

Effects of Cognitive & Metacognitive Strategy for Developing Reading Comprehension Capacity

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Abstract

Reading comprehension ability is potency of students to comprehend meaning of written texts, text details and main ideas. Furthermore, ability of reading comprehension activated learners to communicate with writers. To understand main ideas of written texts, help learners to be aware and to get particular messages from texts. Cognitive and metacognitive knowledges help readers to analyze, to summarize, to judge, and to distinguish main idea of reading texts and also more details about writer viewpoints to predicate and decision making to monitor text contents too. Monolingual students are those groups which must be aware about impacts of metacognitive strategy upon reading development and comprehension through to prepare and emanate bio feedbacks with teachers. Hence, monolingual groups have to be taught more than bilingual ones due to their low – proficiency levels and also their weak knowledge capacities about reading development strategies. Indeed, today understanding the effective strategies which help to learn language skills for all of scholars in TESOL domains is very significant, so every teacher that is aware about efficacy of those psychological strategies like cognitive and metacognitive or both; he or she is able to teach language skills particularly reading comprehension very conveniently and more productive language learning results. Without understanding reading strategy text comprehension to learn language skills is impossible.

Keywords: Cognitive Strategy, Metacognitive Strategy

Introduction

Reading is a cognitive activity which is essential for adequate functioning and to gain information in today's communities. Nowadays, to outburst of researches in SL reading have been focused on readers' strategies. Research in second language reading suggests that learners use a variety of strategies to assist them with acquisition, storage, and retrieval of information (Rigney, 1978). Comprehension or reading tactics exhibit how readers to conceive a task, how they make sense of what they read, and what they do when they do not understand. It is most emphasized in traditional ELT courses and even today is focal center of English as a foreign language instruction in some countries (Susser & Robb, 1990). Reading skill is an instrument to facilitate communicative fluency in each of other language skills. Reiss (1983) contends that "the more our students read, the more they become familiar with figurative and imaginative dimensions and also creativeness native speakers of language." Other researchers emphasized upon importantly about reading and addressed it separately. Rivers (1981) believes that reading is most important activity in any language learning (p. 259). According to Flavell; metacognitive involves about active moni-

toring and subsequent adjusting and controlling of information processing. For example, it includes these elaboration strategies such as building of connected to prior knowledges, or memory strategies such as note taking. According with Pintrich (2000) that combined function of a discrepancy from self-discipline theorists through a common framework that included following factors:

1. Predicting, planning and activating
2. To monitor
3. Controlling and self-awareness
4. Apropos reacting and reflecting

Cognitive process is a mental procedure that includes thinking strategies to solve problems, decision making, to learn new knowledge and to understand previous experiments. English language teaching as a second or foreign language (ESL/EFL) has four basic skills: reading, listening, speaking and writing which have been identified as four policies in language learning. Reading is considered especially valuable under foreign language context because it is one main source for students to achieve language content (Ediger, 2001), therefore it is import-

ant that students become advanced in reading process. Alfassi stated that students should “understand meaning of text, critically to assess message remember content, and apply new-found knowledge flexibly.

Review of Literature

Reading Strategy

Reading strategies which are important for what indicated about the way readers manage to interact with text materials and how those strategies are related to reading comprehension developments. Researchers offer a variety of theoretical definitions of reading strategies in literature, during past decades. Duffy (1993), and Richards and Renandya (2002, p. 278) stated that reading strategies means, plans for solving problems encountered in constructing meaning. According to Brantmeier (2002) reading strategies are “the comprehension processes that readers use in order to make sense of what they read.” According with Garner; reading strategies are essentially deliberate, planned activities used by active learners, over and over to remedy apparent cognitive failure. In same way, reading strategies are defined by Afferbach, Pearson, and Paris (2008) as: deliberate, goal directed attempts to control and modify reader’s efforts to decode text, understand word, and construct meanings out of text.

Reading Comprehension

Reading comprehension is perpetual developmental strategy that is to receive and to interpret encoded information of written texts. In fact, it occurs while readers are extracting and to integrate different types of text contents and then to combine them with their prior knowledges which have been stored in their memories. It is an active and also a complex procedure in which it involves to understand reading texts and to interact with them and to interact with writer’s intensions and their purposes to write text.

Reading to Understand

Reading Understanding: According with R&D Program in Reading Comprehension (RAND Reading Study Group, 2002, p. 11), often referred to as RAND Report, defined reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It consists of three elements: reader, text and purpose of reading.”

Students’ Linguistics Knowledge for Reading Comprehension

There are several differences which affected upon reading comprehension development between L1 and L2 readers that include; linguistic level, educational proficiencies, sociocultural and also institutional differences. There are two kinds of different characters among L1 and L2 readers:

- 1: linguistic differences
- 2: processing differences

Linguistic Differences: Research results revealed that L2 readers commenced their reading processes with different linguistic knowledge resources of first language readers. Ordinary, L1 students approximately know around 5000-8000 new words and

expressions orally while they have six years old and when their reading abilities are being progressed. During that age, they store more enriched knowledges of morphology and syntactic structure of language.

According to Koda (2007): In contrast with L1 reading, L2 reading involves two languages. Dual language involvement implies continual interaction between two languages as well as incessant adjustments in accommodating disparate demands each language imposes for this reason, L2 reading is cross-linguistic, and thus, inherently more complex than first language reading. The false cognates or near cognates had influenced upon word cognition in reader mind. Also, linguistic differences; at discourse, syntactic or orthographic levels can mislead and misconceptions for L2 readers particularly at beginning stages of learning procedures. L2 readers due to their dominance upon two language knowledges they have a professional level about to develop standard level of metalinguistic information which to support their reading comprehension developments.

