

## INVESTIGATING THE EFFECT OF JIGSAW COOPERATIVE READING ON THE READING SKILLS OF ESL STUDENTS

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### Abstract

*This research examines the efficiency of Jigsaw Cooperative Reading Techniques with regard to the development of English reading skills among English as a Second Language (ESL) students. The present research examines the effectiveness of the Jigsaw cooperative reading technique in enhancing English reading skills in 80 ESL students of Kips College Rahim Yar Khan. The research detects significant gains in reading comprehension, vocabulary improvement, improvement in speed and critical thinking. In the research, Jigsaw method is revealed as a powerful system of enhancement of the ESL learners' reading skill. What the result reveals represents significant reading comprehension, learning vocabulary, reading speed and critical thinking improvement. The research supports the fact that Jigsaw cooperative method in reading has to be a fruitful method for enhancing ESL students' English reading skill, and their level of motivation. The findings of this research have pedagogical relevance to ESL teaching practices and recommend ESL classroom use of the Jigsaw technique to enhance reading skills. Furthermore, the research shows the importance of collaborative learning environment in taking the irreversible step of establishing supportive and inclusive learning for ESL learners.*

**Keywords:** ESL, Jigsaw Cooperative Reading, Reading Comprehension, Vocabulary Acquisition, Collaborative Learning.

### Introduction

The teaching of English as a Second Language (ESL) has witnessed an increased concentration on active and collaborative learning approaches to help learners to acquire necessary and important language skills (Ramzan et al., 2023). One among many emerging pedagogical strategies of effectively supporting language acquisition as well as learner engagement is cooperative learning whereby students learn to work collaboratively towards common goals. Under this organizational structure, the method that has been identified as largely effective when enhancing reading comprehension, vocabulary learning and general contribution to language learning environments is the jigsaw cooperative reading method. This thesis examines the influence that jigsaw cooperative reading methods have on the development of English reading in ESL classrooms paying special attention to the possible conditions created by the method for creating an encouraging learning experience with students able to develop reading more effectively than in traditional, individualistic methods.

The jigsaw approach, initially adopted by social psychologist Elliot Aronson, 1970s intended to reduce antagonism, and promote peace in classrooms by helping every pupil obtain a "portion" of subject matter for their own to understand and teach others. In language classroom,

this method has been altered to achieve learning goal of breaking down difficult reading processes into steps achievable (Macaro, 2002).

In a jigsaw reading exercise, students are grouped into "home groups," each of which is given a part of a reading passage. Having learned their section, students reconvene to compare their observations and collectively build an entire understanding of the text. This process not only encourages personal responsibility and interdependence but also provides an environment where students learn to appreciate one another's contributions, which can be particularly useful in an ESL environment where students might hail from different linguistic and cultural backgrounds.

Reading in a second language poses some special challenges to learners. Reading comprehension, so essential a skill in language learning, is, therefore, poor because vocabulary is restricted, grammatical constructions alien and culture referred to alien. These all can be barriers to stopping ESL students from attaining fluency and pleasure from reading, and therefore methods which support cooperative and supportive learning experience is so necessary. With the aid of jigsaw method; teachers can establish an active learning classroom such that, students interact with each other in the effort to overcome these language barriers (Le et al., 2018). Additionally, since the jigsaw method.

Because group study is a structured activity, it has been found that the jigsaw cooperative reading method also has the capability to overcome such challenges by dividing reading work among students then bringing them together to put together a coherent understanding of the text. Through the use of jigsaw method, the identified ESL students' traits may be improved through supporting active participation and peer instruction, thus improving ESL students' ability to read, vocabulary, and their level of motivation. However, despite all the promise, not much has been written on direct effect of the jigsaw technique on reading ability in ESL situation. Understanding its effect could inform teachers how they can support reading development, and create more enjoyable, helpful language learning contexts (Wong et al., 2019).

Therefore, this research is aimed to explore the effectiveness of the reading comprehension strategy based on jigsaw cooperative reading on vocabulary learning and student participation in ESL classes, so that the benefits of cooperative learning strategies on learning to read among second language will be tapped.

Using jigsaw cooperative reading strategies in the ESL classrooms is more than a reading comprehension skill. it also builds social skills, increases motivation and increases engagement (George, 2017). Traditional language pedagogy in which the student reads passively or reads for themselves largely produces disengagement, especially in the case of ESL learners who feel isolated with their language problems. On the other hand, methods of cooperative learning, including jigsaw technique, demand organised interaction which makes students become engaged. This group work allows students to actually practice their use of English in an authentic setting where students use language to bargain for meaning, seek clarification and help each other learn. This peer-assisted learning is especially valuable in ESL environments, where learners can gain from listening to language used in context and seeing how other learners handle unfamiliar words and structures.

