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Enhancing EFL Readers' Metacognition

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Abstract
This article discusses two components of metacognition: knowledge of cognition and regulation of cognition, which are of great importance in learning. In order to be more successful, competent readers, EFL students need assistance in promoting both aspects of metacognition. This article also reviews several ways of improving EFL students' knowledge and regulation of cognition. These may include using tools to assess their metacognitive knowledge and strategy use, applying instructional aids to develop their regulatory skills, and implementing two instructional practices which encourage metacognition: Cognitive Academic Language Learning Approach (CALLA) and Experience-Text-Relationship (ETR).
Key words: metacognitive knowledge, metacognitive regulation, strategy instruction

1. Introduction

Metacognition has received considerable attention among researchers over the past three decades. Its significant role in reading comprehension has also been widely recognized. Previous studies have indicated that metacognitive awareness is of great importance for improving reading performance (Carrell, 1998; Sheorey & Mokhtari, 2001; Hacker, 2004; Zhang & Wu, 2009). Based on this notion, extensive research has been conducted to investigate the possible impacts of metacognitive instruction on reading comprehension (Salataci & Akyel, 2002; Dhieb-Hania, 2003; Fung et al., 2003; Iwai, 2011). The findings revealed that once students' reading strategy awareness improves, their reading performance also improves, and that it would be helpful for foreign language readers to be aware of reading strategies and know how to regulate the use of those strategies. That is, they should know which strategies to apply and how to apply them to ensure success in reading comprehension.

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). Strategy instruction is meant to make students metacognitive in learning. In this instructional model, the instructor becomes a mediator who provides explicit explanation, modeling, and scaffolding to help students become aware of the strategies they employ, regulate strategy use while reading, construct understandings about the content of the text, and monitor their comprehension. The instruction requires teachers to create learning environments where students could apply strategies and reflect on their cognitive processes while reading.

In conjunction with strategy instruction, implementing tools, instructional aids, and activities also plays a significant role in helping teachers understand students' needs and know what is essential for teaching students to be metacognitive (Schraw, 2001; Lei et al., 2010). These facilitators can be used to gain knowledge and necessary information about students' beliefs or awareness of reading strategies. They also provide frameworks in which students could gradually develop their own regulatory skills. The information obtained from these supplies, as a result, allows instructors to adjust their teaching methods and work more efficiently to help students become strategic, responsive readers. Meanwhile, through these resources, students themselves know about what strategies they are using and how they are using them, understand their own needs as well as their reading problems.

The main purpose of this article is to review various means of developing metacognition. The article first outlines the concept of metacognition and makes a distinction between knowledge of cognition and regulation of cognition. Then it focuses on the approaches and instruments used to promote metacognitive knowledge. Instructional aids, methods and activities to enhance students' regulation of cognition are also discussed. The next section of the article includes two reading approaches focusing on strategy instruction through which metacognition can be improved.

2. Metacognition

Metacognition was first described by Flavell (1979) as an individual's knowledge about the cognitive processes and his or her ability to manage the use of appropriate processes to maximize learning. O'Malley et al. (1985) defines metacognition as thinking about the learning process, planning for learning, monitoring for comprehension or production, and evaluating learning after the language activity is complete. In terms of reading, metacognitive awareness involves readers' "knowledge of strategies for processing texts, the ability to monitor

comprehension, and the ability to adjust strategies as needed" (Auerbach & Paxton, 1997, cited in Zhang & Wu, 2009).

According to Schraw (2001), metacognition refers to an individual's knowledge about cognition and regulation of cognition. Knowledge of cognition concerns what one knows about the cognitive processes or general strategies for learning. It is divided into three kinds of awareness, i.e., declarative, procedural, and conditional knowledge. Declarative knowledge refers to knowledge about strategies, one's own learning abilities and factors influencing one's learning performance. Procedural knowledge includes knowledge about how different strategies can be used to solve problems. Conditional knowledge is knowing when and why to apply the strategies. In other words, a metacognitive person knows what the strategies are, how to use them, and under what conditions they might be appropriate.

