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## JIGSAW II: AN EFFECTIVE STRATEGY TO DEVELOP READING COMPREHENSION OF HIGH SCHOOL STUDENTS

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### ABSTRACT

*The Jigsaw II strategy is an efficient strategy to use in a language classroom. The basic activities include 1) Reading with team members 2) Expert group discussion 3) Team members report 4) Test 5) Team recognition. The jigsaw II strategy is easy to implement and works well with a wide range of students. Previous researches related to Jigsaw II shows that it is more powerful and effective and appropriate in situations where learning is from text based materials. Reviews related to the strategy shows that no researches have been carried out to develop the reading comprehension of the high school students, particularly in the Indian context. Hence through this paper an attempt has been made by the researcher to check the effectiveness of Jigsaw II in developing the reading comprehension of High school students. The study statistically revealed that there is significant difference in the reading comprehension achievement of the students who were taught by using the traditional method and to those taught by using the Jigsaw II strategy. In accordance with the qualitative and quantitative findings attained it was found that Jigsaw II was found to be more effective than the traditional teaching method in developing the reading comprehension of high school students.*

### Keywords :

#### INTRODUCTION

The Jigsaw method was developed by Elliot Aronson to promote active learning and cooperation in the classrooms. Later Robert Slavin made some alteration in the Jigsaw method and named the new method as Jigsaw II. As a cooperative learning method, The Jigsaw method has been the centre of research in the educational field. Various educationists, ELT practitioners, economists, researchers etc have explored the Jigsaw classroom in different levels. This method can be adapted to students from fourth standard to any level. Jigsaw method is considered to be one of the most efficient ways to learn a course material. This technique encourages in building up all aspects of language skills and makes students work and cooperate each other to achieve a common goal. In the jigsaw classroom interaction among the students makes the class very active and students gain more knowledge after the end of the session. The major skills involved in jigsaw are reading and comprehension. Jigsaw has been used effectively in difficult subjects like maths, language arts and biology etc.

Jigsaw II is a modification of the original Jigsaw method that includes two important changes. First, all team members read the entire lesson to be learned rather than only one part. Second, as with the other methods of Slavin, individual improvement scores combine to contribute to an overall team scores. The rest is the same with the original part of the Jigsaw. Students become expert on one aspect of the lesson, meet in expert groups and help others to learn the material. According to Johnson and Johnson (1992), Nunan (1992), Kagan (1992) and Slavin (1995) cooperative learning becomes more effective when it is followed by certain principles. They are positive interdependence, Promotive interaction, individual accountability, social skills and group processing. Jigsaw II integrates the basic principles of cooperative learning.

#### Review of Literature

Dr.Mohamad Farouk Abd El Sami Ali (2001) has studied "The effect of using the Jigsaw reading technique on the EFL pre service teachers reading anxiety and comprehension." The subjects of the study were 72 third year students of the English department, Faculty of education, Cairo University. Us-

ing the reading anxiety scale developed by the designer the subjects reading anxiety was tested. Their reading comprehension also tested using TOEFEL comprehension section. The result shows that jigsaw technique resulted in lowering the foreign language reading anxiety of the experiment group. Findings also show that students in the experimental group outperformed those of the control group in reading comprehension.

A study titled "Jigsaw reading to promote autonomous learning" was carried out by Midori Yonezawa Morris (2009). The main goals of the study are (i) becoming aware of the skills necessary for reading (ii) reading by oneself (iii) learning autonomously. The project was to develop reading proficiency and autonomous learning using authentic material. The result shows that the adoption of the jigsaw was successful in promoting autonomous learning.

The reviews related to Jigsaw II strategy reveals that no study has been carried out to check the effectiveness of the strategy with reference to reading comprehension of High school students in India. Hence the present study has been undertaken.

#### OBJECTIVES OF THE STUDY

1. To compare the effectiveness of traditional method and Jigsaw II on achievement in reading comprehension of class VIII students.
2. To examine the effect of Jigsaw II on the experimental group in the Pre test and post test with regard to reading comprehension.
3. To find the correlation between the pre test and post test scores of experimental group with regard to reading comprehension using the Jigsaw strategy.

#### HYPOTHESIS

1. There will be a significant difference in the mean scores of control group and experimental group on post test with regard to the achievement in reading comprehension
2. There will be a significant difference in the mean scores experimental group with regard to reading comprehension in the pre test and post test
3. There will be a significant difference in the correlation be-

tween the pre test and post test scores of the experimental group.

**SAMPLE OF THE STUDY**

The study has been carried out with the students of class VIII of Sri Jayendra Saraswathi M....., Coimbatore. Since it is an experimental study it was decided to have a manageable sample of 40 students. The pre test and post test Questionnaires was developed by the researcher. The questions thus generated were given to the students and they were asked to give appropriate answer for each question. The Pre test and post test questionnaires were used to understand the progress of the students in reading comprehension level with the help of Jigsaw II strategy.

**PROCEDURE**

The Jigsaw II strategy is an efficient strategy to use in a lan-

guage classroom. The basic activities includes in the strategy is 1) Reading with team members 2) Expert group discussion 3) Team members report 4)Test 5) Team recognition. An average class size of twenty students is divided into four groups consisting of five in each group. During the implementation of the technique students got separated from their "home groups" to meet the "Expert group" with the other students who are responsible for preparing the same portion of the given topic. Each member of the home group was responsible for a portion of the reading material that has been given. Selected chapters from the VIII Standard English text book is taken for the present study. Students read the chapter and reported to the expert group to discuss their topic. Students then discussed the ideas represented in the topic and returned to the home group to present their respective topic. A test was conducted by the students to check the students' reading comprehension level after being treated with the Jigsaw II strategy.

**ANALYSIS AND INTERPRETATION OF DATA**

One-Sample Test of the Experimental group						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
pretest	21.305	19	.000	11.40000	10.2801	12.5199
posttest	26.334	19	.000	14.60000	13.4396	15.7604

From the above table it is evident that t value for pre test is 21.305 and the post test is 26.334. The difference between the two tests is 5.029 with the df 19/20 which is significant at .000 level. The mean difference between the two tests is 3.2. Hence it is clear that there is a significant difference in the reading comprehension level of students in the pre test and the post test. The students who were taught using the Jigsaw II strategy fared well in the post test conducted.

From the table it is evident that the bivariate correlation is undertaken for the between the respondents. It was hypothesized that a relationship exists between the pre test and post test scores of the experimental group. The result above shows that, there exists a positive relationship between the pre test and post test scores. (r = .392, p<0.05).

Correlations between the pre test and post test scores of Experimental Group			
		pretest	posttest
pretest	Pearson Correlation	1	.392
	Sig. (2-tailed)		.087
	N	20	20
posttest	Pearson Correlation	.392	1
	Sig. (2-tailed)	.087	
	N	20	20

**CONCLUSION**

The result of the experimental study statistically shows that the Jigsaw II strategy influences the outcome of reading comprehension among the High school students. The major outcome of the experiment highlights the improvement among learners. The students who were taught by the Jigsaw II strategy have recorded high achievements than the conventional classroom teaching. The key element in the Jigsaw II strategy is to hold the students accountable for their learning and give them a sense of powerful and ownership in the ultimate outcome of their learning.

From the qualitative and quantitative analysis of data obtained from the study, class room observations, interview with students and teachers proves the fact Jigsaw II is a powerful strategy to enhance the reading comprehension level of high school students in India.

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3. Midori Yonezawa Morris (2009) "Jigsaw reading to promote autonomous learning"



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