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# METACONITIVE TRAINING FOR AWARENESS OF READING STRATEGIES 

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#### Abstract

Metacognition, defined as knowledge about one's cognitive states, processes and knowledge and as the ability to consciously monitor and adjust these cognitive states, processes and knowledge (Papaleontiou -Louca, 2008), may be „the missing link in school learning" (Nicholls, 2003), the thing that differentiates individuals as concerning their performance. The metacognitive skills during reading are oriented towards better understanding and memorizing of the text being read (Cubukcu, 2008), the main strategies for cognitive adjustment including planning, monitoring, applying, revising, and assessing.

The present case study is part of a more extended research, this being an exploratory session, performed in order to analyze the benefits and drawbacks of a metacognitive training focused on the metacognitive skills used while reading a text in a foreign language that is being learned (in this case, English). The metacognitive awareness was measured before and after the metacognitive training with MARSI (Metacognitive Awareness of Reading Strategies Inventory, version 1.0), developed by Kouider Mokhtari şi Carla A. Reichard (Mokhtari\&Reichard, 2002).

This training, aiming at increasing the student's awareness during reading, improves the efficiency of reading in terms of better understanding and summarizing the text, better retention of new words. This improvement is achieved by using certain strategies which can be grouped in global reading strategies, problem solving strategies, and support reading strategies. However, the most important finding is that these strategies can be learned outside the language class, during a special training and that these strategies can be transferred.


Keywords: metacognition, metacognitive reading strategies, metacognitive methods

## 1. THEORETICAL BACKGROUND

Metacognition refers to what people know about cognition in general and about their own cognitive processes and retrieval, in particular, as well as how they use this knowledge to adjust their informational processes and behaviour [9].

At the basis of a metacognitive training is the concept of metacognition, introduced by John Flavell in 1976 to define awareness of thinking process: what we think, how we think when we face a certain task or situation and
why we think in a certain way. Metacognition also includes the ability to monitor these processes [5].

Papaleontiou-Louca [14] considered important to stress the fact that between metacognition, on one hand, and learning and development, on the other hand, we can not put an equal sign, metacognition meaning learning and development regulation.

The huge potential of metacognition in obtaining performance in language learning was first detected by Wenden [5] in 1987 and many different interpretations of
metacognition and metacognitive models have since appeared, models that have attempted to explain the link between metacognition and language learning. Those who perform in learning a foreign language are those who are aware of learning and use learning strategies (including metacognition) flexibly and effectively [6].

Research has shown that the strategies used during reading are directed both to a better understanding and memorising (Cubukcu, 2008). Also, even those who have good reading skills can improve them if they are trained in the use of effective strategies and are taught to monitor their activity while reading [1]. These strategies include: use of strong personal points (exploiting the abilities best mastered by those who read - if you are good at interpreting graphs, rely on information obtained from them, for example), deduction of meaning of unknown words, use of personal information about topic, search for information relevant to the objective pursued, began returning to the questions to find the answers. Also, use of prior knowledge on the subject in question can improve understanding of the read [3].

## 2. GOALS AND RESEARCH METHODOLOGY

2.1 Goals. My case study is an exploratory one. Its aim was to identify efficient methods of teching and learning metacognitive reading strategies.
2.2 Hypotheses. I started from the hypotheses that if a student learning a foreign language uses metacognitive reading strategies, the efficiency of reading will increase. The criteria for defining efficiency are a better understanding of a text read (reflected in higher scores at exercises which presume answering questions from the text) and a better recall of the texts (reflected in a more fluent and detailed summary of the text).
2.3 Sample.The subject of this study was a 14 years old pupil, atteding the $8^{\text {th }}$ grade. She has been studying English as a foreign language since the $4^{\text {th }}$ grade, being an average student.
2.4 Instruments used. I used the Metacognitive Awareness of Reading

