits, and found joyous relief in running loose in the open again. Many a summer afternoon a party of four or five of my playmates roamed over the hills with me. We each carried a light sharpened rod about four feet long, with which we pried up certain sweet roots. When we had eaten all the choice roots we chanced upon, we shouldered our rods and strayed off into patches of a stalky plant under whose yellow blossoms we found little crystal drops of gum. Drop by drop we gathered this nature's rock-candy, until each of us could boast of a lump the size of a small bird's egg. Soon satiated[1] with its woody flavor, we tossed away our gum, to return again to the sweet roots.

2   I remember well how we used to exchange our necklaces, beaded belts, and sometimes even our moccasins. We pretended to offer them as gifts to one another. We delighted in impersonating our own mothers. We talked of things we had heard them say in their conversations. We imitated their various manners, even to the inflection of their voices. In the lap of the prairie we seated ourselves upon our feet, and leaning our painted cheeks in the palms of our hands, we rested our elbows on our knees, and bent forward as old women were most accustomed to do.

This sentence is from the passage.

"So! my shadow had the impudence to sit down beside me!" (Paragraph 6)

What kind of behavior does the word impudence describe, as it is used in the passage?

◯ 1.   gleeful and lively

◯ 2.   rude and mocking

◯ 3.   reckless and uncaring

◯ 4.   mysterious and intriguing

Figure 1.7. Traditional Item Example Showing How a Sentence Could Use an Excerpt from the Text Demonstrating the Misalignment between the Item and the Passage Prompting Students to Scroll, Seek, and Find the Point in the Passage Where the Evidence Appears (Fletcher, 2006, p. 8)

Conclusion

This chapter mainly focuses on the concept of reading comprehension. At first, it highlights the difference between reading and reading comprehension. It then proceeds to explain the various levels and components of reading comprehension. In addition, the chapter introduces Schema Theory, which proposes that readers' prior knowledge and experiences play a significant role in

their understanding of a text. The next section of the chapter discusses factors that impact comprehension, such as lack of interest, inadequate vocabulary, and insufficient background knowledge, and others. Furthermore, the chapter includes solutions that can be used by teachers to guide students' reading comprehension skills by promoting active reading strategies, providing appropriate texts, and engaging students in discussion, and others. The chapter concludes by explaining how teachers can measure students' text comprehension. Various methods can be used, such as comprehension questions, cloze tests and summary writing.

CHAPTER TWO

Metacognitive Awareness of Reading Strategy Uses

Content

Introduction

EFL learners often encounter difficulties in their reading experiences, which may result in poor reading comprehension. One way to overcome these difficulties is to implement reading strategies. However, their use cannot be effective unless it is associated with a deep awareness and knowledge about their different uses. This chapter attempts to provide an overview about metacognitive awareness of reading strategies. It begins by defining reading strategies and providing the adopted classifications. Then, it tackles some reading strategies and their effects on reading comprehension. Furthermore, it states a brief background related to the concepts 'metacognition' and 'metacognitive awareness'. In addition, it highlights the effects of metacognitive awareness on the process of language learning. The chapter concludes with the discussion of metacognitive awareness about reading strategies, its importance and effects on the reading process in general and reading comprehension in particular.

2.1. Basic Definitions

Scholars in the field of language learning and education have made attempts to define language learning strategies and reading strategies. Their definitions served as a starting point for educators and learners to explore and apply effective strategies in their language learning and reading endeavors. The following definitions aim to provide a clear understanding of these strategies.

2.1.1. Language Learning Strategies

A precise definition for the concept of "strategy" is an essential stage in comprehending Language Learning Strategies (LLS). This is because it represents a foundational knowledge required for this area of study. On the one hand, there was a disagreement among scholars on the use of the word "strategy". Griffiths (2004) clarified that while some scholars preferred to use "learning behaviors" or "techniques", the majority of scholars use the term "strategy" (p. 1). On

the other hand, there is a consensus within the academic community regarding the definition of the term "strategy".

Brown (2007) defined it as the "specific methods of approaching a problem or task, modes of operation for achieving a particular end, planned designs for controlling and manipulating certain information"(p. 119). That is to say, the term refers to particular techniques or approaches used to solve a problem or complete a task; as well as, intentional plans for managing and manipulating information. In addition, Barad (2018) clarified that the word "strategy" derives from the Greek language. It refers to a plan designed to achieve one or more goals under conditions of uncertainty. It includes a range of skills and tactics, including logistics and siege craft (p. 3). To sum up, these definitions indicate that the fundamental concept of "strategy" remains consistent for most researchers.

Concerning the term 'learning strategies', it is simply defined by O'malley and Chamot (1990) as "the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information" (p. 1). This definition emphasizes the active role that learners play in the process of learning new knowledge and skills. Furthermore, by employing learning strategies, individuals can enhance their overall academic performance. Similarly, Cohen (1998) defined learning strategies as "learning processes which are consciously selected by the learners" (p. 24). Cohen's definition stressed the element of choice in the selection of the strategy.

Elsewhere, Oxford (1990) stated that "language learning strategies are steps taken by students to enhance their own learning" (p. 1). Moreover, Richards and Schmidt (2010) clarified that LLS "are the ways in which learners attempt to work out the meanings and uses of words, grammatical rules, and other aspects of the language they are learning" (p. 331). In other words, LLS are ways employed by students to detect linguistic aspects of the language being learned. In

addition, using them will aid students to comprehend, learn, or retain new information in the target language.

To conclude, diverse interpretations, approaches, and contexts gave rise to variations in the use of the term 'strategy". Nevertheless, regardless of whether they are termed as approaches, thoughts, actions, methodologies, or tactics, there is unanimous consensus on the function of language learning strategies among scholars. The above-reviewed definitions stressed LLS as vital in comprehending, acquiring, and retaining new information. Thereby, they significantly improve learners' overall academic proficiency in language learning.

2.1.2. Reading Strategies

Throughout the history of the teaching-learning process, scholars have attempted to discover the diverse range of techniques employed by both native and non-native language readers. Thus, before getting deeper in the different classifications and types of reading strategies, an insightful examination should be provided about the concept of "reading strategies". According to Block (1986), reading strategies describe how readers conceptualize a task, what textual cues they pay attention to. In addition to how they make sense of what they read, and what they do when they do not understand a specific text (p. 465). This means that the different methods readers use to conceive an activity, interpret what they are reading and grasp the material meanings are referred to as "reading strategies".

Additionally, Cohen (1990) described reading strategies as mental abilities that readers consciously choose to employ when approaching reading-related tasks. Such techniques could enhance or hinder good comprehension (p. 133). Generally speaking, Cohen's definition stressed the element of choice involved in strategy selection which, indeed, sets it apart from other mental procedures. Subsequently, Carrell (1998) claimed that it can be exceedingly challenging to differentiate reading strategies from other cognitive processes related to thinking, reasoning,

studying, or motivational strategies (para. 6). This justifies the cognitive nature of the reading process where readers implement mental procedures differently; each according to his/her own cognitive ability.

Elsewhere, Richards and Schmidt (2002) described reading strategies as ways of extracting the intended significations from written texts, which are utilized flexibly and selectively during the process of reading. These strategies encompass keeping important concepts in mind, deducing unknown words from context, and pausing to re-read when encountering comprehension obstacles (p. 455). That is to say, reading strategies can be viewed as the ways readers follow to gradually get into text meanings. Thus, they can be chosen on the basis of readers' aims behind the reading activity.

Moreover, McNamara (2007) provided a quite comprehensive definition of reading strategies, considering them as cognitive or behavioral actions undertaken within specific contextual conditions, with the ultimate objective of augmenting comprehension (p. 6). His definition clarifies that the selection of the strategy is driven by the context in which it is employed; that is to say, the text type and the aim of the reading task. The same definition further elucidates the main aim behind applying reading strategies while interacting with texts, which is enhancing reading comprehension.

According to this general review, a synthesis definition of reading strategies can be provided. Reading strategies, as a broad term, refers to the explicit and implicit practices and efforts that assist readers in interpreting printed materials. Accordingly, some aspects could be highlighted about them as being cognitive processes. They can be chosen consciously and used flexibly depending on the material under study and the purpose behind reading. Correspondingly, the improvement of reading comprehension is the main reason behind their use.

2.2. Classifications of Reading Strategies

Given the fact that researchers defined reading strategies differently, it is not surprising, therefore, that classifying these strategies varied as well. Some of these studies used two or three broad categories (Olshavsky, 1976/1977; Block, 1986; Paris et al., 1991); others used four or five (Pritchard, 1990; Anderson, 1991), while some investigations extended their strategy with taxonomies beyond the five categories (Oxford, 1990; Lau, 2006).

For example, Oxford's (1990) taxonomy classified language learning strategies into direct and indirect strategies. First, direct strategies that include 'memory strategies' for retaining and recalling new information; 'cognitive strategies' for language production and comprehension, and 'compensation strategies' for language application. Second, indirect strategies that compose of 'metacognitive strategies' for learning process direction, 'affective strategies' for emotion controlling, and 'social strategies' for interpersonal learning.

O'malley and Chamot (1990) provided a basic three-category classification: cognitive, metacognitive, and social/affective strategies. 'Cognitive reading strategies' according to Semtin and Maniam (2015) are associated with specific learning activities that are employed during the process of acquiring knowledge, such as connecting new words in the mind and summarizing the main idea (p. 55). That is to say, the procedures that happen in the reader's mind while reading and facilitate his/her comprehension are cognitive strategies for reading. As exemplified by Bouchard (2005), making inferences, visualizing, predicting, note taking, and mapping are all examples of cognitive strategies (p. 5).

However, 'metacognitive reading strategies' are regarded by Flavell (1981) as the deliberate and mindful monitoring and evaluation of one's cognitive processes with the aim of attaining particular objectives (p. 273). In other words, metacognitive reading strategies are the ones responsible for monitoring, controlling, and evaluating comprehension while and after

reading. O'malley and Chamot's third category, 'social/affective reading strategies' (1990), represents a broad grouping that encompasses activities that revolve around either engaging with another individual or exerting cognitive influence over emotions and feelings (p. 45). This implies that these strategies are connected to interpersonal transactions and social mediating activities such as cooperative learning and asking questions to others.

Alternatively, Paris et al. (1991) categorized reading strategies on the basis of reading phases. First, 'pre-reading strategies' that activate prior knowledge that is crucial for interpreting texts. Second, 'while-reading strategies' that assist in the foundation of the text's primary meaning. Third, 'post-reading strategies' that help to evaluate, find, and reflect on the written material. The phase-based classification made by Paris et al. was updated by Anderson (1991) into five groups: supervising, supporting, paraphrasing, establishing text coherence, and test taking strategies. 'Supervision' is used to monitor one's comprehension development; 'supporting' for controlling different processing habits including skipping unfamiliar words; 'paraphrasing' to improve up information reception; 'establishing text coherence' for global text analysis; and 'taking a test' to complete a reading assignment or a test.

With a growing interest in reading strategy research, the above-reviewed studies have provided distinct classifications for them. However, it is noteworthy that researchers' different categorizations do not indicate that their essence is different. They just varied in their terminology use, employed in accordance with the objectives of their studies, but still similar in purpose and functions.

2.3. Types of Reading Strategies

Once a learner builds knowledge from what has been read, real understanding can be demonstrated. However, it can never be achieved without implementing strategies as paraphrasing,

summarizing, skimming, scanning, visualizing, mapping, note-taking, predicting, recognizing text organization, and activating prior knowledge.

2.3.1. Paraphrasing and Summarising

The processes of paraphrasing and summarizing are interconnected because both imply the cooperation of fundamental components, including lexis, semantics, and syntax. Each of these procedures, however, has value in and of itself as a conversation and an understanding tool. Accordingly, Kissner (2006) proposed that students may select the appropriate technique for each situation when they are aware of the differences between these abilities (p. 5).

McNamara et al. (2007) defined paraphrasing as the alteration of the surface features of a sentence by substituting its key words or modifying its syntactic structure (p. 477). In other words, paraphrasing can be described simply as the rendition of others' ideas, messages, and meanings into one's own words with giving credits to original writers. Further, Escudero et al. (2018) discussed the different levels of paraphrasing and how they can relate to comprehension. For instance, if learners have not read the material well, they will simply perform shallow paraphrasing. Mainly through changing words, rearranging sentences, and removing or adding excessive amounts of the original one. However, when students' understanding level rises, they will be able to make significant changes. Predominantly by producing lengthy thoughts, turning an abstract idea into a concrete one, and adding new qualities by applying inferential and critical thinking (p. 58).

Furthermore, it is crucial to note that paraphrasing aims to improve students' capacity to analyze the provided material and produce a result that is more important to them. According to Elida and Oktadela (2022), paraphrasing aids in the reader's development of retrieval cues that permit the incorporation of prior knowledge with the material being read (p. 73). That is, readers are encouraged to be critical thinkers through drawing connections with schemata. Thus, this latter is an interactive process between the critical reader, the direct and the indirect meanings of the text.

Summarizing is more than just retelling or briefly stating the main ideas in a text or a passage. Westby et al. (2010) claimed that summarizing involves analyzing information, distinguishing important from unimportant elements and translating large amounts of information into few short cohesive sentences (p. 277). Studies such as Khoshsima (2014) and Febriani et al. (2018) revealed that summarizing passages boost comprehension and memorization of material information. Particularly, Domersi (2021) claimed that students' understanding of a text is reflected through their text summary because they might be able to repeat a text but not able to sum it up. Thus, students who write effective summaries demonstrate a grasp of the overall structure and main ideas of a text (p. 138). That is to say, good summaries reflect the readers' ability to 'read between the lines' and draw conclusions about concepts and connections that are implied and indeed are crucial for understanding texts.

2.3.2. Skimming and Scanning

EFL students face many problems while reading academic texts in regards to comprehending the ideas presented. Reading strategies are, then, designed to enable students to engage with the written material and understand it effectively. Brown (1994) reported that skimming and scanning are arguably the two most invaluable reading techniques for both language learners and proficient speakers (p. 283). Therefore, skimming and scanning are considered to be crucial for EFL learners.

On the one hand, skimming is defined by Aebersold and Field (1997) as quick and superficial reading of a text in order to understand meaning. It is widely regarded as a useful approach for identifying key concepts, sections, arguments or procedures within the text (p. 76). Aritonang et al. (2018) further explained that skimming is a reading strategy that involves a quick glance over written material to gain a general idea of its content. By avoiding getting too caught up in specific details, students can identify the overall meaning of the text (p. 103). That is to say,

this strategy is perfect for creating an overview for the written text and deciding whether to read further for details or not based on the aim behind reading. However, it becomes inapplicable with certain text structures which do not rely on titles such as chapters in novels.

On the other hand, scanning was defined by Casey (2003) as a tool employed to find specific information that might be questioned at the end of a task (p. 2). Additionally, Aebersold and Field (1997) illustrated the three steps of scanning: determine what keywords to look for, look quickly through the text for those words, and then read the sentences around them to see if they provide the information being sought (p. 76). In other words, the aim behind using this strategy is to search for particular information within a text such as key words, names, titles, subheadings, or a specific definition. The reader, who intends to use this strategy, must be precise with the words or sentences to look for beforehand. Speed reading can help the reader avoid reading irrelevant information from the material at hand.

Skimming and scanning have proved to have a positive impact on EFL students' reading comprehension proficiency. A study by Yusuf et al. (2017) investigated the impact of using skimming and scanning on EFL students' reading comprehension. The sample was constructed of 32 students. A pre-test and a post-test were used to collect data. The results showed that skimming and scanning improved their reading comprehension (p. 1). In short, skimming and scanning are used to search for certain information in a text and proved to enhance EFL students' reading comprehension.

2.3.3. Predicting

Another cognitive reading strategy recommended by Zhang (1993) is 'prediction'. He claimed that prediction gives reading a purpose and triggers a cognitive map that would direct the reader while reading (p. 6). Similarly, Magliano et al. (1993) stated that the process of prediction strategy entails anticipating what could potentially occur next in the text. Effective readers utilize

various tools such as images, headings, and texts, along with their own personal experiences, to form predictions prior to initiating their reading (p. 35). Predicting entails, therefore, anticipating forward while reading and looking at the information and events the text will include. Additionally, using this strategy necessitates readers to stay focused on the present content while simultaneously and actively adjusting and verifying their anticipations.

On that account, Afflerbach (1990) claimed that skilled readers actively build meaning by employing prediction and confirmation techniques. Consequently, applying this technique is an important first step in the creation of a metacognitive system, in which feedback about its validity is retrieved from the text through self-monitoring (p. 132). Likewise, Sumirat et al. (2019) believed that prediction is a key tactic for assisting readers in developing their reading abilities, and using it would help them to read more effectively (p. 522). In other words, anticipating what will come next in a text gives readers a sense of direction and purpose while reading. When their predictions align with the actual content of the text, it reinforces their understanding and comprehension.

On the whole, predicting is a crucial reading strategy. It promotes readers to utilize critical thinking and problem-solving abilities. It enables them to use textual information to predict the coming events. Readers, through this strategy use, are given the chance to consider and assess the material in order to develop a deeper understanding and improve their comprehension abilities.

2.3.4. Activating Background Knowledge

Activating background knowledge, also known as making connections, is one crucial reading strategy used to enhance comprehension and critical thinking skills. Alexander and Jetton (2000) asserted that prior knowledge is a multidimensional and hierarchical construct in breadth, depth, and quality (p. 15). Accordingly, the background knowledge is constructed gradually through time as students engage in different activities. Additionally, Tarchi (2015) defined background knowledge as the total of one's actual knowledge, which has been acquired prior to

engaging in a specific learning endeavor. It is organized into schemata, declarative and procedural, both explicit and tacit, and of a dynamic nature (p. 4). That is, all the previously learned information stored in the person's memory, including explicit, implicit, conceptual, and metacognitive knowledge are referred to as prior or background knowledge. It can evolve and develop over time through new experiences, learning opportunities, and interactions with the environment.

Furthermore, in order to arrive at an accurate interpretation of the material at hand, EFL students must draw on pre-existing schemata. In fact, the significance of using background information or schemata were well addressed by studies such as O'Reilly et al. (2019) and Smith et al. (2021), indicating a constant and bidirectional connection between text content and readers' prior knowledge. They claimed that without any prior understanding, a complex entity, such as a written text, is not merely challenging to comprehend; it essentially lacks significance or purpose. This clarifies that the more background knowledge the reader brings to a text, the quicker it is to interpret. To this end, activating background knowledge helps readers to reflect on the text's key propositions, and then connect them to the existing schema to generate new ones to be stored and retrieved whenever needed.

Activating background knowledge as a reading strategy is closely intertwined with the schema theory. By activating relevant schemata, readers can integrate them with the information presented in the text; therefore, facilitating a deeper and more meaningful engagement with the material.

2.3.5. Recognizing Text Organization and Structure

One of the most extensively studied and theoretically supported learning-from-text strategy is the use of text structure. Greenall and Swan (1984) explained that recognizing text organization refers to knowledge about the ways sentences are used to create paragraphs, how these latter come together to form a passage, and how the overall organization is indicated (p. 3). That is, in order

for a text to be well comprehended, readers need to be aware of its structure and organization; particularly how logically sentences and paragraphs are arranged. In this regard, studies like Shemshadsara et al. (2019) and Eliata and Miftakh (2021) assumed that being able to recognize the text organization directs the encoding, retention, and replication of the text's key ideas. This denotes that the development of text structures' organization is a need for execution of activities requiring global understanding and significant learning.

Being able to recognize text structures may significantly improve students' comprehension of the content being read. Text organization is, then, a reading procedure employed by readers and relates to how the information inside a written text are structured. This technique aids students in understanding a text's main idea and supporting details, a cause and its subsequent implications, or several perspectives on a topic. Additionally, it helps readers comprehend how a writer exploited the necessary resources and organized them cohesively.

2.3.6. Visualizing, Mapping, and Note-Taking

Visualizing, mapping, and note-taking are all techniques that can be used to enhance learning and comprehension. They can help students connect new information with their existing knowledge. Thus, if well used, these strategies can improve critical thinking skills and deepen their schemata.

2.3.6.1. Visualizing

Visualization is a reading strategy that can improve EFL students' critical thinking skills since it revolves around the use of cognition. Pressley (2000) introduced visualization as "the fifth strategy along with prediction, questioning, clarification and summarization … visualization which is based on generative learning could be used effectively in reading comprehension" (p. xi). This means that the strategy is, added to the others mentioned, important for reading quality as it directly affects the quality of students' reading comprehension.

McNamara (2007) introduced visualization as an effective way to extend comprehension beyond textual content. It prompts readers to tap into their existing knowledge and thereby establishing a solid foundation for the ideas explored within the text (p. 488). In other words, this strategy allows readers to link between their schemata and the new pieces of information presented in the new text. One can conclude that when readers create mental images of the content they are reading, they are more able to remember and understand it. This relationship between visualization and comprehension suggests that readers can benefit from implementing their imagination while reading.

A study by Erfani el al. (2011) aimed to investigate the role of visualization strategy in ESP reading comprehension ability. Two groups of Iranian university students participated in the study. One served as the controlling group and the other as the experimental one. The experiment included teaching using visualization for twenty-four sessions. The after-test showed that the experimental group scored higher in reading comprehension. The results confirmed that using visualization in reading comprehension instruction has a positive impact on students' reading comprehension ability (p. 1).

2.3.6.2. Mapping

Mapping is one of the strategies used by students to rewrite key concepts and thoughts into maps. Novak (1990) investigated the use of graphics to convey scientific concepts to young children. Since then, the concept of mapping has been used in a wide range of settings and contexts, most notably in education.

Regarding the definition, Hermida (2009) defined mapping as a technique in which students demonstrate their comprehension of a text. They create graphs that showcase the connections and associations between different concepts and ideas (p. 10). In other words, students create visual graphs to show how concepts and ideas in a text are related to each other. This helps them to better

understand and organize their text knowledge. According to Wang et al. (2010), learners who use this strategy are able to externalise their existing knowledge, combine it with new one, and then reorganize and internalize it in a graphic form using concept mapping lines (p. 235). In short, mapping helps students organize and memorise their thoughts and conclusions from the written materials they read.

