

PEDAGOGÍA DEL LENGUAJE

Reflecting on Metacognitive Strategies in F. L. Teaching and Learning*

Reflexión sobre las estrategias metacognitivas en la
enseñanza y aprendizaje de la lengua extranjera

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Abstract

The present reflection has been written in order to compile the most relevant features that set up metacognitive strategies in connection with second language teaching and learning. The review of literature offers a wide field of practical and effective actions to be included during the classes in order to strengthen metacognitive skills and empower second language learners. It is important to emphasize the representative role of teaching instruction in establishing conditions for the generation of awareness in students as a result of an accurate process of thinking. Finally some points for discussion are presented, which provide rhetorical questions to be answered during an ongoing process of reflection and teaching experience.

Key words: Thinking, skills, knowledge, impact and awareness.

Resumen

La presente reflexión es un intento de recopilar las características más distintivas de las estrategias metacognitivas en relación con la enseñanza y aprendizaje de la segunda lengua. Este estado del arte ofrece un amplio campo de acciones prácticas y efectivas que pueden ser incluidas en las clases para fortalecer las habilidades metacognitivas y fortalecer a los aprendices de segunda lengua. Es importante enfatizar el importante papel que tiene la enseñanza en establecer las condiciones para la toma de conciencia por parte los estudiantes a través de un proceso de pensamiento adecuado. Al final se presenta una serie de puntos para discusión, los cuales ofrecen preguntas retóricas que pueden ser respondidas a lo largo de la experiencia de reflexión y enseñanza.

Palabras clave: pensamiento, habilidades, conocimiento, impacto, toma de conciencia.

Introduction

Metacognition in second language involves a set of activities to foster students' thinking. Explaining the purpose of learning and teaching under a metacognitive model elicits a positive impact in terms of specific teacher instruction and high students' performance. Likewise the types of knowledge encourage students' awareness at the time of selecting and applying the most accurate strategy or procedure during the development of a specific task.

Students are able to go beyond their expectations that encourage them to think about what happens during the language learning process using "study strategies". In other words, when students have the opportunity to choose the best strategy to learn, they self-monitor their process of learning and can promote study skills in different contexts. The ways of establishing and supporting students' metacognitive environment make them develop thinking skills in terms of managing new situations and mastering metacognitive behavior.

The characteristics of effective strategies and some practical implications will be described to offer a huge range of possibilities in the process of learning and teaching a second language through a metacognitive proposal.

Metacognitive Strategies

Several researchers have done their contributions to illustrate how metacognitive strategies have influenced second language learning and teaching.

According to Oxford (1990), metacognitive implies beyond, beside or with the cognitive. This means that students manage what they learn. They are the owners of their knowledge and regulate their disposition toward learning. While Anderson (2002) claims that the real key to learning is metacognition which is labeled as thinking about thinking connected with the awareness of "what I know" and "what I don't know." Learners rule metacognitive understanding and there is no doubt that thinking skills are highlighted creating a connection

between prior and new knowledge. And Taylor (1999) defines metacognition as "an appreciation of what one already knows, together with a correct apprehension of the learning task and what knowledge and skills it requires, combined with the agility to make correct inferences about how to apply one's strategic knowledge to a particular situation, and to do so efficiently and reliably". (p. 1). This definition is more complex and tends to focus on every single step learners need to demonstrate how effective is the use of any metacognitive strategy they choose to achieve the task. All these definitions complement each other and fit accurately with the idea of being aware of the learning processes.

To close the set of definitions, as argued by Adkins (1997), who combines words to form mental pictures of metacognition; this meaningful word-game summarizes what a learner should do using metacognitive strategies:

"Thinking about knowing ...
Learning about thinking ...
Control of learning ...
Knowing about knowing ...
Thinking about thinking ..." (p. 2).

Adkins (1997) also states that there are several reasons to state that metacognitive strategies are vital for successful language learning; for example:

