

University of Guilan

Faculty of Literature and Humanities English Language Department

A Thesis Submitted to the English Department in Partial Fulfillment of the Requirement for the Degree of Master of Arts in TEFL

The Impact of Jigsaw Technique on EFL College Students' Reading Achievement at Intermediate level

By

Mahnaz Kazemi

Supervisor

Dr. Masoud Khalili Sabet

September, 2012

In the Name of God



University of Guilan

Faculty of Literature and Humanities English Language Department

A Thesis Submitted to the English Department in Partial Fulfillment of the Requirement for the Degree of Master of Arts in TEFL

The Impact of Jigsaw Technique on EFL College Students' Reading Achievement at Intermediate level

By

Mahnaz Kazemi

Supervisor

Dr. Masoud Khalili Sabet

Advisor

Dr.Amir Mahdavi Zafarghandi

September, 2012

To my beloved husband

Acknowledgements

First and foremost I offer my sincerest gratitude to my supervisor, Dr.Khalili who has supported me throughout my thesis with his patience and knowledge. I attribute the level of my Master's degree to his encouragement and effort and without him this thesis, too, would not have been completed or written. I also wish to thank my advisor Dr.Mahdavi for sharing his valuable suggestion and experience with me throughout the writing and editing of the present study. I specially thank him for his unfailing support as my thesis adviser. I am grateful to Dr. Farhady for his untiring effort in guiding me through the statistical analyses required for the completion of the present study. Despite the distance, he has painstakingly e-mailed the information I needed. Finally I would like to thank my husband for his love and support.

Table of Contents

Dedica	tion	iii
Ackno	wledgements	iv
Table o	of Contents	v
List of	Tables	ix
List of	Figures	X
List of	Abbreviations	xi
Abstra	ct	xii
1.	Chapter I	
1.1.	Preliminaries	1
1.2.	Statement of the Problem.	3
1.3.	Objectives of the Study	4
1.4.	Significance of the Study.	4
1.5.	Research Questions	5
1.6.	Research Hypotheses	5
1.7.	Limitations of the Study	6
1.8.	Delimitations of the Study.	6
1.9.	Definition of Key Terms.	7
1.9.1.	Traditional Grammar-based Teaching.	7
1.9.2.	Cooperative Language Teaching.	8
1.9.3.	Jigsaw Technique	8
1.9.4.	Reading Skill	9
1.9.5.	Zone of Proximal Development (ZPD)	10
1.10.	Organization of the Study	10
2.	Chapter 2	
2.1.	Introduction	11
2.2.	Theoretical Framework	14
2.2.1.	Cooperative Learning.	14
2.2.2.	Aspects of Cooperative Learning.	16
2.2.2.1	. Positive Interdependence.	16
2.2.2.2	. Group Formation	18

2.2.2.3	. Individual Accountability	20
2.2.2.4	Social Skills	21
2.2.2.5	Structuring and Structures.	21
2.2.3.	Cooperative Learning Advantages and Disadvantages	22
2.2.3.1	. Advantages	22
2.2.3.2	Disadvantages	25
2.2.4.	Methods of Cooperative Learning	28
2.2.4.1	. Learning Together	29
2.2.4.2	Teams-Games Tournaments (TGT)	30
2.2.4.3	Group Investigation (GI)	30
2.2.4.4	. Constructive Controversy (CC)	30
2.2.4.5	. Jigsaw Procedure	31
2.2.4.6	Student Teams-Achievement Divisions (STAD)	31
2.2.4.7	. Complex Instruction (CI)	31
2.2.4.8	Team Accelerated Instruction (TAI)	31
2.2.4.9	Cooperative Learning Structures	32
2.2.4.1	0. Curriculum Packages	32
2.2.5.	Jigsaw Technique	32
2.2.5.1	. Definition	32
2.2.5.2	Jigsaw Implementation	34
2.2.5.3	. The Advantages and Disadvantages of the Jigsaw Technique	34
2.2.6.	Jigsaw Models	37
2.2.7.	Theories Underlying Cooperative Learning.	38
2.2.7.1	. Social Interdependence Theory	39
2.2.7.2	Piagetian Sociocognitivism	40
2.2.7.3	. Vygotskian Socioculturalism	41
2.3.	Background	43
2.3.1.	The Role of Cooperative Learning in Language Teaching	43
2.3.2.	The Role of Cooperative Learning in English Achievement	43
2.3.3.	The Role of Cooperative Learning in Student Motivation	45
2.3.4.	The Role of Cooperative Learning in Social Interaction Skills	46
2.3.5.	The Role of Cooperative Learning in Attitude Development	47

