

The Effect of Collaborative versus Individual Directed Reading-Thinking Activity on Iranian Students' Referential and Inferential Reading Comprehension in Qatar

By

Mohsen Nazari

Thesis Supervisor: **Dr. Mohammad Reza Hashemi**

Thesis Advisor: **Dr. Behzad Ghonsooly**

English Department, Faculty of Letters and Humanities, Ferdowsi University of Mashhad, Iran.

Thesis Submitted in Partial Fulfillment of the Requirement for the degree of Master of Arts (MA) in Teaching English as a Foreign Language (TEFL)

July 2009

Acknowledgements

My heartfelt thanks go to Dr. Hashemi who honored me to his supervision of this study. Equally, I would also like to express my gratitude to Dr. Ghonsooly, the honorable reader, who provided me with encouragement to proceed with the study.

Moreover, I owe a great deal to Dr. Shahsavandi for her kind cooperation in all stages of my study. I am also thankful to Dr. Golkar who spared no effort in encouraging me to conduct this study. I also thank all my professors during my study in Ferdowsi University: Dr. Hosseini, Dr. Rshghadam, Dr. Khodadady, and Dr. Khazaee. I would like to send special thanks to my professors during my study in Tehran: to late Dr. Mirhassani, to whom I am indebted forever, Dr. Farhadi, Dr. Keshavarz, Dr. Mir-emadi, Dr. Birjandi, Dr. Vossoughi , and Dr. Zia-Hosseini.

My special thanks go to my friends Mrs. Salma Hadad from Maha Independent School, Mr. Anwar Abdoulbaki from Qatar Foundation, Miss Neo from Qatar Academy, Mrs. Shick from Canadian Calgary Nursing College, Dr. Lachini from Qatar University, Eliane from the Independent Lebanese School for Girls and Dr. El-Koumy from Egypt. Also, I gratefully acknowledge the supervisor, Principals, and English teachers of Iranian School in Doha-Qatar.

Dedicated to

My Family

TABLE OF CONTENTS

Title page	i
Acknowledgements	
Dedication	
Table of contents	iv
List of Tables	vi
Abstract	vii

CHAPTER 1: INTRODUCTION

1.1. Background	2
1.2. Statement of the Problem	4
1.3. Statement of Hypotheses	7
1.4. Research Question	7
1.5. Significance of the Study	8
1.6. Definition of Key Terms	9
1.6.1. Directed Reading-Thinking Activity	9
1.6.2. Referential Comprehension	10
1.6.3. Inferential Comprehension	11
1.6.4. Individual Method	11
1.7. The Limitations of the Study	11

CHAPTER 2: REVIEW OF LITERATURE

2.1. Introduction	17
2.2. Rational for Cooperative Learning	17
2.3. Theories Underlying Cooperative Learning	18
2.3.1. Motivational Theory	18
2.3.2. Social Interdependence Theory	19
2.3.3. Piagetian Socio-cognitivism	20
2.3.4. Vygotskian Socio-culturalism	
2.4. Benefits of the Cooperative Learning	23
2.4.1. Linguistic Development	
2.4.2. Cognitive Development	24
2.4.3. Affective Development	
2.5. Collaborative Reading Comprehension	27
2.6. Directed Reading-Thinking Activity	33
2.7. Experimental Literature	
2.8. Summary	39

CHAPTER 3: METHODOLOGY

CHAFTER 5. METHODOLOGI	
3.1. Introduction	42
3.2. Research Design	
3.3. Participants	42
3.4. Instrumentation	
3.5. Material	45
3.6. Variables	45

3.7.	Procedure	 	 	 	 	 	 46
3.8.	Summary	 	 	 	 	 	 49

CHAPTER 4: DATA ANALYSIS

4.1. Introduction	
4.2. Computing the Data (Phase One)	53
4.3. Computing the Data (Phase Two)	54
4.4. Computing the Data (Phase Three)	
4.5. Computing the Data (Phase Four)	
4.6. Test Reliability	
4.7. Interpretation of (Phase One and Two)	61
4.8. Interpretation of (Phase Three and Four)	62
4.9. Summary	66