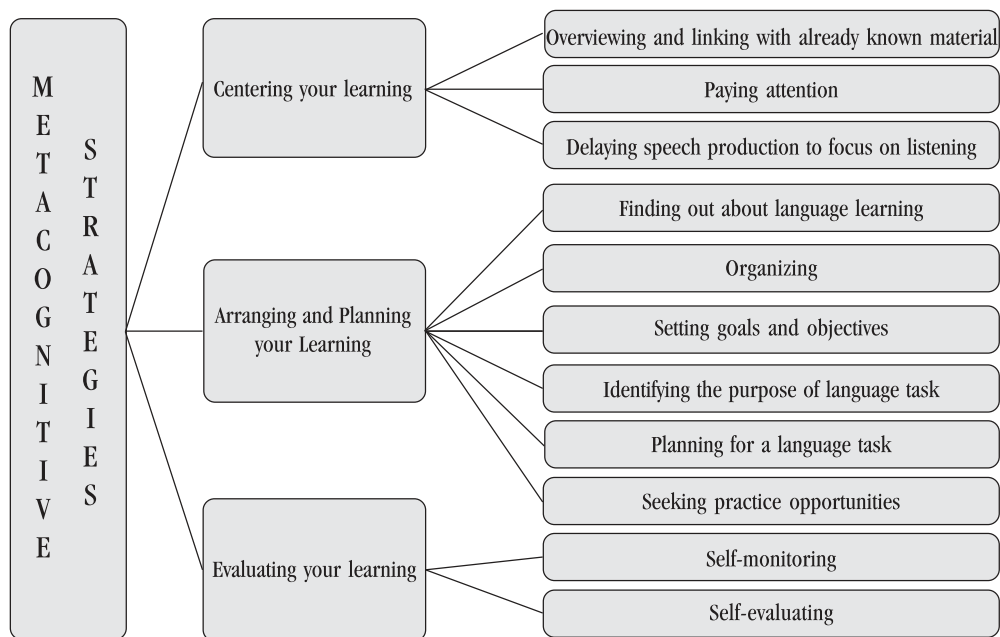
1. Learners become conscious about the selection of a strategy to be effectively used. To generate opportunities of selecting the suitable strategy make the students self-control and self-assess their performance in terms of conscious learning.
2. Students take part and get involved at the moment of arranging and planning their learning and specific tasks. To create a commitment makes learners feel motivated and encourage task comprehension.
3. Learners regulate and monitor their performance during an ongoing process of evaluation and assessing. This is an on-going process. To accomplish effective learning strategies, students foster self-regulation.

The three last reasons are steps that occur before, during, and after the process students follow to develop the tasks. Students are able to decide if it is indispensable to use any metacognitive strategy. Then, they choose the strategy to label a problem situation. After that, learners explore alternative solutions and finally, they determine when the problem is solved.

The teacher's role is to lead students in the process of thinking about their learning process to improve their performance and skills. The independent use of metacognitive strategies develops progressively. If students are aware of how committed they are to reach goals, of how strong their disposition toward learning is and of how focused they are on a thinking task, they can regulate their commitment, disposition, and attention (Marzano, Brandt, Hughes, Jones, Presseisen, Rankin, & Suhor, 1988). This means that teacher's role is as important as students' involvement. Autonomy is part of the palpable results students control at the end of the metacognitive process.

A Model of Metacognition

Oxford (1990) and Anderson (2002) provide a parallel classification of metacognitive strategies which do not need too much explanation, just judge yourself:



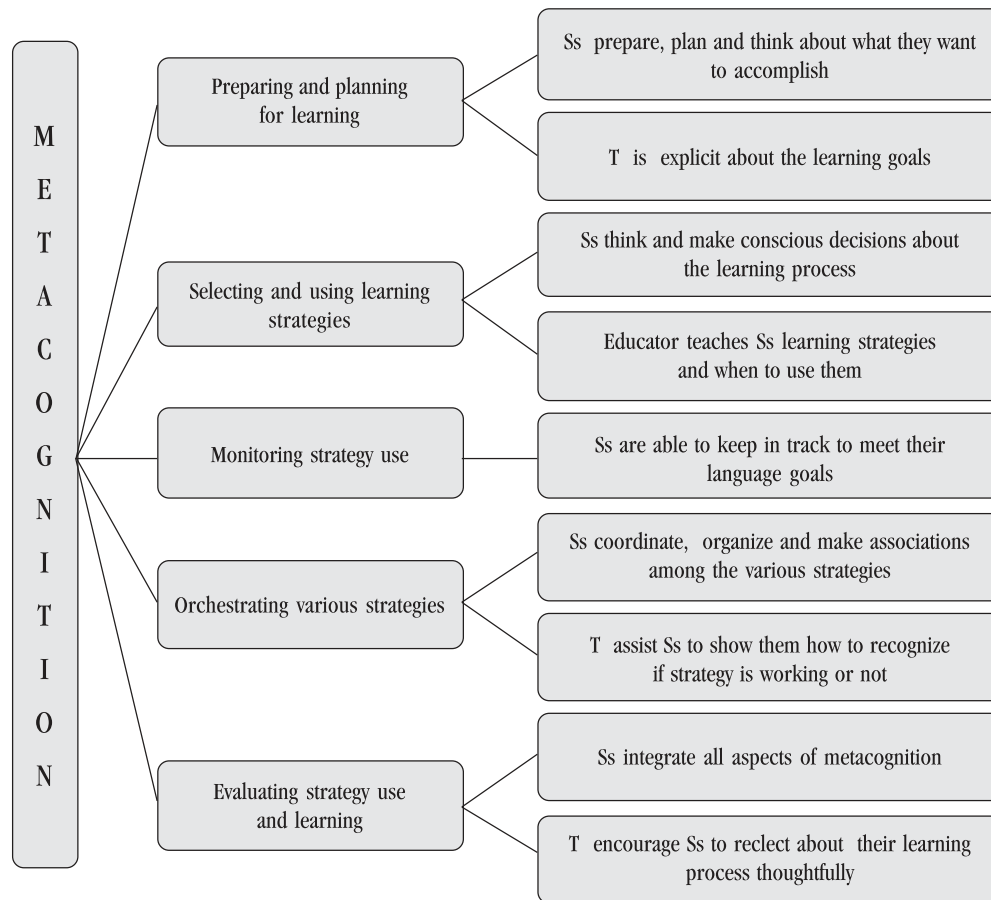
Taken from: Oxford. (1990). *Language Learning Styles and Strategies: What Every Teacher Should Know*. Boston: Heinle&Heinle. (p. 137).