Strategies Inventory (MARSI version 1.0), in the original language as the subject's knowledge of English permitted this. This inventory was designed by Kouider Mokhtar and Carla A. Reichard [10] starting from Flavell's theory on metacognition, shown above. It is a tool that can be used to identify metacognitive strategies used while reading in academic text for understanding it. It has three subscales or factors: 1. global reading strategies (it has 13 items and aims at strategies for a global analysis of text), 2. problem solving strategies (with 8 items on strategies used when the text is too difficult to understand) and 3. functional strategies, supportive for reading (it contains nine items relating to the use of reference materials, taking notes, other practical strategies). The three types of strategies are in interaction and have a great influence on understanding the text. The Cronbach Alpha internal consistency coefficient is .89 for full scale. The questionnaire can be administered individually or in groups, from teenagers to adult students. Responses are recorded on a Likert scale with values from 1 (never do this) and 5 (always do this). The administration has no time limit and generally lasts 10-12 minutes. Interpretation of scale determines the respondents' place into one of three classes of users of learning strategies: high (over 3.5), medium (between 2.5 and 3.4) and low (below 2.4).

There were also used language tests, provided in the school textbook, only the reading exercises being used.

As concerning the metacognitive strategies taught, the following were presented to the subject, during individual sessions, offschool: questioning the thought process, generating questions, strategic questions, think aloud protocols, identifying the problem to be solved, walking through pictures.
2.5. Intervention. At the beginning of the school year 2011-2012, the subject was given an English test, provided by her textbook. She scored 76 points out of 100 . Then, she filled in the Metacognitive Awareness of Reading Strategies Inventory. She had an overall score of 3.16 (medium level). The Global Reading Strategies category was of 3.46 (high level), Problem - Solving Strategies had 3.12
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(medium level) and the last category, Support Reading Strategies totalized 2.77 (medium level). This indicated that she had to work on the last two categories, so the methods chosen for her respected this.

During the first semester of the school year, over 10 sessions of individual preparations, the subject was gradually presented the metacognitve methods that can be used while reading for a better understanding and memorising of the text. She was asked to use them as often as possible during reading an English text. These methods are:

Thinking about the activity performed can be made in order to extract students’ implicit knowledge to about what they are learning, which will become the basis for new learning. It is not limited to activities already carried out, it helps to plan the following ones 5].

A similar method is that of questioning the thought process [13], made at the end of an activity in order to acknowledge the metacognitive strategies used. The method follows three steps: 1. retrospection on the activities, collection of data on thinking processes and their association with feelings, 2. classification of shared ideas and identifying of the strategies used, 3. assessment of each strategy, the elimination of the unproductive ones and the identification of successful one, to be used on other occasions.

Generating questions [13], by definition, involves a high level of metacognition as the learner is actively involved in monitoring and regulating his own independent activities of understanding of what is heard or read.

Strategic questions [2] are those questions asked by the student to inform himself on the strategy for information, indicating awareness of learning context and student intention to control the situation.

Identifying the problem to be solved [13] refers to identifying what you know and what you do not know, as a starting point in developing a strategy that will identify the information sought.

Think aloud protocols [3, 7, 8, 13, 16] mean recording students' thoughts as they perform a task and say aloud whatever crosses mind during this time. The interviewer can stay with students until they complete the task, asking questions such as: "What are you thinking?", "Why have you decided to do this?" [12]. Protocols are subsequently analyzed and students are free to use the native language or the one being taught. These protocols can offer data on the use of strategies.

Walking through pictures involves throwing a look over the images that accompany the text to be read to infer the meaning of the text and discussions on the participants’ opinions.

At the end of the semester, she was tested again. In English, the subject obtained 85 points out of 100 . Her MARSI scores improved: the overall score was 3.56 (high level), the Global Reading Strategies category was of 3.76 (high level), Problem - Solving Strategies had 3.62 (high level) and the last category, Support Reading Strategies totalized 3.22 (medium level).

## 3. RESULTS

The subject's overall MARSI score increased with $9 \%$, which is sufficient for undergoing a metacognitive training, in terms of its pragmatic results. These results also show that metacognitive strategies can be taught and outside the language class,

The subject's results also improved in English, too. In a short debriefing interview,
she also reported using these strategies in other subjects, such as Romanian and History.

I must underlie the fact that, to a certain extent, which was not the aim of this study, these results can appear due to genuine learning of the foreign language or to pure sensibility in such matters.

## 4. CONCLUSIONS

As it is a descriptive exploratory study, it is only the first step in a much larger research. This study's findings will guide its replication with similar subjects in order to identify the metacognitive strategies preferred by most learners. Then, these strategies will be included in a course dedicated to young learners of English.

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