

# METACOGNITIVE STRATEGY INSTRUCTIONS TO ENHANCE READING COMPREHENSION AND VOCABULARY ACHIEVEMENT

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## Abstract

*Reading as comprehension represents the ability to use context and knowledge to derive meaning from what is read. Students' success in completing a reading assignment depends on how well they are prepared for it. Pedagogy to be adopted in the teaching process should ensure both accurate comprehension and correct and effective self-expression by students during the reading activities. By employing metacognitive strategies instruction, teacher can train students to use their metacognition—knowledge, awareness, and control of their own learning—from which they will develop their reading comprehension. Through metacognitive strategies, students as readers are expected to be able to allocate significant attention to control, monitor, and evaluate process, as well as improve their vocabulary mastery.*

**Key words:** metacognitive strategies instruction, reading comprehension, vocabulary achievement

## INTRODUCTION

Reading offers more language input than can usually be provided, especially in second language learning (Johnson, 2005). In classroom context, the learners may be required to reproduce this information as evidence of understanding, often answers to comprehension questions. For many learners, beginning to read the foreign language involved learning an entire new set of written symbols. It is an active interaction between the learner's knowledge of their language with the written material that they perceive visually. The reader makes a contact and communication with ideas. Nuttal (1982) in Simanjuntak (1988) defines reading as meaningful interpretation of printed or written symbols. It means that reading is a result of interaction between the perception of graphic symbols that represent language and the reader's language skill, cognitive skill, and the knowledge of the world. In this process, the reader tries to recreate the meanings intended by the writer. Generally, it can be defined that reading is how the reader acquire information from context and combine the elements into new whole. It is the process of one's ability to interpret text in order to construe meaning.

As reading is to comprehension, it represents the ability to use context and knowledge to derive meaning from what is read. A typical taxonomy of comprehension skills would include for example, the ability to extract the literal meaning from the text, to identify the main ideas or fact supporting details and the relationship between ideas or fact, and to identify longer unit of text which convey "thought" units or "units of the information" (Long & Richard, 1987). In line with that, Hudson (2007:266) states that comprehending requires the learners to reconstruct the structure and meaning of the

writer's idea and composing engages the writer in constructing meaning and developing relating and expressing ideas.

In many respects, students' success in completing a reading assignment depends on how well they are prepared for it. Pedagogy to be adopted in the teaching process should ensure both accurate comprehension and correct and effective self-expression by students during reading activities. Regarding the importance of reading, the skill of teaching reading is very important skill because this is the stage where the students start to spread their knowledge field. It is important for the teacher to encourage their students to think about the reason why they should read and what kind of information they are looking for. In line with this, the teacher must consider the instructions which direct learners to read for the main meaning.

### **READING COMPREHENSION AND VOCABULARY**

The key variables of reading comprehension include the reader as an active information processor, the activity of reading, and the text, all of which intersect to affect how well comprehension occurs (McIntyre, Hulan, & Layne, 2011 in Kazemi, et al, 2013). In doing such activities, readers often face some problems regarding language system, limited vocabulary mastery, motivation, interest, and decoding skill. Many researchers consider vocabulary knowledge to be an important variable that affects reading comprehension. A limited vocabulary size, as well as a lack of sufficient knowledge of word meanings, often hinders learners from understanding the meaning of the text. There are several studies that have shown the relationship between vocabulary knowledge and reading comprehension (Joshi & Aaron, 2000; Qian, 2002; Joshi, 2005; Ricketts, et al., 2007; Martin-Chang & Gould, 2008; Manyak & Bauer, 2009). The aforementioned studies show the close relationship between vocabulary knowledge and reading comprehension. Students with limited vocabulary mastery tend to have difficulty in understanding written text. Consequently, they read less and acquire fewer words. On the other hand, students with better vocabulary knowledge read more and improve their comprehension.

Since it plays significant role in reading, teacher has to pay attention to this issue carefully. It is generally accepted that students learn vocabulary more effectively when they are directly involved in constructing meaning rather than in memorizing definition or synonyms. That's why teachers should encourage students to actively construct links between new information and previously known information about a word. It is helpful for students to understand how they gradually learn words. Being active and cognizant of this process will result in better memory about new words. Dale and O'Rourke (1986), cited in Sedita (2005) proposed a model of four levels of word knowledge. This model should be shared with students so they can be more metacognitive (thinking about thinking) and metalinguistic (thinking about the structure of words) when learning new words: 1. I never saw it before 2. I've heard of it, but I don't know what it means 3. I recognize it in context – it has something to do with... 4. I know it.