CHAPTER V: CONCLUSIONS AND IMPLICATIONS

5.1. Introduction	69
5.2. Restatement of the Problem	69
5.3. Research Question and Hypotheses	70
5.4. Pedagogical Implication	72
5.5. Conclusion	74
5.6. Suggestions for Further Research	76
5.7. Final Remark	
REFERENCES	

APPENDICES

Appendix A: Pre-test and Post-test Paper	87
Appendix B: Sample Reading from the internet	90
Reading 1	90
Reading 2	
Reading 3	93
Reading 4	93
Reading 5	93
Reading 6	94
Appendix C: Students' Pre-Test Score (Control Group)	.95
Appendix D: Pre-Test Experimental Group	.96
Appendix E: Post-test Control Group	.97
Appendix F: Post-test Experimental Group	.98
Appendix G: Post-test Inferential Question (Experimental Group)9) 9
Appendix H: Post-test Referential Questions (Experimental Group)	.100
Appendix I: Post-test Inferential Question (Control Group)	.101
Appendix J: Post-test Referential Question (Control Group)	102
Appendix K: Sample Readings Book 3	103
Appendix L: Personal Communication	.108
Appendix M: Acceptance of the Proposal for Qatar Tesol	110

LIST OF TABLES

Table 1: Students Distribution	43
Table 2: Graphic Organizer	48
Table 3: Pre-Test Mean & Standard Deviation	53
Table 4: Pre-Test Data Analysis (t-test Test for the Pre-Test Result))53
Table 5: Control Group Pre-test and Post-test Paired T-Test	54
Table 6: Experimental Group Pre-test and Post-test Paired T-Test	54
Table 7: Post-Test Mean & Standard Deviation	55
Table 8: Post-Test Independent Samples Test Result (Both Group	ps)55
Table 9: Mean & SD Inferential Questions (post-test)	57
Table 10: Individual Questions for Inferential Questions	58
Table 11: Mean & SD of Referential Questions	59
Table 12: T-test Analysis of Referential Questions	60
Table13: Tests Reliability	61

Abstract

The present study was conducted in the third grade of High School in the Girls' Iranian School in Doha, Qatar to compare the effect of the Directed-Reading-Thinking Activity (DR-TA) on students' referential and inferential English reading comprehension skills. To find out more the effect of collaborative versus individualistic thinking activity was compared. Moreover, for the inferential questions, the writer's tone, purpose, main idea, text conclusion and finding the similarities between the characters in the text were studied; for the referential questions, the learners were to find the antecedents to the personal pronouns as well as the relative pronouns, the relationship between compound clauses and paragraphs, and action sequencing.

Two groups of students were assigned as experimental and control ones, and were given instruction on Directed Reading-Thinking Activities and after some treatment, they were post-tested.

Although the initial pre-test did not show any significant differences, the final post-test result revealed that the cooperative reading comprehension helped the experimental group. The cooperative students' work on Directed Reading-Thinking Activities helped them to improve their referential and inferential reading skills. Whereas the difference between the cooperative and individual work is significant, the role of individual instruction and strategy training cannot be denied. The students in the control group improved their referential and inferential reading abilities, though to a less degree than the experimental group.

Chapter 1 Introduction

Chapter 1: Introduction

1.1. Background

The Directed Reading-Thinking Activity originated with Russell G. Stauffer (late 1950s and early 1960s) well before the impact of computers was felt by society in general and education in particular. Much of the instruction in those days was teacher-centered. Teachers had the teacher's manual, the "right" answers, and teaching was generally thought of as *transmitting* information to students. Students were thought to be receptacles into which information could be poured. Nevertheless, teaching is becoming more student-centered (Richards & Renandya, 2002). Many educators believe that an abundance of information makes it impossible for one person to know everything, so a major teaching thrust today is to help students learn to locate information and listen, read, and interpret messages for themselves.

