Fostering Comprehension through Text structure In EFL reading Classes

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ABSTRACT

The present study aimed at investigating the effect of using text structure instruction on Iranian EFL learners' comprehension in reading classes. Having homogenized the participants by a TOEFL test, they were divided into two thirty -student groups. Afterwards, they were given a subjective test of reading comprehension as pretest. Then the subjects in experimental group received text structure instruction on the basis of Farrel's Hierarchal Summaries [1]. Meyer's theory of text structure [2] and Anderson and Krathwhol's the theory of critical thinking taxonomy [3] were applied as the basis for conducting the present study. Moreover, two groups were provided with a posttest of reading comprehension to check the effectiveness of the treatment. Analysis of the data by independent sample t test and paired sample t test indicated that the learners' reading comprehension in the experimental group outperformed the control group. Thus the treatment was effective and consequently the reading comprehension of the experimental enhanced.

KEYWORDS: Reading comprehension, Text structure, Critical thinking

1. INTRODUCTION

1.1. Critical thinking ability and text structure

In defining reading comprehension, Nimmo [4] argues that "Reading comprehension much like verbal communication, involves the ability to think critically about the author's message so the exchange of ideas and the creation of the new ideas can continue." In other words, reading is complex task which needs not only reader's knowledge about the vocabulary, grammar of the target language but it also require reader's analyzing, synthesizing and evaluating ability.

Reading according to Meyer et al. [5], can be viewed as an interaction among three variables: Reader variable, such as verbal ability and world knowledge, Text variable, such as text structure and Task variable such as telling all you remember from what you read or solving a problem with the information read. They believe that reading cannot be a successful process, just by devoting reading skill to anyone of these variables. However referring to the review of the literature is showing the fact that mostly reading classes are devoted to reader's variable rather than task variable or text variable. In clarifying the meaning of text structure, Meyer et al. [6] defines the structure of a text as the organization that binds it together and give it an overall organization. Meyer gathered evidence for five basic ways to organize discourses: Collection, Description, Causation, Problem/Solution and comparison. Students who are able to identify and use these top-level structures remember more from their reading than those who do not (Meyer, [5]).

1.2. Critical thinking and reading

In reading, critical thinking is involved in evaluating the text that the learner is reading. As Graney [7] believes that critical reading needs that, reader evaluate the text he is reading. Wallace [8] is also defining critical thinking in reading as it maps what is demonstrated in the text against our own knowledge and experience. Moreover, the expected outcome of reading is comprehension and researches have shown that in academic studies, deep comprehension capabilities are needed to be enhanced. According to Dorn & Soffos [9] deep comprehension needs readers to plan, select, direct, and orchestrate the various cognitive structures and processes available to them to obtain a specific goal. In other words, the reader should deliberately choose strategy to understand the meaning of the text in order to comprehend better. This is what some researchers have also labeled it as "Critical Reading".

1.3. Statement of the Problem

Although educators and psychologists have been guiding research on different aspects of reading skill (e.g.; Alderson & Urquhart, [10]; Johnston, [11]; Thorndike, [12]), there are still controversies about what the reading instruction should be. Some researchers believe that college students' purpose of reading is learning from their

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textbooks (Self [13]). Hence the college books are often in expository materials and moreover, based on Williams [14], as expository texts seem to be more difficult than narrative texts, we can observe students lack of understanding while they encounter those texts. One reason about the difficulty of expository texts based on Stein & Trabasso [15] is that the relation between events that are demonstrated in expository text is not the same sequence of familiar events that readers can see in many narratives, since in expository texts, abstract logical relations are depicted.

Regarding text structure awareness, Farrell [1] argues that making EFL or ESL learners aware of how texts are organized also helps them with their reading fluency, comprehension and efficiency. He also suggests that we specifically teach EFL or ESL learners how different texts are structured and organized and even how paragraphs are organized and cohesive. Although teaching learners how to use text structure is a useful strategy, it is not merely effective for fostering comprehension. Based on Baker & Brown [16], the use of strategy without meta-cognition is not effective as meta-cognition involves "Self-awareness and the conscious monitoring and regulation of comprehension". Further, Flavell [17] defines Meta- cognitive strategies as assisting with monitoring and evaluating. Nimmo [4] also believes that meta cognition takes place when the readers are looking for main ideas in the text during reading.

