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The Role of Metacognitive Activities on University Level Preparatory Class EFL Learners' Reading Comprehension

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Abstract

The aim of this study is to investigate the role of metacognitive activities on university level preparatory class EFL learners' reading comprehension. The research was conducted in one of the foundation universities in Ankara, Turkey in the fall term of 2015-2016 academic year. It was designed as an action research study to improve the efficiency of reading lessons in the institution, and two existing B level prep classes were taken as experimental (n:19) and control groups (n:14). In both groups, related vocabulary was introduced prior to giving multiple choice reading test consisting of ten questions, but in the experimental group the learners were also exposed to metacognitive strategies (Socratic circle and shape shifting) as pre-reading activities. Then, an interview study was conducted with 3 randomly selected students from the experimental group to learn how they felt during these activities. The data collected from the reading comprehension text was analyzed statistically and the results showed that the experimental group students slightly outperformed the control group students. This research concludes that significant results can be attained if metacognitive strategies as pre-reading activities are integrated more frequently into reading lessons.

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1. Introduction

Reading is one of the fundamental skills that every educated person needs to acquire to a considerable extent both in their native language and their second or foreign language. Needless to say, reading is not a skill which can be acquired naturally or in an automatic way, but it must be learned and practised through formal instruction and experience. Therefore, a conscious effort is required in order to analyse and comprehend the ideas within the continuous development of a text. When we look at the literature, we see that a lot of studies have been conducted so far in various educational contexts in order to find an answer to the questions: How to increase reading comprehension skills of learners in second language acquisition or foreign language learning process and what factors lead to a successful comprehension? The idea of the present research has been motivated by these studies which will be mentioned in the literature review part of the paper. Since this study has been designed as an action research, it has been aimed to increase the efficiency of reading lessons by integrating metacognitive activities in the pre- reading phase of the lesson, testing their effects and getting feedback from the learners.

2. Literature Review

Reading is a process including several interrelated aspects in it. In this process, first of all readers physically recognize the words and decode them, realize the syntactic order of sentences and by combining their background information with them, they gain semantic awareness of the text. While doing this, they activate both their cognitive and metacognitive skills. Just and Carpenter(1980) explain this process by saying that "Reading can be construed as the coordinated execution of a number of processing stages such as word encoding, lexical access, assigning semantic roles, and relating the information in a given sentence to previous sentences and previous knowledge."(p. 331) From past to now, the views and beliefs on reading skill have shifted from "passive skill" to "interactive skill". In early work of second language teaching, reading was regarded as passive process due to the belief that readers were supposed to get the same meaning with the author. Goodman and Smith (1971) indicated that readers have to work on different types of information to get the original thought of the author, which makes comprehension process harder for readers. However; just decoding the thought of author is not satisfactory for readers as language learners to improve their reading skill, they need to go through an active process. According to Anderson and Cheng (1999);

> "Reading is an active, fluent process which involves the reader and the reading material in building meaning. Meaning does not reside on the printed page..... (a) synergy occurs in reading, which combines the words on the printed page with the reader's background knowledge and experiences." (p.1)

Reading process includes a reader, a text and an author and this process begins with the thoughts and beliefs of the author and ends with the interpretation of ideas and interaction between the reader and the author. Nutall(1982) explains this as follows:

> "...while reading the reader will always have to draw on his interpretative skills to reconstruct the writer's assumptions. He has to read with enough skill and care to make the right inferences about what the writer means and has to remain objective enough to recognize differences in viewpoint between himself and the writer." (p. 10)

The primary objective of reading is to achieve comprehension. Actually, if there is not comprehension, it cannot be accepted as reading in a real sense. (Bölükbaş, 2013) To interact and interpret the meaning correctly, readers need to evoke their background knowledge and combine them with conceptual skills and process strategies. (Coady, 1979) It should be borne in mind that there is a significant difference between native language learning process and foreign or second language learning process. The difference is mainly caused by the low amount of the exposure, which makes reading in foreign or second language learning process more challenging for learners. To overcome this situation and to enable the learners with effective teaching a variety of activities that meet the learners' needs and interests, and strategies that improves their critical thinking skills and raise their awareness of what they read must be integrated into the instruction. To do so, pre-reading phase of reading lessons should be designed in a way that it will activate the reader's background information, prevent failure and support the reader's interpretation of the text. (Karakaş, 2005) According to Al-wossabi (2014), the benefits of pre-reading activities cannot be denied, but, in practice, teachers hesitate to integrate and use these activities in lessons because they have a fear that learners may be reluctant or have difficulty in fulfilling the requirements of the task presented by the teacher. One reason which causes this kind of opposition is that "learners have been following a particular learning scenario based momentously on memorizing prescribed extracts of information given by their teachers rather than on understanding, thinking and acting."(p. 817).