2.3.6.	Cooperative Learning and Academic Achievement.	47
2.3.7.	Cooperative Learning and the Oral Proficiency.	52
2.3.8.	Cooperative Learning and the Writing Skill.	53
2.3.9.	Cooperative Learning and the Reading Skill	55
2.3.9.1	1. Cooperative Learning and the Reading Skill in Iran	57
2.3.10	Jigsaw and the Reading Skill	58
2.3.11	. Jigsaw Technique Effectiveness across Male and Female Learners	59
2.4.	Conclusion	61
3.	Methodology	
3.1.	Introduction	62
3.2.	Participants	62
3.3.	Instrumentation	63
3.4.	Procedure	63
3.4.1.	Phase One: Pre-testing.	64
3.4.2.	Phase Two: Treatment & Placebo	64
3.4.3.	Phase Three: Post-testing.	66
3.5.	Design of the Study	66
3.6.	Data Analysis	66
3.7.	Conclusion.	67
4.	Results and Discussion	
4.1.	Introduction	68
4.2.	Findings	68
4.3.	Statistical Analysis	69
4.4.	Discussion	77
4.5.	Conclusion	78
5.	Conclusion	
5.1.	Introduction	79
5.2.	Implications	80
5.2.1.	Pedagogical Implications	80
5.2.2.	Implications for Materials Developers.	81
5.3.	Suggestions for Further Research.	83
5.4.	Conclusion.	84

Leferences	
Appendix A	
Appendix B	
Appendix C	
Appendix D.	

List of Tables

Table 2.1.	14
Table 2.2	29
Table 2.3	39
Table 4.1	69
Table 4.2	69
Table 4.3	
Table 4.4	71
Table 4.5	
Table 4.6	

List of Figures

Figure 2.1. Jigsaw implementation (adopted from Tewksbury and Macdonald, 2005)	.33
Figure 4.1. The difference between the experimental and control group participant	72
Figure 4.2. The interaction of the independent variables.	75

List of Abbreviations

Analysis of Variance (ANOVA) Communicative Language Teaching (CLT) Complex Instruction (CI) Computer Mediated Communication (CLT) Cooperative Learning (CL) Cooperative Language Learning (CLL) Cooperative Integrated Reading and Composition (CIRC) Cooperative Structures (CS) Constructive Controversy (CC) English as a Foreign Language (EFL) English as a Second Language (ESL) Group Investigation (GI) Grammar Translation Method (GTM) Student Team Achievement Division (STAD) Task Based Language Teaching (TBLT) Team Accelerated Instruction (TAI) Teams-Games-Tournaments (TGT) Test of English as a Foreign Language (TOEFL) Zone of Proximal Development (ZPD)

Abstract

The present study was an attempt to investigate the effect of the jigsaw method on the Iranian intermediate EFL learners' reading achievement. Regarding the importance of the teaching method used in an EFL context to teach the communicative competence, the study was seen as significant because it compared the efficiency of traditional method and the recent jigsaw method.

To this end, the present study answered three research questions dealing with 1) whether the jigsaw method had any impact on the learners' reading achievement, 2) whether there were any significant differences between the control group participants and the experimental group participants, and 3) whether there was any effect for the gender of the participants and their reading achievement. To achieve the purpose of the study, two intact classes were randomly assigned as the control and experimental groups. The experimental group consisted of 40 freshman and sophomore intermediate level male (N=18) and female (N=22) learners and the control group consisted of 38 freshman and sophomore intermediate level male (N=17) and female students (N=21). The control participants received the traditional teacher-fronted method of teaching while the experimental group participants were exposed to the jigsaw method of teaching. The treatment lasted for 10 sessions, after which the participants of both groups were evaluated on their reading achievement.

Results of quantitative data analyses showed significantly higher results for the experimental group participants compared with the control group peers. The gender of the learners, however, was found as a non-significant factor. Results and implications are further discussed.