To manage the process of learning makes the teachers think about and identify their students' learning styles and strategies. Students control their process of learning through the use of metacognitive strategies. Learners are efficiently responsible of their own progress through realistic monitoring and evaluation. Teachers' role is to encourage students' associations

with their prior knowledge and to provide optimal conditions for learning. At the same time, teachers have to offer enough sources of information for students to ask questions, solve problems, share ideas, choose the learning strategy, discuss the purpose or the complexity of the task, select the sources and assess their process.

Being a careful observer is the first step to design an action plan and to choose the most appropriated teaching model to benefit them. After that, it is important to provide the opportunities for students to master the metacognitive strategies for a lifelong learning.

Anderson (2002) provides five primary components to combine thinking and reflective process:



Adapted from: Anderson, N. J. (2002). The Role of Metacognition in Second language Teaching and Learning. Retrieved from ERIC database. (ED463659).

In this model, the author wants to emphasize the autonomous role of the student.

Teacher is just a guide who has to be prepared to teach and model the strategy and to intervene just in case the strategy is not working well. Learners select it according to the context and the teacher shows them a variety of strategies and how to use them according to the specific task. Students monitor the strategy use continuously and teacher assists students when they want to move from one strategy to another, that is part of the orchestration. Finally, students and teacher articulate all the process to see if they could achieve the goal.

Every single metacognitive strategy coordinates the learning process, controls students' cognition and supports and manages language learning without directly involving the target language. They are useful in all virtual language learning situations and are applicable to all four language skills: listening, reading, speaking and writing (Oxford, 1990).

These two models are closely linked. The only difference is the use of terminology but the description of the metacognitive process goes from the simple conception of previous knowledge, as point of departure, until the consciousness of the metacognitive process. Programming assignments with teachers' initial intervention help students to carry out objectives and tasks. After that, it is time to make decisions and look for opportunities that promote autonomy and awareness of the learning process. If students have a successful performance it means that they are ready to self-monitor and self-regulate. Mastering the strategies facilitate having criteria in terms of checking strategy effectiveness or failure. At the end, a reflection process will support the creative use of the reasoning and thinking skills which strengthen an integral system of learning. In a Second Language class the use of metacognitive strategies generates commitment of both teacher and students. They encourage thinking processes and the promotion of a trustful way of managing meaningful learning.

Metacognition and Study Strategies

It is necessary for students to have choices in terms of selecting and applying the most accurate strategy according to the context. Learners monitor application of the chosen strategies in order to self-assess and self-regulate the effectiveness of their metacognitive process. Study strategies articulate the task with the most appropriate way of consolidating the learning process thanks to an assertive selection of the strategy.

Simpson and Nist (2000) summarize five generalizations from a review of the literature of study strategies:

1. Understanding the task accurately in order to use the most effective strategies.
2. What students believe about learning affects their selection of study strategies to interpret the task and interact with the text and the strategy they select.
3. Instructors need to provide good instruction in how to use study strategies and provide feedback including five features:
 - a. Strategy description
 - b. Discussions of what strategy should be learned and its importance
 - c. Models and examples of how the strategy is used
 - d. Explanations as to when and where it is appropriate to apply the strategy
 - e. Suggestions for monitoring and evaluating.
4. Instructors should teach a variety of strategies to be effective
5. Emphasize the cognitive and metacognitive processes that underline a study strategy: elaborating, planning, monitoring and evaluating.

