Comprehension Monitoring Strategies for Fostering Reading Comprehension

Abstract
The present article investigates the effects of comprehension monitoring strategies on performance in reading comprehension. The monitoring techniques opted for are coding texts, restating, asking questions, thinking aloud and repair strategies. Particular attention is given to this subject matter because reading is the language skill most widely practiced in the academic context, and thus success with reading comprehension is of paramount importance for learners. Comprehension, however, is not taught as such; it is rather tested via some questions that follow the reading of a given text. Therein lays the need for finding the instructional methods which can best assist learners in improving their text understanding.

Introduction
Reading is by far the most eminent skill that plays a significant role in improving readers’ language proficiency especially in a foreign language setting. Actually, EFL learners basically rely on this skill to acquire knowledge as foreign language is seldom spoken outside the classroom. Nevertheless, students tend to handle reading without adequate skillfulness; this negatively affects their reading efficiency, and causes comprehension difficulty that is not easy to discern. Thus, for most readers, comprehension is always challenging. They may understand the words separately, but linking them together into meaningful ideas often does not happen as it should. They have not developed sufficient skills to comprehension. So, the problem lies in the fact
that beginning readers are less aware of strategies that can be used to monitor their comprehension than good readers.

EFL learners may not be aware of strategies they could use to achieve better understanding. The objective of this article is to shed light on the strategies that can be used by EFL learners as well as by teacher to improve reading comprehension. In other words, it is meant to give solution to the difficulties that confront EFL learners in their reading tasks. The aim is to prove that adopting comprehension monitoring strategy can foster the learners’ reading comprehension.

Comprehension Monitoring Strategies

Although instruction on text comprehension has been a major research topic for more than 20 years, the explicit teaching of text comprehension before 1970’s was done largely in content areas, and not in the context of formal reading instruction. The idea behind explicit instruction of text comprehension is that comprehension can be improved by teaching students to use specific cognitive strategies, or to reason strategically when they encounter barriers to comprehension when reading. The goal of such a training was the achievement of competent and self-regulated reading.

Strategic learning during reading is all about monitoring reading and making sense. However, good teachers know that teaching students how to monitor their understanding, during the reading process, can take place through adapting comprehension monitoring strategies which is the focus of this article.

Comprehension-Strategy Instruction

What is a Strategy?

Strategies are what we provide to the learner to help him organize and make meaning as he is reading. The learner must be made aware of what is required from him to apply a specific strategy thanks to a full description of the strategy, its features, and steps to be followed in its execution (Pressley, 2002: 45). Israel (2007: 6) refers to this kind of data as “the knowledge function of metacognition”.

How to Use the Strategy

As comprehensive as the definition of a strategy may be, it does not suffice for its fruitful application. A demonstration of how it is implemented in actual reading instances is indispensable. This is achievable by means of think-aloud explanations of the outline employment of the strategy in question (Israel, 2007). Verbal clarification turns around the diverse sub-components of the strategy, and how they operate together as a whole to problem solving a reading complexity (Winograd and Hare, 1988 in Carrell et.al., 2001: 223). ’Procedural function of meta-cognition ’ is the label Israel (2007: 6) gives to this mass of information.

When to Use the Strategy

An important part of the Meta-cognitive teaching of reading strategies entails raising learners awareness to the appropriate times, and conditions under which the carrying out of the inculcated behaviour is needed (Winograd and Hare, 1988; in Carrel et. al., 2001: 22). The circumstances of use are made clearer by establishing
comprehensions, on the one hand, between the arrays of potential strategies applicable in a particular situation, and on the other hand, between occasions of good and bad strategy use (Pressley, 2002: 46).

**Why to Use the Strategy**

It is central to draw the learners’ attention to the rationale behind the selection of a strategy for instruction, its value, and its utility in improving reading comprehension (Schraw, 2001).

When completely informed about the ways in which the taught behaviours will be useful for them, learners as well as teachers will find it easier to shift control of strategy use from the latter to the former (Winograd and Hare, 1998; in Carroll et al., 2001: 234). The ‘When’ and ‘Why’ of strategy instruction is what Israel (2007: 6) calls “executive function of meta-cognition”.

**Cognitive Strategies for Improving Reading Comprehension**

Comprehension strategies are procedures that guide students as attempts to read and write (NRP, 2000). For example, a reader may be taught to generate questions about the text as it is read. These questions are of the ‘Why’, ‘What’, ‘How’, ‘When’ or ‘Why’ variety, and by generating and trying to answer them; the reader processes the text more actively (Pressley, 2002: 47). The value of cognitive strategies in comprehension instruction is, first, their usefulness in the development of instructional procedures and second, the learning of these procedures by students as an aid in their reading and learning, independent of the teacher. (NRP, 2000).

