A CASE STUDY OF THE INSTRUCTIONAL INTERVENTION

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Согласно исследованиям, обучение означает общение с другими с тем, что они уже знают, и новой информацией, которую они узнают [4, p. 24]. Знания строятся на том, что учащиеся уже знают, а не получают от экспертов. Быть успешным учеником означает искать смысл и применять навыки мышления более высокого порядка, такие как критическое мышление и решение проблем, а не навыки мышления более низкого порядка, такие как запоминание или повторение.

Ключевые слова: преподавание английского как второго языка, метапознание, навыки мышления

According to research learning means communicating with others with what they already know and the new information they learn [4, p. 24]. Knowledge is constructed on what learners already know not received from experts. Being a successful learner means to search for meaning and adopting higher order thinking skills like critical thinking and problem solving, not lower order thinking skills like memorizing or repeating.

Keywords: teaching English as a foreign language, meta cognition, higher order thinking skills.

The most powerful concept of cognitive psychology is concept of schema. Schemata are mental frameworks learners use to store and organize their knowledge [5, p. 34]. Many researchers approved that our mental structures influence greatly on our perception, learning and memory. The general model

of memory is called modal model memory and it includes several memory components that each performs different tasks. The components are sensory memory, working memory and long-term memory. Sensory memory is the "initial memory component that receives, recognizes, and assigns meaning to incoming stimuli" [5, p. 15]. Sensory memory briefly processes limited number of incoming stimuli in sensory registers so that perceptual analysis can be done before that information is lost. According to Sperling [7], visual memory is limited and it can process seven to nine pieces of information for about 5 seconds whereas auditory register holds about 5-7 pieces of information for up to 4 seconds.

Then, working memory (short term memory) processes information that comes through sensory memory for meaning. According to Baddeley [3, p.12] the working memory has three sub systems, executive control system, articulatory loop and visual-spatial pad. Like sensory memory, the capacity and duration of working memory is limited [5, p. 56].

Long term memory involves all human memory which developed over periods of days, week, months and years. In other words, long term memory keeps lifetime memory. Procedural knowledge is "knowing how" to perform actions, declarative knowledge is factual knowledge, "knowing what", and conditional knowledge is knowing when and why to use declarative and procedural knowledge. According to Anderson [1, p.93], an interaction of procedural and declarative knowledge enables complex cognition.

Successful learning also involves not only understanding content also learning to become a motivated, self-regulated learner and cognitive processes occur differently, depending on learner's individual goals, experiences, attributions beliefs, intrinsic and extrinsic motivations. Intrinsic motivation refers to one's attributions towards performing, which are engaged in for own sake and someone who is intrinsically motivated means that he or she is doing something out of his or her interest or personal desire. Extrinsic motivation means behaviours which are performed to receive some external promotion for doing something. According to Bruning et al [4], extrinsic rewards decrease intrinsic motivation, whereas increasing one's autonomy increases intrinsic motivation.

Metacognition refers to thinking about thinking and it has been studying for more than twenty years. Metacognition plays an important role in successful learning since it enables students to manage their cognitive skills and identify their weaknesses, which can be developed by applying other sufficient cognitive skills [8, p. 98]. Many researches indicate

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that metacognitive knowledge and regulation can be developed through instructional practices. According to Brown [3, p. 87], meta cognition includes two patterns: knowledge of cognition and regulation of cognition. Knowledge of cognition involves three modules [8, p. 77]. The first includes declarative knowledge about one's own learning and identifying what factors influence one's performance. The second component is procedural knowledge about one's cognitive strategies and the last one is conditional knowledge, knowing when or why to apply cognitive strategies. These kinds of knowledge allow students to choose the suitable strategies for the incident. Another important part of metacognition is that learners set their goals, plan how to succeed those goals, and do self-assessments of what they have achieved. Regulation of cognition has also three components including planning (selecting strategies), regulation (monitoring and assessing learning) and evaluation (appraising the products).

According to Schraw [8] metacognitive knowledge and regulation can be improved by applying different kinds of instructional tactics. Hartman and Sternberg [6, p. 33] introduced four basic ways to improve metacognition in classroom settings, which are 1) introducing the importance of metacognition, 2) improving students' knowledge of cognition, 3) developing regulation of cognition, 3) providing students with metacognition encouraging environment.

Introducing the importance of metacognition: when students start to think about their own learning, they will think about how to think [9, p. 24]. Moreover, it is very important that students understand the difference between cognition and metacognition in order to become self-regulated learners. Schraw [8, p. 76] argued that teacher and student modelling explicitly both cognitive and metacognitive skills increase students' metacognitive awareness. Particularly, teachers should provide their students with modelling regulatory skills such as planning, monitoring, and self-assessing.

Improving students' knowledge of cognition: teachers can use instructional aid in order to improve students' knowledge of cognition. Schraw [8] suggested to use summary matrices.

Developing regulation of cognition: in order develop regulation of cognition teachers can use checklists for their students to do.

Providing students with metacognition encouraging environment: providing students with opportunities to practice their metacognitive knowledge and strategies is important since many students possess appropriate knowledge and strategies but they do not use them.