However; in today's foreign or second language teaching, traditional and old-fashioned methods have given their places to the teaching ideas which are communicative- based and appeal to multiple intelligences. In such educational settings, it is essential to make the learners think critically, raise their awareness, activate their previous knowledge & experience, and to get them involved in the lessons actively. No doubt this will encourage the teacher to make use of different teaching activities and strategies during the teaching process and in this paper, with relation to reading, how pre- reading phase must be designed -to achieve the goal mentioned above- will be discussed.

The educational significance of pre-reading activities is based on schemata theory. According to Ajideh (2003),

> "A schema (plural schemata) is a hypothetically mental structure of representing generic concepts stored in memory. It's a sort of framework, or plan or script. Schemata can be seen as the organized background knowledge, which leads us to expect or predict aspects in our interpretation of discourse."(p. 4)

The aim of pre- reading activities is to make the learners prepared for the text so that they will be able to comprehend the text to the desired extent. In this process, the teacher supplies the learners with suitable schemata which don't exist in the learners' minds and guide them how to connect their previous knowledge with their new learnings, which is fundamental for comprehension. (Carrell and Floyd, 1989) Therefore, at this stage a variety of activities is employed to bring the learners' background knowledge to light and to associate it with new knowledge. Since reading is not just decoding words, readers must understand and interpret what they read, so in addition to cognitive activities, they also need to make use of metacognitive activities in pre-reading because metacognitive activities serve for the intended purpose of today's foreign & second language teaching process; they help students "to think about their thinking." (Boulware-Gooden, Carreker, Thornhill, Joshi, 2007, p. 70) Metacognitive activities "provide frequent opportunities for students to self-assess what they know and do not know, help students articulate their own thinking and foster a shared understanding of the goals" (Lin, 2001, p. 34) All in all, pre- reading phase can be considered as the preparation and motivation stage for the text during which the learners' background knowledge is facilitated and combined with the new knowledge. While doing it, only the use of cognitive activities (such as vocabulary introduction) are not satisfactory; metacognitive activities must be integrated for a better comprehension because they foster critical thinking skills, raise awareness and give a chance to the learners to evaluate and reflect on their learning.

3. Methodology

3.1. Theoretical framework

In this study, the researcher employed an action research study. This type of study is considered as a 'powerful tool for change and improvement at the local level.' (Cohen, Manion, Morrison, 2007, p. 297) In a broad sense, action research is defined as a 'systematic attempt to gain a better understanding of educational process, generally with view to improvement. (Stern, 1983, p. 59) A typical action research follows the order of these steps: initiation, preliminary investigation, hypothesis, intervention, evaluation, dissemination and follow-up. (Nunan, 1992, p. 19) The most significant features of an action research are that it can combine different research methods within the scope of it and it gives way to increasing knowledge about curriculum, teaching and learning process.

3.1. Setting and participants

The present study was conducted in one of the foundation universities in Ankara, Turkey with university level compulsory preparatory program students in the fall term of 2015-2016 academic year. Two B1 level classes where the teachers as a researcher taught were randomly assigned as experimental (n: 19) and the other as the control group (n: 14). The participants' age ranged from 18 to 29 and they had 23 hours of English per week. The proficiency test given at the beginning of the term indicates that the two classes were not distant in terms of their language proficiency, which shows the homogeneity of the two groups in terms of their language competence.

3.2. Instrumentation for data collection

In this action research, the topic 'Serial Killers' and a reading text titled 'Monsters or Victims' which has ten multiple choice questions were chosen as the material. First of all, for both experimental and control groups, related

vocabulary introduction was done by the help of the visuals and sample sentences in the pre-reading phase. In order to learn and memorize the words easily, finding key words exercise was employed as a whole class activity. After the vocabulary introduction, the control group participants were given the reading test and they were expected to answer the questions in 30 minutes. As for the experimental group, in addition to the vocabulary introduction, metacognitive activities – shape shifting and Socratic circle- were employed to build up background information about serial killers and combine this new information with their existing schemata. While doing these activities, the experimental group participants interacted with their classmates, found a chance to reflect on their knowledge, and thought in a multifaceted way. When they finished the pre-reading tasks, they took the reading test and they answered the questions in 30 minutes. Besides the quantitative feature of the study, 3 students were randomly selected from the experimental group and they were face to face interviewed in their mother tongue by the teacher as a researcher to learn how they felt during the activities

3.3. Data analysis

3.4. The data collected for this study were analyzed through test of normality to check whether data has a significant distribution or not. According to the Table 1, the data didn't show a normal distribution since the .sig (0,028) of the test is below 0.05.

Table 1. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total	.189	33	.004	.927	33	.028

a. Lilliefors Significance Correction

In this case, it is proper to use non-parametric tests. As Mann-Whitney test has the highest value of *p,* it was used to figure out the significance rank. Table 2 and Table 3 show the Mann-Whitney test results.