Instruction of strategies for comprehending during reading is a way for teachers to break through students passively, and involve them in their own learning (Meir, 1984). Typically instruction of cognitive strategies employed during reading consists of:

- **The development of an awareness and understanding of the reader's own cognitive processes that is amenable to instruction and learning.**
- **A teacher guiding the reader or modeling for the reader the actions that the reader can take to enhance the comprehension processes used during reading.**
- **The reader practicing those strategies with the teacher assisting until the reader achieves a gradual internalization and independent mastery of these processes** (Pressley, 2002: 48).

The general finding is that when readers are given cognitive strategies instruction, they make significant gain on measures of reading comprehension over students who are trained with conventional instruction procedures (Pressley, 2002: 50).

**What Is Comprehension-Strategy Instruction?**

Comprehension-strategy instruction departs from the convention that “if adequate performance depends on the application of a set of rules, and this rule can be specified exactly, then it should be possible to design instructional routines that introduce the initiated to this possibility” (Baker and Brown, 2002: 375).
There is ample research evidence that text comprehension requires the use of an arsenal of strategies readers need to be aware of, know how to use, and do use frequently (Paris et al., 1991: 610-615). Tankersley (2005: 11) supports this view of studies when asserting that readers will give up and stop reading at once if they have no knowledge of comprehension strategies. Conversely, when they apply them, they can reach satisfactory understanding. As a result, Paris et al. (1991: 624) conclude that reading is strategic, and that strategic reading is typical of skilled readers. Ethnographic studies, interviews, case studies analysis of classrooms discourse, think-aloud, verbal protocols, experiments and observation of classroom practices have supplied educators and reading teachers with an inventory of comprehension strategies known for their impact on enhanced text understanding (Pressley, 2002: 57-59). Experimental research in strategy instruction affirms that studying reading strategies "can be trained and such training can be durable and generalizable" (Baker and Brown, 2002: 382), and that this teaching leads to satisfying gains in comprehension (Cromley, 2005: 195), and memorization of print (Pressley, 2002: 60), and that to be successful, any methodology should be characterized by a meta-cognitive tendency (Israel, 2007: 3).

Two questions with respect to meta-cognitive reading strategies instruction are very important to answer. The first question concerns content strategies, and the second one is about the required instructional practices content (Mier: 1998).

Baker and Brown (2002: 176) have suggested divergent lists of strategies to be taught; nevertheless, all of them intersect in most of the following behaviour:

- Setting a purpose for reading.
- Skimming and previewing.
- Activating text content while reading.
- Differentiating key concepts from trivial one. Using context to clarify an ambiguity or determine a word meaning.
- Inferring or interpreting text at more than the literal meaning; i.e. reading between and beyond the lines.
- Constructing mental images.
- Asking questions about text content.
- Rereading segments of text recognized important or difficult for deeper comprehension.
- Monitoring comprehension and detecting comprehension failures.
- Deploying compensatory strategies to rectify comprehension break downs.
- Summarizing.
- Using graphic organizers, flow-charts, networking, mapping and outlining.
- Varying reading speed and adjusting reading rate.
- Evaluating the material read in terms of content, style, tone.

**Developing Comprehension Ability through Instruction**

As strategic reading is encouraged for sustaining readers’ comprehension then, what strategies should be taught? Comprehension strategies are "specific cognitive procedures that guide readers to become aware of how well they are comprehending as they attempt to read or write" (NRP, 2000: 4-5). In its review of more than 200 studies,
the National Reading Panel (2000) concludes that amid the sixteen categories of strategy instruction surveyed, eight appeared to have a firm scientific ground “for concluding that they improve comprehension in normal readers” (NRP, 2000: 4.42). These strategies are: comprehension monitoring, cooperative learning, graphic and semantic organizers, story structures, question answering, question generation, summarization, and multiple strategies (NRP, 2000: 4-6).

**Cooperative Learning**

Cooperative learning involves learners to work together on strategies, and to be engaged in intellectual discussions to sustain their reading comprehension (NRP, 2000: 4-72).