Cognitive ability is one of the areas of thinking that Anderson and Krathwohl [3] mentioned about it in their taxonomy of thinking. Anderson and Krathwhol [3] taxonomy that is a revised version of Bloom's [18] original taxonomy includes six major categories (hierarchy levels) in cognitive domain. Anderson and Krathwohl [3] taxonomy composes of six levels that are Remembering; Understanding; Applying; Analyzing; Evaluating and Creating. Out of these levels, the top three levels represent learners' higher order thinking skills.

The teaching of reading approach that accompany textbooks and offer strategy instruction, only focuses on explaining the content and vocabulary, and assessing knowledge through some comprehension questions is inadequate for the students to truly understand what they read about in expository texts (Kragler et al.) [19]. they mentioned the traditional reading instruction as inadequate for instruction understanding expository texts.

In the area of teaching reading in colleges, there is still traditional believes that "Most college instructors have a background in elementary or secondary reading instruction". One reason of this problem according to Maxwell [20] and Stahl [21] is that, "There are only a few graduate programs that certify instructors in developing reading". With these assumptions, the study focused on evaluating a new approach in teaching college students how to read critically to achieve educational objectives.

Ladan Javdan Faghat, Zaidah Zainal [22] report that in Iran, English is taught both in guidance and high schools. In guidance schools, English is taught for two years as a subject to introduce the basic English concepts to students, such as basic vocabularies and grammar and in high schools English is taught for four years, thereby it mainly introduces the learners the concept of language knowledge, accompanying grammar, vocabulary, language functions and phonetics. Generally the English Program in high schools is exam-oriented and it is devised to prepare the students for University Entrance Exam where the questions are mainly based on grammar, vocabulary and language knowledge in multiple-choice format. As a result, the focus of teaching is mainly on grammar which is taught in the form of pattern-drills, vocabularies which are taught in context, short reading texts with new vocabularies followed by numerous product-oriented comprehension questions, language functions without any introductory part of the concept and situation of the dialogue, and finally phonetics. Based on their investigation, they discovered that knowledge of text organization affects comprehension mainly in identifying and recalling of the most important information in a text.

The goal of this study is to investigate whether the instruction of text structure affect Iranian female EFL learners' comprehension in reading classes. Accordingly three null hypotheses were considered:

1. The instruction of text structure does not affect Iranian female EFL learners' reading comprehension.

2. The instruction of text structure does not affect Iranian female EFL learners' analyzing skill in reading classes.

3. The instruction of text structure does not affect Iranian female EFL learners' synthesizing skill in reading classes.

2. LITERATURE REVIEW

2.1. Related study on reading strategy to increase comprehension

"In general terms, learner strategies are the cognitive steps learners use to process second language input" (Brantmeier) [23]. However most of the time learners are not aware of these strategies. Moreover, all strategies cannot be effective if they are not used in proper learning situations. One area of learning, which needs strategies to be worked on, is reading and comprehension. Barnett [24] stated that, "Students who were taught reading strategy did show a greater ability to read through context than did their more traditionally taught peers.

Many studies have been done to elaborate the relation between reading comprehension and the use of reading strategy in ESL or EFL reading classes. Kung [25] conducted a study on the relation between reading comprehension and the usage of reading strategy among Taiwan's EFL college students. He found that the higher-grade students possessed more abundant knowledge in reading strategy information and they were able to apply suitable strategy for different types of texts to comprehend better. However, in her study, she surveyed some students who did not have the same English knowledge background. It might have affected the results of her study.

Another study on reading strategy was done by Santoro et.al [26]. Their study focused on different types of reading strategies for fostering comprehension. Their findings showed that read-aloud reading strategy, with direct teaching on comprehension and readers' participation in reading discussions about a text, could increase comprehension. Moreover, they suggested that if the teachers are interested to make the read-aloud sessions more effective, they should make the students recognize the differences between narrative and expository text structure. They concluded that students' capability to differentiate different types of structure in expository texts helped them to discuss about the text in reading activity and it was helpful in increasing comprehension.

Nelson's findings [27] also supported the effectiveness of reading strategy for comprehension of expository texts. The meta-cognitive strategy was the strategy that she presented in her experimental study. Her reading strategy contained reading aloud, text connections, visualization and questioning. Her findings supported the assumption of possibility of teaching meta-cognitive strategy in reading classes. She observed students in experimental groups practicing meta-cognitive strategy application to expository texts. She concluded that this strategy was helpful for all readers with different reading ability. She also mentioned that after meta-cognitive strategy instruction even non-proficient students' reading comprehension significantly improved.

