

Interrelation between EFL Students' Metacognitive Awareness and Reading Comprehension

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Abstract:- Reading is an essential skill in globalized era. It is possible to improve learners' reading comprehension by enhancing their higher order thinking skill, which is referred to metacognitive awareness. Readers who have better metacognitive awareness are more independent, strategic, and perform better than those who do not. The hypothesis that metacognitive awareness has positive relation with EFL reading comprehension was proposed in this study. Thus, successful readers and weak readers should greatly differ in their metacognitive awareness. The aim of this study is to determine whether it is possible to enhance learners' metacognitive awareness in EFL setting by explicit instruction, and if so, to define such a method.

The article consists of the following main parts:

- Introduction and literature review
- Method
- Result
- Conclusion
- Suggestion for further research
- Reference list

Keywords:- *metacognitive awareness, reading comprehension, Schema-building strategy, KWL chart.*

I. INTRODUCTION AND LITERATURE REVIEW

Due to globalization process intensifying worldwide, there is a growing need to learn and communicate English, the international language, at proficient level. As language is the tool of communication and sharing ideas, people strongly feel the importance of mastering English not wanting to be left behind in the information era. Reading is one of the important skills in language proficiency for EFL students to enrich their knowledge, share information, collaborate with others, and educate themselves.

Reading is a complex process, which consists of two interrelated cognitive processes: word recognition and comprehension, the prior one refers to the process of perceiving the written symbols, and the later is the process of making sense of what have been read. Royce (2001) claimed that although every student knows how to read, many have never learned good reading skills. To improve poor reading skill and poor comprehension, students need to be taught efficient reading strategies that surely enhance their metacognitive awareness. Traditional ways of teaching English reading in Mongolia involves delivering lectures on sentence structures, vocabulary, grammar rules and translation process. In other words, teaching reading is traditionally a "passive, receptive" process, which is constrained by textbooks, and focuses on language form,

content lexis, facts or details. As a result, students spend a considerable amount of time memorizing new words, grammar and structures, rather than learning how to comprehend the material by using reading strategies. Because of the intensive academic schedule and loaded materials, students are often encouraged to use imitation or rote learning, which make them less motivated, more anxious and passive receivers. Thus, reading in foreign language teaching in Mongolia is taught predominantly as a receptive process, but not an interactive one. In fact, the reader should play an active role, making predictions and processing information in the reading process.

Reading comprehension can be defined as a level of understanding of written information, its content as well as the intention of its writer. It relates to readers' personal life experience, pre-existing knowledge, syntactic awareness, and word identification skills. In other words, comprehension is considered as a build-up process that integrates the received information with prior knowledge to create mental picture about the text being read. Number of researchers have approved that giving explicit instructions about reading strategies and teaching how to use them appropriately before, while and after reading is one of the effective ways to facilitate good reading. Reading strategies are the mental process used by readers to deal with a text and try to comprehend what they have read.

There are various ways to enhance metacognitive awareness, particularly metacognitive strategy, in FL reading. For this study Schema-building strategy (as a top-down approach) is chosen as a main instrument.

Schema, known as background knowledge or pre-existing knowledge, is an organized structure of knowledge stored in our memory. It is created through our life experiences that we can apply later for different purposes to reach our life goals. Schema, thus, is absolutely essential to reading comprehension as it bridges between our background knowledge and its application to real tasks given. In brief, schema is the knowledge in our mind that helps us improve reading comprehension. When a student does not have any background knowledge about the topic given, he/she may end up not sufficiently comprehending the text. The role of background knowledge in reading comprehension has been formalized as the Schema Theory. According to this theory, it is a reader who retrieves and constructs meaning of a text by him/herself with the help of background knowledge. Anderson et al. (1977) claimed that Schema Theory is based on the belief that "every act of comprehension involves one's knowledge of the world". There are different teaching strategies to activate pre-existing knowledge of students.

As Mongolian students culturally are not open and talkative people, we used KWL chart for them to prepare to exchange information and recall what they know about the topic. Although most of the students are very shy, and not willing to express themselves freely and do the tasks independently, once they prepare, they feel self-confident. KWL chart was suitable for them not only to prepare themselves for the upcoming task, but also to monitor their pre-existing knowledge. The KWL chart, created by Donna Ogle in 1986, consists three parts: *what I know*, *what I want to know*, and *what I learned*.