There are two distinct yet closely related types of mapping. First, Wang et al. (2010) explained that 'concept mapping' is expressing relationships between concepts. The general and most used form of concept mapping conditions the primary concept (s) to be replaced at the top and the secondary ones under (p. 235). The second type is 'mind mapping'. Buzan (1995) is the first to invent this technique and presented it as an effective "graphic technique" that offers an unlock to full capabilities of the brain. It can be utilized in various areas of life to enhance the learning experience (p. 59)

Recent studies have proved the existence of positive impacts of using both types of mapping on students. According to Khodadady and Ghanizadeh (2011), concept mapping holds a positive impact on EFL students' critical thinking ability. In addition, mind mapping use helps students to improve their reading comprehension, reading abilities, and assist instructors in teaching reading for EFL students (Mahmoud & Mohaidat, 2018; Samonlux, 2020; Al-Jarf, 2021). One can conclude that mapping is a way of creating a visual image of concepts and thoughts deduced from written materials. It provides the opportunity to readers to use their critical thinking skills to select the key points that must be mentioned in the map. In addition, the use of this strategy enables individuals to externalize their mental schemata and see how different pieces of information fit together.

2.3.6.3. Note-Taking

Note-taking is another strategy used by students to comprehend information from oral or written materials. Nwokoreze (1990) believed that using note-taking strategy will lead students to

reach a high reading comprehension level (p. 42). This is because of the multiple skills the reader needs to use in order to take notes from a text. These skills are mainly related to the WM, vocabulary, and linguistic knowledge that affect the reader's reading comprehension quality.

O'Malley and Chamot (1990) defined note-taking as "writing down the key words and concepts in abbreviated verbal, graphic or numerical form to assist performance of a language task" (p. 138). That is to say, there are different types of note-taking such as words, doodles, images, and numbers. Additionally, Hartley (2002) stated that note-taking is the process of coding critical information captured from one or more sources from the same or different types of printed material including texts. This strategy is highly dependent on coding, organising, and storing knowledge only in WM using main ideas, short sentences, symbols, or abbreviations (p. 230).

Studies have shown that note-taking use has a positive impact on EFL students' cognitive skills (Zohrabi & Esfandyari, 2014; Bahrami & Nosratzadeh, 2017; Almaagbh, 2020). Rahmani and Sadeghi (2011) conducted a study investigating the effects of the process and the product of note-taking strategy on learners' reading comprehension and retention levels. 108 intermediate undergraduate EFL learners were divided into experimental and control groups. The experimental group received training in note-taking techniques using graphic organizers, while the control group did not receive any instruction. Results reported that the experimental group remembered more important ideas, and created better linkage between them (p. 1). Accordingly, note-taking reading strategy use holds a crucial importance on fostering EFL students' multiple language learning skills, precisely reading comprehension.

2.4. Importance of Reading Strategies

Reading is a fundamental language skill, and developing it is considered to be tremendously difficult for EFL students. Correspondingly, numerous studies discovered that low reading proficiency is mostly caused by insufficient and ineffective use of reading strategies (Ahmadi &

Pourhoseiin, 2012; Hong-Nam et al., 2014; Wu, 2022). McNamara (2007) asserted that proficient readers possess the knowledge of employing specific reading strategies to address comprehension difficulties. This suggests that instructing struggling readers in these strategies could play a crucial role in enhancing their comprehension skills (p. xi). Indeed, providing instruction on the utilisation of reading strategies can lead to improvements in EFL students' comprehension ability of complex texts. Consequently, the uses of reading strategies are indispensable components of effective comprehension.

According to the above-mentioned studies, which have concentrated on finding a way to overcome the reading comprehension challenges previously mentioned, reading strategies can be an effective solution. One study aimed at investigating the key difference between good and poor readers was by Anastasiou and Griva (2009). Results showed that poor readers were less aware of different types of reading strategies (cognitive and metacognitive strategies). Further, the study revealed a positive correlation between reading strategy use, reading accuracy and comprehension. Similarly, Teng (2019) investigated the effects of metacognitive reading strategy instruction on Hong Kong English language learners' reading comprehension. The results indicated an increase in comprehension level for those who were exposed to instructions about reading strategies.

Elsewhere, Banditvilai (2020) conducted a study on Kasetsart University EFL students to explore whether they were able to apply any of the reading strategies taught in reading comprehension training. A questionnaire, reading assignments, semi-structured interviews, and other methods were used to gather the data. The results showed that reading strategies highly improved students' reading comprehension. Furthermore, they exhibited positive attitudes regarding scanning, generating predictions, asking questions, and using these strategies to their reading processes, which improved their text comprehension.

2.5. Metacognition

More than 50 years have passed since research on metacognition first got underway. Unarguably, the word 'metacognition' was first coined in the 1970s by developmental psychologist John Flavell, who is widely regarded as the field's founder. According to Flavell (1976), metacognition is "the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective" (p. 232). Therefore, metacognition can simply be described as the intentional controlling and monitoring of one's cognition that is directed by specific aims.

Additionally, Papleontiou-louca (2003) offered a quite similar definition stating that "metacognition essentially means cognition about cognition; that is, it refers to second-order cognitions: thoughts about thoughts, knowledge about knowledge or reflections about actions" (p. 10). In other words, if cognition entails observation, comprehension, and memorization, then, metacognition entails reflecting about one's own observation, comprehension, and memorization. Thus, the word 'metacognition' remains the preferable name for these numerous cognitions about cognitions. Moreover, Tarricone (2011) claimed that the term 'metacognition' has the disadvantage of making it hard to distinguish between what is metacognitive and what is cognitive (p. 1). However, the primary difference between the two is that cognition is an ongoing flow of information, while metacognition is the understanding and recognition of these processes. Hence, it can be considered as second-order cognition.

Although Hartman's definition (2002) "thinking about thinking or cognition about cognition" (p. xi) appears to be the most straightforward description of metacognition, this definition has to be expanded. Metacognition also entails the capacity to evaluate one's own thoughts, draw conclusions from this evaluation, and, when needed, reconstruct existing ideas.

2.6. Components of Metacognition

Most researchers make a distinction between two components of metacognition: metacognitive knowledge and metacognitive regulation (Flavell, 1979, 1987; Schraw & Dennison, 1994; Schraw, 1998).

2.6.1. Metacognitive Awareness (Metacognitive Knowledge)

Metacognitive knowledge is one key component of metacognition. Flavell (1979) stated that metacognitive knowledge or metacognitive awareness (also called knowledge about cognition) relates to one's comprehension of the variables that affect people, tasks, and strategies. He argued that there are no fundamental differences between metacognitive knowledge and other types of knowledge stored in long-term memory (p. 907). In essence, the term 'metacognitive awareness' refers to what people are aware of about either their own cognition or others' cognition.

More recent studies replaced the term 'metacognitive knowledge' by the term '**metacognitive awareness**' referring to the same concept. According to Ridley et al. (1992), metacognitive awareness refers to the practice of reflecting on one's own thoughts to build knowledge of one's person, task, and strategy (p. 294). Alternatively, Anderson (2002) stated that metacognitive awareness is the integration of several attentive cognitive and thinking processes (pp. 3-4). It consists of five major components:

- Preparing and planning for learning to be aware about its objectives and know how to achieve them.

- Selecting and implementing learning strategies to ensure that learners are able to consider and deliberately make decisions regarding their learning process.

- Monitoring strategy usage to remain on track and fulfill learning objectives.

- Orchestrating numerous strategies is a distinguishable factor that characterizes strong learners.

- Evaluating strategy use and learning.

Anderson's identification of the five major components of metacognitive awareness provides a comprehensive framework for understanding and fostering effective learning. The incorporation of these components helps learners to actively engage in the learning process, make informed decisions, adapt to challenges, and reflect on their learning.

In the context of reading, Fitrisia et al. (2015) clarified that "metacognitive awareness ensures that the students are able to construct meaning from information". She added that they should be able to reflect on their own thinking process, identify, select, manage, and assess the reading strategies they are using (p. 16). Thus, the term 'metacognitive awareness' refers to the conscious control and regulation of thoughts and cognitive processes. In this regard, in reading contexts, metacognitive awareness entails knowledge about reading strategies uses and how to control them while reading.

1.6.1.1. Types of Metacognitive Knowledge (Metacognitive Awareness)

Schraw (1998) distinguished between three facets of metacognitive knowledge (metacognitive awareness): declarative, procedural, and conditional knowledge. First, **declarative knowledge** or as Flavell (1979) termed it "the person category". He claimed that this type encompasses everything that one could conceive regarding the essence of oneself and fellow individuals as cognitive beings. It can be divided into more specific subcategories, namely beliefs concerning variations within individuals, variations between individuals, and the fundamental principles governing cognition universally (p. 709). However, Kaur (2020) asserted that declarative knowledge involves awareness of one's own learning style and the variables that affect performance (p. 163). In other words, this type pertains to an individual's self-awareness regarding his/her learning abilities and cognitive activities. It involves understanding what one knows and what one doesn't know, as well as recognizing one's strengths and weaknesses in various learning situations.

Second, **procedural knowledge** or as Flavell (1979) termed it "the task category" and referred to it as the knowledge accessible to the person within a cognitive enterprise. He clarified that in this specific category, metacognitive knowledge involves understanding the practical implications of task variations (p. 709). Saks et al. (2021) claimed that those who have a high level of procedural knowledge accomplish tasks more quickly and they are more likely to have a large variety of strategies and can successfully reach task goals (p. 2). That is to say, procedural knowledge encompasses the understanding and practical application of specific tasks or activities. It entails grasping the practical implications of task variations and possessing the ability to adapt one's cognitive processes to effectively achieve the desired goals. Possessing a profound level of this knowledge type empowers individuals to complete tasks with greater speed and efficiency.

Third, knowing when and why to employ declarative and procedural knowledge is referred to as **conditional knowledge**. Flavell (1979) referred to it as "the strategy category". He proclaimed that within this type, a vast knowledge awaits those seeking effective strategies to achieve specific objectives in diverse cognitive tasks (p. 709). Teng (2019) argued that effective students, for instance, know when and what material to review. Conditional knowledge is crucial as it enables learners to more efficiently invest their resources and make use of techniques (p. 3). In short, conditional knowledge pertains to the comprehension of the circumstances and reasons behind using particular strategies. It entails the ability to identify the specific conditions under which certain strategies are most suitable and effective.

2.6.2. Metacognitive Regulation (Metacognitive Experiences)

Contrary to metacognitive knowledge, metacognitive regulation or as Flavell (1979) termed it 'metacognitive experiences' (p. 908), may be viewed as the actual behaviors learners engage in to support memory and learning. According to Young and D. Fry (2008), three separate processes can be used to describe metacognitive regulation; planning, monitoring, and evaluating.

Firstly, Mahdavi (2014) explained that **planning** encompasses the deliberate choice of suitable approaches and the distribution of resources that have an impact on performance. Illustrative instances involve formulating forecasts prior to engaging with a text, arranging the sequence of strategies, and allocating time or attention before initiating a task (p. 531). That is to say, planning is precisely outlining a cognitive activity by deciding on the best techniques and cognitive resources to use.

Secondly, Young and D. Fry (2008) defined **monitoring** as the process that entails the indispensable self-assessment abilities required for regulating the process of learning. It pertains to the meticulous evaluation of the efficiency of the strategies or plans that are being put into action (p. 2). Monitoring entails, therefore, being aware of how to do with a cognitive task and have the ability to assess how well one is performing.

Thirdly, according to Lai (2011), **evaluating** entails the deep assessment of the advancements made in the direction of predetermined objectives, thereby initiating subsequent phases of planning, monitoring, and evaluation. A typical example could involve re-assessing one's goals and deductions (p. 7). In simple words, evaluation is examining the results to see if the learning outcome corresponds to learning goals and if the procedures employed were effective.
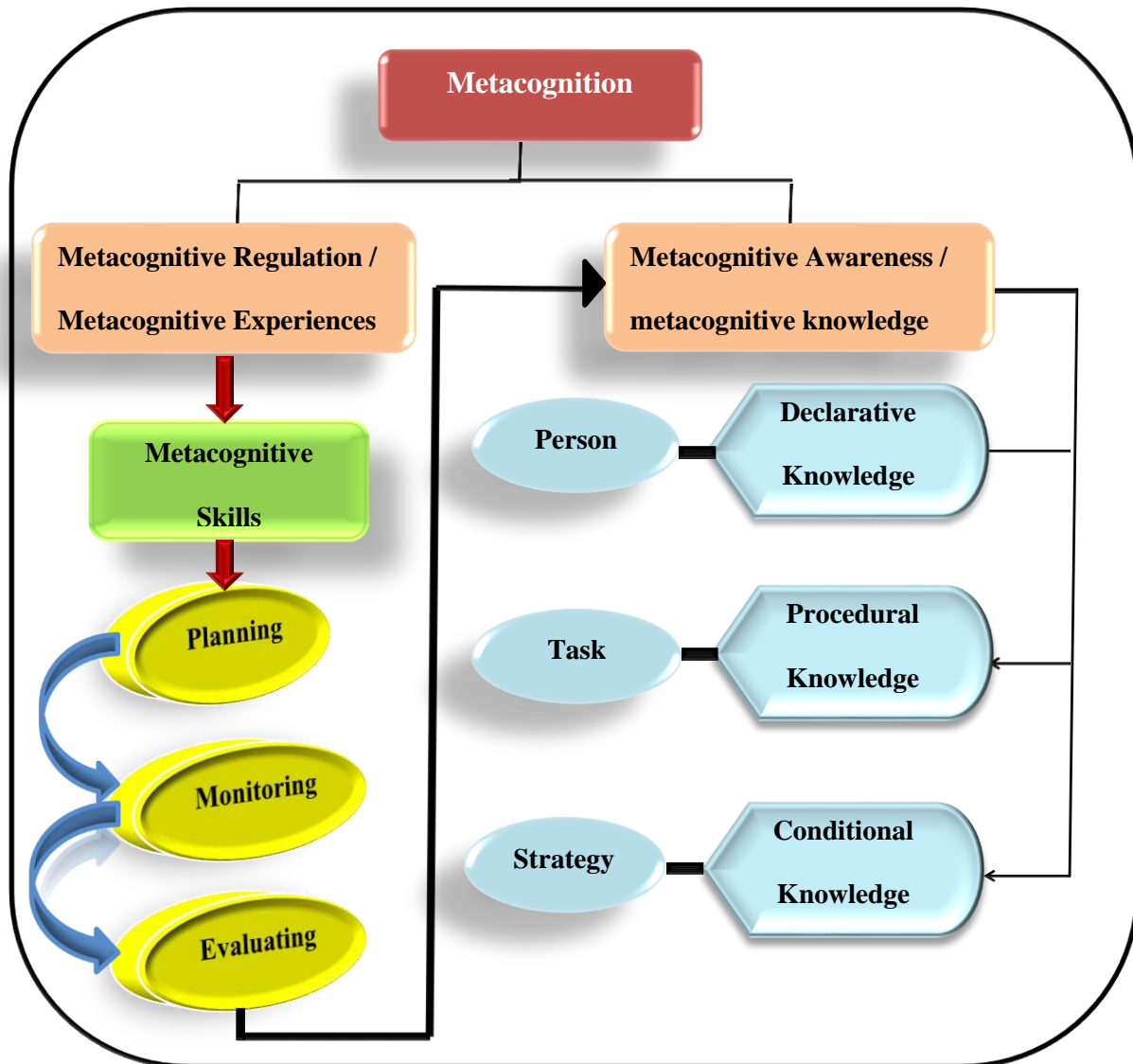
Figure 2.1. Components of Metacognition according to Flavell (1979) and Schraw (1998)

The terms of metacognition, metacognitive awareness, and metacognitive regulation are often utilized interchangeably by scholars and researchers within different contexts (Ridley et al., 1992; Anderson, 2002; Young & D. Fry, 2008; Zhang & Wu, 2009). However, they all can be included under the same umbrella definition. Therefore, all of them can be summarized as the ability to think about one's cognitive processes, control, and evaluate them.

2.7. The Impact of Metacognitive Awareness of Reading Strategy Uses on Students' Reading Comprehension

Trends within the field of reading comprehension have led to an increasing focus on the importance of metacognitive awareness of one's cognitive and motivational processes while reading (Pressley & Afflerbach, 1995; Alexander & Jetton, 2000; Mokhtari & Reichard, 2002; Fitrisia et al., 2015). As mentioned previously, metacognitive awareness can be described as deliberate, purposeful, goal-directed, and future-oriented mental processes that control one's cognition. Accordingly, this section will be dedicated to explore the role of metacognitive awareness on language learning and precisely on the reading process.

2.7.1.   The Effect of Metacognitive Awareness on Language Learning

Finding the function of metacognitive awareness, in students' learning outcomes and accomplishment in various school disciplines, has been the topic of several research investigations. There is numerous evidence that students' metacognition may have an impact on their learning process and achievements (Mokhtari & Reichard, 2002; Bolitho et al., 2003; Feiz, 2016; Özçakmak et al., 2021). Subsequently, by incorporating metacognitive instruction into the educational process and developing awareness of metacognition, desirable educational goals may be attained and students' performance can be enhanced. Flavell (1979) argued for the positive effects metacognition has on learning in general. He believed that metacognitive awareness empowers learners to make informed decisions when it comes to choosing, assessing, adjusting, and discarding cognitive tasks, objectives, and strategies. This decision-making process is influenced by the relationships between these elements, as well as the learners' own abilities and preferences within a given context. (p. 908). That is, metacognitive awareness can assist learners to plan, monitor, check, and evaluate their performance during and after tasks. It also enables making the appropriate cognitive connections for better achievements.

Developing metacognitive awareness is a crucial cognitive skill that helps learners become more productive and, significantly, more autonomous. Therefore, White and Frederiksen (1998) clarified that when it comes to foreign language classrooms, metacognitive awareness is equivalent to being conscious of how to gain language knowledge (p. 4). That is, if learners are aware of how they learn, they may find the most successful methods to acquire a certain language. This view is confirmed by Chamot (2004), stating that strategic language learners exhibit a high awareness of their own cognitive processes and learning strategies. They possess the proficiency to skillfully coordinate and employ strategies that align with the demands of the task at hand (p. 14). This means that being equipped with sufficient metacognitive knowledge about tasks in general is highly associated with the appropriate choice of strategies. This would in turn facilitate language learning.

Furthermore, according to Zhang and Guo (2020), metacognitive knowledge appears to be directly associated to foreign language learning success. Hence, they organize their learning beforehand, monitor it while doing the activity, and assess it when the task is completed (p. 89). This implies that learners who demonstrate metacognitive knowledge are aware of their learning and know when and how to use the most appropriate strategies to complete and perform a given task in the most effective way. Furthermore, learner-centeredness and autonomy can effectively be developed through metacognitive instruction. Accordingly, several studies have proven that teaching students to be metacognitively aware helps them become more self-regulated, self-directed, and effective learners (Kincannon et al., 1999; Vandergrift et al., 2006; Breed & Bailey, 2018).

To conclude, metacognition has been positively correlated with students' cognitive capacities, domain mastery, and self-regulation. Students with good metacognitive abilities are effective learners, and they are more capable of planning, evaluating, and correcting errors.

Therefore, supporting the application of metacognitive knowledge motivates language learning and makes students more autonomous and successful.

2.7.2. Metacognitive Awareness of Reading Strategy Uses (MARS)

As noted before, reading is the process of constructing meaning. Therefore, this meaning construction necessitates higher order mental processes to form the material reading comprehension. In fact, the metacognitive aspect of reading comprehension comes at this point. According to Grabe (2009), reading is an ongoing evaluative process and higher-level reading skills necessitate more conscious reflection, monitoring and self-evaluation from the reader (p. 16). That is to say, only the reader's metacognitive awareness can facilitate the comprehension of complex written materials.

In recent years, metacognitive awareness of one's mental and psychological processes during reading has received great attention in the realm of reading research in foreign language learning (Mokhtari & Sheorey, 2002; Anderson, 2002; Cromley & Azevedo, 2006; Irfan et al., 2019; Pervaiz et al., 2022). As indicated previously, metacognitive awareness is knowledge of the appropriate cognitive processes and behaviors that one engages in to attain a certain objective. Nonetheless, when applied to reading, Ahmadi et al. (2013) defined it as a complex cognitive performance factor entailing the selection, monitoring, and evaluation of reading strategies. That is, the strategies of 'self-selection', 'self-monitoring', and 'self-reflecting' (p. 240). Thus, metacognitive awareness about reading strategies can be described as the knowledge readers apply to select, monitor, and evaluate the reading strategy before, during, and after the reading process.

Al-Mekhlafi (2018) claimed, further, that inefficient readers will become proficient when equipped with knowledge and awareness of the nature of reading and reading strategies (p. 306). Accordingly, it will fulfill the demands of a reading situation more effectively if readers are aware

of what is expected to perform. However, if they are unaware of their own limits or the complex nature of the material at hand, they are unlikely to take efforts to foresee or overcome their difficulties.

To this end, when readers understand how and why to apply these strategies correctly and consciously, they can be deemed competent readers. It is clear, therefore, that an insightful understanding of readers' reading processes and developing metacognitive awareness of reading strategies are required for successful reading.

2.7.3. Metacognitive Awareness of Reading Strategies Uses Measurement

Several descriptive and exploratory studies addressed the issue of metacognitive awareness of reading strategies, with the purpose of defining readers' comprehension (Anderson, 2002; Cromley & Azevedo, 2006; Huo & Cho, 2020). However, the main issue was how to measure readers' metacognitive awareness of reading strategies. One of the approaches adopted by researchers was Mokhtari and Reichard's Metacognitive Awareness of Reading Strategies Inventory (MARSI). According to Mokhtari and Reichard (2002), the major aims behind MARSI were to develop a tool that would reveal students goals and intents for performing academic reading activities. It reveals also how much or how little they are aware about the various procedures involved in reading (p. 251). Such information might draw educators' attention to learners' cognitive processes. As a result, it would enable them to understand their needs better.