Key words: cooperative teaching, jigsaw, traditional grammar-based teaching, gender, reading comprehension, ZPD.

Chapter I

Introduction

1.1. Preliminaries

The issue of learner-centered activities and tasks in the classroom has been considered as an imminent topic of concern for a long time for those in charge of ensuring the best for educational systems. To this end one of the most important skills in EFL contexts such as Iran is the reading skill. Reading provides learners with the important knowledge about the target language and culture. Many factors play a role in the improvement of learners' reading skills, one being the strategies that successful learners use (Hosenfeld, 1977; Qingquan, Chatupote, & Teo, 2008; Rubin, 1975; Vann & Abraham, 1990). In this regard, there is a need to consider the characteristics of the classroom structure and methods to see which one is the best for promoting the reading ability of the learners. According to Jalilifar (2009) "there is a need to take into consideration the way that knowledge is presented to the students on the printed page" (p. 97).

Cooperative learning techniques, as opposed to conventional strategies, provide learners with opportunities to take more active roles in their own learning. Cooperative learning activities lead to peer interaction which itself promotes the development of language and the learning of concepts and content. This strategy is preferred to more solitary-oriented reading techniques. Jigsaw as one of the main task types advocated by CL proponents is an effective means of reaching satisfying conclusions with reading. Abd El Sami Ali (2001) conducted a study to find out the effect of using the Jigsaw Reading technique on the EFL prospective teachers' reading anxiety and comprehension. The findings of the study showed that:

Students, through working together on reading texts, getting feedback from each other, exchanging experiences throughout the texts, as Epstein (1991) asserted, had a wide variety of learning opportunities in a relaxed atmosphere optimum for tension relieving. They also made use of other skills in addition to reading such as note-taking, note-making and sharing responsibilities with each other (p. 14).

One can notice the obvious advantages associated with the jigsaw reading techniques over conventional ones. Firstly, it takes into account all the students in class such that shyer and more introvert students can also carry out the activity with their more extrovert peers. Secondly, texts that at first glance seem to be hard reaching can be divided into smaller parts that can be more easily handled by the students. Third, all the students take responsibility for their own learning which in turn enhances positive interdependence (Richards & Rodgers, 2001). Another advantage of using jigsaw technique is that students can receive peer feedback and can self-assess their own progress. In other words, students can receive support from class members in learning from their reading. Therefore, they can learn and use metacognitive strategies much better. Also, teachers can effectively monitor the students' progress while engaged in the jigsaw activity to gain information about to what extent the students already know about the topic. This allows teachers to tailor instruction accordingly.

In addition to the advantages associated with the use of the jigsaw techniques in reading, there are also some disadvantages accompanied with it. Jigsaw reading techniques can be time-consuming and labor intensive. In the case that students do not get into groups quickly or do not read the materials assigned to them quickly, there may be timing problems. A second problem is that each participant in the group should actively engage in the task and there should be no chance for the students to be silent or passive during the conduction of the task. Therefore, teachers should pay particular attention to these drawbacks to avoid being impeded by the pitfalls.

According to Storch&Aldosari (2010) "The current communicative approaches to second language (L2) instruction encourage the use of small group work (including pair work) in the L2 classroom as a means of providing learners with more opportunities to use the L2" (355). When teaching is aimed at promoting the communicative competence, classroom interaction assumes a

significant role. Interaction and communication are isomorphic, the existence of which implies the existence of the other. If interaction does not exist, communication does not either. Tamah (2007) argues that "in classroom interaction, students use language to negotiate meaning. They get the chance to make use of all they have of the language. This implicitly means that it is crucial for the teacher to provide more chance for the students to interact for the sake of real-life exchanges" (p. 6). According to this definition, learners should be provided with numerous opportunities to engage in interactive activities rather than passive reading. Jigsaw techniques pave the way towards reaching this objective. Jigsaw activities encourage learners to evaluate responses, give further information, give other responses, and terminate the conversation naturally.