Directed Reading–Thinking Activity, henceforth referred to as (DR-TA) can support today's constructivist stance toward teaching and learning. DR-TA is a technique developed by Russell Stauffer (1969) which encourages students to make predictions while they are reading. After reading segments of a text, students stop, confirm or revise previous predictions, and make new predictions about what they will read next. DR-TA can be used effectively to help students interact thoughtfully with both nonfiction and fictional materials they encounter in books, on CD-ROMs and the Internet. Therefore, in today's world students have got more access to information through internet and other worldwide media than

the generation before them. And not all the information they receive is genuine; much of this information is flawed, or even incorrect. Some webmasters disperse a lot of false or misguiding information because of their ignorance or ill intention. Therefore, now more than ever before, students need to blend their own thinking with the information they read to comprehend what is between and beyond the lines (Aegler, 1993).

Reading critically is something which needs to be taught and consciouslyraised as most reading strategies suggest (Janzen, 2002). Even at the contrastive studies level the attention is forwarded to the macro-levels of above sentential attention than pure word and syntactic focus (James, 1980).

Cooperative reading and learning was also beneficial for weak students as in the past, students with special needs were placed in a special education program. Often, students in these special education programs spent at least part of their day in separate classes. The Education of All Handicapped Children Act, mandated that students with special needs be placed in less segregated environments. Increasingly, students with special needs are being mainstreamed and included in the regular classroom. One question that must be addressed is how these learners with special needs can be accommodated in the regular classroom. One possibility is through cooperative learning. Cooperative learning has demonstrated both social and academic effects on learning, when used in a variety of contexts (e.g., Johnson & Johnson, 1989; Slavin, 1990). Cooperative learning has also been effective in improving the social relations between students with and without disabilities in regular education classrooms (Stevens & Salisbury, 1997). One of the goals of cooperative reading is to negotiate and co-construct meaning from text (Paris and Turner, 1990) using information from memory, interactive dialogue, debate and summarization. The roles typically involve individuals who discuss or summarize the passage and one or more individuals who listen, critique, and elaborate on what the discussant has said.

Therefore in this study Directed Reading-Thinking Activity is a way to get the students to predict what they will learn while reading portions of a text. The teacher leads the students to make predictions, read portions of the text, stop and make more predictions, read some more, and so on until the text is finished. Predictions are written on the board, checked when confirmed and erased when not confirmed (Ray & Cooter, 1992).

1.2. Statement of the Problem

A major issue in reading comprehension, as it exists nowadays in Iranian high schools, as in some other foreign schools (El-Koumy, 2006), is that students face difficulty responding to referential and inferential questions. By doing some experiments and experiencing the Iranian schools in Iran and Qatar, the researcher has found that Iranian students studying in Qatar have similar problems in reading comprehension;

students obtain low scores on reading comprehension test. Besides, the third grade high school students face the most difficulty; students have not been prepared to answer the reading comprehensions referentially or inferentially since they have not been taught so; their books have left no room for such strategies. Therefore, they will face problems answering reading comprehension questions in tests and entrance exams. Mostly the students work on word and sentence level with focus on grammar. A simple calculation done by the researcher showed that 23 out of 34 students were not able to answer the inferential and referential questions. Besides students had reading comprehension problems in the following areas:

1. identifying referents,

2. identifying antecedents of anaphora,

3. identifying the relationship of each sentence to its predecessor,

- 4. identifying relationships between and among paragraphs in the text,
- 5. identifying the logical connection between ideas in the text,
- 6. inferring the author's purpose for writing the text,
- 7. inferring the main idea that is not explicitly stated in the text,
- 8. inferring the author's attitude, tone and bias within the text,
- 9. inferring the author's implicit assumptions,
- 10. drawing logical conclusions from the text.

A major cause of Iranian high school students' poor comprehension skills is that EFL teachers spend most of the instruction time assessing reading at the word and sentence levels rather than teaching referential or inferential comprehension; whereas at high school level students should have passed the sentential level. Another cause may be students' lack of reading comprehension strategies. As Thompson (1993) states, problems in comprehension could be a result of the lack of instruction in reading comprehension strategies.

So the problem addressed in this study is that third year Iranian high school

students exhibited low referential and inferential reading comprehension. In an attempt to find a solution to this problem, this study investigates the effects the DR-TA on their referential and inferential reading comprehension. To find out more the effect of collaborative versus individualistic thinking activity is compared. The researcher hopes that DR-TA be a useful strategy to solve students' reading comprehension problem. In order not to deprive the students of the strategy for reading comprehension, the researcher included all his students in both Girls' School. Scholars believe that predictions can be of fundamental support to students' critical learning. Making predictions about the text can help clear up any misconceptions about the topic (Billmeyer & Barton, 1998). To this end DR-TA is a useful tool for teachers to model accurate and appropriate reading skills (Richardson & Morgan, 1997).