Table 2. Mann- Whitney Test Results

	Group	N	Mean Rank	Sum of Ranks
Total	Experiment	19	17.68	336.00
	Control	14	16.07	225.00
	Total	33		

Table 3. p value of the test

	Total
Mann-Whitney U	120.000
Wilcoxon W	225.000
Z	0.485
Asymp. Sig. (2-tailed)	0.628
Exact Sig. [2*(1-tailed Sig.)]	0.653[b]

a. Grouping Variable: Group
b. Not corrected for ties.

Table 3 shows that the *p* value of the test is 0,628, which is higher than 0, 05 and this indicates that there is no significant difference between the groups. However; when the number of correct answers of the groups were compared, which is reflected in Table 4 below, while all participants in the experiment group answer at least 50% of the questions correctly, 4 out of 14 students in the control group answer less than %50 of the questions correctly. The

number of average correct answer for experimental group participants is 6, 94 out of 10 questions, for control group participants it is 6, 14.

Table 4. Percentages of correct answers

Group			**2** correct answers	**4** correct answers	**5** correct answers	**6** correct answers	**7** correct answers	**8** correct answers	**9** correct answers	**10** correct answers	
	Experiment	Count	**0**	**0**	1	7	7	1	2	1	**19 students**
		% within Group	0.0%	0.0%	5.3%	36.8%	36.8%	5.3%	10.5%	5.3%	100.0%
		% within Total	0.0%	0.0%	50.0%	87.5%	70.0%	25.0%	50.0%	100.0%	57.6%
		% of Total	0.0%	0.0%	3.0%	21.2%	21.2%	3.0%	6.1%	3.0%	57.6%
	Control	Count	**2**	**2**	1	1	3	3	2	**0**	**14 students**
		% within Group	14.3%	14.3%	7.1%	7.1%	21.4%	21.4%	14.3%	0.0%	100.0%
		% within Total	100.0%	100.0%	50.0%	12.5%	30.0%	75.0%	50.0%	0.0%	42.4%
		% of Total	6.1%	6.1%	3.0%	3.0%	9.1%	9.1%	6.1%	0.0%	42.4%

Although the test results does not show significant difference between control and experiment groups, the analysis of the number of correctness indicates a difference and experiment group has slightly outperformed compared to the control group.

4. Conclusion and discussion

Although the results of the reading comprehension test doesn't show a significant difference between the experimental group and the control group, this action research gives insight to the teacher as a researcher about the teaching and learning process of the target language and provides feedback. This feedback has been obtained from the interviews conducted with 3 students. Here are the students' responses given to the interview:
Student A;
" Changing the seats, moving around and talking to different people.. these are really enjoyable for me. I enjoyed the lesson. Actually, sitting 50 minutes and looking at the lecturer are boring. Also, these activities were out of the book, which is interesting for me."
Student B;
"For me, it is a good speaking activity. I thought it was a boring reading lesson but these activities made me fun. For example, drawing a picture of serial killer was really fun. It was like a break time as I felt relaxed and enjoyed. The lecturer asked us to use keywords rather than creating sentences. It was good because I could tell what I know easily. I didn't have to think about the grammar or rules of a sentence."
Student C;
"While reading the text, I felt that I was familiar with the topic and details. Of course, the text was more detailed but I could handle it. Changing the seats was one of my favourites. We got freed from monotonous class mode. Also we had fun because sitting 50 minutes is boring. Agreeing and disagreeing to other people were also a joyful activity. I liked it. The topic was interesting, after the lesson, I wanted to make a research about it."

When we examine the students' ideas above and look back the teacher's notes that she took based on her observation during the teaching process, it can be easily said that the integration of metacognitive activities into pre-reading part destroyed the monotonous atmosphere of the lesson. While doing these activities, the students changed their places, moved around the classroom, did drawing, and found a chance to interact with a lot of classmates, which proves that these activities – Socratic circle and shape shifting- appeal to multiple intelligences. Furthermore, the

activities motivated learners to reveal their background information and add new information to it in a communicative way.

All in all, these metacognitive activities motivate learners or improve their critical thinking abilities, but for significant results in reading comprehension, they should be integrated into instruction frequently. Moreover, the variety of activities should be increased in order not to get monotonous. To improve their efficacy, metacognitive activities should be applied in teaching of other skills such as; listening or writing. Since all skills affect each other like a domino, the integration of metacognitive activities into all skills may improve the reading comprehension, as well. The main point is to create and build metacognitive thinking ability in learners' mind. If this ability is acquired by a learner, it can be possible to combine his previous knowledge with new schemata and so the learner becomes ready and motivated for the reading text.

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