Regulation of cognition includes a set of activities which help learners gain metacognitive thinking strategies and control their learning (Schraw, 2001). Three important regulatory mechanisms are planning, monitoring, and evaluating (Carrell, 1998; Mokhtari & Reichard, 2002; Fung et al., 2003). Planning includes the selection of appropriate strategies in order to achieve a goal. Monitoring involves the awareness of comprehension and modification of the strategies. Evaluation entails the examination of progress toward goals—determining whether or not what they are doing is really effective.

The two components of metacognition are interrelated and essential for successful understanding and learning (Schraw, 2001; Brown, 1987). In order to increase metacognition in a reading class, it is therefore necessary to develop both aspects of metacognition.

3. Metacognitive Knowledge

As mentioned previously, metacognitive knowledge or knowledge of cognition is based on three subcomponents: knowing what the strategy is (declarative), knowing how it is used (procedural) and when it should be applied (conditional). It could be enhanced in a classroom setting if students know about their strategy use, prior knowledge, needs and other reading problems. There are, in fact, several methods for improving metacognitive knowledge. These include using certain instruments (i.e. think-aloud protocols, questionnaires, and interviews) as a means of measuring students' metacognitive awareness (Veenman et al., 2006) and instructional approaches (Chamot & O'Malley, 1987; Au, 1979) to promote knowledge of cognition.

Enhancing knowledge of cognition

Previous research has revealed that there is a positive relationship between students' improved reading performance and their awareness and use of reading strategies (Carrell, 1991; Pressley, 2000). In other words, by increasing awareness of their reading strategies, students can improve comprehension. One way to help instructors and students become aware of strategy use is through the analysis of think-aloud protocols (also known as *verbal protocol analysis*). A growing number of studies have shown that the think-aloud procedure provides an effective way to investigate readers' processing as well as their strengths and weaknesses (Ericsson & Simon, 1993; Green, 1998: Laing & Kamhi, 2002; Salataci & Akyel, 2002; Camps, 2003; Fung et al., 2003). The think-aloud protocol consists of utterances made as an individual carries out a reading task. The readers are usually asked to verbalize their thoughts, feelings, and opinions. Through verbalization, they become more aware of their strategies and what changes they should make in order to improve their reading performance. The think-aloud procedure, according to Anderson (2004), is an effective tool to strengthen metacognitive awareness.

Another instrument which can be used as a means of measuring metacognitive knowledge is the Survey of Reading Strategies (SORS), developed by Mokhtari and Sheorey (2002). The SORS questionnaire is designed to assess ESL students' metacognitive awareness and perceived use of reading strategies while reading academic materials in English. The information derived from the SORS helps students develop a better awareness of their reading strategies and assists teachers in measuring such awareness. The tool, thus, is effective for making students become responsive, thoughtful readers and for enabling instructors to address their academic reading needs. The SORS consists of 30 items, using a 5-point Likert scale. It is divided into three parts: Global Reading Strategies (GLOB); Problem Solving Strategies (PROB); and Supporting Strategies (SUP). Global Reading Strategies are planned techniques by which students regulate their reading. Problem Solving Strategies involve techniques which students use to solve problems encountered while reading. Supporting Strategies include supporting techniques which students employ in order to facilitate their reading comprehension.

Zhang & Wu (2009) measured the metacognitive awareness of Chinese senior high school students and their perceived use of reading strategies, through the SORS. They made several adaptations to the instrument, so that it could be well suited to their study. The alterations included translating the questionnaire into Chinese (the participants' native language), rearranging the sequence of questionnaire items, and disregarding or rephrasing certain statements. This was to achieve the best results in data collection and to ensure that the participants thoroughly understood each statement in the questionnaire. Each questionnaire item offered a closed response format with five options (*5—Always; 4—Usually; 3—Sometimes; 2—Occasionally; 1—Never*). The information

derived from the SORS helps increase understanding of students' metacognitive awareness of reading strategies. Instructors, according to Zhang and Wu (2009), can use this knowledge to adjust their instruction and give students guidance. The assessment, on the other hand, helps the students become aware of their reading processes and weaknesses during reading.