Other than vocabulary problems, some factors affect students' reading comprehension are identified by research. Snow (2002) as cited in Wolley (2011) has identified three board areas that impact upon reading within the socio-cultural context, to which has been added the central role of purpose. Socio-cultural context includes all of the

cultural practices within which the learners and learning are placed, in part is the context of classroom. In addition, learners are also shaped by their broader experiences, background knowledge and social/ cultural identities that they bring to a learning activity. Moreover, most learners have reading problems because they lack the specific strategies necessary for efficient reading. When FL reading is a laborious, unpleasant, and unsuccessful process, readers will often be unwilling to read in the target language. This explains why most ESL/ EFL learners do not enjoy reading in English. They simply do not understand what they are reading (Arnold, 2009; Nuttall, 1982 as cited by Chen & Chen, 2015). Hence, a good reader should find a strategy to minimize their reading problem. Research has found that in order to enhance their knowledge about reading strategies and strategy use, EFL students need either explicit strategy instruction or metacognitive activities (Carrell, 1998; Salataci & Akyel, 2002; Dhieb-Hania, 2003; Fung et al., 2003; Martinez, 2006; Cubukcu, 2008 in Wilawan, 2013).

### **METACOGNITION AND METACOGNITIVE STRATEGY IN READING**

Learners should apply strategy while reading in order to make sense of the text. The two most important strategies that are required to achieve understanding of the text in the sense that the learner need are cognitive and metacognitive strategies. These are important to not only notice their thinking skills, but also to plan and evaluate their processes. The problem relates to the terms is that it is difficult to distinguish between what is cognitive strategies and metacognitive strategies since both are closely related and often overlap. Cognitive strategies basically refers to knowing how to reach a goal, for example making prediction, translating, summarizing, linking with prior knowledge or experience, applying grammar rules, and guessing from context. Meanwhile, metacognitive strategies are to make sure that the goal was reached successful, such as monitoring and directing the processes of problem solving; self-regulation or self-management, planning and monitoring strategies (Khezrlou, 2012).

Through some studies, it is reported that when readers encounter comprehension problems, they use strategies to overcome their difficulties. Different learners seem to approach reading tasks in different ways, and some of these ways appear to lead to better comprehension than other ones. Since comprehending text is a complex mental process, readers need to use their prior knowledge to interpret the information in the text and construct a meaningful representation of what the text is. It is important that the readers have to understand and remember what the text is, and also they need to monitor whether comprehended text makes sense or not and whether the information learned from the text can be used to achieve their goals. Good readers know how to use cognitive and metacognitive strategies together to develop a deeper understanding of a book's theme or topic. They learn or "construct knowledge" (using cognitive strategies) through a variety of methods, and then recognize (using metacognitive strategies) when they lack understanding and, consequently, choose the right tools to correct the problem.

The term metacognition as proposed by Flavel (1979) is defined as an individual's knowledge about the cognitive processes and his or her ability to manage the use of appropriate processes to maximize learning. Moore (1982) also gives explanation about metacognition as "an individual's knowledge about various aspects of thinking". While

according to Brown (1987), metacognition refers to one's knowledge and control of one's own cognitive system. Chaudron (1988) in Cahyono & Widiati (2006) state that metacognition refers to knowledge about regulation of cognition (planning, monitoring, and evaluating). In addition, O' Malley, et al. in Wilawan (2013) define metacognitive as thinking about the learning process, planning for learning, monitoring for comprehension or production, and evaluating learning after the language activity is complete.

During reading, metacognitive processing is expressed through strategies. Eventually, metacognitive strategies relates to the learners' awareness of monitoring themselves thus metacognitive strategies are closely related to metacognitive awareness. The reader must purposefully or intentionally or willfully invoke strategies, and does so to regulate and enhance learning from text. In doing so, a reader allocates significant attention to controlling, monitoring, and evaluating the reading process. This is in line with what Sheorey & Mokhtari (2001) in Pei (2014) states that metacognitive awareness includes readers' conscious awareness of strategic reading processes, of the reading strategy repertoires, and of their actual utilization of the strategies to maximize text comprehension. Metacognitive awareness of reading strategies can help students to understand not only what strategies they can use (declarative knowledge) or how they should use them (procedural knowledge) but also why, when, and where they are supposed to use them at a particular stage, and how to evaluate their efficacy (conditional knowledge), along with awareness of the purpose of reading that might trigger particular strategies (Anderson, 2002; Carrell, 1989 in Alhaqbani & Riazi, 2012). Such an approach is likely to lead students eventually to become skilled readers.

According to Oxford (1990) in Hung and Ngan (2015), some specific metacognitive strategies that can be applied are: thinking about what has been known about topic (linking the present topic with previous relevant ones), identifying purpose for reading (determining task purposes so as to apply appropriate reading acts), paying attention (making a decision promptly what to pay attention to, and what to ignore), and self-evaluating (reflecting on what has been done and how it has been done (in the reading)).

## **METACOGNITIVE STRATEGY INSTRUCTIONS**

Many experts refined that teacher should possess some skills regarding to teaching reading activity. Patel and Jain (2008) stated some skills copes with the skill of teaching reading include the skill to select authentic reading material, ability to motivate the students, and choose some eclectic approach in order to help the students to have better comprehension and understanding. Halfield & Halfield (2008), in accordance with that, denoted that teacher should have skill to engage their students to explore their sub-skills in reading include activating their background knowledge, ability in predicting, guessing new words and using linkers. In selecting the appropriate reading selection, the teacher must convince that the text must be interesting, be appropriate to the learners' level, has a variety of different text types, and include both intensive and extensive reading.