To Process Differences: According to that view professionals or L2 ones have a very slowly word recognition ability and also a less accurately ranges about word processing which they led to slowing while they began to read. In summary, while L2 readers are limited in linguistic resources and their experiences with their native language may interfere with L2 reading processing, they enjoy advantage over L1 readers in terms of experience with their native language and the world, as most L2 readers are older in age than L1 readers. Reading researchers are therefore suggested to conduct studies examining differences and similarities between L1 and L2 reading processes which will inform classroom instructions in reading comprehension. In addition, given linguistic processing, educational, developmental, and sociocultural differences between L1 reading and L2 reading, it is recommended that findings and implications from L1 reading research be examined carefully before its application to L2 reading research and instruction.

Reading Comprehension’s Relevant Models

Models provide a description and representation about different reading theories to interpret how reading comprehension process works and to which factors it has been involved. There are two important models: information processing model and multiple component models.

Methodology

Subject

Research participants has been selected among Iranian high school students in public and private departments and institutes that their gender ratios are mostly male and at least female by which their age ranges are from 15-18 years old. Total numbers of research samples are 42 mono and bilingual English language learners. That selection is randomly drafted. According to designed and distributed questionnaires among experimental groups, all of research populations divided to two groups with attention to their linguality abilities. Monolingual groups are those language learners that just know one language (their mother languages) or in fact they are L1s but bilingual populations are those language learners that speak English language

fluently and accurately beyond their vernacular or native language. Language capability phenomena in research paper are ability of experimental groups in their houses and also in outside communications speech particularly L2 or bilingually are more emphasized.

Material

To complete that research article a lot of instruments is being applied.

A: Penguin English reading test which contains of several sections: message, people, places, things, fictions and facts. During test process experimental groups answered to reading questions as fill in blank options, multiple choice items, yes/no questions and short or long answer ones also cloze texts or c-tests (total time=60 m).

B: Reading between lines test, which questions are designed as documents based or DBQs. This test is for middle or high school students to improve their reading comprehension development capacities to learn new vocabulary, learning real grammatical structure, etc. Students have to answer a question according to a particular theme or topic which had a lot of primary related source documents (total time 75 m).

C: Questionnaires predetermined and administered to assess and measurement background knowledges of experimental groups

about reading comprehension development abilities regarding to metacognitive and cognitive strategies with emphasized to linguality. Article has used five- items Likert scale questionnaires by which participants must selected one option from other items for their reading comprehension strategies. Semantic differential scale which has bi-polar attitudes about reading strategies or pairs of adjectives. All of questionnaires were piloted in order to their validity and reliability to use cognitive test procedure.

Procedure

Researcher considered a group of participants to complete article, understanding effects of metacognitive and cognitive strategies with regard to learner's linguality to achieve his intended purposes. At first researcher acted to select research participants then to prepare useful instruments to perform research processes regularly. Writing questionnaire's topic and related content to article subject are other job of research article investigator. To complete that article has been took times at least a month by which included two phases:

First: Reading test was administered among high school student's mono and bilingual ones, total 42 EFL learners.

Second: Questionnaires have been accomplished by participants; mono and bilingual student.

Table 1: Reading Comprehension Test Results

Reading strategy	No	M	SD
Cognitive strategy	42	3	1.09
Metacognitive strategy	42	3	1

Conclusion

Reading is Mental and Cognitive Process Which Combined of Two Abilities: The ability to decode and for comprehension. It is a cognitive ability which helps to learn new knowledges about word meanings and structures. Meta-cognitive process helps learner to monitor, self-awareness, to analyze and to control cognitive ability during reading comprehension. According with research data analysis it indicated that linguality has a significant impact upon both groups' monolingual and bilinguals, especially bilingual groups. Two groups meaningfully are very different regard to applying above strategies developing their reading comprehension.

Keywords Definition

1. Cognitive strategy: It is strategy which helps learners to organizing and summarizing to learn very conveniently
2. Metacognitive strategy: It is strategy by which learner think about the skill that he or she is learning and includes: reflecting, monitoring, problem-solving and think aloud

References

1. Pressley, M., & Afflerbach, P. Verbal protocols of reading: The nature of constructively responsive reading 1995 Hillsdale.
2. Eysenck, M. W., & Keane, M. T. (2015). Cognitive Psychology: A Student Handbook. Psychology press.
3. Forrest-Pressley, D. L., & Waller, T. G. (2013). Cognition, metacognition, and reading (Vol. 18). Springer Science & Business Media.

4. Zhang, L., Zhang, L., & Liu. (2017). Metacognitive and cognitive strategy use in reading comprehension. Springer.
5. Decker, S. L., Strait, J. E., Roberts, A. M., & Wright, E. K. (2018). Cognitive mediators of reading comprehension in early development. Contemporary School Psychology, 22(3), 249-257.
6. Taboada Barber, A., Buehl, M. M., Beck, J. S., Ramirez, E. M., Gallagher, M., Richey Nuland, L. N., & Archer, C. J. (2018). Literacy in social studies: The influence of cognitive and motivational practices on the reading comprehension of English learners and non-English learners. Reading & Writing Quarterly, 34(1), 79-97.
7. Hung, C. O. Y., & Loh, E. K. Y. (2021). Examining the contribution of cognitive flexibility to metalinguistic skills and reading comprehension. Educational Psychology, 41(6), 712-729.
8. Duke, N. K., Ward, A. E., & Pearson, P. D. (2021). The science of reading comprehension instruction. The Reading Teacher, 74(6), 663-672.
9. Thomas, David. (2003). Improving your memory.

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