Although the think-aloud protocols and questionnaires are widely used methods which provides a great deal of information about readers' metacognitive knowledge, there are some limitations to these measures (Helms-Lorenz & Jacobse, 2008; Whitebread et al., 2009). A limitation of think-aloud protocols lies in the fact that the information-gathering and analyzing processes are complicated, laborious and largely time-consuming. The method is, therefore, more appropriate if applied with the small number of students. According to Camps (2003), the potential of the think-aloud approach can be constrained in case students do not reflect adequate useful data. The fact that some students are not good at verbalizing their thoughts and others are not accustomed to the situation where the reading task has to be performed concurrently with the verbalization is likely to lead to incomplete think-aloud utterances, resulting in an inaccurate portrait of students' strategy knowledge. This factor, however, can be controlled if students are provided with training on how to perform the think-aloud protocols properly (Ericsson & Simon, 1993; Camps, 2003). Practice in the procedure also assists students in becoming familiar with the task, thereby producing more reliable data. As regards EFL students, it is important that they should be allowed to use their native language, so that they can verbalize their thoughts as much as possible. It is believed that think-aloud protocols will provide detailed insights into metacognitive knowledge if students report in their own language (Moll, 1988; Moll et al., 1980, as cited in Fung et al., 2003). Limitations of questionnaires are the fact that they may not offer students choices that actually reflect their awareness of strategy use due to the limit of the answers provided in a multiple-choice or Likert-scale format. Further, the questionnaire responses may be affected by students' reflection skills and social pressure (Helms-Lorenz & Jacobse, 2008), thereby resulting in the lack of accuracy. Instructors should therefore determine precisely what metacognitive knowledge can be best measured by which technique.

Whitebread et al. (2009) designed an observational checklist to assess metacognition and self-regulation in children aged 3-5 years. The checklist identifies verbal and non-verbal behaviours indicative of metacognitive knowledge, metacognitive regulation, and emotional and motivational regulation. Teachers are to rate the students' classroom performance on each behaviour on a 4-point Likert scale. The observational technique has advantages over questionnaire and think-aloud methods due to the fact that it can capture learners' actual behaviours and can take into account social processes which may be necessary for the acquisition of metacognitive skills (Whitebread et al., 2009). The checklist also has more validity than other techniques, because it is somewhat independent of the student's verbal ability and working memory capacity (Lai, 2011). Furthermore, this method may be embedded in naturalistic, educational settings.

Recent research supports the view that metacognitive processes form a complex structure which needs to be assessed using multi-method techniques (Zhang & Wu, 2009; Bannert & Mengelkamp, 2008; Scott, 2008; Veenman et al., 2006; Sarac & Karakelle, 2012). Taken into consideration the advantages and disadvantages of each method, assessments by one means should be conducted in tandem with another for additional valuable information. Zhang and Wu (2009) recommend that in addition to the SORS questionnaire, a research study should make use of think-aloud protocols or interviews in order to further investigate students' awareness of their strategy use. Scott (2008) found that the think-aloud data in his study reported only the text content but did not provide metacognitive responses, and that responses on the questionnaires gave evidence of the students' strategy knowledge and awareness. There was also evidence of metacognition in the interview data. Owing to the fact that different measures generate different data types, Scott suggests using more than one approach to tackle the disadvantages of a single method. For example, once the think-aloud assessment has been completed, it could be followed by an interview. Responses to interview questions can supplement unclear information gathered from think-aloud protocols, making it easier to understand and interpret. The idea of assessing metacognition using different means is consistent with other researchers' (Veenman et al., 2006; Bannert & Mengelkamp, 2008; Sarac & Karakelle, 2012).