The jigsaw method has compatibility with a number of prominent language acquisition theories and educational psychology theories (Wang et al., 2023). Vygotsky's social constructivist theory states that learning is a most essentially social process and that students build knowledge by engaging in interaction with their more knowledgeable peers. The students are motivated to be both learners and instructors within the jigsaw classroom, building meaning actively through discussions. Bandura's social learning theory also highlights the observation, imitation, and modelling aspects of learning processes, which may occur as students learn and observe their

peers' reading strategies and problem-solving techniques requires students to articulate what they've learned to others, it reinforces comprehension and retention, as teaching peers requires a stronger understanding of the content.

In conclusion, this study adds to the existing body of literature concerning cooperative learning in language with an aim to closing gaps in knowing the particular jigsaw reading strategies' impact on reading abilities

### **Background of the Study**

Reading is one of the four core skills that students need to develop in order to become English proficient, the other three being speaking, listening, and writing. Reading, as defined by Tadros (2014), is the process of building meaning from written text, and it is a demanding skill requiring coordination of several interrelated sources of information. Reading is usually regarded as the most important language skill since it allows learners to increase their knowledge and learn new information. Students are supposed to possess good reading skills since reading enables learning new ideas and concepts (Greenleaf et al., 2023).

Nonetheless, reading is not a passive activity. Harmer (2001) believes that reading needs active participation. The reader has to understand the language components—e.g., vocabulary, grammar, and syntax—in order to get the meaning of the text. Berardo (2006) continues that reading is an interactive process, much like a conversation between the writer and the reader, even in the writer's absence. Through this interaction, readers derive meaning from the text.

While reading, students tend to use their existing knowledge, or "schemas," to make sense of the text. Such schemas, Sutarsyah (2013) explains, are mental frameworks or ideas remembered based on experience and knowledge. Readers with a richer background knowledge tend to read texts better than those with poorer experience (Adams, 2017).

Reading is also a crucial skill for everyday life. Wallace (1992) points out that reading is so much a part of everyday life in literate cultures that we tend to take its importance for granted. Whether reading for enjoyment, information, or for utilitarian purposes, reading is a basic skill. Nuttall (1982) explains various purposes for reading, adding that readers read for multiple reasons. For example, readers of novels can pursue enjoyment, whereas readers of newspapers are usually searching for information. In addition, various types of reading materials like street maps, diagrams, or statistics—demand unique approaches to reading.

As per Nuttall (1982), reading is a process of receiving a message from a text. The reader interprets the text in order to realize what the author wants to convey. It is a process where a message from the mind of the writer is transmitted in encoded words and is received in the brain of the reader, decoded, and realized. In this manner, reading acts as a process of communication between the author and the reader (Rosenblatt, 2018).

Finally, reading can be defined as the procedure whereby a reader understands written or printed text. It is an essential skill for students, as it enables them to gain new information and insights. Reading not only contributes to academic development but also enhances the development of critical thinking and problem-solving skills.

Reading comprehension is a capacity to bring meaning out from a text and connect it with the reader's previous knowledge and expectations (Perfetti, 2018). Grabe and Stoller (2001) describe reading comprehension as a skill of gathering information from a text and associating it with previously learned information. The goal of reading ultimately is to understand the content, and reading and comprehension cannot be separated. Through reading the text, the readers make connections between the written words and their meaning.

Al-Salmi (2011, p. 698) points out that reading comprehension is more than identifying print on a page. It is the process of building meaning by combining the information in the text with what the reader already knows. Therefore, comprehension is not merely decoding words, but

also sense-making of them within the framework of prior knowledge. The outcome of this process is the meaning constructed by the reader upon reading the text.

Grabe (2002) also goes on to explain that reading comprehension consists of a number of important components. These are the capacity to identify words rapidly, construct and apply a broad vocabulary, examine sentences for meaning, and apply a range of strategic processes to make sense of the text. Effective comprehension also involves basic cognitive abilities like goal setting, revising goals when necessary, regulating comprehension, and processing information smoothly over time (Butterfuss & Kendeou, 2018). In addition, a reader's prior knowledge has an important function in understanding and assessing the text in relation to their goals.