**Using Graphic and Semantic Organizers and Recognizing Story Structures**

Graphic organizers are diagrams or charts that are drawn to represent the relationship of ideas and information in a print. Different texts take different structures; history texts, for instance, present events in chronological order, an article may be organized around a main thesis whereby supporting details are matched to make a persuasive argument, and a story, on the other hand, is organized around a series of events. Recognizing a story structure, or the way its events are organized into a plot enables the readers to become aware of the important story elements (setting, characters, events, goals …etc), and facilitates their understanding and recall. Graphic organizers, thus, help readers be familiar with different text structures and hence enable them to grasp the flow of information within a particular selection (NRP, 2000: 4-73, 4-91).

**Question Answering**

Question answering strategy involves showing the learners how to find, and use information from a text to answer teacher's questions in order to get more from their reading (NRP, 2000: 4-86).

**Question Generation**

Question generation involves learners' asking, and answering of questions about their reading. This improves their understanding and retention (NRP, 2000: 4-89).

Activating and using background knowledge is often used as part of question answering and question generating strategies. Prior Knowledge activation implies the elicitation of students pre-existing Knowledge of the world that they can use to understand what they read. This may be achieved through pre-reading activities which are conceived as a “bridge between readers knowledge base and the text”; they are viewed as "a preparatory step in which purpose setting and concept development are primary goals" (Tiemey and Cunningham, 2002 in Paris et. Al., 1991: 609). One way to fulfill this aim is to ask students to predict the text ‘content relying on their prior knowledge, often in response to pre-reading questions about the text.
Summarization

Summarization requires from the learner to recognize the important ideas of a text. This strategy helps learners to know about the organization of a text, to identify its main ideas, and to connect them together.

Multiple Strategy Instruction

Multiple strategy instruction entails the use of two or more strategies involved in a teacher-learners interaction, usually in small groups. Readers have to be flexible in choosing among the wide range of strategies according to text demands.

Although reading strategies are powerful tools for readers, Harris and Pressley (2002: 50) Point out that strategy instruction does not cure. They are just one instrument to assist students in reading comprehension. There is clearly more to skilled reading comprehension than knowing and using strategies. According to Pressley (2002: 551-553), teaching decoding skills, developing sight words (reading through chunks), vocabulary instruction and encouraging extensive reading are also important to effective reading comprehension. This was clearly stated by Cromley (2005:201):

"I argue that the best way to improve comprehension is by explicitly teaching vocabulary, background knowledge, and the flexible use of specific strategy".

The Difference between Reading Strategies and Comprehension Monitoring Strategies

From the first examinations of reading strategies, researchers have tried to distinguish "good" strategies from "bad" ones with the intention of training less-proficient readers to use "good" strategies as they read (Block, 1998). However, Mier (1984) pointed out that good strategies do not necessarily lead to successful comprehension. Anderson (1985) claimed that proficient and less proficient readers might actually use the same strategies; this uncovered the fact that reading strategies alone cannot account for the effectiveness of reading comprehension. Being aware of this flow, researchers then started to conduct studies related to comprehension monitoring.

Comparing reading strategies with comprehension monitoring strategies, it is found that many types of reading strategies are similar to those of comprehension monitoring strategies. For example, the reading strategy type of "identifying a purpose for reading" in Paris et.al. (1991) study is almost the same as the comprehension monitoring strategy type "clarifying the purposes of reading" in Baker and Brown's (2002) research. The strategy "rereading" in Block's (1986) research is also found in Collins and Smith's (1980) categories of "reread the current sentences". Moreover, the reading strategy type of "monitoring comprehension" and "self correcting" are also identified by Baker and Brown's (2002) "monitoring ongoing activities to determine whether comprehension is occurring” and “taking corrective action when failures in comprehension are detected”.

It seems that the definition, content, and description of reading strategies are very similar to those of comprehension monitoring strategies, although the definition of each strategy may vary subtly from one study to another. Baker (2000) stated that
comprehension monitoring strategies are more concerned with thinking about the reading experience itself. Pressley (2002) described comprehension monitoring strategies as dealing with pre-assessment and pre-planning, on-line planning and evaluation, post-evaluation of language learning activities and of language use events. He also acknowledges that more investigations have to be done in order to make the distinction between comprehension monitoring, and reading strategies clear.

**Comprehension Monitoring Techniques**

As we explained in the previous title, comprehension monitoring strategies are intended to develop meta-cognitive abilities in readers, that is, to help them think about their own thinking. Mc Shane (2005) claims that through the use of comprehension monitoring techniques, readers learn how to:

- **Actively monitor their understanding.**
- **Identify specific problems when comprehension breaks down and**
- **Take steps to solve their comprehension problems.**

In his attempt to identify monitoring techniques, Mc Shane (2005) affirms that there are five techniques to be effective for students to monitor their comprehension. These techniques are: Thinking aloud, restating, asking questions, coding text and monitoring and repair strategies (Mc Shane 2005).