Schraw (2001) proposes an instructional aid called the Strategy Evaluation Matrix (SEM). This instrument is designed to develop metacognitive knowledge in students. The SEM includes five strategies, how and when they are used, and the conditions where they are appropriate. Students are encouraged to complete each row of the matrix, reflect on their own learning and exchange ideas with other students about How to use, When to use, and Why to use each strategy. This is to enhance the development of explicit declarative, procedural and conditional knowledge. Schraw (2001) maintains that the SEM can be useful in three ways. First, it promotes strategy use, thereby improving reading performance. Second, it helps increase metacognitive knowledge. Finally, the matrix enables students to gain knowledge of how, when, and where to use strategies (Schraw, 2001: 11).

According to Murphy (2008), metacognitive knowledge is conceptualized as declarative, procedural and conditional. In this regard, she developed a framework which was grounded upon these three types of knowledge

in order to develop metacognitive awareness. The framework provides prompts in the form of questions and actual examples or statements corresponding to each knowledge component. For declarative knowledge, the prompts and examples enables learners to become reflective and aware of their strengths, weaknesses, interests and feeling while performing a task. The prompts and examples for procedural knowledge serve as a guide as to how tasks should be performed. With prompts and examples for conditional knowledge, students are directed towards the awareness of *when* to use strategies to solve problems and when not to use them and *why* one strategy is more effective than another, and knowledge of the situations in which certain strategies should be applied and might be most appropriate. Murphy claims that the model can also be used by instructors to elicit learners' metacognitive thinking, encourage them to generate discussion and assess their participation in discussions. Although the prompts and examples in her paper serve as a basis for identifying and promoting metacognition in online discussion, alterations can be made in order to suit reading instruction. Presented below are samples of prompts and examples for each type of knowledge, adapted from Murphy's (2008).

Types of knowledge	Prompts	Examples
Declarative	1. What are some ways I can derive meaning from the text? 2. What are some strategies that worked for me in the past? 3. What are my strengths as a reader? 4. What are my weaknesses as a reader?	1. I can summarize, synthesize, analyse, interpret and draw conclusions. 2. I hypothesized and made predictions about the text. 3. I'm good at making connections between ideas. 4. I find it hard to guess the meaning of unknown words.
Procedural	1. How do I get the gist of a text? 2. How do I summarize the ideas of the text? 3. How do I engage in critical thinking?	1. I read the title, subtitles, the first and last paragraph to get the general idea. 2. I can focus on keywords in order to summarize the ideas. 3. To engage in critical thinking, I first need to identify an issue, then I need to…
Conditional	1. When should I think of some questions about the text? 2. What specific strategies do I need to use in this context?	1. I will pay attention to headings, subheadings, and highlighted words and start building questions about each part. 2. I will read slowly and carefully for better understanding.

Figure 3: Prompts and examples for metacognitive knowledge
(adapted from Murphy, 2008)

The enhancement of metacognitive knowledge must be accompanied by the development of metacognitive regulation. That is, apart from being aware of their reading processes, students should also be guided to regulate or monitor the use of those strategies.

4. Metacognitive Regulation

Research supports the idea that the regulation of cognition is an important aspect of successful reading. Learners with regulatory skills can be described as motivated, strategic, and metacognitive (Perry et al., 2007). These students are typically able to use existing strategies, cope with the difficulties they encounter and monitor their comprehension. The regulation of cognition has been considered by a number of studies to be a crucial element in reading comprehension improvement (Auerbach & Paxton, 1997). As previously described, regulatory strategy concerns three important parts: planning, monitoring, and evaluating. Examples for planning are goal setting, scheduling, making predictions, and choosing appropriate strategies for task achievement before the task begins. Monitoring includes revising, modifying while performing the task, asking oneself questions about how well one is doing and whether the goals are being met. Evaluating involves assessing the results and effectiveness of the learning process once the task has been completed. In order to facilitate the regulation of cognition, instructors need to create opportunities or environments that enable students to engage in planning, monitoring and evaluating their learning (Schraw, 2001).