2.2. Related articles on critical thinking and reading comprehension

In spite of the fact that reading needs some skills which are necessary in enhancing comprehension such as word recognition, text recognition, grammar knowledge, world knowledge and etc, some researchers believe that reading is a complex process involving a network of cognitive actions that work together to construct meaning (Baker & Brown [16]; Block & Pressley [28]; Pearson [29]; Farstrup & Samuels [30]; Ruddell etal [31]).

Dorn & Soffos [9] (pp. 15-17) have included one definition for good readers. They defined good readers as readers who can integrate four types of knowledge to sustain and expand their reading comprehension: generic, text, strategic and reflective. They believed that deep comprehension depends on the dynamic interplay between the four sources of knowledge. They defined generic knowledge as "Cognitive information that the reader activates to construct meaning for a text." They believe that generic knowledge comprise readers' believes and perceptions, and consequently this knowledge influences readers' interpretation of the text. Moreover, they believe that without this knowledge the readers' comprehension will be limited to the surface level. Text knowledge as it is discussed earlier is referring to the knowledge of the readers of different pattern of the texts as well as the vocabulary knowledge. Dorn & Soffos [9] (pp. 15-17) described strategic knowledge as "The readers' knowledge of specific strategies for problem solving including cognitive strategies for sustaining and expanding the meaning of the text." Strategic knowledge seems to be substantial for deep comprehension and it should be inculcated as an ability in the readers especially novice readers as Dorn & Soffos [9] elaborated it as "An ability to monitor comprehension and search for meaningful solution, Integrate a range of knowledge sources and make self-corrections. For sure it needs to be nurtured in readers, as using flexible strategy for comprehending texts is hard without guidance for novice or young readers. The last but not the least is reflective knowledge, which Dorn & Soffos [9] considered them vital for deep comprehension. They defined it as "The mind's ability to think abstractly" which contributes thinking beyond the text. Dorn & Soffos [9] clearly stated that reflective knowledge necessitates the readers' information processing at deep levels, including the ability of synthesizing, analyzing and critiquing information in the text.

Many reading researchers believe that teaching thinking skills in reading classes will enhance comprehension. Despite of the fact that teaching thinking skill in reading classes enhances comprehension; Aegler's [32] study did not support this idea. In fact the results of her study did not show any significant differences on reading comprehension of students who were instructed in utilizing thinking ability in reading as compared with students who were instructed in traditional reading. Aegler [32] evaluated direct teaching of thinking skills to improve reading comprehension. The purpose of her study was to determine the impact of direct teaching of thinking skill on reading comprehension. She hypothesized that there would not be any difference between the reading performance of control and experimental group in reading ability to comprehend the text. In her experimental study, the control group received traditional reading instruction while the experimental group was exposed to CORT instruction for a total of ten week (35 minutes a week). A Pre-test and a Post-test were implemented to record students' improvement on reading comprehension ability. The results of her study indicated that the control's mean was 46.43 and the experimental group's mean was 48.78. There were no significant differences in the Post-test. The results proved

that CORT instruction might not have an effect on reading comprehension significantly; however, it did show a slight increased on students' comprehension.

Integrating reading and critical thinking has always been the area of interest for the reading researchers who believe that reading is a complicated cognitive task which needs to be scrutinized. Gray [33] conducted an experimental study on improving critical thinking skills and critical reading. The purpose of his study was to determine first, "What style of pedagogy is effective in improving student critical reading and critical thinking skills in a college learning environment?" and second: "What affects will Meta-cognitive teaching and Hands-On/Minds-On methodologies (students generate ideas and are provided with freedom to be physically active in their search of knowledge; Based on Ridgway [34] have on student learning in a critical reading class?" The study started with 20 students and the duration of the training was for a fourteen (14) weeks. During the training interval, Students worked in groups to solve problems. In This activity the students were expected to create and take some steps, which involved their analysis, synthesis and evaluation behaviors. To measure knowledge of critical reading, critical thinking and relative class based activities; three Pre and Post-tests were administered. Self-questioning strategies were supported while reading, as a means of cognitive and meta-cognitive. The instructor's role in the study was learning facilitator.