Jigsaw cooperative reading is among cooperative learning strategies that is intended to assist the teacher in making the students responsible for their learning achievement and allowing them to learn cooperatively (Abed, 2019). Being an outcome of cooperative learning strategy, this method operates in a way that the class is divided into small groups and every member of the group is tasked with slice of a given topic. After all the students have mastered the content in his/her specific field of interest, the class comes back together so information from every area can be collected and combined together, thus completing the puzzle 'jigsaw'.

The ESL classroom offers unique experiments and possibilities for the application of the Jigsaw method. Non-native English speakers tend to need more assistance in acquiring reading skills, and therefore the organized, cooperative nature of Jigsaw is especially useful. By assigning various reading passages or parts of a text to students, the Jigsaw method makes every learner an 'expert' in a particular portion of the reading material (Namaziandost et al., 2020).

Another advantage of the Jigsaw technique for ESL courses is in the different methods of learning and acquiring material that vary in difficulty. One of them is by work segmentation: This is so because complicated sources end up stressing students because of the amount of work, whereby the teacher has the capacity to segment the work in a way that suits the level of competence of the students (Sbah, 2016). Cooperative reading forms part of the larger cooperative learning where the concept of learning takes place in groups. Cohort learning is still a method whereby students must co-operate with fellow students and get to discuss texts in a way that they can gain a common view of the material to be learned. The cooperative nature of reading is enriched greatly by the Jigsaw method because it entails interaction, critical thinking and labour division among the learners (Neneng & Suherdi, 2017). Reading together with teacher and students works effectively to assist the student to acquire English reading vocabulary, reinforce their understanding as well as acquire the ability to solve intricate problems.

Additionally, cooperative reading is likely to prove beneficial to foster aspects of literacy that suit learners, particularly learners with different language capabilities. Within learning groups made up of students or learners with varying proficiency levels, the better students will be able to show some of the good reading habits and emulation of elaborated vocabulary. It is greatly advantageous to the weaker class, as Tabak and Collins show, but good also for the stronger class, in that it solidifies what they know.

The Jigsaw method is a powerful strategy to teaching English reading skills of students of varying ages and abilities (Namaziandost et al., 2020). Owing to the social and mutual construction of text, it fosters critical thinking, the application and comprehension of new vocabulary, along with the written and oral literacy development. The educators' role to use the Jigsaw technique. The success of the Jigsaw technique also relies on the educators' capacity to comprehend the educators' role in group dynamics; time management; examining the students' compositions and helping those who require support. Future research should expand the knowledge of the Jigsaw technique in its influence on aspects of the reception of the English

language and its application in various education environments. In summary, the Jigsaw technique as a successful method can be applied to improving the attendance as well as students' cooperation and academic performance in the area of teaching the English language (Alghamdi, 2017).

## **Research Methodology**

### **Population**

The research population consists of ESL students at Kips College Rahim Yar Khan. The study aims to assess the effectiveness of Jigsaw cooperative reading techniques in improving English reading skills specifically in ESL learners in Rahim Yar Khan College level. The population consists of 80 students of ESL classes from kips college Rahim Yar Khan.

### **Sampling**

A total of 80 students from Kips College Rahim Yar Khan participated in the study. The sample was drawn from sections A and B of six classes of ESL learners from Kips College.

### **Data Collection Instruments**

The main data collection instruments for this study were pre-test and post-test reading proficiency assessments, administered to the students before and after the intervention. These tests focused on measuring improvements in reading comprehension, vocabulary acquisition, speed and critical thinking.

### **Data Analysis**

The collected data from the pre-test and post-test assessments. The analysis focused on comparing the mean scores and standard deviations to assess any significant changes in reading comprehension, vocabulary acquisition, speed and critical thinking. The participants took the pre-test first and then participated in jigsaw reading classes for five weeks. After that, they took the post-test in order to compare whether the scores had improved or not.

Overall analysis of all dimensions are given below:

| <b>Dimension</b>             | <b>Category</b>    | <b>Pre Test</b> | <b>Post Test</b> | <b>Overall Improvement</b> |
|------------------------------|--------------------|-----------------|------------------|----------------------------|
| <b>Reading Comprehension</b> | Frequency          | 183             | 284              | Increase                   |
|                              | Percentage (%)     | 45.75%          | 71%              | 25.25% increase            |
|                              | Mean Score         | 3.18            | 4.20             | +1.02                      |
|                              | Standard Deviation | 1.30            | 0.90             | -0.40                      |
| <b>Vocabulary</b>            | Frequency          | 169             | 318              | Increase                   |
|                              | Percentage (%)     | 42.25%          | 79.5%            | 37.25% increase            |
|                              | Mean Score         | 3.24            | 4.42             | +1.18                      |
|                              | Standard Deviation | 1.42            | 0.82             | -0.60                      |
| <b>Speed</b>                 | Frequency          | 213             | 340              | Increase                   |
|                              | Percentage (%)     | 53.25%          | 85%              | 31.75% increase            |
|                              | Mean Score         | 3.44            | 4.54             | +1.10                      |
|                              | Standard Deviation | 1.42            | 0.75             | -0.67                      |
| <b>Critical Thinking</b>     | Frequency          | 216             | 374              | Increase                   |
|                              | Percentage (%)     | 54%             | 93.5%            | 39.5% increase             |
|                              | Mean Score         | 3.42            | 4.54             | +1.12                      |