'Problem-solving', 'global', and 'support reading strategies' were the three subdivisions of it. MARSI consists of 30 items to assess MARS, 8 of which measure problem solving, 13 of them evaluate global strategies, and 9 of them look for supporting strategies for reading. Mokhtari and Reichard's Inventory proved to be reliable and valid for assessing and measuring MARS based on a diagnostic data demonstration. Indeed, it has been used by several researchers to assess readers' MARS levels in schools, colleges, and universities.

1. I have a purpose in mind when I read.
2. I take notes while reading to help me understand what I'm reading. .
3. I think about what I know to help me understand what I'm reading.
4. I preview the text to see what it's about before reading it.
5. When text becomes difficult, I read aloud to help me understand what I'm reading.
6. I write summaries to reflect on key ideas in the text. .
7. I think about whether the content of the text fits my purpose.
8. I read slowly but carefully to be sure I understand what I'm reading.
9. I discuss my reading with others to check my understanding.
10. I skim the text first by noting characteristics like length and organization.
11. I try to get back on track when I lose concentration.
12. I underline or circle information in the text to help me remember it.
13. I adjust my reading speed according to what I'm reading.
14. I decide what to read closely and what to ignore.
15. I use reference materials such as dictionaries to help me understand what I'm reading.
16. When text becomes difficult, I begin to pay closer attention to what I'm reading.
17. I use tables, figures, and pictures in text to increase my understanding.
18. I stop from time to time to think about what I'm reading.
19. I use context clues to help me better understand what I'm reading.
20. I paraphrase (restate ideas in my own words) to better understand what I'm reading.
21. I try to picture or visualize information to help me remember what I'm reading.
22. I use typographical aids like boldface type and italics to identify key information.
23. I critically analyze and evaluate the information presented in the text.
24. I go back and forth in the text to find relationships among ideas in it.
25. I check my understanding when I come across conflicting information.
26. I try to guess what the text is about when reading.
27. When text becomes difficult, I reread to increase my understanding.
28. I ask myself questions I like to have answered in the text.
29. I check to see if my guesses about the text are right or wrong.
30. I try to guess the meaning of unknown words or phrases.

Figure 2.2. Metacognitive Awareness of Reading Strategy Inventory Items

(Mokhtari & Reichard, 2002, p. 253)

2.7.4. The Impact of Metacognitive Awareness of Reading Strategy Uses on Students' Reading Comprehension

Students' reading habits are either poor or they are not focusing on what they are reading, resulting in an inadequate level of critical thinking. This makes it hard for them to construct meaning from written materials. On that account, recent developments in foreign language reading research have resulted in a greater focus on the significance of metacognitive knowledge of one's mental and emotional mechanisms involved in reading. In fact, predicting reading comprehension necessitated being aware of and monitoring one's comprehension processes. In a similar vein, a number of researchers have demonstrated the significance of metacognitive awareness in reading

comprehension (Barnett, 1989; Chamot, 2004; Gou, 2008, Anjomshoaa, 2012; Bagci & Unveren 2020).

The MARS has become one of the most important factors for students' comprehension of reading texts. Mokhtari and Sheorey (2002) claimed that metacognitive awareness of reading strategies improves learners' comprehension. It regulates how learners organize their engagement with the material at hand as well as how the selection, regulation, and evaluation of strategies are connected to good reading comprehension (p. 5). Additionally, according to Ahmadi et al. (2013), reading comprehension refers to readers' capacity to fully understand the surface and deep meanings of a book utilizing metacognition (p. 238). Metacognitive awareness of reading strategies, therefore, serves as a crucial factor that predicts learners' engagement and comprehension of the text.

In the same vein, Anderson (1991) ensured that effective reading comprehension requires more than just possessing knowledge of appropriate strategies. It is equally important for the reader to possess the skill and proficiency to employ these strategies successfully (p. 19). That is, in order to achieve a good reading comprehension, one must be aware about the procedures to be chosen for particular task, knowledgeable about their appropriate use, and able to adjust them when needed. In this regard, Tavakoli (2014) clarified that metacognitive awareness of reading strategies can distinguish between proficient and poor readers (p. 333). Thereby, competent readers are able to recognize what and why they are reading, adopt appropriate strategies to deal with their problems, and check their comprehension of content. Nevertheless, those who lack all of these traits to understand the meaning of any text are considered incompetent readers. Briefly said, it can be argued that metacognition's components (metacognitive awareness and metacognitive regulation) work all together to facilitate comprehension and then influence the reader's achievements.

Following this advocacy, many researches have been devoted to examine the role of metacognitive awareness of reading strategy uses in reading comprehension. Their results demonstrated that students' comprehension skills may be substantially enhanced if they apply metacognitive processes. This occurs once readers are aware of the reading strategies they are using during reading. For example, Gou (2008) examined the connection between metacognitive awareness of reading strategies and reading comprehension of 278 Chinese college students. The findings revealed a substantial positive link between MARS and reading comprehension. Similarly, Takallou (2011) investigated the impact of 94 male and female EFL students' metacognitive awareness on their reading comprehension in Kermanshah, Iran. The collected data revealed that those who were instructed about 'planning' and 'self-monitoring' during reading performed better than the control group. Furthermore, data analysis showed that the experimental group's performance in reading comprehension greatly improved after getting instructed on MARS.

Further, Fitrisia et al. (2015), in Indonesia, used the MARSI and two standardized English reading comprehension tests to investigate Banda Aceh' secondary school students' MARS and its effects on reading comprehension performance. Alike the previous researches, this study also showed that, to some extent, MARS influences reading comprehension. Moreover, Kermani et al. (2023) attempted to explore the general pattern of metacognitive awareness of reading strategy use and its possible correlation with reading comprehension of Iranian students at Islamic Azad University. The findings demonstrated a significant positive correlation between perceived metacognitive awareness of reading strategies and reading comprehension success. The findings also revealed that students' awareness of metacognitive reading strategies was considerably affected by their English proficiency levels.

To sum up, the above-mentioned studies explained the important role metacognitive awareness of reading strategies occupies in reading comprehension and learning process in general.

Hence, they stressed that one solution to the problem of poor reading comprehension is rising of metacognitive awareness about reading strategies.

Conclusion

From this chapter, it can be concluded that reading strategies are those cognitive and behavioral procedures used by readers to foster reading comprehension. Thus, implementing strategies as paraphrasing, skimming, scanning, activating prior knowledge, and others, is proved to be one factor for proficient readers. However, this chapter highlights that strategies for reading can be effective once they are accompanied with what is referred to as 'metacognitive awareness'. Further, it stresses the crucial role of metacognitive awareness of reading strategies uses in the teaching-learning process (mainly EFL context) and especially in reading comprehension.

CHAPTER THREE

Field Investigation

Content

Introduction

The present chapter is devoted to the practical framework of this study, aiming at investigating teachers' and students' attitudes towards metacognitive awareness of reading strategies uses and EFL students' reading comprehension. In executing that, two data gathering tools have been used, teachers and students' questionnaires. Thereafter, this chapter is dedicated for the collected data analysis and interpretation in order to answer the research questions and confirm or reject the research hypothesis. The methodology adopted in the present study, data collection tools, and the results discussions are, therefore, all described within this chapter. It finishes with some conclusions, pedagogical implications, limitations of the study, and recommendations for future researchers.

3.1. Research Method

The current study applied the quantitative Descriptive Method (DM) to detect, analyze, and characterize aspects that contribute to reading proficiency, reading comprehension, reading strategies, and students' metacognitive awareness of these strategies. Calmorin and Calmorin (2007) defined the descriptive research method as the process of collecting, analyzing, and accumulating data about the present situation. Its ultimate goal is to draw adequate and accurate interpretations from these data (p. 70). This means that, this method is designed for drawing conclusions and making inferences from collected data about a particular group under certain conditions.

3.2. Data Collection Tools

The present study opted for 'the questionnaire' as a data gathering tool to obtain accurate results. Questionnaires are dispatched to both professors and students affiliated with e Department of Letters and English Language, 8 Mai 1945, Guelma University. They are administered to collect data regarding teachers and students' perceptions towards reading comprehension and reading

strategies. They also serve to determine students' metacognitive awareness of reading strategies (MARS) and its impact on their reading comprehension.

3.3. Research Population and Sample

According to Richards and Schmidt (2010), on the one hand, 'population' in statistics refers to "any set of items, individuals, etc. that share some common and observable characteristics and from which a sample can be taken" (p. 343). On the other hand, the term 'sample' is defined according to them as "any group of individuals that is selected to represent a population" (p. 506). Accordingly, the research sample was chosen from First-Year Master students enrolled in the academic year 2022/2023 at the Department of Letters and English Language, 8 Mai 1945 Guelma University.

The reason behind opting for First-year Master students, as a sample for this study, is the fact they have "advanced reading skills" as a separate module in their first semester. Moreover, they are assigned to deliver virtually whole courses orally. Thus, they are expected to read various materials that require them, on the one hand, to practice their reading skills, and on the other hand, to collect essential information for their classroom presentations. At this advanced level, students are also supposed to possess certain cognitive capacities and processes that enable the researcher to assess their MARS. Given these considerations, a random sample of 110 students was chosen from a total of 134 according to Krejcie and Morgan's method of determining sample size (1970, p. 608). Therefore, this sample would enable the researcher to make generalizations to the entire population.

In addition, the current study is directed to teachers at the Department of Letters and English Language, 8 Mai 1945 Guelma University. In order to ensure a diverse representation and without any prior considerations or standards in regard to the selection of teachers, this sample is randomly

chosen from a total of 55 teachers teaching different modules and levels. However, only twenty-eight (28) of them were addressed to answer the questionnaire.

3.4. Teachers' Questionnaire

3.4.1. Aims of Teachers' Questionnaire

The purpose of this questionnaire is to examine teachers' perspectives concerning EFL students' reading experiences. Initially, it aims at gathering information about teachers' perspectives on students' reading comprehension abilities and the challenges they encounter during the process of reading. Furthermore, it seeks to explore the strategies employed by EFL instructors to enhance their students' reading comprehension skills. Additionally, the questionnaire endeavours to capture teachers' opinions on reading strategies, their significance, and their utilization by EFL students. Finally, it concludes by investigating teachers' attitudes towards students' MARS and its potential relationship with reading comprehension.

3.4.2. Description of Teachers' Questionnaire

Teachers' questionnaire is theoretically organized according to the research layout. It consists of twenty-six (26) questions divided into four (04) sections; arranged from general to specific (*Appendix B*). Most questions are close-ended such as multiple-choice and dichotomous (yes/no and agree/disagree) ones, followed-up by some others devoted to provide further additions, explanations, and justifications. In addition, few open-ended questions are incorporated to allow participants to express their ideas freely using their own words.

3.4.2.1. Section One: Teachers' Background (Q1 - Q3)

This section contains three questions **(Q1-Q3)**. It aims at collecting data about how long teachers have been teaching English at the University, their qualification, and whether they are working at English Department as part-time or full-time teachers.

3.4.2.2. Section Two: Reading Comprehension (Q4 - Q11)

Typically, the reason behind setting the questions of this section is to reveal teachers' perceptions towards students' reading proficiency and comprehension difficulties. To achieve this, a set of seven questions has been compiled. The section opens with (**Q4**), which prompts teachers to describe First-Year Master students' reading proficiency. Then, they are questioned, in (**Q5**), to indicate, whether grammar, fluency, vocabulary, or comprehension should be the primary focus while teaching reading. In (**Q6**), they are requested to define reading comprehension and state how often their students struggle in comprehending any written materials in (**Q7**). Additionally, (**Q8**) is designed to diagnose the main reasons behind poor reading comprehension. (**Q9**) asks participants whether or not they work on enhancing their students' reading comprehension with clarifying the means to do so in (**Q10**). The section concludes with a question (**Q11**) that seeks the appropriate assessment tool for reading comprehension followed by a required justification.

3.4.2.3. Section Three: Reading Strategies (Q12 - Q17)

This section is designed to convey teachers' perspectives towards the use and importance of reading strategies. It also sheds light on the most used reading strategies among EFL sample students according to their teachers. Precisely, (Q12) and (Q13) are planned to explore teachers' viewpoints regarding the significance of reading strategies on students' learning, in general, and reading comprehension, in particular. In (Q14), teachers are required to point out the type of learning strategies they prefer to be used by their students (cognitive, metacognitive, or socio-affective strategies) with justifications. Additionally, in (Q15), teachers are required to indicate how frequent they provide direct instruction about reading strategies. Then, a set of ten literacy techniques is offered, in (Q16), from which teachers need to select the most used ones by EFL students. Moreover, (Q17) aims at precising how often teachers raise their students' awareness about the importance of reading strategies use.

3.4.2.4. Section Four: Students' Metacognitive Awareness of Reading Strategy Uses (Q18 - Q26)

This section aims at investigating teachers' attitudes towards the correlation between the research variables through a set of nine **(9)** questions. In **(Q18)**, participants are asked to briefly define the term 'metacognitive awareness'. Then, two dichotomous questions **(Q19** and **Q20)** are set to figure out whether or not teachers have ever used the term in their classrooms and taught their students how to be metacognitively aware. As a follow up question for those who would answer 'yes' in **(Q20)**, **(Q21)** aims at exploring the ways instructors raise their students' attention towards developing metacognitive awareness. **(Q22)** attempts to discover instructors' attitudes towards metacognitive awareness and successful language learning. Further, **(Q23)** seeks to evaluate students' MARS through teachers' lenses. Meanwhile, **(Q24)** is designed as an attempt to discover the causes of low metacognitive awareness with specifying any other possible reasons. In **(Q25)**, respondents are questioned whether metacognitive awareness of reading strategy uses may help EFL students achieve better reading comprehension or not. Correspondingly, their responses are required to be justified. Ultimately, in the last question **(Q26),** teachers are asked to add any further suggestions or comments about MARS and reading comprehension.

3.4.3. Administration of Teachers' Questionnaire

The questionnaire was administered to EFL teachers at the Department of Letters and English Language, 8 Mai 1945 University of Guelma. It was given hand to hand to 28 teachers, from the 10th to the 17th of April 2023, who were promised that their answers will remain confidential and will only be used for the sake of research validity.

3.4.4. Data Analysis and Interpretation of Teachers' Questionnaire

Section One: Teachers' Background

Question One: How long have you been teaching English at the university?

Table 3.1

Teaching Experience

Options	Frequency (N)	Percentage (%)
Less than 12 years	7	25%
More than 12years	21	75%
Total	28	100%

From the results displayed in Table (3.1), the majority of teachers (75%) asserted that they have been teaching English for more than 12 years. However, quarter of the informants (25%) stated that they have been teaching English at university for less than 12 years. This implies that the sample, upon which this study is conducted, is highly experienced and is expected to provide accurate information regarding students' level and learning difficulties.

Question Two: Specify your qualification, please?

As it is shown in Table (3.2), most teachers (67,86%) claimed that they have a Magister degree. Some teachers (25%) asserted that they have a Doctoral degree. Whereas, only few of them (7,14%) opted for 'Master II' as their academic qualification. These results indicate that the sample teachers under investigation are highly qualified. Accordingly, they can retain reliable judgments about both teaching and learning reading comprehension.

Table 3.2

Teaching Qualification

Options	Frequency (N)	Percentage (%)
Master II /M.A	2	7,14%
Magister / M.A	19	67,86%
Doctorate / Ph.D	7	25%
Professor	0	0%
Total	28	100%

Question Three: Do you work at the English Department as part-time teacher or full-time teacher?

Sector 3.1

Teachers' Job Profile
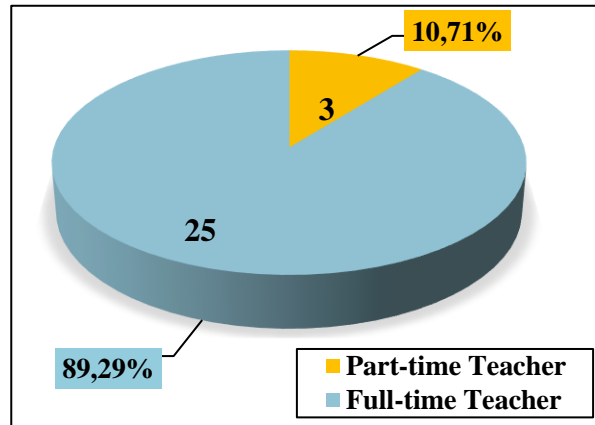
As it is indicated in Sector (3.1), almost all participants (89,29%) are full-time teachers, while only 3 teachers (10,71%) are part-time teachers. This indicates that the Department of Letters and English Language, Guelma University, is more concerned with giving its students a dependable and consistent educational experience. Full-time teachers, often, have a higher level of institutional knowledge and are more invested in the institution's and its students' success.

Therefore, according to the statistics provided through this initial section, it is deduced that the data to-be analysed, in the coming sections, are going to be more from full-time, trustful experience, and exceedingly qualified teachers. They can, indeed, provide based information and perspectives about students' reading proficiency.

Section Two: Reading Comprehension

Question Four: Based on your teaching experience, how would you describe First-Year Master EFL students' reading level (proficiency)?

Table 3.3

First-Year Master Students' Reading Level

Options	Frequency (N)	Percentage (%)
Good	5	17,86%
Average	23	82,14%
Below average	0	0%
Total	28	100%

Table (3.3) displays that the majority of participants (82,14%) judged First-Year Master students' reading level as being average. Whereas, the rest (17,86%) described it as 'good'. Based on these assessments, the teachers reached a consensus that the reading level of First-Year Master is generally considered to be average. This suggests that these participants do not perceive students' reading abilities to be good or below average.

Question Five: According to your teaching experiences, do you think that reading instruction should focus more on grammar, fluency, vocabulary, or comprehension?

Graph (3.1) exhibits instructors' primary focus when teaching reading or having reading sessions. Comprehension, according to teachers, comes in the first place (92,86%). This indicates

that understanding the material under study's meaning (both surface and deep meanings) is of a primary focus in EFL classes. Fluency is the second ability that teachers consider while teaching reading (50%). This implies that, in EFL classes, teachers focus also on students' communicative competence by developing their English language fluency. That is to say, for those teachers, the ability to use English language fluently, clearly, and effectively should be given attention.

35,71% of participants opted for vocabulary as a primary focus while teaching reading. Correspondingly, building vocabulary knowledge is necessary for understanding written texts. However, grammar comes at last by 25%. This shows that some teachers focus more on developing students' language accuracy; as understanding how the different parts of a sentence fit together. Alternatively, some of them (10,71%) believed that the cultural aspect should also be taken into consideration. Therefore, culture is an integral part of language and should be given attention when reading.

Graph 3.1

Reading Instruction Primary Focus
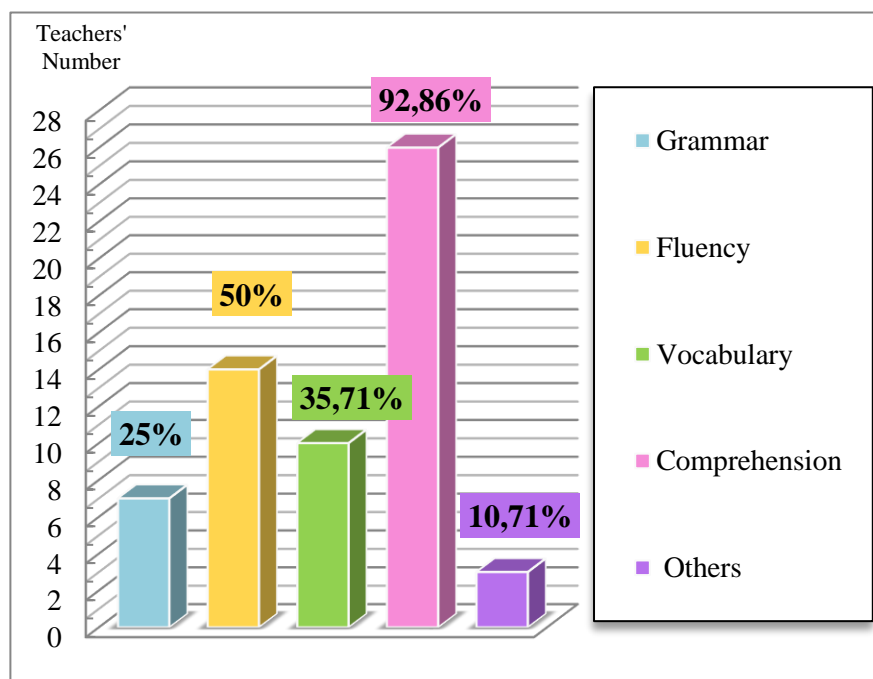
Question Six: How can you define 'reading comprehension'?

Teachers' Reading Comprehension Definitions

Below are some of teachers' common provided definitions for 'reading comprehension'

- ➢ The ability to process a written text.

- ➢ Reading comprehension is the ability to understand and grasp the meaning of different kinds of texts through the use of various reading strategies.

- ➢ It is the process of constructing meaning from a written material through connecting the readers' prior knowledge with the author's ideas to form their own understanding, which is the product of reading.

- ➢ Reading comprehension refers to the ability to decode a text and grasp its information.

- ➢ It is the ability to comprehend a written text, understand its meaning, and integrate it with what the reader already knows.

- ➢ It is an active and complex process in which the reader grasps both the lines' and between the lines' meanings.

All participants (100%) defined reading comprehension using different words. Generally speaking, they agreed that reading comprehension is the process of constructing meaning from written materials. However, as indicated in the above-mentioned definitions, some respondents added conditions for this meaning formation. 25% believed that comprehension can be achieved once reading is accompanied by reading strategies. On that account, reading strategies help readers to focus their attention on the most important information in the text, which can improve their ability to retain and recall that information. Some others (17,85%) emphasized the significance of connecting to background knowledge while reading. Indeed, this confirms Richards and Schmidt's (2013) (chapter I, p. 17) assertion that activating previous schemata serves as a foundation for building new comprehension and can fill in gaps in students' effective understanding.