Establishing a metacognitive environment in second language teaching and learning promotes awareness of thinking, supports co-planning between teachers and students, enhances reflection and keeps an ongoing process of evaluation. When teachers provide opportunities for practicing problem-solving and research activities, when teachers and students concentrate on how tasks are accomplished and when the goals and contents are concerted and evaluated with students the results are the understanding of thinking processes that support meaningful and metacognitive learning.

How Second Language Teacher Can Implement the Strategy

Kyger (2009) suggests a series of activities to implement the metacognitive strategies in class and I adapted them to a second language class:

1. Choose and appropriate metacognitive strategy for the language skill and its purpose.
2. Describe and model the strategy at least three times.
3. Check students' understanding in relation to the strategy and how to use it.
4. Provide several opportunities for students to drill using the strategy.
5. Provide positive feedback and remodel use of strategy as needed.
6. Provide students strategy cue sheets to foster independent use and the memorization of the strategy they have learned.
7. Use the strategy appropriately to reinforce students.
8. Use the strategy when performing the corresponding language skill in class.

Through a clear application of the learning strategy, students are able to keep a metacognitive environment. What they perform and how well teachers and students are doing their job determine the effectiveness of the strategy. In the Second Language Class teacher plays an influential role because he/she is always by students' side to assure students' success and to readjust the strategy when necessary.

Suggested Activities to Develop Metacognitive Behaviors and Strategies

Metacognition is not a linear process; it demands the use of several strategies to promote second language learning. To provide opportunities for students to think how they integrate strategies raises the assertiveness in terms of strategy use. To include thinking vocabulary in students' speech, as a result of the metacognitive process, is part of the positive results obtained after doing a meticulous practice. Performance in both teaching and learning will be effective and full of tools to face new challenging situations during the class or even in the real life. The continuous reflection will not let any doubt in relation to accurate use of strategies and its implications. All this process demands a serious commitment to establish solid basis to guarantee success.

There are some activities presented by Anderson (2002) and Peirce (2003) that are useful to maintain a metacognitive atmosphere:

1. Identifying "what you know" and "what you don't know" helps students to verify, clarify and expand or replace information.
2. Talking about thinking: students recognize their thinking skills to plan, solve problems and summarize the studied material using thinking vocabulary.
3. Individual learning plan: according to Chiang (1998), it is the process of setting goals, monitoring the learning process, writing a reflective journal and making summative evaluations.
4. Keeping a thinking journal: Students reflect upon their thinking, makes notes about their awareness and comment how they have dealt with difficulties.
5. Learning portfolio: Commander and Valeri-Gold (2001) describe it as the collection of students' papers applying learning strategies to:
 - a. Capture the students' intellectual substance
 - b. Encourage students to review their learning and improvement
 - c. Create a culture of professionalism about learning
6. Planning and self-regulation: Students make plans for learning activities with time, materials, scheduling procedures and criteria for evaluation.
7. Test debriefing: Weimer (2002), cited by Pierce (2003), claims that teacher uses metacognition as he/she debriefs students after returning an exam in order to give them a sense of control over their learning. Students write a reflective note to themselves about what they learned from preparing for and taking the exam.
8. Debriefing the thinking process: closure activities help students to develop awareness of strategies used and apply them to other learning situations through 3 steps:
 - a. Teacher guides students to review the activities.
 - b. Group classifies related ideas and identifies thinking strategies used.

- c. Students evaluate their success.
9. Self-evaluation: it can be done through individual conferences and checklists focusing on thinking processes. The purpose is that students will be able to transfer learning strategies to new situations.
 10. Feedback: when teachers and learners reflect upon their learning strategies, they become better prepared to make conscious decisions to improve the strategy use.

Implications

One of the neuralgic problems in teaching and learning a second language using metacognitive strategies is leading with monitoring problems with learning. Sometimes students could omit important data or avoid separating the relevant data from the irrelevant. What is more, they could fail to choose the right subskills to be applied in a specific language task. When there is no understanding of the task instruction they could confuse the criteria application. As a result, goal accomplishment stops working.

In the area of Cognition the mandatory use of many language subskills (e.g. identifying text organization -reading-) to carry out a complex language task demands a mastery of competences which are not automatic and internalized enough, so the goal is affected again.