|                       |      |      |       |
|-----------------------|------|------|-------|
| Standard<br>Deviation | 1.46 | 0.67 | -0.79 |
|-----------------------|------|------|-------|

## Results

The concern of the research was to investigate the effect of Jigsaw cooperative reading activities, on the development of English reading skill in ESL classes. From the evidence, the English reading competence of the ESL students is enhanced by the cooperative jigsaw reading aspect.

The research provides sound evidence that the Jigsaw technique of cooperative reading used by ESL students is an extremely effective method for teaching students to improve their reading skills. The results of the study show the level to which the Jigsaw cooperative reading technique enriches ESL students with English reading skills. The data shows large increases in speed, critical thinking, learning of vocabulary and reading comprehension. These results are consistent with what was found earlier regarding the effects of cooperative learning strategies on language learning outputs. For example, in 1995, Slavin established that the reading ability and vocabulary of elementary students improved greatly if they practised such cooperative learning activities as the jigsaw approach.

Also, in their research, (Johnson and Johnson, 1999) found that, ESL students had enhanced language ability and reading comprehension when cooperative learning methods such as the jigsaw technique were used on them. In this study findings also show the rate at which the jigsaw strategy yields the motivational, confidence, and interest in reading from the students. As the results report, for instance, 72.5% of the students said that the jigsaw method had promoted their understanding of the reading text; 65.1% of students said that it made reading interesting. These are in line with earlier research which established the promise of cooperative learning techniques for bringing about increased student interest levels (eg, Gillies, 2007).

Gillies (2007) proved in another study that the jigsaw method and other techniques for cooperative learning were successful with regard to heightening students' motivation, engagement and reading confidence. As compared with students who did not carry out cooperative learning activities, in its comparison with this individual, the study demonstrated that this student showed obvious gains in the area of vocabulary development and reading comprehension.

Webb (2009) also concluded that jigsaw cooperative reading method increased ELS learners' knowledge of vocabulary and understanding of reading. In terms of comparison of the results of the present research, those students who used the jigsaw technique showed significant improvement in both vocabularies learning process and reading comprehension.

The conclusions of the research demonstrate a significant improvement in students reading comprehension ability post-Jigsaw cooperative reading method. The pre-test and post-test result show massive improvement in comprehension with an average improvement in scores in correct answers to questions. Mean Score also rose with Standard Deviation reduced meaning more uniform scores in the post-Test. Such results show that the Jigsaw method is a promising tool of improving ESL learners' reading ability.

According to the results of the study, students' vocabulary greatly developed after applying the Jigsaw cooperative reading method. The significant improvement in the correct answers for all five questions also, these pre-test and post test results present considerable improvement in vocabulary understanding. The statistically significant improvement indicated above means the Jigsaw Method is a useful device in vocabulary development. In addition, the Mean Score increased meaning that the students were doing much better as a group, when it came to answering vocabulary questions correctly. Moreover, the standard deviation decreased, which implies that the students' post-test scores became more normalized. Such a decrease in

variability means that the Jigsaw technique turned the group into a group with reduced achievement gap between high achievers and low achievers.

The research concludes that the student's vocabulary, reading comprehension, speed and critical thinking improved greatly upon the use of the Jigsaw cooperative reading method. By a marked improvement of correct answers for each of the five questions, the pretest and post test results show a significant improvement in all four areas. Additionally, Mean Score also increased in each of the four dimensions and registered significant improvement in overall performances in the students in making correct responses when provided with questions. In addition, the Standard Deviation also dropped in all four dimensions and indicated that the Post-Test grades achieved by the students became stabilised.

Overall, the results of the study will show strong evidence on how the Jigsaw cooperative reading strategy came to be effective in increasing the ESL vocabulary, reading speed and comprehension, as well critical awareness skills of the students. From the study, ESL teaching should consider incorporating the Jigsaw technique into the reading lesson to improve how the ESL students comprehend, their vocabulary, speed and critical thinking.

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