



Metacognitive Strategies Used in Comprehending Reading Academic Texts for Doctoral Students

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ABSTRACT: The importance of metacognitive strategies in achieving proficiency in second or foreign language reading is widely acknowledged. There is a growing interest in the reading of specialized academic literature in a second language. The objective of this study was to examine qualitatively the metacognitive strategies employed by students majoring in English Education during academic reading. Participants involved in this study was seven students in second-year of the Doctoral Program of Makassar State University. The metacognitive strategies employed by the participants were determined through the collection of data integrating journal entries. The results revealed the overall metacognitive strategies used in comprehending academic reading of doctoral students were activated prior knowledge, relating the text to their own experiences, determining the meaning of unfamiliar words, summarizing the information, determining the most important information and what is worth remembering. Only the strategies that were frequently cited by the participants were established or changed by them are addressed in the rest of the study, based on the theory of Flavell (1976).

KEYWORDS: Academic Reading, Comprehending, Doctoral Students, Metacognitive Strategies.

INTRODUCTION

In the contemporary era of digitalization, when information is readily accessible, the skill of reading assumes highest priority. As stated by Eskey (2005), while English as a Foreign Language (EFL) students may not require speaking English in their everyday activities, they must be able to read it in order to access the enormous quantity of knowledge available in English. According to Levine et.al (2000), the proficiency in comprehending academic texts holds significant importance, particularly for college or university students who are learning English as a foreign language.

Adequate comprehension has become crucial in academic reading, as it is frequently linked to the need to complete certain cognitive and procedural activities, such as taking a test, writing a paper, or delivering a speech (Shih, 1992). Consequently, the challenge of comprehending academic reading has emerged as a significant obstacle. Grabe and Stoller (2002) emphasized that achieving high proficiency in second language reading is a challenging task due to the complex processes of the process. According to Snow (2002), a significant number of learner encounter challenges when it comes to comprehending academic literature.

Numerous researchers, including Chamot and O'Malley (1990), Oxford (1990), Ellis (1994), and Cohen (2005), have provided definitions for metacognitive strategies. In summary, metacognitive strategies are considered to be advanced executive abilities that use understanding of cognitive processes and represent an effort to manage one's own learning through the processes of planning, monitoring, and assessing. Metacognitive strategies in the context of reading includes self-monitoring and self-regulating activities that revolve around both the process and the outcome of reading. Metacognitive strategies in reading refer to the particular strategies that aim to enhance readers' awareness and control, improve their reading comprehension, and assess the success of their comprehension efforts.

The role of metacognitive processes in attaining comprehension has been widely recognized (Phan, 2006). Metacognitive strategies have garnered acceptance as a beneficial tool in the reading process due to its cognitive, social, and linguistic advantages. Multiple scholarly investigations (Carrell, 1995; Wenden, 2001; Chamot, 2005) have examined the beneficial outcomes associated with the application of metacognitive strategies during the act of reading. The metacognitive strategies demonstrate a direct correlation with reading comprehension. Studies on metacognition and reading have been demonstrated that when individuals encounter challenges in reading comprehension, they often employ metacognitive strategies as a means of managing these difficulties (Wen, 2003).



Numerous studies have provided evidence indicating that the process of reading comprehension extends beyond mere comprehension of individual words, sentences, or texts. Instead, it encompasses a multifaceted combination of the reader's pre-existing knowledge, linguistic aptitude, and metacognitive approaches (Hammadou, 1991). Most educators regard metacognition to be an essential component for various cognitive learning tasks.

Metacognition, as defined by Flavell (1976), pertains to an individual's understanding and awareness of their own cognitive processes and outcomes, as well as any aspects associated with them. Additionally, it encompasses the proactive monitoring and following control and coordination of these processes in connection with the cognitive units or information they pertain to, typically in pursuit of a specific aim or target. In essence, individuals possess an understanding of their cognitive processes and hold the capacity to employ this information in order to select the most optimal strategies for resolving problems. Metacognition can be defined as the cognitive capacity to engage in self-reflection and self-observation. Furthermore, this skill is frequently associated with successful acquisition of knowledge and proficient execution in several domains of problem-solving (Block, 1992).