Question Seven: How often do your students struggle in comprehending texts or any written materials?

Table 3.4

Students' Reading Difficulties Frequency

Options	Frequency (N)	Percentage (%)
Always	4	14,29%
Sometimes	24	85,71%
Rarely	0	0%
Never	0	0%
Total	28	100%

The majority of teachers (85,71%) declared that their students sometimes struggle in comprehending texts or any written materials. Whereas, the rest of participants (14,29%) stated that their students always have problems in reading comprehension. These results ensure that students do experience difficulties in understanding texts. Reading comprehension proficiency, lack of reading skills and strategies, motivation, and individual learning styles are all factors that may contribute to students encountering comprehension difficulties. Addressing these factors through targeted instruction, providing appropriate reading materials, and fostering a supportive learning environment can help improve students' comprehension abilities.

Question Eight: What do you think the main reason behind this is? (You can choose more than one option)

After providing teachers with possible reasons behind poor reading comprehension, Graph (3.2) shows that insufficient use of appropriate reading strategies was selected first with a percentage of 85,41 followed by limited vocabulary knowledge with 60,71%. The difficulty level

of the text and failure to connect with prior knowledge with 46,43%, comes at third place. 35,71% of teachers opted for failure to connect with prior knowledge to be the cause behind students' struggle in comprehending written materials. Nevertheless, some of them (7,14%) suggested that lack of motivation and insufficient cultural knowledge can also affect EFL students' reading comprehension.

From the results described in Graph (3.2), it can be concluded that inadequate use of appropriate reading strategies is the main reason behind students' failure to achieve good reading comprehension. Hence, by not employing appropriate reading strategies, students miss out on valuable tools that can significantly enhance their comprehension abilities. Similarly, the text's difficulty level and failure to connect with prior knowledge can result in ineffective comprehension. This indicates that to promote effective reading comprehension, educators should consider the appropriate difficulty level of texts, taking into account students' reading abilities and gradually introducing challenging materials. They should also encourage students to activate their prior knowledge and make connections between the text and their existing knowledge.

Graph 3.2

Reasons behind Poor students' Reading Comprehension
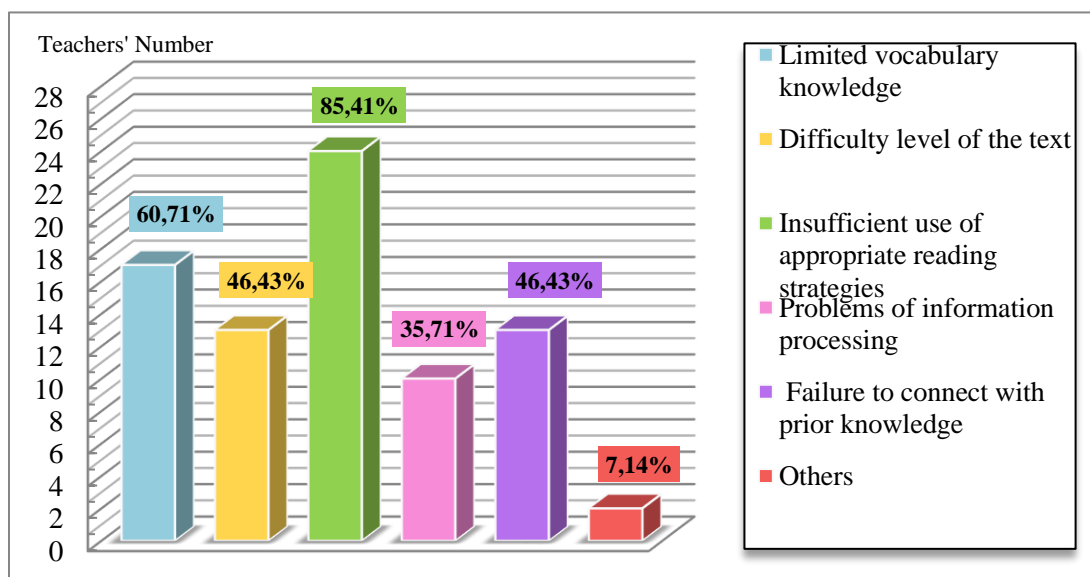
Question Nine: Do you work on enhancing your students' reading comprehension?

Sector 3.2

Teachers' Reading Comprehension Instruction
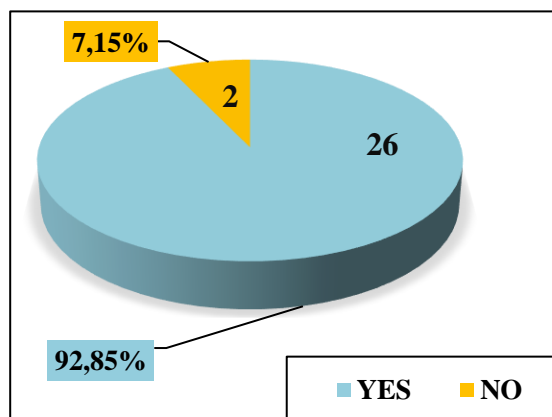
Sector (3.2) shows that the overwhelming majority of teachers (92,85%) work on enhancing their students' reading comprehension. While, only 7,15% of them claimed that they do not dedicate efforts to improve students' reading comprehension. Teachers value reading comprehension as a significant skill enabling students to analyze, evaluate, and synthesize information. Accordingly, they work on fostering it through various instructional strategies.

Question Ten: If yes, say how? (You can choose more than one option)

As it is displayed in Graph (3.3), participants' vast majority (78,57%) engage their students in classroom discussions to improve their reading comprehension. This shows that teachers are aware of the importance classroom discussion occupies in promoting active learning. By actively being engaged in discussions, students can deepen their understanding of the text and improve their overall reading comprehension abilities. However, slightly more than half of participants (53,57%) opted for building disciplinary and world knowledge; as well as, for building vocabulary and language knowledge. Correspondingly, treating learners' knowledge inadequacies by building their disciplinary and world knowledge, in addition to expanding their language vocabulary, are of

utmost importance when it comes to enhancing reading comprehension. By addressing these gaps, teachers can equip learners with the necessary tools to understand and engage with texts effectively.

Nevertheless, 39,28% of teachers declared that teaching comprehension strategies are one way to enhance students' comprehension. Some others (25%) believed that exposing students to a range of text types and structures can also be helpful. Differentiating reading comprehension instruction was also suggested by few teachers (7,14%). Different learners have different learning styles, various abilities, and demonstrate distinct comprehension levels. Thus, using different teaching methods can assist teachers to better guide their students' reading comprehension.

Graph 3.3

Teachers' Instructional Activities to Foster Students' Reading Comprehension
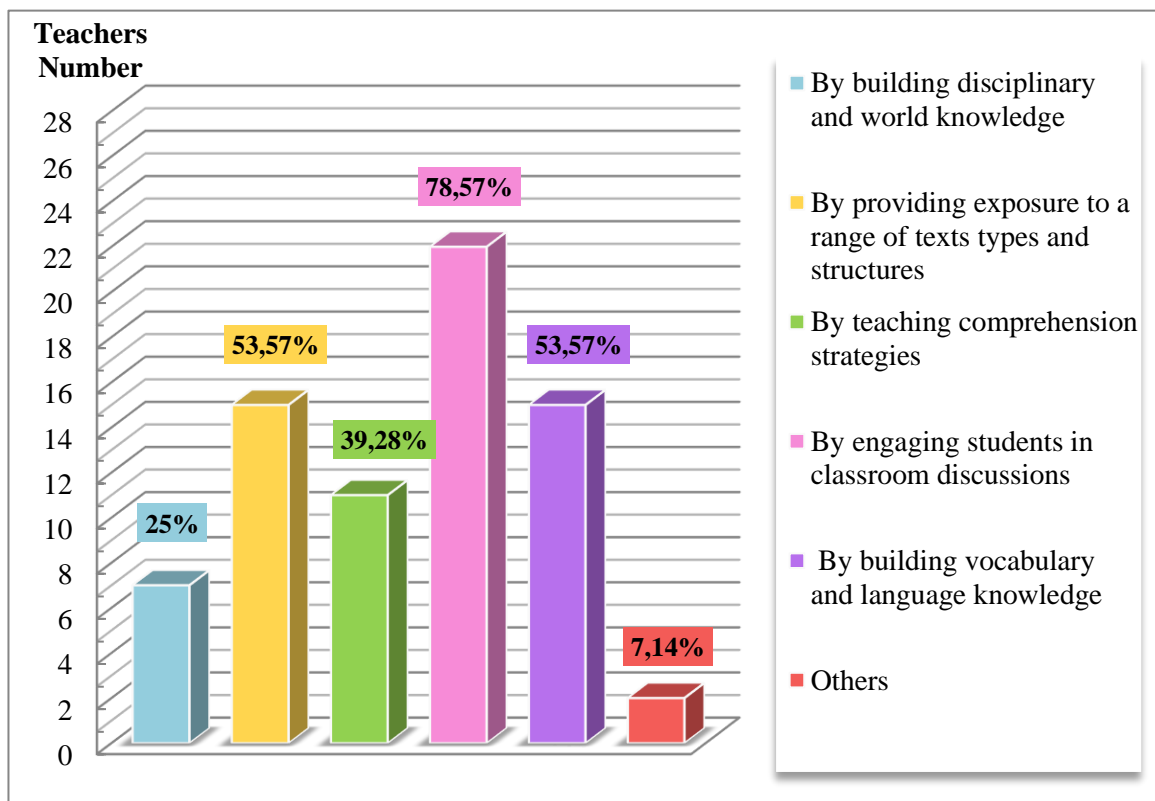
Question Eleven: In your opinion, what assessment tool is more appropriate for reading comprehension?

Table 3.5

Teachers' Selected Assessment Tool for Reading Comprehension

Options	Frequency (N)	Percentage (%)
Retelling	2	7,14%
Questioning	15	53,57%
Cloze procedure	1	3,57%
Writing activity	3	10,71%
Teachers' made-tests	7	25%
Total	28	100%

As indicated in Table (3.5), more than half of teachers (53, 57%) asserted that questioning is the most useful reading comprehension assessment tool. Accordingly, by asking a variety of questions, teachers can assess different aspects of comprehension; such as identifying main ideas, making inferences, drawing conclusions, and evaluating the author's purpose. This comprehensive assessment helps teachers understand the students' overall grasp of the material. However, a quarter of participants (25%) claimed that teacher-made tests are their preferred way to assess reading comprehension. They believed that these tests offer valuable insights into students' understanding and provide means to address weaknesses.

Additionally, 10,71% of participants stressed 'writing activity'. This tool helps students to go beyond simple meaning recognition and encourages them to engage with the text. Therefore, they can demonstrate their comprehension through their own words. Only 7,14% of teachers favored retelling; this is for the fact that, it assesses students' ability to extract the essential

information from a text and condense it into a coherent and concise summary. This skill reflects their comprehension of main ideas and important details; as well as, their ability to organize information effectively. Alternatively, only one teacher (3,57%) believed that cloze procedures are the best assessment tool for students' literacy comprehension. It provides insights into their ability to understand and apply language skills in a meaningful way.

Section Three: Reading Strategies

Question Twelve: To what extent do you think reading strategies are important in facilitating students' learning?

Table 3.6

Teachers' Attitudes towards Reading Strategies Importance for Students' Learning

Options	Frequency (N)	Percentage (%)
To a high extent	22	78,57%
To a certain extent	6	21,43%
To a low extent	0	0%
Total	28	100%

As it is shown in Table (3.6), more than two–thirds of teachers (78,57%) declared that reading strategies are highly important in facilitating students' learning. Whereas, only (21,43%) said that reading strategies are important to a certain extent. Overall, teachers agreed that reading strategies provide students with necessary tools and techniques to become successful learners.

Question Thirteen: Do you agree that reading strategies can help students achieve better understanding of written materials?

Concerning teachers' attitudes towards the importance of reading strategies in enhancing students' reading comprehension depicted in Table (3.7), equally, teachers selected 'strongly agree'

and 'agree' with 50%. This implies that teachers believe that reading strategies, in general, help students achieve better understanding of written materials. Therefore, by employing them, students can overcome comprehension barriers, connect the text to their prior knowledge, and think critically. This can further result in deeper and more comprehensive understanding of written materials.

Table 3.7

Reading Strategies Effects on Reading Comprehension

Options	Frequency (N)	Percentage (%)
Strongly agree	14	50%
Agree	14	50%
Neither agree nor disagree	0	0%
Disagree	0	0%
Strongly disagree	0	0%
Total	28	100%

Question Fourteen: What type of reading strategies do you prefer your students to use while reading? (You may Choose more than one option)

As it is displayed in Graph (3.4), 78,41% of informants prefer their students to use 'metacognitive strategies'. Thus, they believe that these strategies develop students' self-awareness, critical thinking, problem-solving skills, and autonomy. 71,57% represents those who favored 'cognitive strategies'. They explained that these latter prioritise deep comprehension, critical thinking, independent learning, and student engagement. Whereas, 67,86% of them opted for 'socio-cognitive strategies'. They added that not only these strategies enhance comprehension but also support the development of communication skills and teamwork. These skills are crucial for

achieving success in both academic and real-world contexts. Based on the aforementioned answers, it can be inferred that teachers highly value the three categories of reading strategies. They recommend their utilization by students as means to enhance their reading proficiency and language learning

Graph 3.4

Teachers' Preferred Types of Reading Strategies
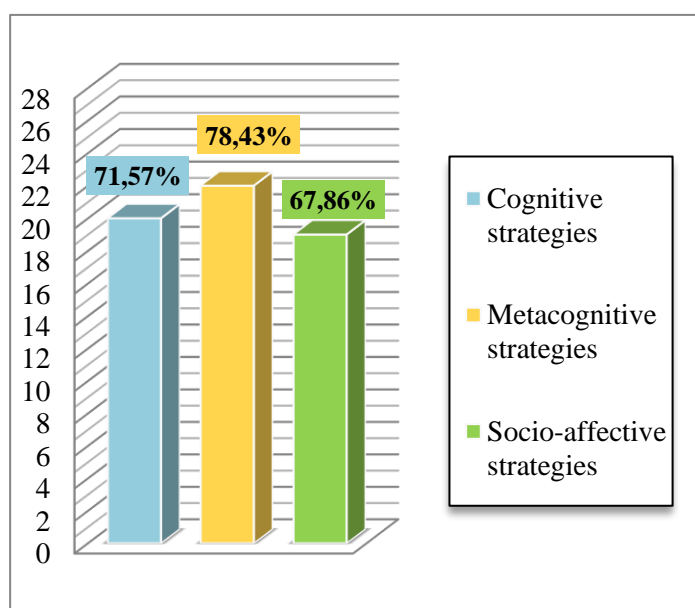
Question Fifteen: How often do you provide direct instruction about reading strategies?

Table 3.8

Teachers' Reading Strategies Instruction

Options	Frequency (N)	Percentage (%)
Always	8	28,57%
Sometimes	17	60,72%
Never	3	10,71%
Total	28	100%

According to the results displayed in Table (3.8), a significant portion of teachers (60.72%) claimed that they sometimes provide direct instruction about reading strategies. Therefore, teachers reported occasionally engaging in explicit instruction on reading strategies. This suggests that most teachers do not provide consistent direct instruction about them; rather, they do so intermittently. Conversely, 28,57% reported that they always provide explicit instruction regarding reading strategies. That is, they either teach reading modules or have a deliberate approach to teaching reading strategies. They make sure that learners get clear guidance on how to employ different strategies effectively. Moreover, 10,71% declared that they never engage in explicit instruction on reading strategies.

Question Sixteenth: According to your teaching experiences, what are the mostly used reading strategies among your students? (You can choose more than one option)

Graph 3.5

Students' most Used Reading Strategies according to Teachers
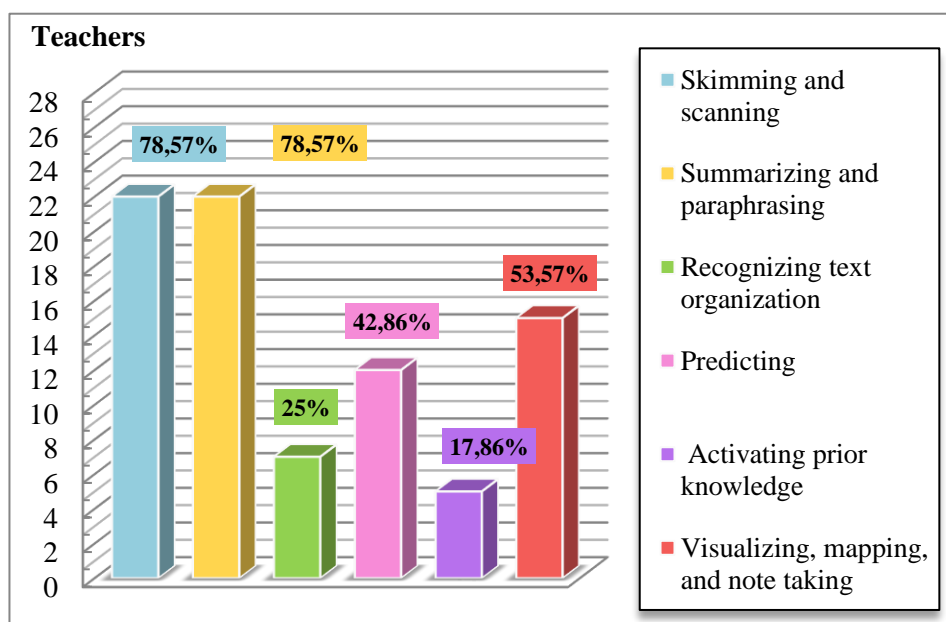
According to the data demonstrated in Graph (3.5), the greater part of the sample (78,57%) selected 'skimming and scanning' and 'summarizing and paraphrasing' as the most used strategies

among EFL students. Visualizing, mapping, and note taking come with 53,57%. However, less than half of the sample (42,86%) claimed that 'prediction' is one of the employed techniques by EFL students. 25% of teachers opted for 'recognizing text organization'; yet, only 17, 86% picked 'activating prior knowledge' as one of the strategies used by EFL students.

Based on these statistics, it can be assumed that 'skimming and scanning' and 'summarizing and paraphrasing' are widely used strategies among EFL students. They provide valuable tools for navigating the complexities of English texts and developing language proficiency. 'Visualizing, mapping, and note-taking' strategies are also popular among EFL students due to their effectiveness in promoting cognitive engagement and comprehension enhancement. Additionally, predicting is an effective strategy among EFL students. It actively encourages critical thinking which helps construct meaning from the text. However, EFL students do not commonly employ strategies such as recognizing the structure of the text and activating their existing knowledge. This implies that they may not be aware of their importance or they find them challenging to perform.

Question Seventeen: How often do you raise your students' awareness about the importance of reading strategies' use?

Table (3.9) reveals that twelve answers (42,86%) asserted that teachers 'sometimes' raise their students' awareness about the importance of reading strategies' use. However, eleven teachers (39,29%) claimed they 'always' aim to increase their students' understanding of the significance of utilizing reading strategies. Whereas, four participants (14,29%) stated that they 'usually' strive to enhance their students' awareness about the importance of employing reading strategies. Alternatively, only one respondent (3,57%) proclaimed that s/he 'never' raise students' awareness about the effectiveness of reading strategies' use. Therefore, it can be concluded that teachers are, to a certain extent, aware of the significance reading strategies have on students' reading proficiency and comprehension. They believe that teaching students to employ appropriate

strategies can lead to improved reading skills and overall language development. Accordingly, they dedicate some effort to raise their students' awareness about their importance.

Table 3.9

Raising Students' Awareness towards Reading Strategies Use Importance

Options	Frequency (N)	Percentage (%)
Always	11	39,29%
Usually	4	14,29%
Sometimes	12	42,86%
Never	1	3,57%
Total	28	100%

Section Four: Students' Metacognitive Awareness of Reading Comprehension Strategy Uses

Question Eighteenth: What do you think the concept 'metacognitive awareness/ metacognitive knowledge' refers to?

Teachers' provided definitions for 'metacognitive awareness/ metacognitive knowledge' that can be summarized as below

Metacognitive Awareness/ Metacognitive Knowledge Definitions

➢ It means being aware of how you think. It is the awareness of one's thinking and the strategies one is using.

➢ Refers to the state of being aware and conscious and what one thinks.

➢ It is when the learner is aware of the strategy s/he is using while reading and evaluating it after reading.

➢ It refers to students thinking about their own thinking. They should be conscious about how their brains function.

➢ It is being aware of one's own thinking and learning. In other words, it entails self-reflecting on one's learning process.

➢ It refers to the set of strategies one uses to monitor, plan, and guide cognitive processes. In other words, being aware about knowledge and learning process.

➢ It is the knowledge beyond cognition. It includes processes such as self-reflection, self-evaluation, and self-monitoring.

The concept of 'metacognitive awareness' or 'metacognitive knowledge' was defined by a significant portion of teachers (67,86%). Although they employed varied terminology, there was a general consensus among them. They claimed that metacognitive awareness entails a conscious comprehension and scrutiny of an individual's cognitive processes and strategies. This includes being aware of one's thinking patterns, evaluating them, devising plans, and monitoring one's own learning. In essence, teachers concisely summarized metacognitive awareness as the act of reflecting upon one's own thinking.

Question Nineteenth: Have you ever used one of these terms in your classroom?