In the scope of skills, teacher must be careful and explain students a task step by step to lead with thinking process described by students. It helps to encourage the needed mental abilities and make them fit to the suitable level. The lack of level feeds frustration and demotivation. Attributing failure to a lack of ability weakens self-confidence, intellectual and emotional competences, inhibit good performance in the next challenging tasks. Sometimes teachers are wrong when they do not explicitly teach strategies that are effective to develop a complex task in the second language.

In the field of self-evaluation it is fundamental to realize that it is not easy to acquire this strategy because it often comes at the end of a task when time or interest is not enough or because in some measure it implicates comparing oneself with others and learners could feel threat of failure. Teacher requests training in a non-threatening and on-going method to raise the right awareness.

There is a point of view cited by Town (2004) that suggests: "individuals with a poorly developed or confused self-concept will lack insights into their own intentions, motives and intellectual functions, and that development of metacognitive awareness in later life may ultimately depend on early social conditioning" (p. 2). Here it is relevant to see the role of self-esteem in academic achievement.

Conclusions

There are several points which deserve a short but meaningful description to articulate skilled teachers and students into the perspective of the metacognitive process:

Metacognitive Strategies are accurate and efficient for problem-solving activities and task performance. Providing enough opportunities for students to master metacognitive strategies assures high-quality performance and dominance. When students have memory problems, metacognitive strategies help them to retrieve information.

Teaching students to master thinking skills is the clue to develop metacognitive insights. Being reflective about what is done and what needs to be improved is the top stage in the awareness process. This process enhances the concrete and abstract students' understanding.

Second language information and skills empower thanks to an efficient way to acquire, store, and express data. Students' thinking and actions are necessary to perform second language skills.

In the field of autonomy students develop confidence and motivation toward their process of learning. They are able to face future unfamiliar and challenging tasks in several contexts inside and outside the classroom.

Bibliographical references

- Adkins, J. (1997). *Metacognition: Designing For Transfer*. College of Education. University of Saskatchewan. Retrieved from <http://www.usask.ca/education/coursework/802papers/Adkins/ADKINS.PDF>
- Anderson, N. J. (2002). *The Role of Metacognition in Second language Teaching and Learning*. Retrieved from ERIC database. (ED463659).
- Blakey, E. et al (1990, November). *Developing Metacognition*. Retrieved from ERIC database. (ED327218).
- Commander, N. E., & Valeri-Gold, M. (2001). The learning portfolio: A valuable tool for increasing metacognitive awareness. *The Learning Assistance Review* 6(2), pp. 5-18.
- Chiang, L. H. (1998). *Enhancing metacognitive skills through learning contracts*. Retrieved from ERIC database. (ED425 154).
- Kyger, M. (2009). *Metacognitive Strategies*. The Florida Center for Instructional Technology FCIT. MathsVids Instructional Strategies. Retrieved from <http://fcit.usf.edu/mathvids/strategies/tms.html>
- Marzano, R. J., Brandt, R. S., Hughes, C.S., Jones, B. F., Presseisen, B. Z., Rankin, S. C., & Suhor, C. (1988). *Dimensions of thinking: A framework for curriculum and instruction*. Retrieved from ERIC database (ED294222).
- Oxford, R. L. (1990). *Language Learning Styles and Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle.
- Peirce, W. (2003). *METACOGNITION: Study Strategies, Monitoring and Motivation*. A greatly expanded text version of a workshop presented November 17, 2004, at Prince George's Community College. Retrieved from <http://academic.pgcc.edu/~wpeirce/MCCCTR/metacognition.htm>
- Simpson, M. L., & Nist, S. L. (2000). An update on strategic learning: It's more than textbook reading strategies. *Journal of Adolescent and Adult Literacy*, 43(6). Retrieved from <http://academic.pgcc.edu/~wpeirce/MCCCTR/metacognition.htm>

Taylor, S. (1999). Better learning through better thinking: Developing students' metacognitive abilities. *Journal of College Reading and Learning*, 30(1). Retrieved from http://findarticles.com/p/articles/mi_hb3247/is_1_30/ai_n28746729/

Town, D. A. (2004). *Metacognition and Its Development*. Universidad de Belgrano. Argentina. Retrieved from <http://www.monografias.com/trabajos16/metacognition/metacognition.shtml>

Town, D. A. (2004). *Metacognition and Its Development*. Universidad de Belgrano. Argentina.
Retrieved from <http://www.monografias.com/trabajos16/metacognition/metacognition.shtml>