A. Statement of purpose

The aims of the study are to:

- determine whether metacognitive awareness and reading comprehension have positive interrelation, if so ..
- identify the way to improve EFL students’ metacognitive awareness through explicit classroom instruction.

B. Hypotheses

Recent studies have shown that metacognitive knowledge does have positive influence on learning. In addition, cognitive and metacognitive skills can be developed and improved by doing practice and drills. In terms of reading, if a teacher helps students link their prior knowledge with the topic to be studied, they may learn more effectively.

We hypothesized that the more metacognitive knowledge EFL learners have, the better their reading comprehension outcome should be. Schema-building strategy has been chosen to test our hypothesis. Thanks to a KWL chart, students think what they already know about the topic, have a purpose and interest to participate and engage in reading activity, as well as expand their knowledge beyond the text to be dealt.

C. Implications

The findings of this survey have pedagogical implications not only for students, but also for teachers. It is possible for students to improve their performance (of different skills, such as reading, listening, writing, and speaking) by activating their prior knowledge.

Knowing how much students know about the topic, teachers will be able to define what amount of support he/she should provide students with. Finally, it can encourage instructional and educational organizations including language centers, universities, and schools to use such reading strategies especially for low level EFL students.

II. METHODS

A. Participants

Two groups, each with 30 freshmen taught by the same teacher, participated in the survey. The freshmen study at the University of the Humanities, Mongolia, majoring in different fields. Two of the four groups were experimental groups who were taught using Shema-building strategy, the other two were control groups for whom non-Shema-

building strategy was conducted in 6 weeks. Using CLUSTER SAMPLING as a research method for the survey, 60 freshmen were divided into 4 groups/clusters based on their final grades of the first semester, 10 students (16.7%) had been graded A; 19 (31.7%) B; 15 (25%) C, and 16 (26.6%) D. As confidence interval (margin of error) +/- 10 and confidence level 95% were used in the survey, 20 students from each group (n=40), proportionally 5 from the A grade-group, 5 from B, 5 from each C and D, were randomly chosen from each group for the questionnaire using the table in the book “Research methodology” by Jadambaa.B and Chimedlkham.Ts.

Gender	Number	Percentage
Male	16	40
Female	24	60
Total	40	100

Table 1: Respondents’ Gender

B. Instruments and procedures

In the study, metacognitive awareness of reading strategy inventory (MARSIS) and two comprehension tests were used to measure learners’ metacognitive knowledge and reading comprehension. A pretest and posttest design were used to evaluate change in metacognitive knowledge and reading comprehension of the participants. We had the MARSIS survey and one reading task completed by the participants before the course. Six weeks later, the participants completed the MARSIS and a different test of reading comprehension after the class.

The MARSIS survey, which was developed by Mokhtari and Reichard (2002), is a self-reported instrument designed to examine students’ use of reading strategies for academic reading purpose. The MARSIS survey is one of the few instruments to measure metacognitive knowledge associated specifically with reading. According to the developers of the survey, the survey was piloted and evaluated several times in terms of validity, reliability, and consistency. The questionnaire contains thirty statements ranging 1-5 on a Likert-item scale (1 means *I never or almost never do this* while 5 means *I always or almost always do this*). The statements were designed to define knowledge of global, problem-solving, and support strategies of the learners. To help students understand the questions and to avoid confusion, the MARSIS used in this study was translated into Mongolian and a little bit adjusted to suit the Mongolian context.

The two comprehension tests were used to evaluate learners’ English reading comprehension, one before the Shema-building course and the other after it. For these tests, participants read a text, approximately 370-word long, designated for this survey. The two texts were selected on the discussion with other teachers, and checked for its reliability through SPSS, and the texts were relatively similar level with similar content. The reading tasks consist of three types of 15 questions. The first type of questions were true or false questions, not requiring to provide justification for the answers. The second questions, detailed information, asked students to find the particular information in the text while the third category of questions

comprised general idea questions. Each correct answer was marked with 1 point whereas wrong answers were marked with 0. The respondents are allowed half an hour to complete the MARSİ survey and sixty minutes to complete the comprehension test.