Sector 3.3

Metacognitive Awareness/ Metacognitive Knowledge Use in Classroom
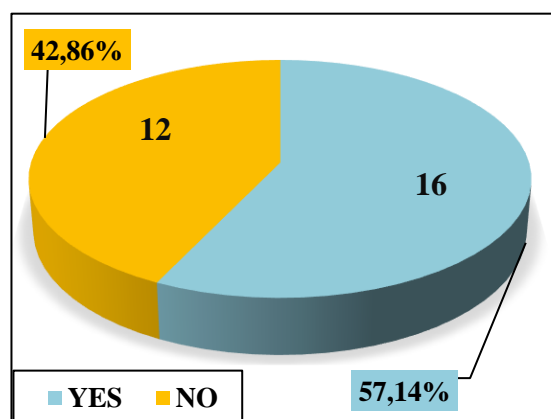
Sector (3.3) indicates teachers' use of the terms metacognitive awareness or metacognitive knowledge in their classrooms. More than half of participants (57,14%) declared that they used one of these terms in their classrooms. This indicates that a majority of the participants were familiar with and utilized the concept of metacognitive awareness in their teaching practices. However, a significant portion of teachers (42.86%) have never used these terms.

Question Twenty: Do you draw or raise your students' attention towards how to be metacognitively aware?

Sector 3.4

Raising Students' Metacognitive Awareness
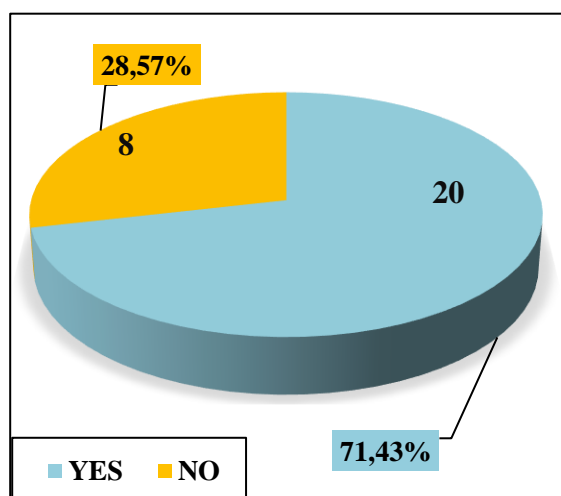
With regard to the data displayed in Sector (3.4), the vast majority (71.43%), which consists of twenty (20) over twenty-eight (28) teachers, have claimed that they do raise their students' attention towards how to be metacognitively aware. This indicates that by raising students' attention towards metacognitive awareness, teachers aim to help learners develop an understanding of their thinking processes, learning strategies, and overall language learning experiences. However, only 28.57% of them stated that they do not, which implies that they do not actively focus on raising their students' metacognitive awareness in their classrooms.

Question Twenty-one: If yes, please explain how?

Teachers' Explanation

To highlight their answers discussed above in Sector (3.4), teachers provided the following explanations:

➢ I promote students' metacognitive awareness indirectly, using questions.

➢ I do not use the term explicitly. Instead, I help and guide them to analyze texts autonomously.

➢ I raise it by designing self-reflection forms that students are required to fill after accomplishing certain tasks and activities.

➢ I do that by asking them questions while reading.

➢ I raise it through asking students to question their own thinking; hence, they will think about their own thinking.

➢ I draw students' attention towards how to be metacognitively aware through: provocative questions, encouraging self-assessment, helping students to recognize their points of strengths and weaknesses in reading and learning in general. I also implement various tasks that promote learners' autonomy, and involve learners in reflective activities and processes.

➢ I do not use the term because students are not familiar with it. However, I do ask questions and design activities that help students reflect and evaluate their cognitive processes.

The overwhelming majority of teachers (80%), from those that responded with 'yes' in the previous question, clarified the ways they apply to foster their students' metacognitive awareness. 45% of participants asserted that they ask students questions, encourage self-assessment, and engage them in reflective activities. These approaches aim to enhance students' metacognitive abilities by helping them recognize their strengths and weaknesses. Whereas, 25% of them stated that they do not use the term explicitly. They guide students to think about their own thinking and learning processes through thoughtful questioning and reflective practices. The rest (10%) claimed

that they promote students' metacognitive awareness through various methods such as autonomous analysis of texts. According to their answers, teachers proved to be actively involved in promoting their students' metacognitive skills through different instructional techniques.

Question Twenty-two: Do you agree that developing metacognitive awareness is important for successful language learning?

Table 3.10

Teachers' Arguments towards Metacognitive Awareness Importance in Language Learning

Options	Frequency (N)	Percentage (%)
Strongly agree	13	46,43%
Agree	14	50%
Neither agree nor disagree	1	3,57%
Disagree	0	0%
Strongly disagree	0	0%
Total	28	100%

As it is displayed in Table (3.10), half of the investigated sample (50%) agreed that developing metacognitive awareness is important for successful language learning. In addition, a significant portion of EFL teachers (46,43%) strongly agreed on the significance of cultivating metacognitive awareness for achieving success in language acquisition. However, 3,57% of teachers were neutral. In general, teachers are aware of the importance of metacognitive awareness by either strongly agree or agree. They believed that it equips learners with the necessary skills to navigate the complexities of language learning effectively. Thus, this will lead to greater success in mastering English language.

Question Twenty-three: How can you describe students' metacognitive awareness about reading strategies' use?

Table 3.11

Teachers' Opinions about Students' Metacognitive Awareness about Reading Strategies' Use

Options	Frequency (N)	Percentage (%)
High	1	3,57%
Average	20	71,43%
Low	7	25%
Total	28	100%

According to the findings presented in Table (3.11), the greater part of teachers (71,43%) described students' metacognitive awareness about reading strategies' uses as being 'average'. This shows that students have a moderate level of understanding and control over their thinking and learning processes in relation to reading strategies. Nonetheless, 25% of participants claimed that EFL students exhibit a low MARS uses. Such an assertion implies that EFL students have limited understanding and application of reading strategies that involve thinking about their thinking (metacognition). Accordingly, students may lack explicit instruction on metacognitive strategies for reading. Yet, only one teacher 3,57% believed that EFL students' metacognitive awareness is high. Generally, students' MARS use appears to be average. This suggests that students possess an average foundational grasp of utilizing strategies to enhance their reading comprehension.

Question Twenty-four: In your opinion, from what students' low metacognitive awareness about reading strategies can result?

Graph 3.6

Reasons behind Students' Low Metacognitive Awareness of Reading Strategies
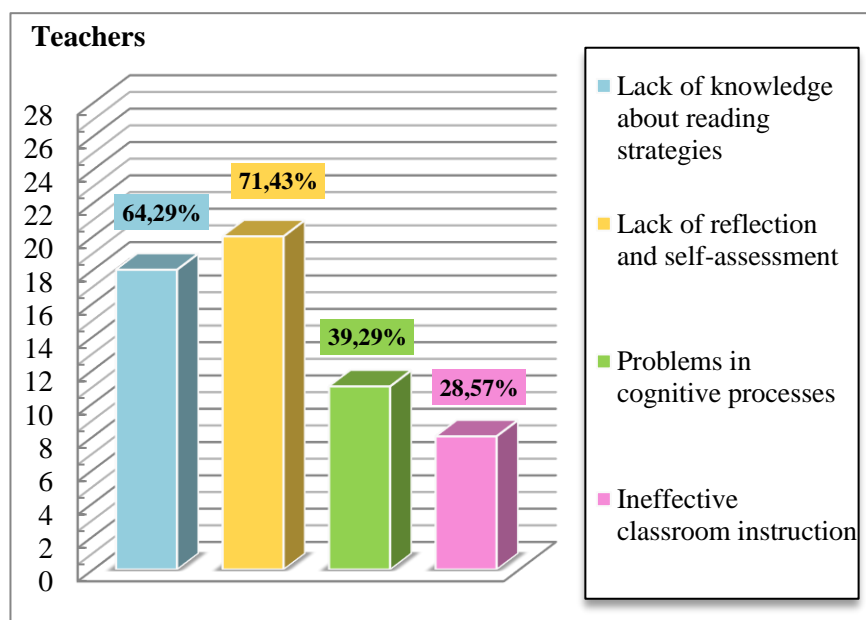
Graph (3.6) depicts the reasons behind students' low metacognitive awareness of reading strategies according to teachers' perspectives. The majority of teachers (71,43%) claimed that students' limited MARS results from lack of reflection and self-assessment. This emphasizes that reflection and self-assessment play a critical role in enhancing students' MARS. Therefore, such a claim implies that students may struggle to effectively analyze their own reading processes. Additionally, a significant portion of teachers, specifically (64,29%), believed that students' inadequate understanding of reading strategies can be attributed to a deficiency in knowledge about them and their appropriate uses. This implies that EFL students are may be unfamiliar with different strategies that can enhance their reading comprehension. As a result, they may struggle to be metacognitively aware about the appropriate strategies for different reading texts or tasks.

Less than half of the sample (39,29%) asserted that students' insufficient MARS is due to problems in cognitive processes. This highlights that low metacognitive awareness of reading strategies stem from problems related to cognitive abilities; such as memory, attention, or critical thinking skills. Accordingly, barriers in cognitive processes may hinder students' ability to effectively monitor and regulate their own comprehension and learning strategies while reading. However, only 28,57% opted for 'ineffective classroom instruction' as a contributing factor to students' limited metacognitive awareness. Hence, lack of explicit instruction on metacognition or failure to guide students in developing their metacognitive skills can result in ultimate deficiencies in metacognitive awareness of reading strategies.

Question Twenty-five: Do you think that being metacognitively aware of reading strategy uses may help EFL students achieve better reading comprehension or not?

Sector 3.5

The Impact of Metacognitive Awareness of Reading Strategy Uses on EFL Students' Reading Comprehension
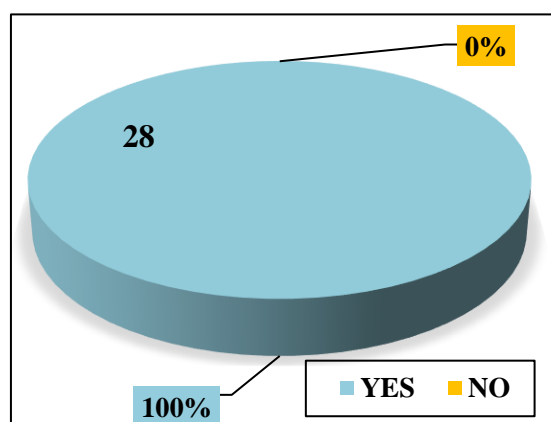
Sector (3.5) indicates teachers' perceptions towards the impact of metacognitive awareness of reading strategy uses on EFL students' reading comprehension. All participants (100%) asserted that being metacognitively aware of reading strategy uses helps EFL students achieve better

reading comprehension. 75% of them confirmed the research hypothesis and further justified their answers as follows:

➢ Logically yes, MARS makes students good autonomous readers, critical thinkers, and problem solvers.

➢ It helps learners to achieve their reading objectives quickly and effectively.

➢ It stimulates learners' memorization skills and they will find it easy to recall prior information or knowledge.

➢ Reading strategies are used to overcome comprehensions difficulties. Hence, being aware of their uses can definitely lead to a better understanding and efficient interaction with any written material.

➢ Awareness of reading strategies and how to use them will definitely help in processing and understanding texts.

➢ When students are metacognitively aware of reading strategies uses, they can monitor their own reading processes; therefore, achieving good reading comprehension.

➢ It helps learners to be active readers.

➢ Metacognitive awareness helps readers learn how to read texts, how to grasp ideas, how to analyze the information found in texts, and how to decide whether the information is useful and significant or not.

➢ A crucial strategic reading can be achieved through the metacognitive control, in which readers intentionally steer the reasoning process. When readers are aware of the thinking involved in reading, they can retrieve and apply that reasoning in comparable reading contexts in the future.

Teachers' answers confirmed the research hypothesis. Therefore, MARS benefits EFL students by enhancing their reading comprehension, autonomy, critical thinking, and problem-

solving skills. It enables them to achieve reading objectives effectively, stimulates memorization, and facilitates recalling prior knowledge. Additionally, by using reading strategies, students overcome comprehension difficulties and interact efficiently with the written material at hand. Moreover, monitoring reading processes improves comprehension, encourages active engagement, and facilitates information analysis. In short, metacognitive control allows intentional navigation of the reasoning process, leading to strategic reading and application of learned strategies in future contexts.

Question Twenty-six: If you have any other suggestions, comments, or additions, please do not hesitate to add them below.

Teachers Suggestions and Comments:

15 teachers (53,57%) added the following suggestions and comments:

➢ Metacognitive monitoring should be a priority in designing steps of transmitting knowledge as it helps students to discover their thoughts and motivate the learning atmosphere. Simply, teachers should take it into consideration to attain their class objectives.

➢ I highly recommend developing MARS for effective reading comprehension skills. Understanding and utilizing reading strategies can significantly enhance the ability to understand and engage with various types of texts. It empowers learners to take control of reading processes, monitor their comprehension, and adjust their strategies as needed.

➢ In reality, this is an essential problem that most EFL students are struggling from, during their academic years at the University and, especially, while writing their dissertations. For example, they are required not only to understand others' writings and ideas, but also, comment on them, analyze and even criticize some of them with a critical eye. Here lies the use of metacognitive ability or awareness while reading different kinds of text.

> ➢ MARS is indeed a valuable area of study, as it has the potential to greatly enhance reading comprehension and overall learning outcomes.

3.4.5. Summary and Discussion of the Results and Findings from Teachers' Questionnaire

The data previously reported and analyzed have collaborated to a great extent to detect teachers' views concerning the impact of metacognitive awareness of reading strategy uses on EFL students' reading comprehension. The compiled data of section one, entitled "Teachers' Background", revealed that most teachers are full-time ones (89,29%) and highly experienced (75% of them have been teaching English for more than 12 years). Additionally, their qualification varies from a Magister degree (67,86%) to a Doctoral degree (25%).

The analysis of section two, "Reading Comprehension", revealed that 82,14% of EFL teachers at the Department of Letters and English Language, 8 Mai 1945 Guelma University, judged first year Master students' reading level as being average. Accordingly, 92,86% of them declared that comprehension should be the primary focus when teaching reading. Further, 85,71% of teachers claimed that their students 'sometimes' struggle in comprehending written materials. Yet, they justified this by the insufficient use of appropriate reading strategies and limited vocabulary knowledge.

Moreover, as a direct answer to one of the main research questions (Q9, p. 81), a significant majority of participants (92,85%) do strive to enhance their students' reading comprehension; precisely, through actively involving them in meaningful classroom discussions. Still, they address students' knowledge gaps by nurturing disciplinary and world knowledge, alongside with expanding their vocabulary skills. These findings affirm the previous assertion (chap I, p. 30, 31) made by Duke et al. (2011). They reported that that successful teaching of reading comprehension relies heavily on engaging students in classroom discussions, fostering disciplinary and world

knowledge, and developing vocabulary. This section's analysis concludes by identifying the most suitable assessment tool for reading comprehension; where a significant proportion (53,57%) of the participants expressed a preference for 'questioning'. This is because it provides valuable insights into students' overall grasp of written materials.

The third section, titled "Reading Strategies", displayed teachers' perspectives towards the use and importance of reading strategies. The majority of teachers (78,57%) agreed, in line with McNamara's (2007) assertion (chap II, p. 53), that reading strategies provide students with the tools and techniques necessary to become proficient and independent readers. Therefore, teachers highly recommended the utilization of cognitive, metacognitive, and socio-affective strategies by students as effective means for enhancing their reading proficiency. Moreover, 78,57% rated 'skimming and scanning' and 'summarizing and paraphrasing' as the most used literacy strategies among EFL students. Overall, teachers understand that teaching students how to employ appropriate strategies can lead to improved reading skills. As a response for one of the key research inquiries (Q17, p. 88), 42,86% of teachers affirmed that they 'occasionally' make concerted efforts to raise their students' awareness regarding the significance of reading strategies.

From the analysis of the fourth section, titled "Metacognitive Awareness of Reading Strategy Uses", as a direct answer for one of the research main queries (Q20, p. 91), the vast majority of informants (71,43%) have claimed that they, indirectly, do raise their students' attention towards how to be metacognitively aware. Aligning with Chamot's (2004) and Zhang and Guo's (2020) claims (chap II, p. 61), teachers recognize that metacognitive awareness equips learners with the necessary skills to successfully master a foreign language. They further stated that lack of reflection, self-assessment, and inadequate knowledge of reading strategies can be attributed to a deficiency in awareness about MARS. Lastly, in (Q25, p. 96), teachers at the Department of Letters and English Language, 8 Mai 1945 Guelma University confirmed the research hypothesis. They

claimed that MARS benefits EFL students by enhancing their reading comprehension, autonomy, critical thinking, and problem-solving skills. This corresponds with the earlier finding (chap II, p. 66) by Fitrisia et al. (2015) and Kermani et al. (2023) that metacognitive awareness of reading strategies appears to be directly associated with reading comprehension.

In conclusion, the current study tended to explore the role of metacognitive awareness of reading strategy uses on EFL students' reading comprehension. Results showed the interconnectedness existing between MARS and reading comprehension. Consequently, the above results obtained from teachers' questionnaire analysis confirmed the research hypothesis that "metacognitive awareness of reading strategy uses improves students' reading comprehension".

3.5. Students' Questionnaire

3.5.1. Aims of Students' Questionnaire

This questionnaire allowed the researcher to have an insightful description of EFL students' reading experiences. It aims at identifying the different intrinsic and extrinsic reasons behind students' poor reading comprehension and the various readings strategies they implement to overcome such problems. The questionnaire seeks to investigate students' MARS, as a preparatory phase that would help to reach the ultimate aim behind this questionnaire; "students' attitudes towards the impact of metacognitive awareness of readings strategies on reading comprehension".

3.5.2. Description of Students' Questionnaire

The questionnaire is primarily developed on the basis of the notions discussed in the theoretical chapters. It consists of 20 questions ranging from general to specific and organized into four major sections, each of which addresses a different variable (*Appendix C*). Both close-ended and open-ended questions are implemented within this questionnaire. The former included questions such as multiple-choice and dichotomous (yes/no and agree/disagree) questions followed-up by some questions to provide further additions, explanations, and justifications. The

latter included some open-ended questions that enable participants to express their ideas and respond to questions freely using their own words.

3.5.2.1. Section One: General Information (Q1 - Q2)

This section involves the very first two questions of the questionnaire, which were dedicated to target learners' personal information and educational background. In **(Q1)**, respondents are required to precise their English study career years. Whereas, **(Q2)** was set to reveal students' judgment of their English level.

3.5.2.2. Section Two: Reading Comprehension (Q3 - Q8)

Typically, the reason behind setting the questions of this section is to look at the notion of reading comprehension in real-classroom situations. It aims, therefore, at highlighting the difficulties students face during their reading experiences, in addition to whether or not they have received teachers' instruction or guidance regarding their reading comprehension. More precisely, in **(Q3)** and **(Q4)**, students are asked to determine how regularly they read in English and whether or not they vary their English reading materials. **(Q5)** asks participants to define reading comprehension briefly in their own words in an open-ended question using their own words. Then, in **(Q6)**, respondents were asked whether or not they face difficulties in comprehending written materials. As a follow-up question for those who answered with 'yes' in the previous question, **(Q7)** is designed to diagnose the different difficulties learners face while reading. In addition, they were provided with space to add any other possible answers. The last question **(Q8)** aims to explore how often First-Year Master students receive guidance from their teachers concerning their reading comprehension.

3.5.2.3. Section Three: Reading Strategies (Q9 - Q13)

This section prepares students for the next phase. It is designed to convey students' perspectives towards the use and importance of learning strategies in general and reading strategies

in particular. It further sheds light on the most used reading strategies among EFL First-Year Master students. In the first question **(Q9)**, students are asked whether or not they use any learning strategies. **(Q10)** asks them to identify which types of learning strategies are more preferable to them. Moreover, **(Q11)** aims at precising the extent to which learners think reading strategies may facilitate their reading comprehension. **(Q12)** seeks to know how frequently their teachers raise their awareness towards the importance of using them. For **(Q13)**, students under investigation are required to select the reading strategies they usually use when interacting with a reading material from a set of 6 items.

3.5.2.4. Section Four: Students' Metacognitive Awareness of Reading Strategy Uses (Q14 - Q20)

This section reflects the crux of the research's conduction; a set of seven (7) questions is devised in order to determine EFL First-Year Master students' MARS. Then, it aims at providing a thorough insight of students' attitudes towards the correlation between both variables: metacognitive awareness of reading strategy uses and reading comprehension. Accordingly, this section intends to investigate the effects of students' MARS uses on reading comprehension. In **(Q14)**, students are asked if they had ever been introduced to the term 'metacognitive awareness/metacognitive knowledge'; followed by asking to define it by those who answered 'yes' in the previous question.

Additionally, a set of three questions **(Q15, Q17,** and **Q18)** serve as a three-step basis for claiming First-Year Master students' MARS. **(Q15)** seeks to determine whether or not students think consciously about the reading strategies to be selected before reading the material at hand. Then, in **(Q16)**, they have to clarify the basis on which they select the appropriate strategy (on the basis of the text type, the aim behind reading, or both). Similarly, in **(Q17)**, respondents are required to indicate how often they tend to analyze and monitor their selection of the reading strategies

during reading. Therefore, **(Q18)** is dedicated to predict how frequently they evaluate the effectiveness of the selected reading strategies after reading. In **(Q19)**, as the ultimate question in this research, respondents are asked whether or not MARS uses (consciously selecting it before reading, monitoring it during reading, and evaluating its effectiveness after reading) would enhance their reading comprehension. Eventually, the last question in this section **(Q20)** looks for students' suggestions or comments concerning the topic under investigation.

3.5.3. Administration of Students' Questionnaire

The questionnaire was administered at the Department of Letters and English Language, 8 Mai 1945 Guelma University; to First-Year Master students from 16th to the 24th of April 2023 due to absences' issues. It is worth noting that the questionnaire was delivered in the presence of an EFL teacher for fifteen (15) minutes and handed back in the same session. Indeed, participants answered this questionnaire after being assured that their answers would be kept confidential and used only for this research validity. The majority of the questions are simple, direct, and clear to help students understand and answer them as effectively as they could.

3.5.4. Data Analysis and Interpretation of Students' Questionnaire

Section One: General Information

Question One: For how many years have you been studying English?