3. METHODOLOGY

3.1. Participant

The total number of 130 female advanced EFL learners, ranging in age from 21-30 from a variety of academic background, completed four terms in TOEF preparation at three private language institutes in Qaemshahr ,a city in North part of Iran, took part in the study. After the groups got homogeneous by the TOEFL proficiency test, the result was 60 female students participating in the population in a way that on the basis of their level of proficiency. Therefore, the students who got more than 70% in TOEFL proficiency test were randomly divided in to groups named as control and experimental groups. The researcher decided to select the advanced level students or the students with high level of proficiency. The reason for selecting the students with high level of proficiency according to Young [35] was that, advanced level students can analyze what they read. Therefore they are able to think critically when they read a passage. Another ten students, similar to the target group in terms of proficiency and education status, participated in the piloting phase of the study.

3.2. Materials

To homogenize the participants of the study regarding their general proficiency, the standardize TOFEL test was used. Also, the reading sections of the TOEFL test including subjective questions were utilized as independent tests to signify whether there was any significant difference in terms of the reading ability of the learners before and after the treatment. The TOEFL test consisting 55 multiple choice items on the English structure vocabulary and reading comprehension was piloted with a group of 10 students similar to those of the target sample before the main administration. The IF and ID of each item was calculated and the malfunctioning items were discarded. Following the piloting process and discarding the malfunctioning items, 50 multiple choice items were selected for inclusion in the test. Afterwards the internal consistency of the test was calculated through Kudar-Richardson Formula (KR-21), the result ($r=0.71$) indicating a relatively high reliability index. Moreover a reading comprehension test including passage with the same level of difficulty as the pre-test measured by Flesch readability software [36] and a similar subject was given to the participants of both control and experimental groups.

3.3. Procedures

Having homogenized the participants by a TOEFL test, they were divided into two thirty -student groups. Subsequently, a reading pretest was given to both groups to measure their reading comprehension ability before the treatment. The test included 3 questions that asked students to analyze, find the main idea and summarize the text. The readability of the passage in pre-test based on Flesch Readability software [36] (26.10) showed the passage could be best understood by college students. The treatment took 10 sessions each lasting for two hours. The process of teaching in each of the group was as follows:

The experimental group received text structure instruction while the second group was given traditional instruction on reading. The strategy, which the study used us a way of teaching, was called Hierarchal Summaries, which was suggested by Farrell [1] to help the students to recognize different types of structures

After the treatment, the reading comprehension post-test was administered to the participants of both groups. The test including a passage with the same level of difficulty as the pre-test (25.60), and the same subject of psychology, asked students to write the topic sentence, find the main idea and summarize the passage. Since the questions in the established pre-test and post-test were subjective, inter-rater reliability was calculated to determine the consistency of

the evaluation. The mean scores of each evaluator for both pre and post test were very close which indicated an overall high consistency. The difference in the means is less that 1 (0.37 for pre-test and 0.60 for post-test).

3.4. Analysis

Independent sample t -test and paired sample t -test were used to compare the scores of the two groups and interpret the results. The analysis of pre test and post test were performed to determine the immediate effect of the treatment. Furthermore, the statistical package for social science (SPSS) (Version 16.0) was used to perform statistical procedures.

4. RESULTS

4.1. Reliability table

Test items	Mean	Variance	N	reliability
55	33	31	10	**0.71**

Table1. Reliability table

In the table above, Prior to the study, the TOEFL test was piloted with a group of 10 examinees and the reliability index of TOEFL test (r=71) showed a high value.

4.2 Descriptive analysis of the data

This section focused on the descriptive analysis of the obtained data in this study that can be summarized as the followings:
The purpose behind such analysis was to see if the results obtained from experimental group and control group were the same or not.
 (Experimental and Control Group)

	Experimental Group			*Control Group*		
Test	*N*	*Mean*	*Sd*	*N*	*M*	*Sd*
Post- test	30	53	11.11	30	45	11.25
Pre- test	30	17	15.20	30	17	11.54

Table.2 Pre and Post-test Results

The descriptive analysis of the data shows a dramatic improvement in the Experimental group's performance in the Post-test (Table2). The Experimental group registered better results in the Post-test (M=53; SD=11.11) as compared to the Pre-test (M=17; SD=15.20). The group had a 36-point increase in the average score over the Pre-test. Another significant observation was the lowering of the standard deviation score of the Post-test (SD=11.11) as compared with the Pre-test (SD=15.20). This indicated that the Post-test scores of individual members of the group were less dispersed from the mean.