Metacognition in awareness and self-regulation are important in learning process since learners will be capable to monitor their cognitive processes, develop, and apply appropriate strategies to review and regulate the activities if they are aware of their mental activities and many other researchers indicated that becoming aware of one's cognition activities helps learners greatly to improve their learning.

Objective of my instructional intervention is to improve my participants' metacognitive awareness in their writing skills. Metacognition in writing means awareness of purpose and process of writing and self-regulation of writing.

The participants of my instructional intervention are two Mongolian students from a primary school in Adelaide, Australia, who are currently enrolled in New Arrivals Program. They have been studied English for about a year and they are supposed to enter mainstream class at the end of this term. At first, it was very impressive for me to see how quickly the children have learnt English, whereas I have been learning English for more than 10 years. However, after working with them for about a few weeks, I noticed that they have difficulties with writing comparing to other skills speaking, listening and reading.

The participants and their parents were informed about the purpose of this study and their rights. The anonymity of participants will be protected.

The students were initially tested on their metacognitive awareness in writing. The pretest task was to write a short essay on topic "My last Weekend".

I collected my data during the pretest through observation. From my observation, they started writing immediately after I gave the topic and submitted their writing without any review or revision as soon as they finished writing. Moreover, they looked frustrated by their lack of appropriate vocabulary or English phrases and sometimes seemed out of ideas and stopped writing for a while. Then, they continued writing when they had new ideas and beside mechanical errors there were many errors related to meaning and coherence.

I adopted scaffolded instruction to provide my participants with guided practice since they are 9 years old, until they master the metacognitive strategies. According to Vygotsky's concept of zone of proximal development [10, p. 86], "the distance between actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration

with more capable peers". In order words, in zone of proximal development, experts and novices work together on problems that novices cannot work out alone.

I had three instructional intervention sessions with my participants, each lasted for approximately for 1,5 hrs. In order to decrease their intrinsic motivation and cognitive overload for my participants, I decided to keep the number of interventions small and asked them to choose the topics of the essays. The topics the participants chose are "My best friend", "My favourite book" and "My family".

The details of my scaffolded instructional intervention after pretest as follow:

#	Interventions	My role as a teacher	Participants' roles as students
1	Modelling	Have an active role. Modelling how to write a piece of English composition in English by using thinking aloud my cognitive activities involved in task.	Have passive roles. Observe how the teacher using thinking aloud technique.
4	Guided practice	Decreasing involvement in assisting and increasing participants' self-regulation.	Practicing think aloud technique before started writing.
4	Self-practice	Have a role as facilitator. Observing how students practice strategies.	Have active roles. Regulate their cognitive activities involved in the task. Think independently.

In intervention 1, my role serves as an expert model for my participants to observe since modelling provides knowledge about how experts think about problems and try to solve them. Modelling regulatory skills such as planning, monitoring, and self-assessing are the crucial skills required for learning [8]. I used a marker and blackboard to write down the essay while I was thinking aloud in front of my participants. Some of my thinking aloud monologues are: "What was I going to say next?", "Is this sentence clear?", "Should I use another word?" My participants were observing me carefully and they seemed interested.

In intervention 2, my participants are guided to write an essay together. Both of them were asked to think aloud their cognitive activities for both other participants and me as a teacher that enabled students to observe their peers solving problems since other students are also good models and better models than teachers in some ways [4].

They had problem with talking and writing at the same time, so I wrote what the participants said on the board. Moreover, they had difficulty to tell

us what they thought. I asked from them questions when they made mistakes such as "Do you think that sentence will fit there?" What do you mean by these sentences?"., etc.

In intervention 3, I tried to decrease the guidance and encourage them to practice the metacognitive strategies by themselves but they had to sit distant from each other and writing while they are thinking aloud. I was listening them talking to themselves and making sure they are performing correctly.

On the last session, I asked them to write a short essay on topic "My last weekend" and observed them while they are composing. This time I asked them to whisper themselves while they are writing aloud and asked questions from themselves. During the first session, while I was modelling, they both seemed interested in what I was doing and during the second session they asked from me whether the spelling or meaning or the coherence is correct. After I encouraged them to self-questioning and they started to correct one's own mechanical errors like spelling and punctuation. They kept asking themselves whether the sentence or spelling is correct and when they review it, they tend to correct the mistakes. During the last session they performed actively but they seemed they still have troubles with writing.

However, most importantly they did the checking and some self-correction before handing up. From the results of the posttest there were improvements related to mechanical errors but there still were errors related to meaning and coherence.

According to the limited numbers of intervention instruction it is difficult to say whether the participants' metacognitive awareness improved or not. However, obviously they are now aware of metacognition and they can apply in order to improve different learning activities. There are some limitations in scaffolding instruction, according to Hartman [8, p. 45], scaffolding instruction, particularly guided instruction needs further individual elaboration and improvement before it is practiced in large classes and it is time consuming. So, the scaffolding instruction is not suitable for big classes and it requires many hours to practice think aloud activity. However, scaffolded instruction is suitable for novice learners in order to improve their self-efficacy and motivation.

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