1.3. Statement of Research Hypotheses

This study aimed at testing the following null hypotheses:

Ho1 There would be no statistically significant difference ($\alpha \le 0.05$) in the thirdyear high school Iranian students' <u>referential</u> reading comprehension between the collaborative and individual exposure to the DR-TA.

Ho 2 There would be no statistically significant difference ($\alpha \le 0.05$) in the thirdyear high school students' <u>inferential</u> reading comprehension between the collaborative and individual exposure to the DR-TA.

Ho3 There would be no statistically significant difference ($\alpha \le 0.05$) in the thirdyear high school students' <u>inferential</u> and <u>referential</u> reading comprehension in the experimental and control groups in Qatar Iranian School.

1.4. Research Questions

The research questions formulated for the purpose of this study are:

1. Is there any statistically significant difference ($\alpha \le 0.05$) in the third-year high school Iranian students' <u>referential</u> reading comprehension between the collaborative and individual exposure to the DR-TA?

2. Is there any statistically significant difference ($\alpha \le 0.05$) in the third-year high school students' <u>inferential</u> reading comprehension between the collaborative and individual exposure to the DR-TA?

3. Is there any statistically significant difference ($\alpha \le 0.05$) in the third-year high school students' <u>inferential</u> and <u>referential</u> reading comprehension in the experimental and control groups in Qatar Iranian School?

1.5. Significance and Justification of the Study

The significance of this study lies in the exploration and verification of an avenue for improving third stage EFL students' referential and inferential reading comprehension to enable them to deal wisely with information in the Information Age. Besides, the students were unable to deal with most reading comprehension questions, related to inferential and referential ones. Being aware of the strategies to answer these two types of questions helps the students gain confidence when reading and achieve better comprehension.

In searching for a solution to students' poor comprehension skills all over the world, many researchers (Bongratz., 2002; Cramer, Fate & Lueders, 2001; Song, 1998) found that reading strategies are beneficial in helping poor readers improve

their comprehension skills. Therefore, this study attempts to build students' comprehension strategies through the implementation of the collaborative and individual DR-TA for teaching reading comprehension. Besides, rooted in the ideas of Piaget and Vygotsky for equilibration, socialization and proximal development, the researcher tries to testify these notions by exercising collaborative reading

(Jay & Salisbury , 2000; Chen 2008).

In a cooperative learning setting, learners come to the cooperative setting with a variety of different ability levels. According to Vygotsky, learning may take place in a student's zone of proximal development, which is the zone in which the student can't accomplish a task by him/herself, but can accomplish a task through the assistance of a more able other (Jay & Salisbury , 2000; Vygotsky, 1978).

1.6. Definition of Important Terms

1.6.1. Directed Reading-Thinking Activity

Based on Ray & Cooter, (1992) the DR-TA is defined operationally as a reading strategy which consists of the following six steps:

1. The teacher writes the title of the reading passage on the board and asks students to read it,

2. The teacher asks students to make predictions about the title using these Questions—in groups or individually:

a. What do you think a passage with a title like this might be about?

b. Why do you think so?

3. The teacher lists predictions on the board and initiates a discussion with the students by asking them to respond to the following questions:

- a. Which of these predictions do you think would be the likely one?
- b. Why do you think this prediction is a good one?
- 4. The teacher invites students to work in small groups to complete the discussion following the same format.
- 5. The teacher asks students to read the passage silently and to confirm or reject their own predictions. Then he asks them the following questions:
 - a. Were you correct?
 - b. What do you think now?
 - c. Why do you think so?

6. The teacher asks students to reflect on their predictions through responding to

the following questions:

- a. What prediction did you make?
- b. What made you think of this prediction?
- c. What in the passage supports this prediction?
- d. Do you still agree with this prediction? Why?

1.6.2. Referential Comprehension

For the present study, referential comprehension refers to understanding the

cohesive relationships among words, sentences, paragraphs and the whole text.