Table (3.12) illustrates the distribution of students based on their academic years while studying English. The majority of participants (73,64%) reported studying English for 11 years. This implies that they have a successful academic career. However, 17,26% declared studying English for more than 11 years. This indicates that they encountered obstacles during their educational journey.

Table 3.12

Years of Studying English

Options	Frequency (N)	Percentage (%)
11 years	81	73,63%
More than 11 years	19	17,27%
Total	110	100%

Question Two: How can you evaluate your level in English?

Table 3.13

Students' Self-evaluation of English Level

Options	Frequency (N)	Percentage (%)
Very good	22	20%
Good	70	63,63%
Average	18	16,36%
Below Average	0	0%
Total	110	100%

The results tabulated above display that the majority of students (63.63%) demonstrated a satisfactory level of proficiency and rated their English level as 'good'. This implies an overall positive self-evaluation with acknowledgment of their need to improve their English level. Additionally, 20% of them evaluated their level to be 'very good'. That is to say, these students most likely possess a good command of English, a high proficiency level in regards to the four skills, and can effectively communicate in the language. However, 16.36% claimed their level to be 'average'. This suggests that students had reached a point where they felt comfortable and

competent using English, but still encountered challenges regarding specific aspects of the language.

Section Two: Reading Comprehension

Question Three: How regularly do you read in English (academic lessons are counted)?

Table 3.14

Students' Reading Frequency

Options	Frequency (N)	Percentage (%)
Seldom or never	8	7,27%
Less than once a week	26	23,63%
Multiple times per week	44	40%
Daily	32	29,09%
Total	110	100%

According to the results showed in Table (3.14), the highest percentage of students (40%) claimed to read English written materials multiple times per week. While, 29,09% of them engage in reading activities on a daily basis. This indicates that these students are regularly exposed to reading materials. Therefore, they are most likely to have encountered with variety of vocabulary, text types, and topics. This exposure is, therefore, essential for adequate readers. Nevertheless, 23,6% of the sample admitted that they read less than once a week. The smallest percentage of students (7,27%) reported rarely reading. Correspondingly, these students deal less with written language. They are unlikely to develop proficient reading abilities.

Question Four: When you read in English, do you vary your reading materials (texts, books, articles, essays, and others.)?

Sector 3.6

Students' Variation of Reading Materials
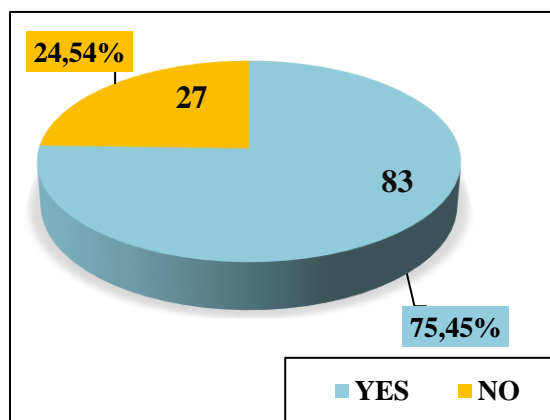
Sector (3.6) displays that the vast majority of informants (75,45%) confirmed that they diversify their choice of reading materials. This implies that they are actively exploring a range of written materials in English. Accordingly, they can enhance their vocabulary, improve their comprehension skills, and broaden their knowledge and understanding of various subjects. Whereas, the rest of participants (24,54%) asserted that they do not vary their reading materials. This suggests that students tend to stick to a narrower range of written texts. They may have specific academic requirements or personal interests that lead them to focus on certain types of texts. Consequently, students are unaware of unique characteristics of different text types and do not possess experience in dealing with them.

Question Five: Can you give a brief definition of reading comprehension?

Students' Definition of Reading Comprehension

Below are some of the students' provided definitions:

➢ It is the process of grasping and decoding meaning from a given material.

➢ It is the process of analyzing the information of a given material through making links between what you already know as information or knowledge.

➢ It is the process of decoding information from a printed material.

➢ Reading comprehension, in simple terms, refers to the competency or the ability to understand what you are reading.

➢ It is the main goal behind the process of reading that involves understanding the intended meanings of a written material.

➢ It is the ability to process written texts and understand their meaning and integrate the grasped information with the previous knowledge.

Notably, the vast majority of participants (75.45%) had provided definitions of reading comprehension. Their definitions demonstrated that they possess a broad understanding of this concept. Accordingly, reading comprehension encompasses the process of decoding written language in order to extract meaning.

Question Six: Do you face obstacles in comprehending reading material?

Sector 3.7

Students' Reading Comprehension Difficulties
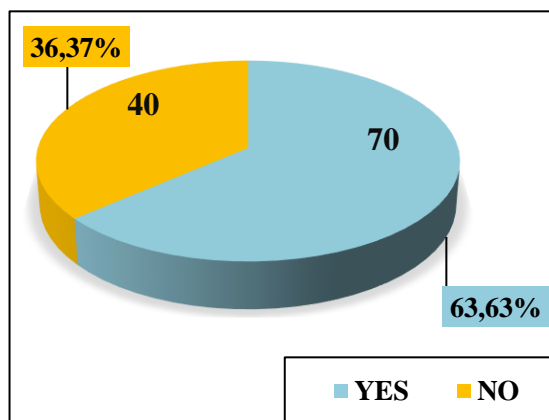
Based on the responses presented above, 63.64% of students stated that they face difficulties in reading comprehension, while 36,36% of them do not. These results ensure that the

majority of students under investigation declared facing challenges in comprehending reading material, which can be attributed to various factors. Language proficiency, cultural variances, inadequate reading skills and strategies, lack of motivation, and individual learning preferences can all be examples of challenges they encounter.

Question Seven: If yes, what type of these obstacles (you may select more than one option)?

Graph 3.7

Types of Difficulties Students Face
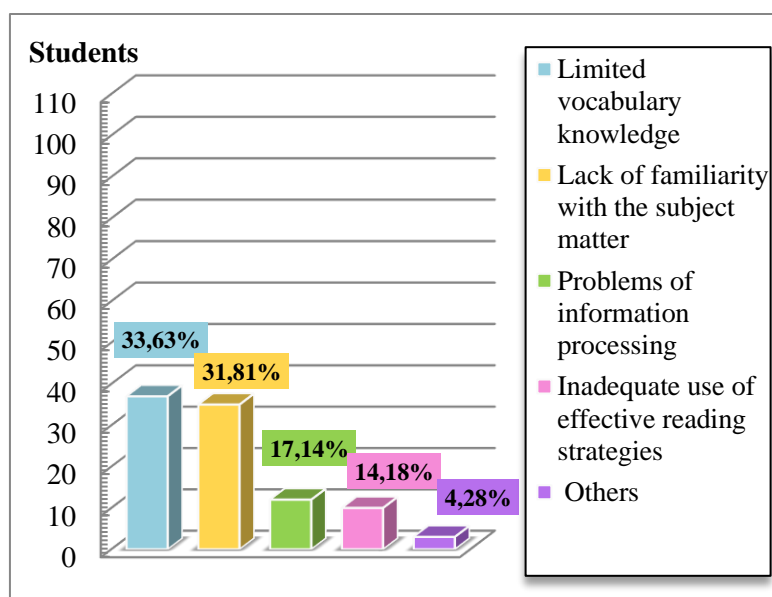
Students who admitted facing obstacles in comprehending reading materials were given the chance to identify some of them. 33,63% of students under investigation selected 'Limited vocabulary knowledge'. Correspondingly, they are unable to achieve good reading comprehension proficiency due to their limited vocabulary repertoire. Factors such as limited exposure to language or lack of targeted vocabulary instruction can restrict its development. However, a significant portion of students (31,81%) recognized 'lack of familiarity with the subject matter' as a hurdle. These students struggle to grasp the content and concepts presented when they encounter texts

about unfamiliar topics. This suggests that providing opportunities for students to explore a wide range of subjects can contribute to their ability to understand diverse reading materials.

Additionally, 17,14% of the informants reported struggling with processing meanings from presented texts. This suggests that they may have difficulty to organize and interpret the information they read, which hinders their overall comprehension. It may arise from inadequate cognitive abilities that hinder the proper comprehension and interpretation of information. Whereas, few respondents (14,18%) opted for 'inadequate use of effective reading strategies' to be a potential factor contributing to students facing challenges in understanding reading materials. This may result from a possible lack of awareness among learners regarding the presence and advantages of reading strategies. It is plausible that they have not received adequate instruction or exposure to effective strategies designed to enhance their comprehension of textual materials. Further, some participants (4,28%) declared 'lack of motivation' as a reason behind ineffective reading comprehension. Accordingly, these students may approach reading tasks with disinterest, leading to reduced engagement and effort in the process.

Question Eight: How often do you receive guidance from your teacher regarding your reading comprehension?

The provided data pertains to how often participants receive guidance from their teachers regarding their reading. 69,09% of the total sample said that they 'sometimes' receive guidance from their teachers. This suggests the absence of constant guidance from instructors. Therefore, there might be a potential gap in teacher-student interactions or support for reading-related activities. A smaller percentage of (20,90%) reported 'never' receiving instruction about reading. This indicates that these teachers either do not prioritize reading as a skill or may not fully understand the importance of explicit instruction in reading comprehension. However, 10% of students reported that they 'always' receive guidance from their teachers. It seems that these

students tend to be equipped with the necessary knowledge to comprehend and engage with a wide range of texts.

Table 3.15

Teachers' Remedy of Reading Problems

Options	Frequency (N)	Percentage (%)
Always	11	10%
Sometimes	76	69,09%
Never	23	20,90%
Total	110	100%

Section Three: Reading Strategies

Question Nine: Do you use any learning strategies during reading?

Sector 3.8

Students' Reading Strategies Use
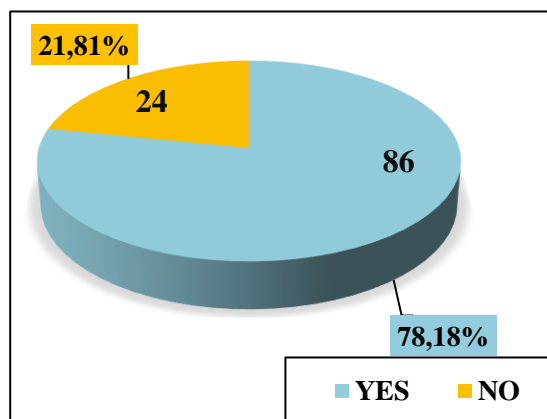
In Sector (3.8), the focus is on students' utilization of learning strategies during reading. The findings revealed that a significant majority, (78,18%) of the total sample, reported that they employ learning strategies in their reading activities. This can be attributed to their recognition of

the positive impact these strategies have on their reading comprehension. However, it is noteworthy that 21,81% of the sample said that they do not use any learning strategies while reading. These students may lack awareness regarding the benefits and effectiveness of learning strategies. It is possible that they have not received sufficient guidance on various reading strategies leaving them unaware of how to effectively implement them.

Question Ten: If yes, which type of them do you use more?

Graph 3.8

Students' most Used Reading Strategies Types
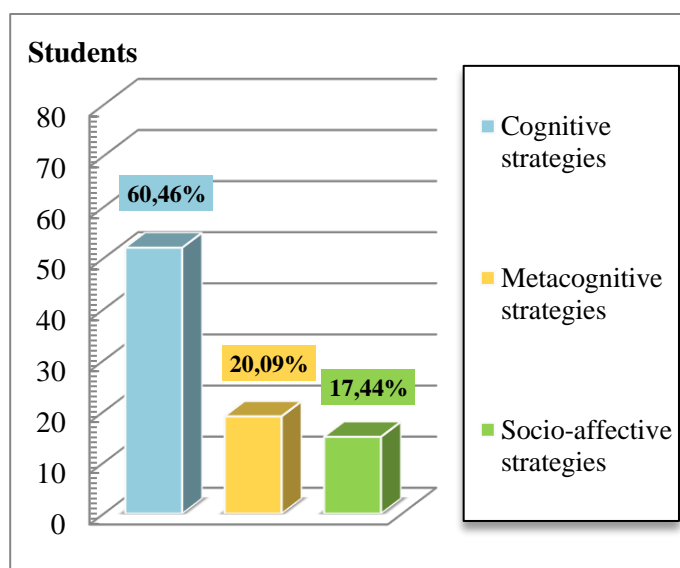
Students who responded with 'yes' in the previous question were provided an opportunity to specify the various types of reading strategies they employ. These students' responses varied to 3 categories. Cognitive strategies are the most selected type among the majority with a percentage of 60,46. Students who opted for this type are most likely aware of their effectiveness in enhancing their understanding and retention of the reading material. Therefore, they consider that active engagement with reading materials through these strategies helps them extract key information and construct content's meaning. Whereas, 20,09% favored metacognitive strategies. Students gravitated towards this type probably find value in monitoring their own comprehension, setting

reading goals, and employing self-regulation techniques. These students may prioritize reflective thinking and self-awareness to improve their overall reading experience and comprehension. Socio-affective strategies were selected by only 17,44% of the informants. This implies a preference for peers interaction, sharing perspectives, and participating in collaborative activities that help them better understand and connect with the content they are reading.

Question Eleven: To what extent do you think reading strategies may facilitate your reading Comprehension?

Table 3.16

Importance of Reading Strategies

Options	Frequency (N)	Percentage (%)
To a great extent	60	54,54%
To a certain extent	50	45,45%
To a very small extent	0	0%
Total	110	100%

Correspondents expressed their views about the extent to which reading strategies facilitate their reading comprehension, in Table (3.16). Accordingly, 54.54% believed that reading strategies promote their reading comprehension to a great extent. They perceive that effective reading strategies uses have a positive impact on their reading comprehension level. Possibly, these students have experienced the benefits of employing strategies and might find that using them enhances their understanding. While approximately half of participants (45.45%), claimed experiencing significant yet limited benefits of employing reading strategies. These students have the impression that using them has a moderate impact on their comprehension.

Question Twelve: How often do your teachers raise your awareness about the importance of using reading strategies?

Table 3.17

Teachers' Frequency of Raising Awareness on Reading Strategy Use

Options	Frequency (N)	Percentage (%)
Always	31	28,18%
Usually	31	28,18%
Sometimes	40	36,36%
Never	8	7,27%
Total	110	100%

This inquiry addresses the frequency with which students receive information about the value of utilizing reading strategies. A considerable percentage of students (36.36%) claimed to be informed, usually, about reading strategies use. This indicates that they are knowledgeable about different strategies and likely apply them regularly when reading. Accordingly, 28.18% of participants selected 'always' and 'sometimes' respectively. The results may state that the former group is more likely to possess strong reading comprehension skills. This can be attributed to the consistent teachers' emphasis on reading strategies impact on their comprehension level. Whereas, the latter group's reading comprehension abilities may still be fairly satisfactory. 7.27% stated that they 'never' receive instruction regarding the use of reading strategies. This may be the result of a total absence of any reminders from their teachers about the importance of using reading strategies. They might encounter difficulties in improving their reading comprehension skills. Consequently, they may exhibit lower levels of reading comprehension compared to other groups

Question Thirteen: What reading strategies you usually use when interacting with a reading material (you may select more than one option)?

Graph 3.9

Students' Usually Used Types of Reading Strategies
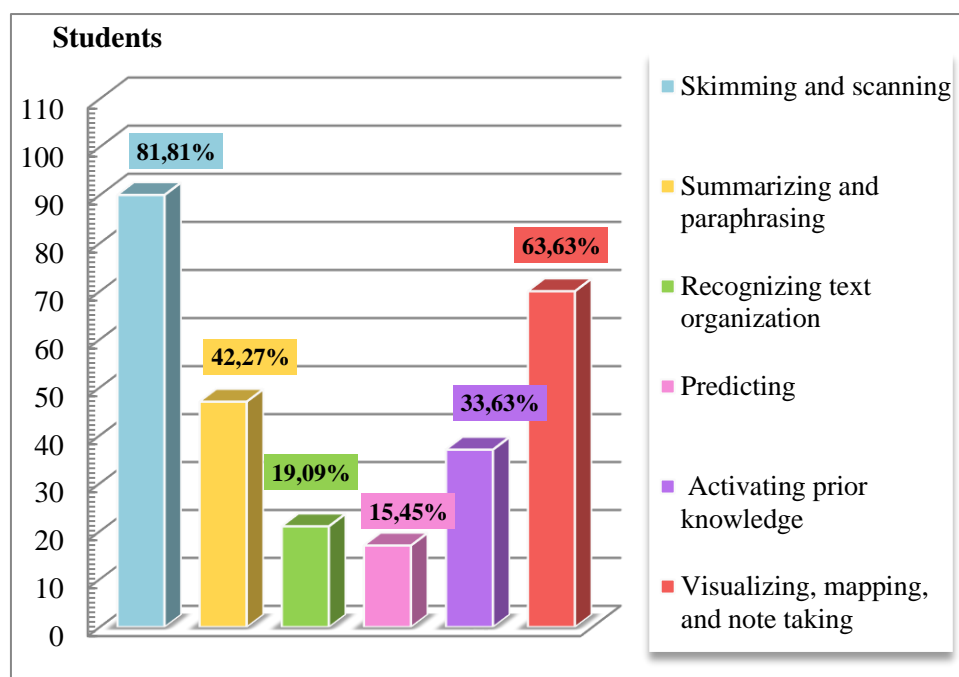
Graph (3.9) displays results about different reading strategies students usually use when interacting with a reading material. The vast majority of students, representing (81.81%), selected 'skimming and scanning'. This suggests that these students prefer a general understanding of the material or searching for specific details without reading every word or sentence. Skimming and scanning strategies are beneficial for getting a general idea of the text's content and locating specific information respectively. For example, they are valuable for exam revision. 'Visualizing, mapping, and note-taking' have been identified as the second most widely chosen by students with 63,63%. This indicates that these students prefer to engage in activities such as creating mental images, making concept maps, and taking notes to interpret and analyze the text they are reading. By employing them, students can significantly enhance their comprehension skills and reinforce their

critical thinking. Additionally, they can also help with organizing thoughts and information retrieval.

'Summarizing and paraphrasing' was selected by 42.27% of participants. These students likely focus on extracting essential information and presenting it in a concise and understandable manner using their own words. This strategy substantially contributes to the enhancement of comprehension when engaging with written texts. 'Activating prior knowledge' was selected by 37 students (33.63%). This strategy involves connecting new information with existing knowledge or experiences. Therefore, students may draw upon their schemata to make sense of the text and relate it to their own understanding. Accordingly, activating prior knowledge facilitates comprehension and helps build a broader understanding of the topic.

Predicting was selected by 21 students (19.09%); as it involves making educated guesses about what might happen next based on the information presented in the text. Students who use this strategy are presumed to be actively engaged with the material, making connections and hypotheses. Using prediction can help both comprehension and critical thinking abilities. Only 17 students (15.45%) chose 'recognizing text organization'. This strategy requires paying attention to text organization, including headings, subheadings, paragraphs, and others. By employing it, students can effectively navigate the text and understand the relationships between different parts; therefore, enhancing their overall comprehension.

Section Four: Students' Metacognitive Awareness of Reading Strategy Uses

Question Fourteen: Have you ever been introduced to the term 'metacognitive awareness/ metacognitive Knowledge'?

In Sector (3.9), participants provided answers regarding their familiarity with the term 'metacognitive awareness / metacognitive knowledge'. Consequently, 70 students, which represents (63,63 %) of the total, reported never being introduced to the term. On the contrary, 40

students, representing (36,36%) of the total, indicated that they have been introduced to this term. The reported answers suggest that a majority of the students may lack familiarity with both terms and the underlying concept. It appears that EFL students may not have sufficient exposure to this term within academic environments. This deficiency could potentially be attributed to a lack of explicit instruction on the significance of metacognitive awareness, particularly, in relation to reading comprehension.

Sector 3.9

Familiarity with Metacognitive Awareness
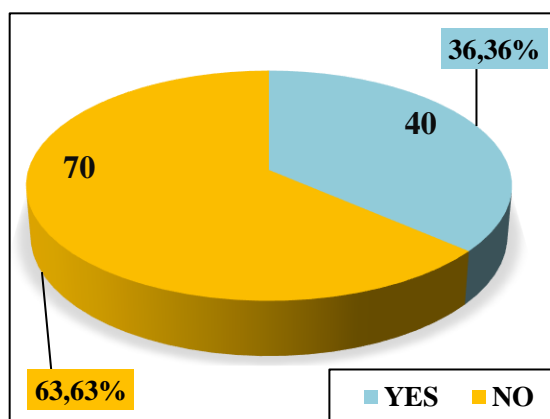
Question Fifteen: If yes, can you define it?

Students' Definitions of 'Metacognitive Awareness/ Metacognitive Knowledge'.

Some of those who answered 'yes' provided the following definitions:

➢ Being aware of how you think.

➢ Being aware of the strategies you are using.

➢ Thinking about thinking.

➢ Being conscious about what you are doing.

The majority of respondents (61.35%) who affirmed their familiarity with metacognitive awareness/metacognitive knowledge in the preceding question offered diverse definitions. These definitions demonstrate a profound comprehension of the concept, as they were able to provide

concise yet comprehensive and satisfactory responses. Basically, the EFL sample summed up metacognitive awareness as reflecting on their thinking.

Question Sixteen: Before reading, do you think consciously about the reading strategy (ies) to be selected for the reading material at hand?

Sector 3.10

Students' Pre-reading Selection of the Reading Strategy
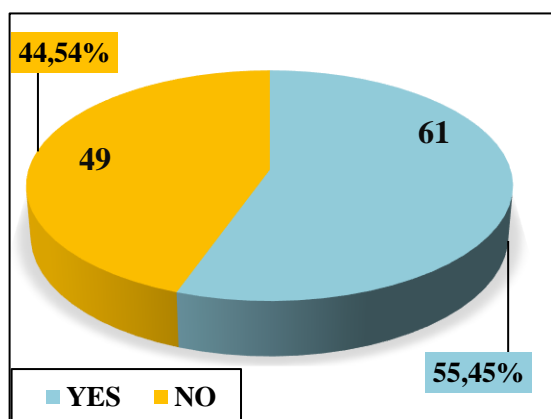
This question aimed to investigate whether or not students consciously consider the reading strategy they will use before reading. The findings revealed that more than half of the participants (55.45%) stated that they actively select appropriate reading strategies in advance before encountering reading material. They likely recognize the importance of deliberate strategy choice for improving reading comprehension. The remaining participants (44.54%) indicated that they do not consciously choose a reading strategy before reading. This implies that a significant portion of students do not specifically plan their reading strategies in advance. It is possible that these students adapt their strategies unconsciously as they read. However, their selection may be less systemic and could result in reduced effectiveness and suitability.