Enhancing regulation of cognition

Schraw (2001) encouraged instructors to use a regulatory checklist (RC) as an instructional aid to improve

students' regulation of cognition. The RC consists of three important components: planning, monitoring, and evaluating. Schreiber (2005) states that this regulatory checklist is useful in that it "provides a framework on which to model the cognitive processes of experts" (p.232). With the checklist, students follow a regulatory sequence which assists them in controlling their learning processes and performance. The prompts from the checklist help them become more strategic and systematic in their progress through an assignment. For effective implementation of this instructional aid, as Schraw (2001) maintains, it is necessary to provide students with an opportunity and a sufficient amount of time to practice and reflect upon their own learning.

Similar to Schraw's (2001) regulatory checklist (RC), Kujawa and Huske (1995) also proposes prompts that help improve regulation of cognition. The prompts are based upon the three essential skills: planning, monitoring, and evaluating. Planning involves setting purposes and making predictions about the material at the very beginning of the assignment. Monitoring concerns identifying the task and checking comprehension. Evaluating includes the assessment of the result and progress towards goals which can lead to more appropriate modifications.

Parsons (2008) designed an organizational framework, ACCESS, which can assist teachers in planning instruction. The six characteristics of the model were based upon extensive research into fostering self-regulated learning. ACCESS stands for *authentic, collaboration, challenge, end product, self-direction, and sustain learning*. Parsons gives an example of an ACCESS task by illustrating a classroom with a teacher and students working collaboratively. Each group of students had a specific task to read and study the reading selections and to complete authentic, challenging projects (e.g. creating newspaper articles) based upon those reading materials. Meanwhile, the teacher was giving an explicit explanation of how text structure could be used to facilitate understanding of the informational texts. Explicit instruction and guidance was also provided when necessary. From this example, Parsons claims that the newspaper task is authentic because the students work for real purposes. The assignment allows students to work together, it is therefore collaborative. Due to the fact that the newspaper activity is not an easy task and it requires the students to work hard together, it is motivating and challenging to them. The assignment culminates with an end product because it has a clear purpose; the students must come up with a completed artifact, a finalized newspaper in this case. This activity also provides self-direction; the students are given choices and allowed to make their own decisions about the work load, information gathering, the content and format of the newspaper. Creating a newspaper sustained several weeks. Students are then engaged in this assignment over a long period of time. Sustained learning across time allows students to set an explicit purpose in order to complete the task (Miller & Meece, 1999; Perry et al., 2004, cited in Parsons, 2008). Parsons maintains that assignments which include these six components are viewed as promoting self-regulated learning. Classroom activities, however, may not need to include all these characteristics.

5. Instructional Approaches

Previous research indicated that metacognitive knowledge and regulation could be markedly developed by strategy instruction (Carrell, 1998; Salataci & Akyel, 2002; Dhieb-Hania, 2003; Fung et al., 2003; Martinez, 2006). In order to help students develop awareness of their own cognitive processes and abilities as well as essential skills such as planning, monitoring, evaluating, specific instruction should be integrated into the reading course so that they will become more successful readers (Celce-Murcia and Olshtain, 2000). It is important that EFL readers are taught to be aware of what strategies are required, when and how they should apply them, when confronted with difficulties in reading. Also, they need to learn to self-regulate and self-evaluate their own cognitive processing. Such awareness and regulatory skills can be increased through instructional approaches which have been successfully applied with EFL readers. These include the Cognitive Academic Language Learning Approach (CALLA) and Experience-Text Relationship (ETR)—both integrate the three subcomponents of metacognitive knowledge (declarative, procedural, and conditional knowledge) and the three regulatory mechanisms (planning, monitoring, and evaluating).