"Interpretive or referential comprehension: At this level, students go beyond what is said and read for deeper meanings. They must be able to read critically and analyze carefully what they have read. Students need to be able to see relationships among ideas, for example how ideas go together and also see the implied meanings of these ideas. It is also obvious that before our students can do this, they have to first understand the ideas that are stated (literal comprehension). Interpretive or referential comprehension includes

thinking processes such as drawing conclusions, making generalizations and predicting outcomes. At this level, teachers can ask more challenging questions such as asking students to do the following:

0	Re-arrange the ideas or topics discussed in the text
0	Summarize the main idea when this is not explicitly stated in the text.
0	Select conclusions which can be deduced from the text they have read."

(Mohammad, Akmar, 1999).

1.6.3. Inferential Comprehension

It refers to what the reader infers from the text. It includes inferring the main idea and additional details not explicitly stated in the text, inferring the author's purpose for writing the text, drawing logical conclusions from the text, etc. Moreover, the online encyclopedia defines the inferential comprehension as:

"Inferential comprehension is the level of understanding of a text: the reader can read meanings which are not directly explained. For example, the reader would be able to make inferences about the time of year from information given about temperature, weather, etc and from characters' behavior and dialogue." (online encyclopedia) http://www.encyclo.co.uk/define/InferentialComprehension "

1.6.4. Individual method

For the present study, the individual method refers to the method in which the students respond to the referential and inferential questions with no help from each other. The reading procedure is similar to collaborative work except for the group work on the strategies.

1.7. Limitations of the Study

The following lists can be regarded as the limitations of this study:

1. Only females were studied. Due to the number of the subjects in Doha, the

researcher cannot easily generalize the findings.

2. When the learners were stuck in a task and wasted most of the class time discussing trivial things (the print of the papers, the color of the pens, etc.), as far as the discussion was relevant to the critical thinking on the text, the instructor did not meddle. But when he realized that the learners were going stray, he stopped the dispute and guided them to the right direction. Therefore he ended up the discussion by providing more help or finalizing the discussion with the help of other pupils.

3. It was noted that when students were reading the texts, they mostly had vocabulary problems. If they should know 95% of the whole text vocabulary, they seemed to know much less. Then the group heads were doing help, which took most of the group work dealing with unknown words rather than critical thinking.

4. The researcher was not fully aware of the students' social and economic background as a variable. Nevertheless, it seemed that students were almost homogenous. Besides, dealing with learners with so much variation in background and expectation was really demanding.

5. There were also times when the class could not continue its routine teaching especially when the weather was not nice and the students asked excuse themselves for not being able to continue, or when they had guests, meetings, etc. 6. It should be mentioned that the situation in Iranian government schools is different from the English private language schools where the learners are highly motivated, properly placed in their classes based on some placement tests, are few in number and mostly sensitive to learning English. Besides they pay for their learning. Managing the Iranian government schools is an art by itself which

11

necessitates dealing with much variation.

7. The syllabus in schools is strictly controlled and any slight deviation from the school's syllabus will be abruptly mentioned and filed in the teacher's file. Although there were so many instances of such filing for the present researcher, he continued his job. Besides there were times when the teacher was stigmatized as with time-wasting labels or being unable to manage his class because the learners worked cooperatively and had to discuss. The easy feeling of the students added up to the tensity of the situation.

8. The incongruence of the cooperative work with other teaching techniques, mostly lectures, caused many mismatches. At first the students could not take cooperative work so serious; they talked about so many different personal subjects. But with more and more monitoring and explanation, they got used to it. Even they suggested other teachers do cooperative work in their classes instead of just give lectures.

9. This study applied just quantitative analysis; other qualitative measures like interviews and questionnaires could have been used. Nevertheless due to limitations in Qatar caused by time shortage, inaccessibility to validated sources, and students' condition, qualitative analysis could not be employed.

10. Students' sensitivity to understand everything made them linger in text for long times unless they were helped or asked to move faster.

11. Most students had contact with natives or non-natives, who spoke English; nevertheless their English reading comprehension ability was not as expected. But in general they were better than their counterparts studying in Iran.