# The Association amid the practice of Metacognitive awareness and Reading Strategies among Architecture students

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## Abstract

Academic Reading is formulated for study at a university and needs to read and comprehend different genres of English. Acquiring skills and knowledge in English language can create great opportunities in the job market.The study brings out the association amid the practice of Metacognitive awareness and Reading Strategies among Architecture students the classroom. The study examines whether the activity based teaching strategies and modules help the students to develop reading skills. This study was done using qualitative research using think aloud strategy with metacognition, the sample size comprises of 80 students of Architecture students at a University. A questionnaire was prepared and distributed to the students with ten questions. The data was analyzed with representing charts using information-elicitation techniques. Finally, the feedback of the students was used to identify the problems and suggest ideas to overcome the barriers.

**Key Words:** Metacognition Strategies,  Activities, Reading , Think aloud , Verbal Reports

## Introduction

Good readers only become aware of their strategy use when they recognize that they are failing to comprehend. They then are cognizant of the need to re-evaluate their strategy use in order to remedy their failure to comprehend. Furthermore, good readers are more likely to fall back on appropriate strategies when the need to change strategies becomes apparent. For most poor readers however, using a variety of strategies, using strategies appropriately, and monitoring strategies is not automatic.

Learning a discipline involves developing familiarity with the ways of being, thinking, writing, and seeing the world of those experts in the discipline. Reading academic texts published by those disciplinary experts permits students to immerse in the culture of the discipline and facilitates learning its conventions, discourse, skills, and knowledge but, this is only possible if students take a deep approach to reading. A surface approach to reading is the tacit acceptance of information contained in the text. Students taking a surface approach to reading usually consider this information as isolated and unlinked facts. This leads to superficial retention of material for examinations and does not promote understanding or long-term retention of knowledge and information. In contrast, a deep approach to reading is an approach where the reader uses higher-order cognitive skills such as the ability to analyse, synthesize, solve problems, and thinks meta-cognitively in order to negotiate meanings with the author and to construct new meaning from the text.

Reading comprehension is the culmination of all of the reading skills and the ultimate goal of learning to read. The purpose of mastery of each of the four previous skills is to enable comprehension. Likewise, reading comprehension facilitates mastery of the other four skills. For example, reading comprehension is clearly related to vocabulary knowledge and development. Comprehension is an active process that requires an intentional and thoughtful interaction between the reader and the text that can be explicitly taught through text comprehension instruction.

All reading is an active, reflective, problem-solving process. The notion of inference equations is particularly powerful in this regard. Readers can use the notion of inference equations to test whether or not the ingredients for a given inferences are indeed present. To show lying, for instance, a text must show that someone made a statement that they knew was incorrect and that they made that assertion with the specific purpose of deception. If they did not know it was wrong at the time, it's an error, not a lie. If they did not make the statement for the specific purpose of deception, we have a misstatement, not lying.

The progress of reading skills facilitates academic ability for all learning. Without the ability to read, the opportunities for academic and occupational success are limited indeed. Moreover, because of its importance, difficulty in learning to read crushes the excitement and love for learning that most students when reach the undergraduate level. One of the major components that the current pedagogy does not focus is prior knowledge of the learner.

## Purpose of the Study

This study is aimed at increasing our understanding of the second language (L2) readers' metacognitive awareness and the perceived use of reading strategies. Within the framework provided in the prior studies review, it examines the Architecture students' reported use of reading strategies in English, using Think Aloud method which they employ when they read in the academic contexts, in order to find out their overall tendency and principal components affecting their strategy use.

## Research Questions

• What is the trend of metacognitive awareness of reading strategy by learners of English in an academic context?

• What are the differences between the readers who use Think Aloud strategy and other strategies.

## Objectives

• To develop reading potentiality in the Architecture students using metacognitive strategies.

• To facilitate the students to enhance reading strategies and learn all other subskills.

## Review of Literature

Alyousef (p. 143) says that in teaching reading, contemporary reading tasks, involve three-phase procedures: pre-, while-, and last- reading stages. The pre-reading stage helps in activating the relevant schema. For example, the teacher can ask students questions that arouse their interest while previewing the text. The aim of while- reading stage (or interactive process) is to develop students' ability in

tackling the text by developing their linguistic and schematic knowledge.

Jahandar et al. (2012) say that using the Think Aloud Method in teaching EFL reading comprehension will enable students to raise their awareness of becoming strategic readers. Also for teachers, using the Think Aloud Method will provide information about the needs of individual students and will enable them to provide appropriate instruction for students learning reading to improve their comprehension. Jahandar et al. (2012) also add that while joining in Think Aloud exercises, students will gain insight into the complexities of reading, and hence expand their understanding of what it means to become a good reader. Cassanave (1988) claims that by applying think aloud strategy, students are able to improve their reading quality by focusing on the main points and ask questions related to main ideas in the text rather than less important details. Thus, this method is useful because students are verbalizing all their thoughts in order to create understanding of the reading texts. Therefore, as the students think aloud, they learn how to learn, and they develop into reflective, meta-cognitive, independent learners, an invaluable step in helping students understand that learning requires effort and is often not easy. The Think Aloud is also used to model comprehension processes such as making predictions, creating images.