The strategies encompassed in this framework based on Flavell's theory (1976) consist of *planning* (activating their prior knowledge, getting an overview of the information in the text, making connections between the text and other texts, relating the text to their own experiences), *monitoring* (determining the meaning of unfamiliar words, asking questions to deepen their understanding, reflecting on the text, keeping track of their comprehension, summarizing the information, actively looking for important details), and *assessing* (analyzing the text from the author's perspective, evaluating the overall quality of the text, anticipating how to apply the knowledge gained from the text, monitoring their understanding, recognizing when they know and when they don't know, using and creating schema to make connections and activate background knowledge, asking thought-provoking questions before, during, and after reading, determining the most important information and what is worth remembering).

Flavell (1992) stated that the utilization of metacognitive strategies is particularly probable in contexts that elicit extensive and deliberate cognitive processes. Metacognitive strategies encompass several techniques, such as self-evaluation and deliberate focus on the learning task (O'Malley & Chamot, 1990). There is a lack of research and examination about the application of metacognitive strategies among Doctoral Students majoring English Education. This study presents a qualitative examination of metacognitive strategies used for the comprehension of English academic reading texts. Metacognitive strategies in this research pertain to the actions performed by participants to regulate, oversee, and assess their own understanding during the process of academic reading.

According to Adamson's (1991) recent case studies, it was observed that English as a Second Language (ESL) students with diverse academic and cultural backgrounds displayed a broad spectrum of academic techniques. The students' approaches to their academic activities were shaped by their respective academic backgrounds and cultural influences, as well as their unique learning styles and the characteristics of the assigned tasks. The individuals employed diverse strategies based on their level of comprehension of the subject matter. According to Adamson (1991), even successful learners frequently utilized poor strategies, such as attempting to deduce the meaning of each unfamiliar word based on the surrounding context, resulting in the missing of crucial information. The case studies presented in this study served as the foundation for examining the metacognitive strategies utilized by the doctoral students during the process of reading their academic materials.

MATERIALS AND METHODS

Participants

A total of seven second-year students from the Doctoral Program at Makassar State University participated in this study. The method employed for sample selection is random sampling technique. PhD candidates are required to possess an excellent ability for comprehending texts in order to successfully complete their dissertation and attain their PhD degree, especially academic texts such as books and journals.

Instruments

The study's data came from the journal entries of the participants. Journals have proven to be useful in revealing the reading methods that students employ (Wollman 1989). As a condition of participating in this study, all participants agreed to keep journals in which they would write down the strategies they employed when reading. The length of entries was not limited to any particular rules. The participants should write about their ways to comprehending academic texts in order to finish their final research.



Data Analysis

Coding helps to condense, synthesise, and organise the emerging themes in journal entries, according to Strauss and Corbin (1990). Coding, as used by qualitative researchers, entails generating categories based on the interpretation of the data and assessing the pre-formed categories in light of the investigation's objectives. In the current study, the researchers carefully went through the participant journals to look for any codes or categories that might be important to the goals of the study. Open coding, or the process of dissecting, reviewing, comparing, conceptualising, and classifying data, was used to analyse the data gathered for this study (Strauss & Corbin 1990). Numerous metacognitive strategies that the participants commonly described aligned with the results of other studies, such as the application of prior knowledge, translation, self-questioning, summarization, prediction, and so on.

RESULTS AND DISCUSSIONS

The objective of this study was to investigate the metacognitive strategies employed by doctoral students in the process of accepting academic reading texts. The analysis of the data revealed that the participants employed a diverse range of strategies to effectively comprehend academic contextual information. The participants in the study identified several strategies that can be employed to enhance their reading comprehension. These strategies include activated prior knowledge, relating the text to their own experiences, determining the meaning of unfamiliar words, summarizing the information, determining the most important information and what is worth remembering. Only the strategies that were frequently cited by the participants were established or changed by them are addressed in the rest of the study, based on the theory of Flavell (1976).

Activating Their Prior Knowledge

Activating prior knowledge is utilizing and using existing information and experiences to facilitate comprehension and acquisition of new concepts or problem-solving. This strategy facilitates students in establishing correlations between their existing knowledge and the novel information they come across. Through the process of activating prior information, students have the opportunity to expand upon their existing knowledge, establish significant associations, and enhance their comprehension of new ideas. A constructivist perspective facilitates the activation of students' pre-existing knowledge, enabling them to utilize their prior experiences and expertise in order to generate new perspectives and foster fresh learning opportunities. In some cases, specific strategies exhibit greater efficacy when employed inside a particular academic field.