**Thinking Aloud**

One way to teach adults how good readers monitor their understanding is to show them how you do it (Mc Shane, 2005). Gromley (2005) reported that thinking aloud strategies is used unconsciously by skillful readers; they use a range of strategies to make meaning from text. If they are not skillful, Israel (2007) suggested that the teacher must engage the readers even skillful ones, in a meta-cognitive dialogue about their comprehension of the text, and the use of reading strategies. Baker (2000) pointed out that the think aloud strategy involves modeling these strategies by “thinking aloud” while reading, and responding to a text. Markman (1978) pointed out that thinking aloud is a literacy strategy designed to help students monitor comprehension, and direct their thinking as they work through the problem solving process. He suggested that thinking aloud strategy can be implemented effectively in many content areas. Mc Shane (2005), on the other hand, pointed out that think aloud technique is both a strategy for readers, and an instructional approach the teacher can use with any of the other comprehension strategies as well.

Mc Shane (2005) explains how thinking aloud technique works: you read a passage to the learners, and thinking aloud about how you process the information. When you run into problems, you express your confusion, and talk through your thinking as you solve the problems. Following are examples of strategies you might demonstrate:

- **Stopping to reread or restate a difficult section**
- **Summarizing long sentences or other bits of text and putting them in your own words**
- **Looking back in the text to locate the person or thing that a pronoun refers to**
- Identifying important or not-so-important information
- Using various strategies to identify or determine the meaning of an unknown word (McShane, 2005:37).

Block (1992:68) proposed another application; selecting a piece of text and model conversation about the process a readers use.

**Restating**

Through restating technique, readers identify key elements, and condense important information in their own words during and after reading to solidify meaning (Tenkersley, 2005). McShane (2005) suggested that teachers can teach learners to stop periodically (after each section, for example), and try to restate what has been in their own words. If they have trouble with this, they know they are not getting it.

**Asking Questions**

Another way through which students can monitor their understanding is to ask themselves “who”, “what”, “when”, “where”, and “why” questions after each section or page. If they cannot answer these questions, they have to stop and reread (McShane, 2005). Asking questions or “self-questioning” as identified by Nuttal (1996), in McShane (2005), has been described as a characteristic of good reading because it promotes cognitive processes such as inferring, monitoring, understanding, and so on. Tenkersley (2005) noted that asking questions strategy may work best with stories, news articles, and other narrative texts because they are likely to have all the “5 Ws” represented.

**Coding Text**

Coding text is one of comprehension strategies.

Block (1992) defined text coding as a strategy used to help students keep track of thinking while they are reading. Students use a simple coding system to mark the text and record what they are thinking either in the margins or on post it notes. McShane (2005) said that teachers can tell learners to take “notes” using symbols to identify important information or unfamiliar terms. The readers also may mark the text with question marks when anything is confusing or unclear. These marks represent the readers thinking at that point in the text (Baker and Brown, 2000).

**Monitoring and Repair Strategies**

Teachers also may teach specific strategies for solving comprehension problems (Davey and Kibby, 1983, in McShane, 2005). Tenkersley (2005) pointed out that teachers can describe and demonstrate the different kinds of problems that can arise while reading. Then, taking them one at a time, they can also teach appropriate repair strategies, by modeling, providing guided practice, and independent practice.

**General Conclusion**

Reading is a complex cognitive activity that draws in many meta-cognitive strategies; the comprehension monitoring strategy is one of them. That is in order to be
able to monitor understanding with some proficiency; students must use comprehension monitoring strategies.

The present article is an attempt to shed light on the relation between reading comprehension strategy and comprehension instruction. The concern behind this is the search for a teaching reading methodology that best assists learners to become autonomous text comprehenders, especially that reading is the most important skill for learning English at the University. It also aims at investigating the potential positive effect of teaching comprehension monitoring strategies on students’ performance in reading comprehension.

The readers’ meta-cognitive awareness about how comprehension works is the key factor in this interface. Thus teaching reading should provide learners with this meta-cognitive knowledge, and train them how to monitor their understanding through the use of monitoring techniques. Monitoring Instruction teaches students to be aware of their understanding when they engage in the process of reading. For this reason, we explained the different monitoring techniques and gave instances of how they can be instructed by the teachers so that they can be well practiced by the students.

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