

Effectiveness of Jigsaw Method in Enhancing students' Comprehension and Vocabulary

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Abstract

Having complication in its practice, reading has been the centre of discussion in the educational practice from different perspectives. The challenge among educational practitioners is to develop reading comprehension among students of diverse ability. Various learners are at different levels of speed and accuracy while learning English as a second language. This affects their comprehensible level and in completing the learning tasks. English is the compulsory subject taught at the schools in India. In learning English as a second language, reading has to be given topmost priority as it is considered important for academic success. The present paper is an attempt to analyze the effectiveness of Jigsaw method in enhancing students' comprehension and vocabulary, particularly in Indian context.

I. Introduction

In second language teaching and learning, reading involves understanding and comprehending meaning or message conveyed in the written text. According to Adams (1990), the act of comprehending a written text is a complex one that depends upon a different thinking process within the reader. These include word-level processes like the ability to identify words quickly, accurately, and effortlessly. Complexity in comprehending a text occurs not because words cannot be read but in understanding the word meaning. Students fail to acquire new and difficult words by not attending to the meaning of difficult words. This results in gaining the vocabulary knowledge. Comprehension and vocabulary are directly linked to each other. Reading comprehension depends heavily on vocabulary knowledge. Researchers have argued that many students enter higher education unprepared for the reading demands they encounter. Despite the efforts being made by educationists to improve reading, students still have difficulty with reading in general and with specific components such as comprehension and vocabulary. The investigator had learned from the review of literature that an orientation towards reading comprehension at the school level, preferably upper primary, would enhance reading comprehension at the higher level.

In order to fill the gap and make students more pertinent in vocabulary and comprehension, the investigator adopted Jigsaw method which focuses on engaging students in learning prose lessons from the prescribed English syllabus of the subjects by highly interactive learning experience. Though extensive research has been done in the field of English Language Teaching in developing the reading comprehension of students by using various methods, the concept of placing students in groups as in Jigsaw method is yet to be investigated with specific reference to Upper Primary students in the Indian context. Therefore, the study has been undertaken to explore the possibilities and importance of Jigsaw method in developing the reading comprehension of upper primary students.

Jigsaw Method

The jigsaw method was initially developed by the American psychologist Elliot Aronson as a result of desegregation happened at Austin, Texas in 1971. Jigsaw method is a group learning method in which individuals within the group study different aspects, or pieces of a topic with students from other groups who received the same material, then come together to teach one another about what they have learned, ultimately resulting in the entire group learning about all of the studied aspects of the topic. In the jigsaw classroom, interaction among students makes the class very active and students gain more knowledge at the end of the session. The major skills involved in jigsaw are reading and comprehension. Aronson and Shelley (1978) observe that Jigsaw has been used effectively in difficult subjects like maths, language arts and biology etc. Jigsaw enables students to be introduced to the material and yet bear a high level of personal responsibility. Like all methods of teaching, Jigsaw is very effective and can be modified into number of ways to meet the specific needs of students. Once students have learned the method, they can use it to learn many concepts in the core academic curriculum. The Jigsaw method is now recognized as an innovative pedagogical practice across globe

and promotes learning, and higher-level thinking among students. There is no group reward for success. Each group member is personally responsible for studying the whole lesson through members of the group

II. Methodology

The experimental study was conducted at Sri Jayendra Saraswathi Mahavidyala School in Coimbatore. Thirty-five students participated in the study. The overall research strategy adopted in the study is determined from the research questions, the characteristics of the Jigsaw method, and the expected types of results in mind. Prior to the experimental study, an exploratory study was conducted for a number of 25 students who belonged to the category of Upper Primary. Main purpose of the study was to replicate the main study by using a smaller sample of students. Choice of the material to be read in class is critical while implementing the Jigsaw method. The reading material should reflect central themes within the discipline and be easily understood by the students. Hence, the investigator adopted seven prose lessons for the implementation of the method from the state mandated VIII Standard English text of Tamil Nadu. Since the text was designed considering the learners' level of proficiency and knowledge level, the investigator realised that no other material would be a better choice than the academic text for the implementation. Moreover, implementing the method using the academic text helps to contribute to the overall academic performance of learners. Prose lessons are lengthy texts and can be easily divided into segments. The chosen texts are easy to divide into logical segments. That is, an individual piece of the lesson is understandable to a student of the Jigsaw group without the knowledge of the other portions given to his group mates. Though poetry can also be well implemented, the investigator decided to stick on with the prose lessons because while including poetry section in the implementation students are to be divided into different Jigsaw groups depending on the text. The investigator does not wish for changing the Jigsaw groups as it affects the group scoring. Therefore, the investigator had chosen only the prose lessons for implementing the Jigsaw method.

Prose Lessons Adopted for the Study:

- 1) Living Amicably
- 2) The Wooden Bowl
- 3) The Power of Laughter
- 4) Rani of Jhansi
- 5) The Unforgettable Johnny
- 6) What is your Address?
- 7) Our Winged Friends

Table 1: Significance of difference between the various prose lessons selected for the study

Sl.No	Prose Title	N	Mean	SD
1	Living Amicably		10.48	1.900
2	The Wooden Ball		12.40	1.333
3	The Power of Laughter		13.03	1.839
4	Rani of Jhansi		13.31	2.259
5	The Unforgettable Johnny		11.83	1.807
6	What is your Address?		14.11	2.097
7	Our Winged Friends		15.45	1.945

The table above shows the mean differences of various prose lessons selected for the study. It is understood from the above table that there is a remarkable increase from prose 1 to prose 7. The minimum marks obtained by the students is 10.48 in prose 1 and the maximum marks obtained is 15.45 in prose 7. The gradual progression of students in the reading comprehension after having taught with the Jigsaw method is revealed. Therefore, there is a significant difference in the mean scores of various prose lessons adopted for the study with regard to achievement in reading comprehension.

Table 2. Significance of difference between the mean scores of experimental group in vocabulary pre-test and post-test with regard to gender

Experimental Group	Gender	N	Mean	SD	t	Df	Sig.(2 tailed)
Pre-test Vocabulary	Boys	23	5.26	1.421	0.024	33	0.981
	Girls	12	5.25	0.9653			
Post-test Vocabulary	Boys	23	7.30	1.820	-1.79	33	0.082
	Girls	12	8.33	1.073			

The table above reflects that out of 35 students in the experimental group, boys (23) have scored the mean score of 5.26 and girls (12) have scored the mean score of 5.25 respectively. The t value obtained for both and girls in pre-test is 0.024. The value of two tail significance is greater than .05 ($p < .05$), as such the difference between means is not significant. Similarly in the post-test on vocabulary, the boys and girls scored the mean scores of 7.30 and 8.33 respectively. The t value obtained for both boys and girls in post-test is -1.79. The value of two tail significance is greater than .05 ($p < .05$), as such the difference between mean is not significant. Therefore, it can be said that there is a significant difference between the two tests in terms of gender. This indicates the influence of Jigsaw Method in enhancing the students' vocabulary in terms of gender.

III. Conclusion

The findings of the study proves that Jigsaw method advocates teaching English by interactive tasks in English language classroom. Incorporating the Jigsaw Method in India is not without challenges. Initially, teachers and students have to face various challenges. However, once it is accomplished the first time, the method is less time consuming. It is recommended that language teachers should promote teamwork among students for high level of academic achievement. The investigator asserts that the teaching -learning condition in India must undergo a major reform. This reform should include a slow move from a didactic approach to a more interactive learning experience. A teacher should be familiar with advanced teaching methods and strategies. Therefore, efforts must be taken to explore more effective ways of teaching.

References

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