### METACOGNITION AND LANGUAGE LEARNING

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# Abstract

One of the most important missions of educators is to teach students how to learn on their own throughout their lifetime. How we learn how to learn, how we know what we have learned and how to direct our own future learning are all questions addressed by the concept of metacognition. Metacognition is a notion that has been used to denote a variety of epistemological processes. Metacognition means cognition about cognition, it refers to second order cognitions: thoughts about thoughts, knowledge about knowledge or reflections about actions. If cognition involves perceiving, understanding, remembering, then metacognition involves thinking about one's own perceiving, understanding, and remembering. It is also vital in understanding successful performance.

Metacognition enables and helps us to become successful learners, and has been associated with intelligence. The Merriam-Webster online dictionary defines it as "awareness or analysis of one's own learning or thinking processes". In other words, metacognition is the knowledge that a person has of his/ her own cognitive processes.

Activities such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task are metacognitive in nature. Because metacognition has a crucial function in successful learning, it is essential to study metacognitive activity and development to establish how students can be taught to better apply their cognitive resources through metacognitive control.

Metacognition often occurs in situations when learners become aware of the fact that their cognition, their ability to comprehend something has failed them, for example, not being able to understand some information or a formula, and that they have work to do to make sense of it. In this case, the metacognitive act can be understood as the learner's realization, firstly, that there are limitations to everybody's knowledge to complete a task, and, secondly, that learners possess strategies for correcting that situation.

The role of the educator in the learning process is in question when viewed from a metacognitive perspective. From this perspective, the teacher, even at an early stage of development, must have as one of his/ her learning objectives to make himself/ herself redundant. Effective learning is achieved by the adjusted abandonment of learning support to

<sup>&</sup>lt;sup>1</sup> "metacognition." Merriam-Webster Online Dictionary. 2009. Merriam-Webster Online. 15 August 2009 <a href="http://www.merriam-webster.com/dictionary/metacognition">http://www.merriam-webster.com/dictionary/metacognition</a>

learners while they engage in the activity or process that is the focus of the learning process. Educators at primary level have a relatively stable position in the learning process. At later developmental stages educators have a greater responsibility to encourage learner independence. This is achieved most effectively by assisting learners to develop a capacity for self-reflection both on themselves as learners and on their position within society and the community. Ultimately, educators have an effect on everyone's life in one way or another. Thus educators' characteristics and styles are critical. However, they need to be considered in context with what learners bring to the learning environment. Some learners will benefit more from structure than others and some educators may be able to handle flexible teaching better than others. The extent to which these elements shift in emphasis depends upon the developmental stage of the learner and what is to be learnt.

Three aspects are crucial to metacognition. The first is self-awareness. The first stage to effective learning is to know one's learning style, that is, whether the learner is visual, auditory or kinaesthetic. When a learner knows their individual learning style, they can take measures which will enable them to process the information more efficiently. For instance, if a student knows that their memory is poor, they will also be aware of the necessity to compensate this by note-taking and studying the notes.

The second step is to uncover more about how languages are acquired. Language acquisition is a complex process that involves both knowing information and knowing how to utilize it. If students believe that by merely attending class they will learn the language, it stands to reason that they will not reach their objective. But if the students become conscious of the fact that it is necessary to participate actively in the class, to get involved and take part in every activity, they will have a greater chance of being effective and successful.

The final step is the stage of preparation and planning for effective learning. The setting of learning goals is crucial because learners will reach their objectives more easily if they have clearly stated what these are.

If a teacher knows that metacognitive strategies will help students become better learners, then the obvious classroom implication is that he or she needs to incorporate explicit teaching and implicit use of these strategies into the everyday classroom activities.

The first step in strategy training is to help the students know themselves and their learning styles. There are a number of questionnaires available even on-line. The questionnaire can be done at the beginning of the course, with students exchanging questionnaires, interviewing each other and then, as a group, discussing their learning styles.

Occasionally, teachers might need to remind their students of their learning styles, to bring them back to achieving what they expect and of using strategies that are functional for their individual style. The teacher should also be prepared to do a variety of classroom activities that are suited for the individual learning styles, so that no one is left out.

Goal setting should be done at the beginning of every new course by having the students look over the goals of the course book, and then establishing their own goals. For example, students can decide if they merely want to pass the course, or to get an excellent mark. They can also decide what specific language areas they want to focus more on: reading, grammar, speaking, vocabulary, etc.

Five main components for metacognition have been proposed. These are:

- 1) preparing and planning for learning
- 2) selecting and using learning strategies
- 3) monitoring strategy use
- 4) orchestrating various strategies
- 5) evaluating strategy use and learning.

## 1) Preparing and planning for learning

The reason for this component is that students make a plan of what they need to do and organize their thoughts and activities in order to engage in complex tasks. This preparation helps them to complete more complex tasks than would otherwise be possible. Organizing or planning is helpful before starting any large assignment that can be divided into smaller parts in order to make it more controllable.

# 2) Selecting and using learning strategies

This strategy is vital to problem solving. Students reflect on their personal learning styles and strategies. They control their own learning conditions to take full advantage of achieving their goals. Students realize how they learn best, they organize conditions to help themselves learn, they focus their attention on the task, and they seek opportunities for practice in the target language. Managing one's own learning is an important part of problem solving on any task.

## 3) Monitoring strategy use

Learners question whether an idea makes sense in order to check the clarity of their understanding or expression in the target language. Students are aware of how well a task is progressing and notice when comprehension breaks down.

### 4) Orchestrating various strategies

Knowing how to coordinate the use of more than one strategy is an important metacognitive skill. The ability to direct, systematize, and make connections among the various existing strategies is a key distinction between strong and weak second language learners. Teachers can support learners by making them aware of multiple strategies available

to them. The teacher also needs to show students how to recognize when one strategy is not working and how to shift to another.

#### 5) Evaluating strategy use and learning

Deciding for themselves how well they acquired some material or performed on a task helps students categorize their strengths and weaknesses so they can do even better the next time. Assessing how well a strategy works for them helps students decide which strategies they prefer to use on particular tasks.

#### Conclusion

These five metacognitive skills are interrelated because metacognition is not a linear process which simply moves from preparing and planning to evaluating. During a second language learning task more than one metacognitive process may be occurring at a time.

This emphasizes the way in which the combination of various strategies is a vital component of second language learning. Allowing learners opportunities to reflect on the way they combine various approaches facilitates the improvement of strategy use.

The teaching of metacognitive skills is an important use of instructional time for a second language teacher. When learners reflect upon their learning strategies, they become better prepared to make conscious choices about what they can do to improve their own learning.

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