To that end, as the students need to master a number of reading strategies to be able to comprehend text information, thus, reading instruction should help students become strategic readers. A well-structured environment, pedagogical support, sufficient time and

opportunity should be provided for students to develop the strategies necessary for meaningful learning. In the past three decades, the fields of pedagogy and reading have focused on strategies, and strategies have been given an important role in reading behavior discussions. Readers may become expert readers and learners and also develop a more positive attitude towards reading if they are explicitly taught effective strategies and trained to check and monitor their comprehension while reading (e.g., Dole et al., 1991; Janzen, 2003; McNamara, 2007; Pressley, 2006 in Kazemi, 2013). This is in line with Oxford (1990) in Pei (2014) statement that explicit strategy instruction raises learners' consciousness both of their own strategy use and of the existence of other strategies. Teachers work to guide students to become more strategic thinkers by helping them understand the way they are processing information. Questioning, visualizing, predicting and synthesizing information are all ways that readers can examine their thinking process.

The strategy instruction based on Chamot & O' Malley's Cognitive Academic Language Learning Approach (CALLA) model includes five steps, namely 1) *preparation*, 2) *presentation*, 3) *practice*, 4) *evaluation*, and 5) *expansion* (Cubukcu, 2008). Each of the instructional stages has its own particular aims and procedures. In *Preparation* stage, the purpose is to help students identify strategies they are already using and to develop their metacognitive awareness of the relationship between their own mental processes and effective learning. In relation to reading comprehension, students with the help and guidance of the teacher set the specific goal to accomplish the task. Next, *Presentation* stage relates to modeling the learning strategy. Learners are explicitly taught about variety of strategies to use, for instance which relate to reading task and unknown vocabularies. In *Practice* stage, students had the opportunity of practicing the learning strategies with an authentic learning task. They are asked to make conscious effort using the metacognitive strategy in combination with vocabulary and reading. After that, in the fourth stage which is *Evaluation* stage, the main purpose of this stage is to provide students with opportunities to evaluate their own success in using learning strategies. Finally, in *Expansion* stage, students are encouraged to use the strategies that they find most effective, apply these strategies in new context, and devise their own individual combination and interpretation of metacognitive learning strategies.

## **TEACHING PROCEDURE**

In applying metacognitive strategies in teaching reading, teacher gives instructions and modeling in order to make the students think about the strategies they use in comprehending a reading passage as well as enhance their vocabulary achievement. According to Cahyono & Utami (2006), current approaches to reading instruction usually divide a reading lesson into three parts, namely pre-reading activities (made congruent with the student planning), during- reading activities (which conform to the student monitoring), and ends with post-reading activities (tailored to the student evaluating activities).

- Pre-Teaching
  1. Thinking about what has been known about the topic. This step is intended to activate students' background knowledge of the lesson's topic. The teacher can capture the students' attention by pose a topic or picture. Teacher then asks the students about what they know about the topic (the activities can also be employed to elaborate the students' vocabularies by mapping the words categories or classification).
- Whilst-Teaching
  2. Identifying purpose for reading. The teacher gives the text or part of text to the students, and asks the students about the purpose of reading activity (whether they want to find main idea, answer a question, guess meaning from the context etc.). While answering this question, the students finally find the reason why and what they read for.
  3. The teacher leads the students to find ways to reach their goal (by questioning what to pay attention or what to ignore. For example, when the students stated that they want to answer questions, teacher asks them whether they should read the whole passage or scanning the text to find certain information to answer the questions. Another example, if they want to guess meaning from context, teacher can ask them whether they can find the context from the description, example, synonym, antonym, etc.).
- Post-Teaching
  4. Self-Evaluating. The teacher encourages the students to review what they have learned from the reading activities, for examples by utilizing Learning Log. Learning Logs are like diaries students keep that record their reflections about what they are learning and how they are going about learning it (e.g. I've been learning about..., Knowing about this topic helps me..., This topic reminds me of..., The part I know the most is about..., the part that is the most confusing is about..., I'd like to know more about...). They are also useful tools for teachers because they can reveal students' perceptions (and misperceptions) of the information, as well as reveal how they are reacting to the way the material is being taught.

## CONCLUSION

There are many strategies in reading that can be used by the students as readers to reach the goal of reading activity as well as improve vocabulary achievement. Teaching reading comprehension and enlarging students' vocabulary using metacognitive strategies instruction is not only beneficial for students to reach comprehension but also beneficial in promoting their high order thinking skills. The ultimate goal of strategy instruction is transfer — to be able to use any strategy at any time and for any purpose. Teaching for metacognitive strategies assures that students will be able to successfully use these strategies well into adulthood. A useful suggestion is that this strategy can be applied for any level or grade, by considering the students' background and degree of material difficulties.

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