The survey consisted of five stages.

- Stage 1.
 - Translating the questionnaire (MARSİ) into Mongolian and choosing the reading materials.
- Stage 2.
 - Explaining participants the purpose of the study and giving instruction on the task they should do.
 - Making the participants complete the MARSİ and reading test.
- Stage 3.
 - Giving instruction how to use KWL chart.
 - Practicing the strategy while reading during a 6-week reading course.
- Stage 4.
 - Making the participants complete the posttest of MARSİ and a reading test.
- Stage 5.
 - Collecting the materials, counting, evaluating and analyzing the data.

For the survey, SPSS was used to determine the average score, mean and standard deviation.

Scoring Rubric for MARSİ is “3.5 or higher = High, 2.5 – 3.4 = Medium, 2.4 or lower = Low”.

III. RESULTS

At the beginning of the survey, the data gathered revealed that there was no significant difference between the experimental group and control group on the average MARSİ scores as well as on reading comprehension task results. Here are the results of strategy usage before and after the course.

		Before the course		After the course	
		Mean	SD	Mean	SD
Experimental group	Global strategies	3.06	0.331	3.51	0.315
	Support strategies	3.68	0.617	3.87	0.505
	Problem-solving strategies	3.37	0.372	3.78	0.481
Control group	Global strategies	3.01	0.326	3.08	0.338
	Support strategies	3.42	0.371	3.53	0.326
	Problem-solving strategies	3.12	0.392	3.31	0.623

Table 2

The above mean scores for the use of reading strategies in MARSİ indicate that support strategy is the most frequently used strategy, followed by problem-solving and global strategies respectively by learners. It is noticed that most students tend to use bilingual dictionary instead of trying to guess the meaning of unknown words from the context. The moderate use of the global strategies shows that the learners neither plan and preview before reading, nor try to guess the meaning of the text to be read. It might be related to the fact that our students do not make almost any choice what to read, but they read what teachers or textbooks provide them.

	Average score before course	Average score after course	Variable	Variable by percentage
Experimental group	6.81	7.68	0.87	12.7%
Control group	6.74	7.25	0.51	7.5%

Table 3: Results of the reading comprehension tests

After the course, the scores of the both groups increased compared to the pretest scores, but by different amounts. In addition, the score of each student performance increased during the period.

Both MARSİ and test score of the experimental group increased far higher than the score of the control group. The results show that activating prior knowledge for reading has an influence on promoting students’ metacognitive awareness and reading comprehension. Activating prior knowledge helps students predict, question, and clarify what to be read and comprehend it better.

IV. CONCLUSION

Based on the research findings, it can be concluded that activating prior knowledge is one of the effective strategies to improve learners’ metacognitive awareness, which leads to better reading comprehension. Educators should use Schema-building strategy in teaching EFL reading as this learner-centered approach is more efficient than traditional method (Grammar Translation Method has been most-commonly used strategy for years), and it helps students be more motivated, active, enthusiastic, effective and self-confident readers.

In secondary education system, Mongolian students are not sufficiently taught to work independently, but they are encouraged to imitate what teachers teach and instruct. Once they are instructed, they do well, but are not good at initiating, seeking for solutions, and working on their own. Teachers need to teach them to go into “files” in their brain to find out what they already know about the reading task instead of waiting for instruction. By activating their prior knowledge, they can solve number of problems they face while reading(guess the meaning of unknown vocabulary, think logically and use pre-existing knowledge to answer the questions correctly,etc), save their time to do the task and improve the outcome.

Like many other studies, the findings of this survey revealed that effective metacognitive reading strategies can be taught explicitly. One of the most favorable results noticed during the experiment was that students got much more information and knowledge about the topic beyond the text when having used KWL charts. Thus, KWL chart is a simple, inexpensive, but efficient way to improve comprehension especially for low-level students.

• **Suggestions for further research:**

- Test other reading strategies to improve learners' metacognitive awareness that is suitable for Mongolian setting
- Explore the potential use of Schema-building strategy for other skills such as listening and writing

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