5.1 The Cognitive Academic Language Learning Approach

The Cognitive Academic Language Learning Approach (CALLA) was originally developed as an instructional model by Chamot and O'Malley (1987) in order to assist students learning English as a second language in becoming more successful. Based on the cognitive learning theory, in which students are viewed as active and productive learners, CALLA integrates content-based language instruction with metacognitive awareness of the learning process and learning strategies. It provides students with an opportunity to learn a new language independently and to become self-regulated of their own learning. The CALLA model encourages students to employ various strategies of learning, make use of prior knowledge to aid comprehension, and construct meaning from text information.

The CALLA approach combines three basic components: content topics; development of academic language; learning strategy. Regarding content academic subjects, students should be allowed to experience authentic content to which they can subsequently apply strategies as well as undertaking classroom activities or tasks

which require more practice and extensive use of the learning strategies. For the development of academic language, it is necessary to equip students with the language functions (i.e. describing, classifying, explaining, comparing and/or contrasting) used in different subject areas. It is also important to learn the vocabulary and grammatical structures. The third component which integrates the three basic parts includes learning strategies. CALLA's students are taught three types of learning strategies: cognitive strategies, metacognitive knowledge and social/affective strategies. By applying cognitive strategies, students construct meaning of incoming information by categorizing, making connections between prior knowledge and new ideas, making inferences and summarizing. Metacognitive strategies enable students to determine which learning strategies are most appropriate for a certain task, self-monitor, and evaluate achievement. Through the use of social/affective strategies, students participate in group activities and interact with their classmates for information-gathering, problem-solving, and enhanced understanding of the content material.

The integration of the three components mentioned above is conducted through five instructional phases:

Preparation: At this stage, students are provided with an overview about the entire lesson theme and guided to retrieve their existing knowledge relevant to the topic. Students should also be explained what they will learn, why the concepts and skills are important for the lesson and how they will achieve the learning.

Presentation: In this phase, the use of the new strategy is modeled and explained about how and when to use it. The new concept or model is introduced using presentation modes, demonstrations or visual aides. The application of graphics and titles to make predictions is also included.

Practice: Practice phase emphasizes students' use of strategies to acquire the new material and engagement in cooperative learning activities. Students work together in groups, ask questions, gain knowledge, and exchange ideas. In this phase students are made conscious of their thought processes while performing the task.

Evaluation: Students, at this stage, assess their level of understanding, the strategy use and its effectiveness for the task. They are also asked to analyze the reading problems they encountered.

Expansion: During this phase, students apply new knowledge and skills they have acquired to new situations or tasks.

According to Chamot and O'Malley (1996), it is unnecessary to go though these instructional phases in a linear, strict sequence. Also, practice of each step may vary depending upon students' needs.

Cubukcu (2008) examined how strategy instruction affected Turkish students' reading comprehension and vocabulary development in English. Participants of his study were divided into two groups—one as experimental and the other control. The experimental group received CALLA instruction which incorporated metacognitive strategies. Following the five steps of the model, the students were provided with opportunities to select and apply different, appropriate learning strategies. The post-test scores showed that the experimental group achieved significantly better results than the control group. The study also indicated that students who received the CALLA instruction learned to think metacognitively about the strategies they could use in their reading tasks and become better, strategic readers after the training.

5.2 Experience-Text-Relationship

Another instructional approach is Experience-Text-Relationship (ETR), originally designed by teachers in Hawaii and researchers, particularly Kathryn Au (1979). The ETR method focuses mainly on general discussion to bridge students' background knowledge with the material they will be reading. This teaching model is performed in three phases: Experience (E); Text (T); and Relationship (R).

Experience: For pre-reading, teachers create a motivating reading environment by asking students questions about their background experiences and knowledge directly related to the selected theme. Based on the discussion, students make predictions about what they will soon read and set goals.

