

THE IMPORTANCE OF COGNITIVE AND METACOGNITIVE METHODS IN TEACHING

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This article deals with strategies used to teach students a foreign languages. The main idea is cognitive and metacognitive methods in teaching. The article gives valuable information about learning style. The author writes that motivation and desire to learn more are great tools. The aim of this article is to give an evident proof of using the psychological process of thinking and criticism at the lesson, showing the skills of teaching and learning at the same time, and the effectiveness of cognitive and metacognitive methods during the education process. In conclusion the authors write that introducing and producing these methods (cognitive and metacognitive) will be success both to the teacher and to the students taking into consideration the of knowledge, at the lesson, showing, effectiveness of cognitive and metacognitive methods.

Keywords: Success, value, strategy, approach, motivation, knowledge

There are a lot of strategies used to teach the students a foreign language. The use of the strategies is a successful way to achieve a teacher's goal – to make a student communicate properly in different situations, keeping in mind the 4 majors of methods of teaching. They are: reading, speaking, listening and writing.

Different students have different ways of learning. Some of them look out conversation partners, some group words to be learned and then label them, the others use gestures to communicate when the words do not come to mind or use guessing when reading [1].

Part of the effectiveness of the cognitive apprenticeship model comes from learning in context and is based on theories of situated cognition. Cognitive scientists maintain that the context in which learning takes place is critical (e.g., Godden & Baddeley, 1975). Based on findings such as these, Collins, Duguid, and Brown (1989) argue that cognitive apprenticeships are less effective when skills and concepts are taught independent of their real-world context and situation. As they state, "Situations might be said to co-produce knowledge through activity. Learning and cognition, it is now possible to argue, are fundamentally situated" [2]. In cognitive apprenticeships, the activity being taught is modeled in real-world situations.

By using processes such as modelling and coaching, cognitive apprenticeships also support the three stages of skill acquisition described in the expertise literature: the cognitive stage, the associative stage, and the autonomous stage.[3] In the cognitive stage, learners develop declarative understanding of the skill. In the associative stage, mistakes and misinterpretations learned in the cognitive stage are detected and eliminated while associations be-

tween the critical elements involved in the skill are strengthened. Finally, in the autonomous stage, the learner's skill becomes honed and perfected until it is executed at an expert level.

Like traditional apprenticeships, in which the apprentice learns a trade such as tailoring or woodworking by working under a master teacher, cognitive apprenticeships allow the master to model behaviors in a real-world context with cognitive modeling.[6] By listening to the master explain exactly what she is doing and thinking as she models the skill, the apprentice can identify relevant behaviors and develop a conceptual model of the processes involved. The apprentice then attempts to imitate those behaviors with the master observing and providing coaching. Coaching provides assistance at the most critical level – the skill level just beyond what the learner/apprentice could accomplish by herself. Vygotsky (1978) referred to this as the Zone of Proximal Development and believed that fostering development within this zone leads to the most rapid development. The coaching process includes additional modeling as necessary, corrective feedback, and reminders, all intended to bring the apprentice's performance closer to that of the master's. As the apprentice becomes more skilled through the repetition of this process, the feedback and instruction provided by the master "fades" until the apprentice is, ideally, performing the skill at a close approximation of the master level.

Students need a good conductor to teach them to use the language properly, and the conductor, or a teacher, should know there are different types of students who demand a different approach. The approaches extend as far as the knowledge and understanding of the learner's motivation, gender, cultural background, attitude and belief, type of a task given, age,

student's personal learning style and tolerance of ambiguity [ibid.].

Motivation touches upon the most difficult point among us, teachers, as it seems to be the most important and at the same time, the debatable question: What can a teacher motivate a student with? In our case the answer is often as not tends to grading bias, though not only assessment can become a true motivational zone for a student. The future plans connected with the professional growth are usually one of the answers too. However, nowadays it is not so easy to say that a profession of a foreign language teacher is of great value or importance. Here, to my mind, a more reasonable would sound the real desire of a student to become a teacher. Of course, the thing arises out of the love, devotion and choice of a person.

The other important point is learning style. The analytical-minded students prefer contrastive analysis, rule-learning, dissecting words and phrases; the global students use guessing, scanning, predicting, paraphrasing, gesturing [ibid.]. The research shows cognitive and metacognitive methods are often used together supporting each other.

Cognitive methods in learning involve translating, analyzing, grouping, taking notes, making summaries, mental images, relating new information to previous concepts and skills; and metacognitive comprise planning for learning, monitoring comprehension and production, evaluating how well learning objectives have been achieved.

The role of the last method, thinking, or metacognition, which allows the students to plan, control, and evaluate their learning strategies depending on the topic of the discussion. And one of the important things here is evaluation of the success achieved. A teacher can suggest several questions like:

- 1) What am I trying to accomplish?
- 2) What strategies am I using?
- 3) How well am I using them?
- 4) What else could I do?

Responding to these questions allows the second language learner to reflect through the cycle of learning [3].

Critical thinking and self-assessment are involved in this kind of activity.

Concerning the students we can say, that motivation and desire to learn more are great tools to reach the goals. Moreover, metacognitive process in the minds of our student will give rise to new creative ideas. The students are allowed to think free and evaluate their actions. Cognitive methods are also important during the study. As a matter of fact both these

methods are successfully used by our teachers at the lessons of the English language as a second/foreign language. Nevertheless, continue to use them gives the teacher an opportunity to properly evaluate the student, give necessary advise to achieve better results.