The mean and the standard deviation of the Post-test (M=45; SD=11.25) & Pre test (M=17; SD=11.54) of the Control group remained close to each other, which established the fact that the Control group did not show any significant improvement.

Group	N	Mean	SD	t	df	sig.(2-tailed)
Experimental						
Pre-test	30	17	15.20	7.64	29	.000
Post-test	30	53	11.11			
Control						
Pre-test	30	17	11.54	0.24	29	0.807
Post-test	30	45	11.25			

Table3. Results of paired sample t-test;

Table3 shows data of two different groups' respondents. The mean score of the experimental group in the pre—test (M;17)while the post –test mean was (M;59.the difference between the means of post-test and pre-test of the experimental group was 36.the paired sample t-test run on the score of the respondents of the experimental group, for the pre-test and the post-test , t (29)=7.64.p=0.000(p<0.05), indicated that there was a significant difference between the pre-test and post-test performance of the experimental group .

Compared to this ,for the control group as it is shown in table 4.6,the mean difference in the pre-test and post-

test was 28.the paired sample t-test of the control group respondents ,for their pre and post tests , t (29)=0.24.p=0.807(p>0.05),had p value greater than 0.05,this indicated that there was no significant deference between the pre-test and post-test performance of the control group.

Test	N	M	Sd	Df	T	Sig(2-tailed)
Experimental	30	17	15.20			
Control	30	17	11.54	60	-1.08	0.29

Table4. Independent Samples Test (Pre-test)

From the table 4, It is observed that the t (60) = -1.08; p=0.29 (p>0.05) retained the Null hypothesis and proved that the average Pre-test score of the Experimental group (M=17) did not differ significantly from that of the Control group (M=17).

Test	N	M	Sd	Df	T	Sig(2-tailed)
Experimental	30	53	11.11			
Control	30	45	11.25	60	5.88	0.000

Table5. Independent Samples Test (Post-test)

To determine whether the instruction on Experimental group was effective in enhancing their critical thinking ability and consequently whether they outperformed the reading ability of the Control group, an Independent Sample t- test was performed on the Post-test results of both the groups. Table 5 indicated that there was a significant variance between the mean scores of the Experimental and the Control group in their perception of the effects of awareness of the structure of the text on students reading ability before and after the intervention.

According to Levene's Test for equality of variances, if the p value is greater than 0.05 then the null hypothesis that states, the possibilities that the difference between the two groups is zero, is retained. From the table 4.8 this fact is observed t (60) =5.88; p=O.OOO (p<0.05) established the fact that, the t-test with 30 degree of freedom was significant enough to reject the Null hypothesis and this proved that the average Post-test score of the Experimental group (M=53), as expected, differed significantly from that of the Control group (M=45).

	Pre- test		Post-test	
Question measuring skills	M	Sd	M	Sd
Q1 : testing the analyzing skill	0.69	0.75	1.65	0.42
Q2: testing the analyzing skill	0.59	0.66	1.76	0.30
Q3: testing the analyzing skill	1.74	0.88	2.59	0.78

Table6. Critical thinking questions analysis

Table 6 demonstrates the Experimental group's improvement in critical thinking ability after the intervention. The comparative analysis of Pre-test and Post-test means for question number one indicated an increase in mean in the Post-test. The lower standard deviation in post-test (SD=0.42) compared to the pre-test (SD=0.75) indicated homogenous improvement.

The analysis of finding for question number 2 revealed a similar pattern. The table 6 showed an improvement in analyzing skills of the students (Pre-test mean=0.59 and Post-test mean=1. 76). The lower standard deviation in post-test (SD=0.30) compared to the Pre-test (SD=0.66) indicated homogenous improvement as well.

The Post-test mean and standard deviation (M = 2.59; SD= 0.78) over the Pretest mean and standard deviation (M = 1.74; SD = 0.88) for question number three, showed dramatic improvement in student's ability in the 'Creating' and 'summarizing' skill.

5. DISCUSSION

The literature review revealed that the role of critical and creative thinking skills was a topic, which had been the most controversial issue in most educational researches, and it still prevails in recent researches. The literature on critical thinking ability supported the works of Anderson and Krathwohl's taxonomy [3] on higher order thinking skills and critical thinking skills. Anderson and Krathwohl's taxonomy [3] is used to evaluate students' understanding of the written texts, and is composed of six hierarchy levels of cognitive domain which are: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.