1.2. Statement of the Problem

This study intends to investigate the effect of cooperative learning on Iranian EFL university students' reading achievement abilities. Reading is a complex and multifaceted issue that develops only with practice. Reading is certainly a meaning-centered activity and requires active meaning construction. This complexity of reading can best be handled by using appropriate learner-centered and cooperative activities. CL has recently been at the focus of education research. It has several types, one of which is Jigsaw. In spite of much debate regarding the obvious effectiveness of jigsaw and CL techniques in bringing about effective learning, there are still much conventional grammar-based classes held in Iran. This study attempts to provide further investigation to see the effect of the jigsaw methods on students reading achievement in order to help teachers and learners in the process of learning.

1.3. Objectives of the Study

The purpose of this study is to obtain a closer look at the effectiveness of either CLL techniques or more conventional techniques in promoting learning. Traditional and cooperative learning strategies have been studied for many years, but no study has been conducted to examine the impacts of both teaching strategies on Iranian learners' reading achievement. This study aims to provide sufficiently compelling data and perhaps valuable insights to help administrators, leaders and principals with decision-making. Cooperative learning presents an example of an innovative approach (Ellis, 2003) that constitutes a paradigm shift in the area of language teaching. The emphasis on the achievement of adequate reading goals and abilities in EFL contexts puts extra emphasis on improving goals and outcomes in education. And it is assumed that skilled instructors, principals and administrators continue to search for effective and reliable instructional strategies. Therefore, the present study attempts to provide a comprehensive and detailed comparison of two instructional techniques, namely the conventional and cooperative, on the success of Iranian EFL learners in terms of their reading comprehension achievement.

1.4. Significance of the Study

The present study was an attempt to explore the efficiency of the jigsaw technique of teaching as opposed to the traditional grammar-based teaching type on the students reading skill. Considering the fact that English as a foreign language in Iran serves no official role in the community, learners should be provided with more appropriate methods of teaching so that they can compensate for the lack of exposure to language outside of the class. It is clear that Iranian EFL learners have been thoroughly taught about the structures and the grammatical rules of the language with little or no focus on the use of the language in communicatively appropriate contexts. It is obvious that grammatical competence is a part of the larger communicative competence which itself has other significant components such as sociocultural and pragmatic

competence. Therefore, in order to have communicatively fluent learners of the target language, teachers should provide them with more recent methods of instruction that can reflect the outside chances of interaction. One such technique is the jigsaw technique of teaching. In the jigsaw technique related to the reading comprehension, learners are firstly given the material and are required to master them first in the expert groups, and then go to the home groups to explain and teach the materials to the peers. All of these activities foster their development of communicative competence. This issue has formed the central tenet of the present study.

1.5. Research Questions

The study set out to seek answers to the following research questions:

- 1. Does jigsaw technique have any effect on students' reading achievement?
- 2. Is there any significant difference between the reading achievement of the students who are taught based on jigsaw technique and that of those who do not?
- 3. Is there any significant difference between the reading performance of the male students who receive jigsaw technique and that of the female ones?

1.6. Research Hypotheses

The above research questions lead to the statement of the following null hypotheses:

- 1. Jigsaw technique does not have any effect on students' reading ability.
- 2. There is no statistically significant difference between reading achievement of the students who are taught based on jigsaw technique and that of those who do not.
- 3. There is no significant difference between the reading performance of the male students who receive the jigsaw technique and that of the female ones.

1.7. Limitations of the Study

The present study has a number of limitations which are to be taken into consideration when interpreting the results.

- 1. In the present study only one means of data collection and analyses, namely the quantitative method was employed. In order to get much more accurate results, triangulation either at the data collection or data analyses levels is necessary.
- 2. The present study only investigated gender from among a number of individual variables that can impact learning.
- The current study is a cross-sectional study and included a few sessions of treatment.
 Longitudinal studies are preferred to keep track of the changing development of learners in reading comprehension.

1.8. Delimitations of the Study

Following are the delimitations of the study:

- 1. The present study only investigated the intermediate level of proficiency and other levels have not been taken into account.
- 2. The study tested the participants' improvements after the treatment in only the reading skill and other language skills were not considered. In other words, the reading skill served the ability according to which learners' enhancements were evaluated.
- 3. The study was limited to Iranian EFL learners living in an EFL situation, so the educational background of them was the same.
- 4. All the participants were from state-run school to make the sampling homogenous one.