Metacognitive strategies are sequential processes that one uses to control cognitive activities, and to ensure that a cognitive goal (e.g., understanding a text) has been met. These processes help to regulate and oversee learning, and consist of planning and monitoring cognitive activities, as well as checking the outcomes of those activities. However, the majority of learners instinctively obtain metacognitive knowledge and skills from their relatives such as parents, classmates, and especially their teachers, metacognitive strategies instructions demand to enhance metacognition and learning in a wide spectrum of students, particularly low achievement learners. In a proposition to facilitate students in learning activities, many researchers have outlined a variety of metacognitive strategies that need to be taught. (What to-do, Why they are beneficial, When to use them, and How to use strategies) For a valid metacognitive strategies instruction based on three fundamental principles as: 1) Integrating this instruction in the content material to ensure connection between a purposed task and relevant metacognition skills. 2) Informing learners about the effectiveness of metacognitive activities for stimulating them to the initial extra effort during performing related tasks, and 3) Extended training to guarantee the use and maintained application of metacognitive activity. In this respect, Lai (2011) asserted that the most effective instructional strategies included the textual dissonance approach, self-questioning, and backward-forward search strategies, although the authors recommend using a variety of diverse techniques for best results. Furthermore, results suggest that instructional interventions involving fewer than 10 minutes of instruction per lesson are insufficient for producing these types of effects. On the other hand, metacognition becomes more domain-specific as students age and acquire more specialized content knowledge, therefore self-report strategies which emphasize on general metacognition skills may be ineffective in older-students (tertiary level). Therefore, encouraging the students to ask questions themselves in a specific subject is one of the strategies which can be used for developing metacognition within the framework of constructivism learning. According this view, Hacker and Dunlosky (2003) stressed that teachers should ask the following questions as metacognitive strategy instruction

in activating the thinking and contributing to the development of metacognitive abilities such as What about next? What do you think? Why do you think so? How can you prove this? Most important, these effective questions are a type of scaffolding can build a good self-questioning habit as a common metacognitive comprehension monitoring strategy. However, there exist several researches about the role of metacognition strategies in problem solving at different level of education, the metacognitive skills and strategies have yet reminded less-known in problem posing. We engage in metacognitive situation every day. metacognition enables us to be successful learners, and has been associated with intelligence and stimulates higher-order thinking which involves active control over the cognitive processes engaged in learning. metacognition situations encourage activities such as planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task. Due to students have shown a considerable variation in their metacognitive adequacy, it is important to expose learners in metacognitive situations to determine how students of various education levels can be taught to better apply their cognitive resources through metacognitive control. Therefore, educational researchers and teachers need to assess the learners' behaviors in proposed metacognition situations to can improve students' metacognitive skills. Lai (2011) stressed that assessment of metacognition is challenging for a number of reasons: 1) Metacognition is a complex construct, involving a number of different types of knowledge and skills. 2) It is not directly observable. 3) It may be confounded in practice with both verbal ability and working memory capacity. 4) Existing measures tend to be narrow in focus and decontextualized from in-school learning. Therefore, considering the ambiguity of the definition and theory of metacognition, more difficulty is created in measuring metacognition. Briefly, metacognition is usually assessed in two principal ways: observations of students' performance or by self-report inventories. Therefore, few popular techniques used in measuring metacognitive knowledge and processes are; self-report such as questionnaires or rating scales, error detection, interview (structured, semi structured, unstructured, open-ended, closed, introspective, and retrospective) and thinking-aloud. However, each technique has inherent weaknesses and strengths. In order to decide which method to use [1].

In conclusion we would like to say that introducing and producing these methods in class will be a success both to the teacher and

the students taking into consideration the level of knowledge (from A to C). The aim of this article was to give an evident proof of using the psychological process of thinking and criticism at the lesson, showing the skills of teaching and learning at the same time, and the effectiveness of cognitive and metacognitive methods during the education process. Actuality of these topics is quite obvious, as teachers should learn and introduce new methods of teaching at the lesson, keeping in mind the ability of the learners to study harder.

Cognitive apprenticeship is a theory of the process where a master of a skill teaches that skill to an apprentice.

Constructivist approaches to human learning have led to the development of a theory of cognitive apprenticeship.[1] This theory holds that masters of a skill often fail to take into account the implicit processes involved in carrying out complex skills when they are teaching novices. To combat these tendencies, cognitive apprenticeships "...are designed, among other things, to bring these tacit processes into the open, where students can observe, enact, and practice them with help from the teacher...". This model is supported by Albert Bandura's (1997) theory of modeling, which posits that in order for modeling to be successful, the learner must be attentive, must have access to and retain the information presented, must be motivated to learn, and must be able to accurately reproduce the desired skill.

Teaching methods. Collins, Brown, and Newman developed six teaching methods rooted in cognitive apprenticeship theory and claim these methods help students attain cognitive and metacognitive strategies for "using, managing, and discovering knowledge".[2] The first three (modeling, coaching, scaffolding) are at the core of cognitive apprenticeship and help with cognitive and metacognitive development. The next two (articulation and reflection) are designed to help novices with awareness of problem-solving strategies and execution similar to that of an expert. The final step (exploration) intends to guide the novice towards independence and the ability to solve and identify problems within the domain on their own. The authors note, however, that this is not an exhaustive list of methods and that the successful execution of these methods is highly dependent on the domain.

References

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