This study is done to examine the strategies used by undergraduate students in an English Language classroom, to which effective and ineffective readers fluctuate in the obtained strategy through face to face interview and questionnaire methods. If a student has a prominent and specific weakness in either phonological or rapid print processing, they are said to have a single deficit in word recognition. Double-deficit children are more common than single-deficit and are also the most challenging to remediate. Related and coexisting problems in children with reading disabilities often include: faulty pencil grip and letter formation, attention problems, anxiety; task avoidance, weak impulse control, distractibility, problems with comprehension of spoken language, and confusion of signs and computation processes.

Thinking aloud is a method which, in principle, does not lead to much disturbance of the thought process. The subject solves a problem while the talking is executed almost automatically. So the data gathered are very direct, and there is no delay. The subject does not give an interpretation of his or her thoughts nor is he or she required to bring them into a predefined form as in structured techniques. He or she renders them just as they come to mind. Think aloud protocols are not necessarily complete because a subject may verbalize only part of his thoughts. Compared with structured elicitation techniques, the think-aloud method makes it easy for the subjects, because they are allowed to use their own language. Structuring the information is the task of the person who will analyse the protocols Someren, Barnard and Sandberg (1994).

**Thinking Aloud as a Research Tool**

Olson et al., (p.253-286) stated that using think-aloud technique is one of the most effective ways to assess higher-level thinking processes (those which involve working memory) and that it could also be

used to study individual differences in performing the same task. Ericsson and Simon conclude that even if their view of thought processes is necessarily incomplete, verbal reports such as those from think-aloud data are a "thoroughly reliable" source of information about thought processes (p. 247). Nonetheless, before designing a research plan which involves think-aloud methods, researchers need to decide on the type and level of difficulty of the research task, the degree of prompting which is appropriate, the use of other data to support inferences from think-aloud protocols, and the method of analysis.

Prior to a further discussion of how readers comprehend the written words and what the necessary conditions are to maximize comprehension, a broad analysis of the models of the reading processes proposed in reading research would be helpful in giving deeper insight into the nature of reading comprehension. Models of the Reading Processes Reading researchers have sought to identify how reading comprehension works and what processes are involved in comprehension. Interview is conducted to know the perception of the students regarding the strategies used in the classroom.

The most prominent example to state is, five major reading strategies were selected because they are viewed basic for learners to indefectible their ability to understand and procedure a reading substance or a text: Skimming is reading rapidly through a text to understand the main ideas and get an overview. Skimming is the act of going through the reading material rapidly in order to get gist of it, to get the overall of the text. It is appropriate when there is no time to read relatively carefully or when

trying to decide if careful reading is merited.

## Cognitive Strategies in Reading

Williams and Burden state that cognitive strategies are seen as mental processes directly concerned with the processing of information in order to learn, that is for obtaining, storage, retrieval or use of information ( p.148). They are more limited to specific learning tasks and involve more direct manipulation of the learning material itself Brown( p.115). In general, studies in both L1 and L2 reading research provide a binary division of cognitive strategies as bottom-up and top-down. Goodman refers to the bottom up model as the "common sense notion" (p.11). In this approach, reading is meant to be a process of decoding; identifying letter, words, phrases, and then sentences in order to get the meaning.

On the other hand, top-down model advocates "the selection of the fewest and most productive elements from a text so as to make sense of it" (Lynch & Hudson, p. 218) and views the reading process as an active "psychological guessing game" Carrell (p.2).Top-down rejects the notion that identification of letters to form words, and the derivation of meaning from these words is efficient reading. On the contrary, it assumes that efficient reading requires the readers to make predictions and hypothesis about the text content by relating the new information to their prior knowledge and by using as few language clues as possible. It is further assumed that the readers can check whether the hypothesis are correct or not by sampling the text.

## Methodology

The sample population were selected and randomly divided into two groups: experimental and control groups, 40 students each group. The control group was trained in reading using traditional methods and the treatment group in think aloud method and reading strategies. All students were tested before- homogenizing- and after the treatment- to determine the impact of think-aloud method. They were trained and practiced think-aloud method as well as reading strategies in a 3-week course of English reading comprehension. The class met twice per week for a total of 3 weeks, with each class meeting lasting approximately 90 minutes every session 30 minutes using think-aloud along with strategy training and practice.

The curriculum for this training group covered the basic theory and practice of the think-aloud method as well as teacher modelling, practice and strategy training. All the sessions for the treatment group were held in the lab and it was observed that the class was performing well in the controlled group using metacognitive strategies.

**Data Analysis**

The think-aloud method plays a more significant role in learning receptive skills such as reading comprehension and individuals who use a cluster of strategies are always successful. As it was observed, students can plan their reading, adjust strategies flexibly, monitor their comprehension, share the things, can set their own goals, they learn how to learn, and develop into reflective, independent readers after the study.