Question Seventeen: If yes, on which basis you select the appropriate strategy?

Based on the data presented in Table (3.18), the majority of informants (54.54%) proclaimed that they consider both the text type and the aim behind reading when selecting an

appropriate reading strategy. This suggests that First-Year Master EFL students grasped the importance of considering multiple factors to enhance their comprehension level. By considering both the text type and the aim, they can choose suitable strategies to each encountered context. However, 27.27% of students indicated that their reading strategy selection is based on the aim behind reading. This denotes that they are conscious of their reading goals and recognize that different aims require different strategies.

However, they ignore the text type factor. This can lead to false selection which will directly affect reading comprehension level. Only 3 students (2.72%) reported that their selection is based only on text type. This suggests that a small minority of students consider the structure of the text to be the only criteria for choosing reading strategies. Thus, they recognize the importance of text structure with no attention to other possible standards.

Table 3.18

Students' Basis of Reading Strategy Selection

Options	Frequency (N)	Percentage (%)
On the basis of the text type on the	3	2,72%
basis of the aim behind reading	30	27,27%
Both	60	54,54%
Did not answer	17	15, 45%
Total	110	100%

Question Eighteen: During reading, how often do you monitor your selection of the reading strategy (ies) and then change it when needed?

Table 3.19

Frequency of Reading Strategy Monitoring

Options	Frequency (N)	Percentage (%)
Always	8	7,27 %
Often	55	50 %
Sometimes	41	37,27 %
Never	7	6,36 %
Total	110	100%

Table (3.19) shows that, practically, half of students (50%) declared that they 'often' analyze and monitor their reading strategies' selection and imply necessary changes during reading. This suggests that a significant number of students actively reflect on their chosen strategies and modify them as they engage with reading materials. This indicates that they may exhibit a significant level of metacognitive awareness about reading strategies. 37.27% of respondents said that they 'sometimes' analyze and monitor their reading strategies and opt for suitable changes in their selection. These students' level of MARS may be average since they monitor their selection and change it on occasion only. A small portion of 8 students (7.27%) responded with 'always'. Accordingly, they consistently assess their choice and adjust it throughout the reading process. This may indicate a high level of metacognitive awareness. Only 6.36% of the sample stated that they never analyze and monitor their reading strategies or make changes when needed. Lack of conscious monitoring of strategy selection during the reading process can negatively affect students' MARS.

Question Nineteen: After reading, how often do you evaluate the effectiveness of the selected reading strategy (ies)?

Table 3.20

Frequency of Reading Strategy Evaluation

Options	Frequency (N)	Percentage (%)
Always	15	13,63 %
Often	45	40 %
Sometimes	35	31,81 %
Never	16	14,54 %
Total	110	100%

As displayed in Table (3.20), 45 of the students (40%) evaluated the effectiveness of their selected reading strategy frequently. By assessing the effectiveness of a reading strategy, learners become more aware of their strengths and weaknesses. They can identify which strategies work best for them, and make informed decisions about their future readings. Correspondingly, these learners possess good MARS level. Nonetheless, 15 students (13.63%), assessed the effectiveness of their selected reading strategy every time they read. These students are actively engaged in evaluating the impact of their chosen strategy and make changes accordingly. Thus, they exhibited the highest level of MARS. This self-assessment helps them gauge their reading comprehension proficiency and identify areas for improvement.

Additionally, 31.81% of the sample claimed to 'sometimes' evaluate the effectiveness of their selected reading strategy. These students may demonstrate average MARS use, as they rarely evaluate their selection. 16 students (14.54%) stated that they never evaluate the effectiveness of their selected reading strategy. This group of students does not engage in self-evaluation regarding

their reading strategies. This may be due to the lack of awareness of how assessing and evaluating them positively contribute to their comprehension skills. Potentially, they will miss opportunities for improving their reading comprehension and metacognitive awareness.

The analysis of the results concerning the three aspects associated with metacognitive reading abilities, namely, **selecting**, **monitoring**, and **evaluating** reading materials, reveal the following: Approximately 55,45% of First-Year Master students **consciously select** reading strategies pre-reading. Furthermore, half of them (50%) demonstrate a habit of **actively monitoring** their reading selections and making necessary adjustments as required. When it comes to **evaluating** their choices for future improvement, 40% of the participants claimed to engage 'often' in this practice, while (31,81%) indicated doing so 'occasionally'. According to Ahmadi's et al. (2013) definition of metacognitive awareness within reading contexts (chap II, p. 63), these findings indicate that the sampled individuals possess a commendable level of metacognitive awareness. However, it is worth noting that a notable portion (63.63%) of participants had not been exposed to the concept of 'metacognition'. This suggests that their awareness has not been cultivated through a systematic approach but rather arises spontaneously.

Question Twenty: Do you think that being metacognitively aware about the reading strategy uses (consciously selecting it before reading, monitoring it during reading, and evaluating its effectiveness after reading) would enhance your reading comprehension?

Sector (3.11) unveiled students' opinions of whether or not being metacognitively aware of reading strategy use would enhance their reading comprehension. Almost all participants (91.81%) believed that being metacognitively aware of their reading strategy use would enhance their reading comprehension. This suggests that they perceive self-awareness and reflective thinking as valuable tools for improving their understanding and interpretation of written texts. Therefore, these students

demonstrate an appreciation for the significance of consciously choosing a suitable strategy, actively monitoring it during reading, and subsequently assessing its effectiveness.

Meanwhile, (8.18%) of students hold the belief that their reading comprehension would not be enhanced by MARS use. These students may have alternative perspectives or may not fully grasp the benefits of metacognitive awareness. EFL First-Year Master students may not be aware of the positive effect of being metacognitively aware of reading strategy use on reading comprehension. Further, students were asked to provide justifications for their answer.

Sector 3.11

Students Perception towards the Importance of Metacognitive Awareness of Reading Strategy Use on Enhancing Reading Comprehension.
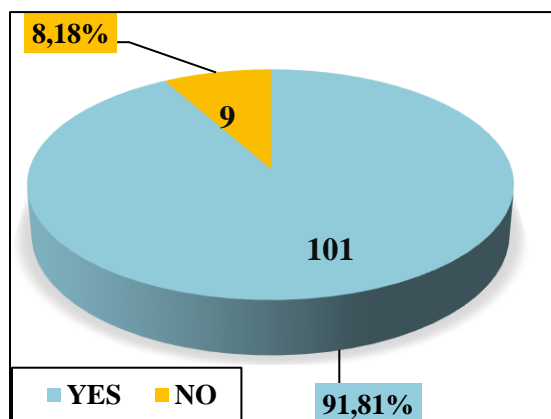
Only 65 participants (59,09%) justified their 'Yes' and 'No' answers as follows:

Students' Justifications for 'Yes' Answer (55,45%)

➢ Being aware of reading strategies help in processing the text information easily and quickly and achieve good reading comprehension.

➢ I believe that being aware of the selected strategy prior to reading, can enhance its effectiveness which, in turn, would help to achieve a better reading comprehension and fulfill the objectives of the reading process.

➢ Metacognitive awareness of reading strategies gives me the chance to evaluate my performance in reading comprehension and enhancing it.

The majority of students recognize the value of being aware of reading strategies to improve their reading comprehension. They believe that pre-selecting and post- evaluating effective strategies can lead to easier and quicker processing of text information, resulting in better comprehension. They also understand that metacognitive awareness allows them to evaluate their own performance in reading comprehension and work towards enhancing it, aligning with the goals of the reading process.

Students' Justifications for 'No' Answer (3,63%)

➢ Being cognitively aware distracted me from my aim behind reading.

➢ Metacognitive awareness of reading strategies is not always good for reading comprehension enhancement. Personally, even if I am not aware of the reading strategy to be used, I can achieve good reading comprehension.

➢ It is difficult for me to choose between different strategies.

➢ It creates a sense of confusion for me.

The justifications provided indicate lack of understanding around the meaning of the metacognitive awareness as a concept. Students feel that being metacognitively aware can be distracting and divert them from their intended purpose of reading. They believe that reading comprehension can still be achieved without consciously employing specific reading strategies. They also find it difficult to choose between different strategies, leading to confusion. Overall, these concerns reflect a hesitation towards the perceived benefits of metacognitive awareness in enhancing reading comprehension.

Question Twenty-one: If you have any further suggestions or comments, please do not hesitate to mention them below.

Students' Suggestions and Comments

Only 55 students (50%) added the following suggestions and comments

- ➢ The term metacognitive awareness or metacognitive knowledge was never introduced to us. I guess it was introduced by another name. It would be better to add it in the reading courses syllabuses.

- ➢ Metacognitive strategies are highly important in language learning they help you to be conscious of your reading process.

- ➢ Throughout the four years we studied at the University, there has not been a great focus on reading in general. Most of the reading courses where theoretical end we did not receive a practical instruction about it that is why most of us do not know how to use readings strategies effectively. This results in problems in reading comprehension

- ➢ Teaching students how to be metacognitively aware about reading strategies is a good way to achieve the best reading comprehension

Students highlighted the absence of metacognitive awareness and practical instruction in their reading courses and suggested its inclusion in the syllabus. They emphasized the importance of metacognitive strategies in language learning and their impact on conscious reading. Furthermore, they propose that teaching metacognitive awareness of reading strategies would greatly improve reading comprehension. Overall, students advocate for incorporating metacognitive instruction into reading modules to enhance students' reading abilities.

3.5.5. Summary and Discussion of the Results and Findings from Students' Questionnaire

The data collected from the administered questionnaire to EFL First-Year Master students draw clear conclusions about their views on the impact of metacognitive awareness of reading strategy uses on their reading comprehension. The first section entitled "General Information" demonstrated that a significant majority of respondents (73,64%) pursued English language studies for a duration of 11 years. Additionally, 63,63% of the informants have judged their English level as being 'good'. It can be said that the selected sample exhibits a significant level in English language studies as a result of dedicating at least a decade to it.

The second section, titled "reading comprehension", clarified that participants do engage in habitual reading. Specifically, 40% of them engage in reading activities multiple times per week, while 29,1% do read daily. Moreover, 75,45% of students explore different text's types and structures since they diversify their reading materials. 63,63% of participants admitted to face problems in the reading comprehension process. 'Limited vocabulary knowledge' was the main obstacle selected by 52,35 % of the sample. A significant portion of students (50 %) recognized 'lack of familiarity with the subject matter'. This corresponds with Westwood's (2008) contention (chap I, pp. 23, 24) that one of the major challenges readers encounter while reading is the lack of familiarity with the subject matter and insufficient vocabulary knowledge. Furthermore, as a response for one of the key research inquiries (Q8, p. 110), the majority of informants (69,09%) do receive guidance from their instructors regarding reading comprehension.

Section three entitled "Reading Strategies" displayed the frequency of reading strategy use among the selected sample and its effect on their reading comprehension. The majority of participants (78.18%) reported their utilization of reading strategies during reading. Moreover, 54,54% of them showed high awareness of the positive impact implementing reading strategies has

on their reading comprehension. Teachers commonly deliver regular instructions to students concerning the importance of reading strategies uses. This latter result answers one of the research questions (Q12, p. 114) as evidenced by 36.36% of participants.

The analysis of the fourth section titled "Students' Metacognitive Awareness of Reading Strategy Use" displays 63,63% of students have never encountered the term "Metacognitive Awareness/ Metacognitive Knowledge" in classroom. The rest of them (36,36%) provided concise yet sufficient definitions that can be summarized in 'thinking about thinking'. Further findings (Q16, 18, 19, pp. 118- 121) directly answered one of the research main questions. They indicate that the sample respondents possess 'a good level' of metacognitive awareness. Hence, aligning with Anjomshoaa's (2012) and Bagci and Unveren (2020) findings (chap II, p. 65), Q 20 (p. 122) confirmed the research hypothesis. The overwhelming majority of First-Year Master EFL students (91,81%) believed that being metacognitively aware about the reading strategy use would enhance their reading comprehension.

In conclusion, the primary objective of the current study was to delve into teachers' and students' attitudes towards the impact of metacognitive awareness of reading strategy uses on the reading comprehension abilities of EFL students. The findings of the study provide substantial evidence supporting the presence of a positive attitude among participants on the connection between variables.

Conclusion

Based on the results collected from the field investigation that is recorded in this third chapter, it is proved that there is a relationship between metacognitive awareness of reading strategies and reading comprehension. Thus, MARS benefits EFL students by enhancing their reading comprehension, autonomy, and problem-solving skills. Further, it enables them to achieve reading objectives effectively, stimulates memorization, and facilitates recalling prior knowledge.

Accordingly, the adequate implementation of MARS instruction will have a significant role in improving students' reading comprehension skills. The role of the teacher is, therefore, very important in encouraging students to consciously select, monitor, and evaluate reading strategies. This will promote and greatly impact students' reading comprehension.

GENERAL CONCLUSION

Concluding Remarks

The conducted research delved into an inquiry aimed at investigating teachers' and students' attitudes towards metacognitive awareness of reading strategy uses among EFL students on their reading comprehension abilities. The outcomes of this study have provided valuable insights into the significance, utilization, and relevance of reading strategies; specifically emphasizing the metacognitive awareness associated with them. More importantly, the research focused on raising awareness among both teachers and students about the pivotal role played by MARS implementation in increasing reading comprehension skills.

The study addressed three main chapters; the first two chapters form the theoretical parts. The first holds a comprehensive framework about reading skill and the reading comprehension process. In order to help EFL students strengthen their reading comprehension abilities, it discusses some causes of poor reading comprehension. Further, it tackles some elements that every teacher should develop for effective reading comprehension instruction. Meanwhile, the second chapter covers literacy techniques. It offers several strategies that may be used to improve students' reading proficiency. Furthermore, it examines the effects of metacognitive awareness on the process of language learning. In short, this chapter scrutinizes metacognitive awareness about reading strategies, their importance, effects on the reading process in general and reading comprehension in particular.

The last chapter is the practical part. It has dealt with the data gathering tools, as well as the analysis and interpretation of the obtained results. Thus, with the assistance of teachers and First-Year Master EFL students' questionnaires, the efficiency of MARS on reading comprehension has been explored. Accordingly, the five key research questions were eventually answered. The very first question was set to figure out whether teachers guide their learners' reading comprehension.

While the majority of teachers strive to enhance their students' reading comprehension, First-Year Master EFL students proclaimed receiving, sometimes, guidance regarding it. The second raised question was precisely set to determine how frequently instructors emphasize the importance of reading strategies. Therefore, both learners and teachers affirmed that within EFL classes, some efforts are made to raise students' awareness regarding the significance of reading strategies.

The third question sought to ascertain First-Year Master EFL students' MARS level and whether or not teachers work on raising it. Consequently, it was evident that teachers recognize the importance of metacognitive awareness and employ subtle but purposeful methods to incorporate and foster it within their classrooms. Furthermore, although learners have never received formal instruction about metacognitive awareness, findings indicate that First-Year Master EFL students demonstrate a remarkable metacognitive awareness level. The ultimate research question was set to pinpoint the degree to which metacognitive awareness of reading strategy uses improves EFL students' level of reading comprehension. Based on the obtained questionnaires' results, it has been inferred that almost all participants emphasized that MARS use enhances students' reading comprehension. More precisely, it enables them to be autonomous, critical learners, and helps them achieve reading objectives effectively; therefore, attaining a high reading proficiency.

According to the typical findings, both EFL students and teachers are aware of MARS in aiding to attain good reading comprehension skills. On that account, they all validated its inevitable outcomes and considered it as a fruitful instrument in achieving a high reading proficiency. Nonetheless, the use and teaching of this cognitive phenomenon seem to be limited in the academic setting. Therefore, such an application would enhance students' reading along with its detailed features and aspects.

Pedagogical Implications and Recommendations

After thoroughly exploring the realm of practical analysis, it is noteworthy to acknowledge the significant contribution of the current academic research by examining aspects to validate the chosen research topic. Specifically, valuable insights have been highlighted regarding metacognitive awareness, in relation to one of the fundamental language skills: reading. Consequently, a substantial array of contributions and recommendations necessitates attention and discussion.

Foreign language students must understand the importance of reading strategies in the reading process. They should have a clear and general understanding of their objectives and goals, as well as their appropriate uses to facilitate the reading comprehension process. Following this advocacy, by explicitly and practically teaching reading strategies; such as, predicting, skimming, summarizing, and visualizing, educators empower students to take a critical role in their learning. Learners who are aware of these strategies can consciously apply them while reading, and then improve comprehension. Therefore, it is suggested that teachers should dedicate more efforts to raise students' awareness about the importance of not only using strategies but also using them appropriately. Similarly, when students generate questions while reading, they actively engage with the material, monitor their understanding, and seek clarification if needed. A set of sample activities that may assist in teaching reading strategies, mainly metacognitive strategies, can be identified within Bouchard's work (2005). One metacognitive reading strategy that teaches students to monitor their own thinking and comprehension is found in (*Appendix D).*

Furthermore, the analysis of students' questionnaires revealed a significant lack of awareness among the majority of students regarding the concept of metacognitive awareness and its implications. Consequently, teachers must offer explicit, practical and systematic guidance in reading modules syllabi. In addition, they have to address the significance of metacognitive skills

(selection, monitoring, and evaluation) in relation to reading comprehension. Metacognitive awareness of reading strategies and reading comprehension are closely linked. The former directly influences the latter. When students possess a strong understanding of their thinking processes and the strategies they can employ while reading, they become more equipped to comprehend the text. As a result, it is recommended to call learners' attention to be metacognitively aware of reading strategies. In this regard, Hartman (2002) provided sample student self-questions for managing reading based on the selection, monitoring, and evaluation skills (p. 58) *(Appendix E)*.

Accordingly, the current academic research contributed to stressing the essential adaptability of metacognitive awareness as an efficient instrument to improve EFL students' reading comprehension. When doing so, intensifying the direct MARS's instruction among learners' reading tasks at universities needs to be prioritized. Therefore, when educators acknowledge and address the importance of MARS, they can empower their students to become more effective readers. As a result, they can actively monitor their comprehension and adjust their strategies as needed.

In this regard, Mokhtari and Reichard's (2002) Metacognitive Awareness of Reading Strategies Inventory (MARSI) (*Appendix A*), can be a valuable tool for teachers to explore the effects of strategic reading instruction on students' reading comprehension. It increases students' self-awareness of their reading strategies, enabling them to modify their beliefs about reading and take the initial crucial step towards achieving constructive and thoughtful reading. In addition, MARSI serves as a useful tool for teachers to assess, monitor, and document the variety and frequency of reading strategies employed by students (p. 255).

Research Limitations

The current research journey was paved with some hurdles that restricted its completion in terms of both theoretical and practical chapters, as well as time constraints. Theoretical parts demanded a substantial amount of time due to the limited availability of well-established theoretical foundations regarding the concepts of metacognition and metacognitive awareness. This is due to their relatively recent emergence in the field of education.

Among the 35 questionnaires distributed to teachers, a notable portion failed to yield substantial responses to the majority of the questions. Additionally, a considerable number of teachers chose not to respond at all. Compounding these issues, the distribution of the questionnaires coincided with the month of Ramadan and the subsequent Eid celebration, resulting in a significant absence of both students and teachers. Furthermore, due to time limitations, researchers were compelled to rely exclusively on the descriptive method and questionnaires as the primary tools for data collection. Moreover, because of the limited sample size comprising only First-Year Master students, careful consideration must be exercised when generalizing the obtained results to encompass all EFL students at 08 Mai 1945, Guelma University.

Suggestions for Future Research

In this section of the present study, some suggestions are introduced by researchers, that may help future investigators or anyone interested, for further exploration of the impact of MARS on EFL students' reading comprehension. As the present study solely relied on one source of data collection, a larger body of knowledge about the topic could not be unveiled. Subsequently, the inclusion of additional tools and methodologies on similar topics would provide a more comprehensive exploration of reading strategies and metacognitive awareness. Administering interviews and experiments can potentially uncover significant insights and shed light on the significance of reading comprehension. Therefore, conducting further research on MARS in the

future would hold immense value, particularly in its implications for EFL learning, teaching and research.

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Appendix A

Metacognitive Awareness of Reading Strategies Inventory (Version 1.0)

According to Mokhtari and Reichard (2002, p. 258)

Directions: Listed below are statements about what people do when they read academic or school-related materials such as textbooks or library books. Five numbers follow each statement (1, 2, 3, 4, 5), and each number means the following:

• **1 means** "I never or almost never do this."

• **2 means** "I do this only occasionally."

• **3 means** "I sometimes do this" (about 50% of the time).

• **4 means** "I usually do this."

• **5 means** "I always or almost always do this."