Students across various age groups possess a diverse range of views, experiences, and knowledge pertaining to their acquired knowledge and learning processes. An essential element of the teaching and learning process involves dedicating time to ascertain students' knowledge, lack of knowledge, and beliefs on a certain subject.

The activation of pre-existing knowledge gives significant advantages to students. When students acquire the ability to analyse and differentiate novel information from their current knowledge, they develop metacognitive skills. This implies that they possess an understanding of their own cognitive processes and develop the capacity to reflect on their thoughts while assimilating new information.

When students are instructed to engage their existing knowledge, they are effectively acquiring the ability to provide support and guidance to themselves. Subsequently, novel facts, ideas, and concepts are constructed, enabling individuals to contemplate the integration of the new information with their existing knowledge.

Relating the Text to Their Own Experiences

Establishing a connection between text and one's own experiences requires connecting the text's substance to personal knowledge, emotions, and prior events. This strategy facilitates students' comprehension and active involvement with the curriculum by providing it pertinent to their personal experiences. Students can establish links between text and their own experiences through several means, including personal, cultural, emotional, real-world, and transdisciplinary connections. In general, establishing a connection between literature and one's own experiences enables students to establish personal associations, enhance their comprehension, and actively participate in the topic. Additionally, it facilitates in the cultivation of critical thinking abilities and empathy through the examination of many viewpoints and circumstances.

Determining the Meaning of Unfamiliar Words

The ability to ascertain the significance of unknown words is a fundamental competency for proficient reading comprehension. It promotes the utilization of dictionaries or online resources by students to search for the definition of unfamiliar



words. The proper utilization of dictionaries by students is of paramount importance, encompassing a comprehensive grasp of various definition kinds, part of speech labels, and illustrative sentences. Through the implementation of this approach, children can cultivate the ability required to autonomously determine the significance of unknown words, so increasing their overall reading comprehension proficiencies. Consistent use and reinforcement of this strategy can contribute to the enhancement of their language acquisition abilities in the long run.

Summarizing the Information

It is important for all readers to simplify their arguments in order to effectively convey the main idea. A summary serves the purpose of enhancing comprehension and offering valuable insights into individual activities by presenting study concepts from multiple perspectives. Additionally, it has the advantage of saving valuable time that would otherwise be spent on rewriting material.

The utilization of this method facilitates the acquisition of additional knowledge through the synthesis of existing knowledge, while also enabling the identification of a subject for further investigation or deliberation. Summarizing is a crucial skill that readers employ on a daily basis while engaging with media and assimilating novel information from it. Summaries are composed subsequent to reading books or journals as they enable students to condense the entirety of their understanding of someone's work into concise terms. This allows anyone who have not personally read the book to gain an understanding of its content without the need for extensive effort.

Determining the Most Important Information and What is Worth Remembering

A crucial component of efficient studying and learning is figuring out what is worth remembering and what is the most important knowledge. Identifying the primary ideas and concepts, for instance. It may inspire students to recognize the main points and concepts in the content. These are frequently the main ideas or points of contention that the text is making. Comprehending these basic ideas offers a structure for classifying and remembering additional data. In addition, students have the option to review and reflect. Frequent review and reflection helps in reinforcing knowledge and highlighting the most important details for students. Motivate students to go over their notes on a regular basis, underline important ideas, and consider the lessons they have learned. They are able to prioritize information and solidify their understanding through this process.

CONCLUSIONS

The study's data clearly demonstrate that the participants were able to verbalise the process in English and that they had a significant awareness and control over their cognitive functions while reading. The data that the participants supplied showed that doctorate-level academic reading is a complicated process in which they actively and deliberately used a variety of metacognitive strategies. While reading academic literature, they employed these skills to organise, oversee, assess, and correct their knowledge. The study is noteworthy because it gives a thorough explanation of the metacognitive strategies participants used when reading academically. It offers empirical backing for earlier studies on metacognitive strategies, which are critical for students to master in academic reading. The results revealed the overall metacognitive strategies used in comprehending academic reading of doctoral students were activated prior knowledge, relating the text to their own experiences, determining the meaning of unfamiliar words, summarizing the information, determining the most important information and what is worth remembering.

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Cite this Article Andi Adisaturrehimi, Marlia, Sabrina Retnasari Iswahyudi (2024). Metacognitive Strategies Used in Comprehending Reading Academic Texts for Doctoral Students. International Journal of Current Science Research and Review, 7(4), 2025-2029