Procedures involving participants included a student profile, informal conversations, questionnaires and face to face interviews, through interviews, the researcher asked students questions about their educational experiences as a second language learner, especially on learning reading skills and interacting with the teacher. The researcher recorded responses by the use of observational notes an audio recording. Student answers remained confidential, and the identity of the participant was known only by the researcher. Confidentiality was maintained by the use of a code for each participant. . As the teacher read each of the items to the individual pupil in question form, each pupil was expected to respond to the teacher within a frame of 90 seconds per item. Pupils' performances in each item were rated on scale of 0 to 5 (0 = No Response, 1= Very Poor, 2 = Poor, 3 = Fair, 4 = Good and 5 =Very Good). The study included 80 Architecture students. Through these studies, relevant and effective strategies emerged that gave instructional leaders not only new insight on metacognition strategies, but also the unique opportunity to discover how second language learners feel about interactive reading models. By analysing the results, it can be said that the individual student's needs can be provided with appropriate instruction.

**Findings**

The think aloud method avoids interpretation by the subject and only assumes a very simple verbalization process. The think-aloud method treats the verbal protocols that are accessible to anyone, as data thus creating an objective method. The think-aloud method is accepted as a useful method by a large part of the scientific community in psychology and it also has its place in the repertoire of

education. Brown & Rogers investigated that (p.60) two of the areas in which introspective studies have proved most fruitful have been in the investigation of the processes involved in reading comprehension and written composition the think-aloud method is accepted as a useful method by a large part of the scientific community in psychology and it also has its place in the repertoire of education. Brown & Rogers investigated that ( p.60) two of the areas in which introspective studies have proved most fruitful have been in the investigation of the processes involved in reading comprehension and written composition.

## Recommendations and Conclusions

In the present paper, the study was about considered a type of verbal report and the way it can be used in foreign language reading comprehension along with strategy training. The important factor about this method is that it helps get the cognitive processes of readers. Only the conscious processes are available for verbalization, that is, much of what is going on in readers' mind remains hidden. It will help to know how human brain works and by analysing students' behaviour, one can discover things about them, so he can reconsider his own reading habits, his expectations of students and the role of reading comprehension in language teaching. The researchers have argued that this research method has the potential of becoming part of the language teacher's repertoire. By thinking aloud, teachers demonstrate effective comprehension strategies and, at least as importantly, when and when not to apply them. By using coached practice, and reflection, you can teach your students strategies to help

them think while they read and build their comprehension.

From the five aspects of reading comprehension, vocabulary had the highest increase, while the lowest increase was in the main idea. The purpose of the Think Aloud Method is to make students comprehend the texts better, finding the main idea, the detailed information, the inferences, the references and understanding the vocabulary, all increased. According to Huang (2010, p. 149), the Think Aloud method helps improve five functions in learning EFL, via: (1)practicing pronunciation, (2) improving oral language, (3) getting deeper understanding, (4) strengthening knowledge of EFL, and (5) improving the classroom atmosphere. Principally, by applying this technique, students were taught to listen to the English text as much as possible so they became more familiar and were able to read the English texts with correct pronunciation as demonstrated by their teacher. Then, the students were asked to comprehend the text deeper; to find the main idea as the main point of the text to catch the information. They also learnt to note the detailed information in the text, plus learning how to find the references, how to make inferences and how to guess the meaning of new vocabulary. From this study, the Think Aloud Method had a positive effect for the students in improving their reading comprehension, they were able to combine their experiences during their lessons, so it motivated the students who enjoyed the learning process more and this improved their comprehension of the texts.

The think aloud method is one of the few techniques that gives direct data about the reasoning process. These are obviously

areas of keen interest to language researchers and language teachers. These findings have implications for theories of reading comprehension, for future reading comprehension research, and for teachers, researchers and administrators who are responsible for educating undergraduate and postgraduate students. In studies on cognition, verbal protocols are used as raw data about cognitive processes. Such protocols require substantial interpretation and analysis to see their implications for process theories of problem-solving. The think aloud method can be used to investigate differences in problem solving abilities between people, differences in difficulty between tasks, effects of instruction and other factors that have an effect on problem-solving.

Previous studies have focused on observation of the teachers' approach when teaching reading comprehension plus the instructional techniques and the students' responses; but in this study, the focus was to examine the five aspects of reading comprehension, namely the main idea, detailed information, references, inferences and the meaning of vocabulary. So, the researchers were able to determine what aspects greatly improved when the

Think Aloud method was used in the learning processes. As we know, students with different interests in learning can improve their understanding in reading by using a proper method and improving motivation.

Think-aloud protocols are suggested as a good methodology as allow both ongoing behaviour and the mental pictures of the participants. Therefore, it is an essential method for areas such as cognitive psychology, educational science and knowledge acquisition. Analysing the protocols to obtain a model of the cognitive processes that take place during problem solving or to test the validity of a model is derived from a psychological theory In sum, it is necessary to design studies based on a model of mental processes, and to incorporate proper warm-up activities, careful task instruction and appropriate monitoring of participants' task performances in order to optimize opportunities for valid and reliable findings. In short, the Think Aloud Method not only makes learning reading more interesting, but it also improves the students' ability to comprehend the text.

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