Text: While reading, teachers and students stop periodically to discuss the text content, evaluate or confirm their predictions, and ensure comprehension. Teachers, at this point, may need to correct students' misunderstanding or confusions.

Relationship: For post-reading, students are guided to draw connections between the ideas from the reading text to their personal experiences which have been discussed in the Experience phase. The integration of the text information and prior knowledge helps increase students' understanding of the reading task (Dowhower, 1999).

Salataci and Akyel (2002) investigated the possible effects of strategy instruction on reading strategies in Turkish and EFL and reading comprehension scores in EFL. The subjects received an instruction on reading strategies. Using the Experience-Text-Relationship (ETR) method, students were guided to elicit their

background knowledge about the topic of the passage, ensure their clear understanding of the text and relate the content of the text to their personal experiences. It was found that readers with lower level language proficiency benefited from the ETR approach. Carrell et al. (1989) conducted a study with bilingual university students from different countries. The subjects were divided into four groups: one group participating in semantic mapping; another receiving the ETR training; the other two assigned as controls. The findings revealed the effectiveness of the ETR instruction in improving the students' comprehension of TOEFL reading passages and their ability to create semantic maps without scaffolding.

6. Final Thoughts

Metacognition plays an important role in reading comprehension since it enables readers to reflect upon and monitor their own reading processes. In order to enhance the development of students' metacognition in EFL reading classes, instructors should emphasize both knowledge of cognition and regulation of cognition. First, they need to increase students' awareness of their reading strategy use and abilities. This can be achieved through the use of several instruments such as think-aloud protocols, the SORS and the SEM. It should be noted that more than one type of assessment tools will help provide a more comprehensive view of the students' reading awareness. These tools, however, should not be used merely to indicate how much declarative, procedural or conditional knowledge EFL students possess, rather they should be applied to make students more reflective of their reading strategies, how to use them and when and why to use those strategies. The information derived from these tools enables EFL readers to gain awareness about their reading processes, strengths and weaknesses, so they can search for more efficient strategies. Second, students should be provided with instructional aids or activities that help them regulate their reading processes. Simply knowing the quantity of students' reading awareness is certainly inadequate for the development of metacognition. Students should have opportunities to engage in activities in which they learn to regulate or monitor the use of various strategies to ensure success in reading comprehension. Approaches such as using prompts, the RC, or the ACCESS method, which involve all three phases of reading, i.e., planning, monitoring and evaluating, allow students to systematically and more efficiently control their reading tasks.

The two aspects of metacognition can be met through instructional approaches like the CALLA and ETR. Being known to improve metacognition in students, these teaching methods provide explicit knowledge of what, how and when of the strategies to be applied as well as teacher guidance and modeling of strategies. The CALLA and ETR create learning environments where students can share their knowledge of cognition and engage in activities which could lead to strategy use. The tasks enable them to know, to think, and to reflect upon their learning activities. These instructional models also increase students' responsibility for planning, monitoring and evaluating their reading processes, thereby empowering them to be more successful, independent readers.

Although the instruments and instructional approaches previously discussed help promote students' awareness of reading strategies and regulatory skills, it is not necessary for instructors to include all these components in one reading class. Yet, apart from these tools and teaching methods, there are many other ways which can be used to enhance the development of metacognitive knowledge and regulation. Any technique could be applied as long as they are of great benefits to students. The point is instructors must select appropriate tools and classroom activities that meet their requirements and suit different contexts and various kinds of EFL learners. The aim is to teach students to read metacognitively—enabling them to become more aware of their reading strategies and abilities as well as to know what and how to use different strategies in certain situations. Since EFL students seem to experience greater difficulties in reading than first language learners, a sufficient amount of time and ample opportunities for practicing specific skills or performing reading tasks are particularly essential for them to achieve maximal reading performance.

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