After reading each statement, circle the number (1, 2, 3, 4, or 5) that applies to you using the scale provided. Please note that there are no right or wrong answers to the statements in this inventory

Type	Strategy	Scale				
GLOB	1. I have a purpose in mind when I read.	1	2	3	4	5
SUP	2. I take notes while reading to help me understand what I' m reading.	1	2	3	4	5
GLOB	3. I think about what I know to help me understand what I' m reading.	1	2	3	4	5
GLOB	4. I preview the text to see what it' s about before reading it.	1	2	3	4	5
SUP	5. When text becomes difficult, I read aloud to help me understand what I' m reading.	1	2	3	4	5
SUP	6. I write summaries to reflect on key ideas in the text.	1	2	3	4	5
GLOB	7. I think about whether the content of the text fits my purpose.	1	2	3	4	5
PROB	8. I read slowly but carefully to be sure I understand what I' m reading.	1	2	3	4	5
SUP	9. I discuss my reading with others to check my understanding.	1	2	3	4	5
GLOB	10. I skim the text first by noting characteristics like length and organization.	1	2	3	4	5
PROB	11. I try to get back on track when I lose concentration.	1	2	3	4	5
SUP	12. I underline or circle information in the text to help me remember it.	1	2	3	4	5
PROB	13. I adjust my reading speed according to what I' m reading.	1	2	3	4	5
GLOB	14. I decide what to read closely and what to ignore.	1	2	3	4	5
SUP	15. I use reference materials such as dictionaries to help me understand what I' m reading.	1	2	3	4	5
PROB	16. When text becomes difficult, I begin to pay closer attention to what I' m reading.	1	2	3	4	5
GLOB	17. I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
PROB	18. I stop from time to time to think about what I' m reading.	1	2	3	4	5
GLOB	19. I use context clues to help me better understand what I' m reading.	1	2	3	4	5
SUP	20. I paraphrase (restate ideas in my own words) to better understand what I' m reading.	1	2	3	4	5
PROB	21. I try to picture or visualize information to help me remember what I' m reading.	1	2	3	4	5
GLOB	22. I use typographical aids like boldface type and italics to identify key information.	1	2	3	4	5
GLOB	23. I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
SUP	24. I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
GLOB	25. I check my understanding when I come across conflicting information.	1	2	3	4	5
GLOB	26. I try to guess what the text is about when reading.	1	2	3	4	5
PROB	27. When text becomes difficult, I reread to increase my understanding.	1	2	3	4	5
SUP	28. I ask myself questions I like to have answered in the text.	1	2	3	4	5
GLOB	29. I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
PROB	30. I try to guess the meaning of unknown words or phrases.	1	2	3	4	5

Scoring Rubric

According to Mokhtari and Reichard (2002, p. 259)

Student name: ....   Age: ....   Date:

....

Grade in school: 6th   7th   8th   9th   10th   11th   12th   College   Other

1. Write your response to each statement (i.e., 1, 2, 3, 4, or 5) in each of the blanks.

2. Add up the scores under each column. Place the result on the line under each column.

3. Divide the subscale score by the number of statements in each column to get the average for each subscale.

4. Calculate the average for the whole inventory by adding up the subscale scores and dividing by 30.

5. Compare your results to those shown below. 6. Discuss your results with your teacher or tutor.

Global Reading Strategies Reading (GLOB subscale)	**Problem-Solving Strategies** (PROB subscale)	**Support Reading Strategies** (SUP subscale)	**Overall** Strategies
1..............	8..............	2..............	GLOB.............
3..............	11..............	5..............	PROB.............
4..............	13..............	6..............	SUP.............
7..............	16..............	9..............	
10..............	18..............	12..............	
14..............	21..............	15..............	
17..............	27..............	20..............	
19..............	30..............	24..............	
22..............		28..............	
23..............			
25..............			
26..............			
29..............			

..........GLOB score   ......PROB score   .....SUP score   ....Overall score

..........GLOB mean   ......PROB mean   ......SUP mean   ....Overall mean

| Key to averages: | 3.5 or higher= high | 2.5–3.4 = medium | 2.4 or lower= low |

Interpreting your scores:

The overall average indicates how often you use reading strategies when reading academic materials. The average for each subscale of the inventory shows which group of strategies (i.e., global, problem solving, and support strategies) you use most when reading. With this information, you can tell if you score very high or very low in any of these strategy groups. Note, however, that the best possible use of these strategies depends on your reading ability in English, the type of material read, and your purpose for reading it. A low score on any of the subscales or parts of the inventory indicates that there may be some strategies in these parts that you might want to learn about and consider using when reading.

Categories of Reading Strategies Measured by the Metacognitive Awareness of Reading Strategies Inventory

According to Mokhtari and Reichard (2002, p. 259)

Global Reading Strategies	Problem-Solving Strategies	Support Reading Strategies
Examples include setting purpose for reading, activating prior knowledge, checking whether text content fits purpose, predicting what text is about, confirming predictions, previewing text for content, skimming to note text characteristics, making decisions in relation to what to read closely, using context clues, using text structure, and using other textual features to	Examples include reading slowly and carefully, adjusting reading rate, paying close attention to reading, pausing to reflect on reading, rereading, visualizing information read, reading text out loud, and guessing meaning of unknown words. **(Items 8, 11, 13, 16, 18, 21, 27, 30)**	Examples include taking notes while reading, paraphrasing text information, revisiting previously read information, asking self-questions, using reference materials as aids, underlining text information, discussing reading with others, and writing summaries of reading. **(Items 2, 5, 6, 9, 12,15, 20, 24, 28)**

enhance reading comprehension. **(Items 1, 3, 4, 7, 10, 14, 17, 19, 22, 23, 25, 26, 29)**		

Appendix B

TEACHERS' QUESTIONNAIRE

Dear teacher,

You are kindly invited to go through this questionnaire, which is part of a research work for accomplishing a Master dissertation at the Department of Letters and English Language, University of 8 Mai 1945, Guelma. It aims at investigating 'teachers' and students' attitudes towards the metacognitive awareness of reading strategy uses on EFL students' reading comprehension'.

We shall be very grateful if you could answer the following questions by ticking the appropriate answer or by providing full answers, justifications, comments, or suggestions whenever necessary.

Please be sure that it is highly confidential, since the data collected is going to be used only for the sake of this research.

Thank you for your valuable time and contribution, as it is very crucial for strengthening the validity of this research

Donia AROUEL

Hena GUERFI

Second year Master Students

Faculty of Letters and Languages

Department of Letters and English Language

University of 8 Mai 1945, Guelma

I.   **Section One: Teacher's Background**

1. How long have you been teaching English at the university? (Please specify the

number of years)

a. Less than 12 years ☐   b. More than 12years ☐

2. Specify your qualification, please?

a. Master II /M.A ☐

b. Magister / M.A ☐

c. Doctorate / Ph.D ☐

d. Professor ☐

3. You work at the English Department as:

a. Part-time teacher ☐

b. Full-time teacher ☐

II.   **Section Two: Reading Comprehension**

4. Based on your teaching experience, how would you describe First-Year Master

EFL students' reading level (proficiency)?

a. Good ☐

b. Average ☐

c. Below average ☐

5. According to your teaching experiences, do you think that reading instruction

should focus more on:

a. Grammar ☐

b. Fluency ☐

c. Vocabulary ☐

d. Comprehension ☐

Others please specify!

………………………………………………………………………………………………

6. How can you define 'reading comprehension'?

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

7. How often do your students struggle in comprehending texts or any written materials?

    a. Always ☐

    b. Sometimes ☐

    c. Rarely ☐

    d. Never ☐

8. What do you think the main reason behind this is? (You can choose more than one option)

    a. Limited vocabulary knowledge ☐

    b. Difficulty level of the text ☐

    c. Insufficient use of appropriate reading strategies ☐

    d. Problems of information processing ☐

    e. Failure to connect with prior knowledge ☐

Others please specify!

……

……

9. Do you work on enhancing your students' reading comprehension?

a. Yes ☐   b. No ☐

10. If yes, say how? (you can choose more than one option)

     a. By building disciplinary and world knowledge ☐

     b. By providing exposure to a range of texts types and structures ☐

     c. By teaching comprehension strategies ☐

     d. By engaging students in classroom discussions ☐

     e. By building vocabulary and language knowledge ☐

Others please specify!

....

....

11. In your opinion, what assessment tool is more appropriate for reading

comprehension?

     a. Retelling ☐

     b. Questioning ☐

     c. Cloze procedure ☐

     d. Writing activity ☐

     e. Teachers' made-tests ☐

Could you please justify your answer!

....

....

....

III. Section Three: Reading Strategies

12. To what extent do you think reading strategies are important in facilitating

students' learning?

    a. To a high extent ☐

    b. To a certain extent ☐

    c. To a low extent ☐

13. Do you agree that reading strategies can help students achieve better

understanding of written materials?

    a. Strongly agree ☐

    b. Agree ☐

    c. Neither agree nor disagree ☐

    d. Disagree ☐

    e. Strongly disagree ☐

14. What type of learning strategies do you prefer your students to use while reading?

    a. Cognitive strategies ☐

    b. Metacognitive strategies ☐

    c. Socio-affective strategies ☐

Could you please justify your answer!

....

....

....

15. How often do you provide direct instruction about reading strategies?

    a. Always ☐

b. Sometimes ☐

c. Never ☐

16. According to your teaching experiences, what are the mostly used reading strategies

among your students?(you can choose more than one option)

    a. Skimming and scanning ☐

    b. Summarizing and paraphrasing ☐

    c. Predicting ☐

    d. Recognizing text organization ☐

    e. Activating prior knowledge ☐

    f. Visualizing, mapping, and note taking ☐

17. How often do you raise your students' awareness about the importance of reading

strategies' use?

    a. Always ☐

    b. Usually ☐

    c. Sometimes ☐

    d. Never ☐

IV. **Section Four: Students' Metacognitive Awareness of Reading Comprehension**

Strategy Uses

18. What do you think the concept 'metacognitive awareness/ metacognitive

knowledge' refers to?

………………………………………………………………………………………

………………………………………………………………………………………

………………………………………………………………………………………

19. Have you ever used one of these terms in your classroom?

    a. Yes ☐   b. No ☐

20. Do you draw or raise your students' attention towards how to be metacognitively

aware?

    a. Yes ☐   b. No ☐

21. If yes, please explain how?

………………………………………………………………………………

………………………………………………………………………………

22. Do you agree that developing metacognitive awareness is important for successful

language learning?

    a. Strongly agree ☐

    b. Agree ☐

    c. Neither agree nor disagree ☐

    d. Disagree ☐

    e. Strongly disagree ☐

23. How can you describe students' metacognitive awareness about reading strategies'

use?

a. High ☐

b. average ☐

c. Low ☐

24. In your opinion, students' low metacognitive awareness can result from:

    a. Lack of knowledge about reading strategies ☐

    b. Lack of reflection and self-assessment ☐

    c. Problems in cognitive processes ☐

    d. Ineffective classroom instruction ☐

If others, please specify!

....

....

....

25. Do you think that being metacognitively aware of reading strategy uses may help

EFL students achieve better reading comprehension or not?

    a. Yes ☐   b. No ☐

Please, justify your answer!

....

....

....

....

26. If you have any other suggestions, comments, or additions, please do not hesitate

to add them below.

……

……

……

……

Thank you for your cooperation.

Appendix C

STUDENTS' QUESTIONNAIRE

Dear First-Year Master students,

You are kindly asked to answer this questionnaire; which is used to conduct research about 'investigating teachers' and students' attitudes towards the metacognitive awareness of reading strategy uses on EFL students' reading comprehension'. This questionnaire may take 15 minutes to answer.

Please, answer the statements by ticking (√) in the right box (es), or by providing full answers, justifications, comments, or suggestions whenever necessary. Please be sure that the information you provide will be kept confidential and will be used only for the purpose of this research. Thank you for your valuable time. Your participation is highly appreciated.

Donia AROUEL

Hena GUERFI

Second year Master Students

Department of Letters and English Language

Faculty of Letters and Languages

University of 8 Mai 1945, Guelma

I. Section One: General Information

1. For how many years have you been studying English?

    a. 11 years   ☐   b. More than 11 years   ☐

2. How can you evaluate your level in English?

    a. Very good   ☐

    b. Good   ☐

    c. Average   ☐

    d. Below average   ☐

II. Section Two: Reading Comprehension

3. How regularly do you read in English (academic lessons are counted)?

    a. Seldom or never   ☐

    b. Less than once a week   ☐

    c. Multiple times per week   ☐

    d. Daily   ☐

4. When you read in English, do you vary your reading materials (texts, books, articles, essays, etc.)?

    a. Yes   ☐

    b. No   ☐

5. Can you give a brief definition of reading comprehension?

……

………………………………………………………………………………………………………..

……

6. Do you face obstacles in comprehending a reading material?

    a. Yes ☐

    b. No ☐

7. If yes, what type of these obstacles (you may select more than one option)?

    a. Limited vocabulary knowledge ☐

    b. Lack of familiarity with the subject matter ☐

    c. Problems of information processing. ☐

    d. Inadequate use of effective reading strategies ☐

If others, please mention them

………………………………………………………………………………………………………

………………………………………………………………………………………………………

8. How often do you receive guidance from your teacher regarding your reading comprehension?

    a. Always ☐

    b. Sometimes ☐

    c. Never ☐

III.   Section Three: Reading Strategies

9. Do you use any learning strategies during reading?

    a. Yes ☐

    b. No ☐

10. If yes, which type of them you use more?

    a. Cognitive strategies ☐

b. Metacognitive strategies ☐

c. Socio-affective strategies ☐

11. To what extent do you think reading strategies may facilitate your reading comprehension?

d. To a great extent ☐

e. To a certain extent ☐

f. To a very small extent ☐

12. How often do your teachers raise your awareness about the importance of using reading strategies?

e. Always ☐

f. Usually ☐

g. Sometimes ☐

h. Never ☐

13. What reading strategies you usually use when interacting with a reading material (you may select more than one option)?

a. Skimming and scanning ☐

b. Summarizing and paraphrasing ☐

c. Predicting ☐

d. Recognizing text organization ☐

e. Activating prior knowledge ☐

f. Visualizing, mapping, and note taking ☐

IV. Section Four: Students' Metacognitive Awareness of Reading Strategy Uses

14. Have you ever been introduced to the term 'metacognitive awareness/metacognitive

knowledge'?

    a. Yes ☐   b. No ☐

15. If yes, can you define it?

………

………..

………

16. Before reading, do you think consciously about the reading strategy (ies) to be selected

for the reading material at hand?

    a. Yes ☐   b. No ☐

17. If yes, on which basis you select the appropriate strategy?

    a. On the basis of the text type   ☐

    b. On the basis of the aim behind reading ☐

    c. Both   ☐

18. During reading, how often do you monitor your selection of the reading strategy (ies) and

then change it when needed?

    a. Always   ☐

    b. Often   ☐

    c. Sometimes   ☐

    d. Never   ☐

19. After reading, how often do you evaluate the effectiveness of the selected reading

strategy (ies)?

    ☐

a. Always

b. Often ☐

c. Sometimes ☐

d. Never ☐

20. Do you think that being metacognitively aware about the reading strategy uses (consciously selecting it before reading, monitoring it during reading, and evaluating its effectiveness after reading) would enhance your reading comprehension?

a. Yes ☐   b. No ☐

Justify your answer please!

....

....

....

....

21. Further Suggestions

If you have any further suggestions or comments, please do not hesitate to mention them below.

....

....

....

....

Thank you for your participation

Metacognitive Strategy Activity

According to Bouchard (2005, pp. 34, 35)

Think Alouds

ENGLISH LANGUAGE LEVEL

Speech Emergence To

Proficiency

KEY VOCABULARY

- **Think**
- **Alouds**

Example: Science

To compare and contrast the processes of photosynthesis and respiration CLARIFY THE PROBLEM. Say: "This task is asking me to compare the processes of photosynthesis and respiration."

ACTIVATE PRIOR KNOWLEDGE. Continue: "I already know that in respiration carbon dioxide is given off, and in photosynthesis oxygen is given off. They seem to be the opposite of each other."

CHOOSE A STRATEGY. Suggest: "Maybe I'll use a T-chart or other graphic organizer to compare and contrast the similarities and differences. It may be a good idea to write both formulas and begin by comparing those." (Demonstrate the strategy.)

MONITOR COMPREHENSION. Follow up: "I think this is working. I can see the similarities and differences now between the two processes."

Purpose This strategy teaches students to monitor their own thinking and understanding by following along as you model strategic thinking through difficult text or problems. It teaches the student to actively choose alternative strategies when something does not make sense.

Key Benefits for ELLS Having a teacher model what strategic thinkers/readers do to monitor their understanding is particularly helpful for ELLS who are learning a new language and new content simultaneously and need the extra support. In addition, Think Alouds are versatile and can be applied to numerous learning tasks and varied content areas. This enables ELLS to transfer strategic thinking skills to other learning situations.

Procedure

1. Assign a specific task or reading selection. The nature of the think aloud will vary according to the task and content you are teaching.

2. Model how you arrived at the answer or accomplished the task by modeling your thinking "out loud." Go through a step-by-step process of the strategies you are following. For example, clarify the problem by identifying what the task is asking you to accomplish. Discuss what prior knowledge or experiences you might have that relate to the task. Suggest what strategies might be helpful in this learning situation. In addition, monitor your comprehension as you go along. "Is this strategy working for me?" (See the example below.)

3. After the modeling, assign small groups of students to do a task and take turns "thinking aloud."

Metacognitive Strategies

Think Alouds

Example: Math
To reduce a fraction to a mixed number.
CLARIFY THE PROBLEM. Say: "Let's see. This problem is asking me to reduce this fraction to a mixed number."
ACTIVATE PRIOR KNOWLEDGE. Continue: "I know that a mixed number contains a whole number and I am going to have to divide in order to reduce the fraction. I'm not sure which number is the divisor."
CHOOSE A STRATEGY. Suggest: "Maybe I'll go back into the chapter and review the example problems for mixed numbers. Then I'll use these numbers in the process and see what I get." (*Demonstrates the strategy.*)
MONITOR COMPREHENSION. Follow up: "These examples seem to fit the problem and when I divide the numerator by the denominator, I get a whole number and a fraction. This seems to be correct. Maybe I'll ask others what they think."

Extensions

■ For ELLs: Ask students to share the strategies they used when learning in their first language or in a prior school experience. Ask them to share with the class in the form of a think aloud.

■ Have students work in pairs to solve a problem using the think aloud strategy. Each student models his or her think aloud strategy to a partner.

> It is effective to use Think Alouds when explaining to ells the process used to solve story problems.

Sample Progress Indicators for THINK ALOUD

Student will:	IP	A	NOTES
Verbalize relationships between new information and information previously learned.			
Verbalize the use of strategic strategies for self- monitoring comprehension.			
Evaluate his or her own success in a completed task.			
Imitate the behaviors of native English speakers to complete tasks successfully.			

Metacognitive Strategies

Appendix E

Sample Student Self-Questions for Managing Reading

According to Hartman (2002, p. 58)

Thinking Objective	PLANNING	MONITORING	EVALUATING
Reading	• What do I already know about this topic? • What am I expected to learn from this reading? • How much time should it take for me to read this?	• Is there anything I don't understand? • Can I figure it out on my own? • Which ideas are most important? • How can I remember what I've read so far?	• Did I understand and remember everything? • Which reading strategies worked best this time? • How can I read with better understanding next time?

Résumé

La compréhension de lecture est une compétence essentielle dans l'enseignement des langues, en particulier pour les étudiants d'anglais en tant que langue étrangère (ALE). Cependant, de nombreux étudiants d'ALE rencontrent des difficultés en raison de la complexité des processus cognitifs impliqués. Ainsi, les enseignants doivent sensibiliser les étudiants aux stratégies de lecture. À cet égard, la présente dissertation vise à étudier les attitudes des enseignants et des étudiants à l'égard de l'impact de la conscience métacognitive de l'utilisation des stratégies de lecture sur la compréhension de lecture des étudiants d'ALE. On suppose que les enseignants et les étudiants ont une attitude positive à l'égard de la conscience métacognitive de l'utilisation des stratégies de lecture et de la compréhension de lecture des étudiants d'ALE. L'étude a utilisé une méthode quantitative-descriptive en utilisant deux questionnaires. Le questionnaire des étudiants a été administré à 110 étudiants choisis au hasard parmi la population totale, tandis que le questionnaire des enseignants a été administré à 28 enseignants du département de Lettres et de Langue Anglaise de l'Université du 8 mai 1945 à Guelma. L'analyse et l'interprétation des données collectées ont révélé des attitudes positives chez les enseignants et les étudiants à l'égard de la conscience métacognitive de l'utilisation des stratégies de lecture et de la compréhension de lecture des étudiants d'ALE. Il est donc recommandé aux enseignants d'intégrer l'instruction métacognitive dans leur programme pour aider les étudiants à développer leurs capacités métacognitives et à devenir autonomes et réflexifs dans leur apprentissage.

ملخص

تعتبر القراءة وفهمها من المهارات الأساسية في تعلم اللغة، وتحديداً في سياق تعلم اللغة الإنجليزية كلغة أجنبية. ومع ذلك، فإن العديد من طلاب اللغة الإنجليزية يواجهون صعوبات وتحديات كبيرة بسبب تعقيد العمليات الإدراكية المتضمنة. ولذلك، يحتاج المدرسون إلى زيادة وعيهم تجاه استخدام استراتيجيات القراءة. في هذا السياق، تهدف هذه الدراسة إلى استكشاف تأثير الوعي ما فوق الإدراكي لاستخدام استراتيجيات القراءة على فهم الطلاب للقراءة. يفترض أن لدى المعلمين والطلاب مواقف إيجابية تجاه الوعي فوق ادراكي مع استخدام استراتيجيات القراءة وفهم القراءة لطلاب اللغة الإنجليزية كلغة أجنبية. من أجل تحقيق أهداف البحث والإجابة على الأسئلة واختبار الفرضيات، تم استخدام المنهج الوصفي الكمي واستخدام استبيانين. تم توزيع استبيان الطلاب على 110 طالبًا في الماستر من السنة الأولى، تم اختيارهم عشوائيًا من بين العدد الكلي للطلاب. وتم توزيع استبيان المدرسون على 28 مدرسًا في قسم الآداب واللغة الإنجليزية في جامعة 8 ماي 1945 ـ قالمة. أظهر تحليل وتفسير البيانات المجمعة مواقف إيجابية بين المعلمين والطلاب تجاه الوعي التربوي باستخدام استراتيجيات القراءة وفهم القراءة لدى طلاب اللغة الإنجليزية. وبالتالي، أظهرت النتائج وعيًا جيدًا لاستخدام استراتيجيات القراءة بين الطلاب المشمولين في الدراسة.