In Anderson and Krathwohl's taxonomy [3] it is mentioned that 'Understanding', 'Applying' and 'Analyzing' involve putting elements together to construct meaning but they are not complete without 'Creating'. It is emphasized that 'Understanding', 'Applying' and 'Analyzing' skills involve students' comprehension; however, this is

not enough to meet the higher levels of learning's objectives. The simple objective of 'Creating' can be found where the learners attempt to summarize a passage on their own words. Bloom (1956) argued that synthesizing skills ('Creating' skills in Anderson and Krathwohl's taxonomy, [3]) objectives occur at most levels of education. He argued that some goals of education are the same at each level. For example, skill in writing is appropriate at the elementary school level as well as at the PhD level. The ability to write well-organized ideas and statements is the objective of 'creating'. Based on the review of the literature, critical thinking relates to one's conscious effort in deciding what to do or to believe by focusing one's thought on it. In relating critical thinking with reading, the review of the literature highlighted the fact that critical reading needs readers to evaluate the text they are reading. It was also proven by studies that a skilled reader who possesses critical thinking skills is capable of understanding the purposes, which the author tries to convey through the text.

The purpose of this study was teaching the students how to analyze the texts based on finding the implied topic sentence as well as writing the main idea of the text and summarizing. As in any experimental study, there was one experimental group and one control group. The control group was introduced traditional instruction in handling reading passages while the experimental group received the treatment in 10 sessions. Experimental and Control were at the same level at the beginning of the study, by looking at the Post-test, it is noticeable that there is a dramatic increase in the performance of the Experimental group. In fact the Experimental group outperformed the Control group pretty much, while the Control group's performance did not register any noticeable increase when compared with the mean of both Pre-test scores. Based on what has been discussed, it can be concluded that text structure awareness does help the readers to apply their critical thinking ability while reading expository texts. It also proved that text structure instruction significantly increased students' ability in analyzing the text and it consequently resulted in better performance for them.

6. CONCLUSION

This study strived to scrutinize the effects of text structure awareness on students' critical thinking ability among Iranian undergraduate freshmen majoring in English Translation and at the same time it attempted to demonstrate the enhancement of the students' critical thinking ability in an English reading class. Incorporating 'Analyzing' and 'Creating' (Summarizing) skills in reading expository texts in this study helped the students to find meaningful connection between the sentences of the text and the messages that the author intended to convey to the readers. By mastering the 'Analyzing' skills, the students found that some sentences of the passage indicated the key value in conveying the author's message, which should be considered; while some others were just details and could be ignored. It helped the students in their reading ability.

The study achieved its' objectives that teaching students how to analyze and consequently to summarize the texts would inculcate, and improve their critical thinking skills in English reading classes. It is also believed that in the long run, it would help students to improve in their overall achievement in all courses, as these skills would not be merely devoted in English reading classes.

7. Recommendation for future research

The findings from this research have brought to the surface a number of challenges for future research in the area of critical thinking and reading comprehension in EFL classes. Existing studies related to this area were restricted to the concept of teaching thinking skills or mere teaching reading skill without having a broad exploration of integrating existing teaching approaches with the critical thinking ability.

Thus the current study employed a new approach in reading classes, as the readers were taught how to go beyond grammar and vocabulary, and find an area to comprehend better. With a deeper focus on the structure of the text, this study has brought to the surface the fact that the critical thinking can be enhanced in reading classes.

However this study was done on a small population of university students majoring in English. Further studies need to be attempted to evaluate the effects of awareness of text structure on a bigger population of university students. Moreover, the present study was done with students who were majoring in English. It is suggested that future studies consider students from other disciplines of studies too.

The time allotted to critical thinking instruction and teaching text structure was ten sessions of two hours each. Although the study was able to achieve its' desired objectives in this short interval, the researcher believes that a longer term of instruction/treatment would have far reaching results and would open a wide perspective on the implementation of the text structure strategy in reading classes and in developing critical thinking skill.

The main focus of this study was limited to Cause/Effect text structure, while other types of text structure were not explored extensively. The researcher believes that imparting training/instruction in all other types of structure would have even more effective improvement in students' reading comprehension and critical thinking ability.

The opinion survey conducted in the treatment group, they revealed their willingness to have text structure strategy as a part of reading course in their university curriculum. However, the researcher believes more detailed study and extensive research would be needed in this area before this concept can find a place in college and university curriculum.

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