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# Using Jigsaw Strategy for Teaching Reading to Teenager Learners in Vietnam

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**ABSTRACT:** This paper indicates strong points of using the jigsaw strategy for teaching reading to teenagers. Two kinds of datasets including survey and interview provided the researcher with enough evidence in order to judge innovation. Although this is not a very successful innovation, it helps the researcher experience jigsaw reading lessons in her own teaching context. Vitally important, the innovation helps engage students in reading lessons and create meaningful interaction among them. Therefore, the research results will be applied into other reading courses at institutions in Vietnam and the researcher hopes that it might be useful for those who are interested in teaching reading through the jigsaw strategy.

**Keywords:** jigsaw reading, English, teenager learners.

#### I. INTRODUCTION

As a developing country, Vietnam has been more and more promoting investments from foreign companies, encouraging cultural exchange programs as well as giving opportunities for students to study and work abroad. Apparently, English is considered as a key to help Vietnamese learners approach this ever-growing integration. Therefore, improving the quality of English teaching and learning is being taken in full consideration. According to Vietnam Ministry of Education and Training (2002), beside the need to develop high quality human resources, other factors like teaching facilities, learning environments and quality of textbooks must also be improved. Hence, most English textbooks nowadays are bought from famous brands like Cambridge or Oxford whose books are well-designed to cover four basic language skills (listening, reading, speaking and writing). However, teaching these four skills in Vietnam is still unbalanced and readings still a difficult subject to Vietnamese learners (Le, 2011).

#### **Rationales**

The domination of different teaching approaches in each Vietnamese educational stage results in the imbalance of teaching and learning four language skills (Le, 2011; Hoang, 2008). For instance, as a traditional teaching approach, Grammar-Translation method focuses on grammar, writing and literature. Teacher is centered in the classroom and most students learn passively. In recent years, however, Communicative Language Teaching approach (CLT) has been popular and favored by many Vietnamese EFL teachers. Accordingly, oral communication skills are emphasized and students are exposed in authentic learning materials or real-life situations. Students are expected to be fluent in oral communication (Brown, 1994; Pham, 2005). Consequently, reading skills these days seems to be put behind (Hoang, 2008; Le, 2011).

Jigsaw is known as one of the teaching techniques in CLT. Originally, jigsaw came from the constructivist theory by Lev Vygotsky that allows learners to join "in a process of meaning and knowledge construction as opposed to passively receiving information." (Kardaleska, 2013, p. 55) So as to generate a more active and cooperative learning environment, Professor Elliot Aronson followed the constructivism and developed the first jigsaw classroom in 1971 in Texas (Adhami, 2014). As Johnson (2005) and Aronson (2008) suggested, jigsaw is one kind of group work activities but it does not simply have students sit side by side to do an assigned job and then the group leader reports their work to the teacher. Cooperative learning could be found in jigsaw where each group member is responsible not only for his own learning but also for helping other teammates' work. Hence, in a jigsaw task, it is expected for students to work

together, exchange information and explain to each other until all group individuals understand and achieve the task's goal (Mengduo & Xiaoling, 2010).

#### Aims of the Study

Much work suggests that jigsaw is a beneficial strategy in language teaching and might engage students in reading comprehension effectively. However, there is a little discussion related to Vietnamese teaching and learning context. In order to fill this gap, the jigsaw strategy is applied in teaching reading in ESL classroom of teenager learners to evaluate how jigsaw worked in this class and to examine how teenager students viewed about jigsaw reading lessons. This paper therefore focuses on formative evaluation as it aims to identify the strengths and weaknesses of the ongoing classroom research and to improve the curriculum as well (Richards, 2001).

#### **Research Questions**

In order to reach the aims discussed above, the study attempted to elaborate two following research questions:

- 1. How effectively can the jigsaw strategy be used for teaching reading?
- 2. How do teenager students respond to jigsaw reading tasks?

#### II. LITERATURE REVIEW

#### 2.1. The Jigsaw Strategy

As a cooperative learning strategy, jigsaw consists of five significant principles as follows:(i) Positive interdependence, (ii) Face-to-face promotive interaction, (iii) Individual and group accountability, (iv) Interpersonal skills, (v) Group processing. Accordingly, positive interdependence can be found in the jigsaw technique since each student has to make contributions to the common task and every individual's effort is indispensable for their group success. Obviously, teamwork and shared responsibility must be focused in the group process. Besides, students have to orally explain how they cope with the task to each group member so meaningful interactions among students need to be promoted. Some interpersonal skills such as decision making, trust-building and conflict management are also essential for the successful jigsaw learning.

Moreover, in an attempt to picture what a jigsaw classroom looks like, Aronson (2008) puts forward ten useful steps. First of all, students are divided into home groups with four or five students in each group. Secondly, group leaders are chosen to manage their own groups. Thirdly, the reading text or the assignment should be divided into four or five sections (for each group individual). Next, each student is required to study his or her assigned part. And then, expert groups are formed; students who have the same part will join in one expert group so that they can share opinions, discuss the main ideas of the text, and prepare to report what they learn from the text to their own home groups. In this step, teacher needs to act as a facilitator to observe the process and helps expert groups when needed. After that, students come back to their home groups and present their parts. Next, other members are allowed to ask questions and discuss together to make clear what they learn from their teammates. Finally, students present their own learning and do some follow-up exercises to check their understanding on the given material.

# Previous Discussion about the Jigsaw Strategy in Teaching Reading

Meng (2010) used the jigsaw technique to teach reading comprehension to 25 students in China. The researcher conducted observations during four months and had interviews with some students at the end of the course to evaluate the effectiveness of the jigsaw technique in her own class. The findings showed that most students played an active role in class participation. They found themselves as experts who contribute something important to the group success and they seemed to enjoy peer teaching in class. Therefore, Meng (2010) concluded that the jigsaw reading could enhance learner-centeredness in the classroom and help the teacher save energy, generate individual responsibility and encourage cooperative learning. However, there was one limitation in this article. The pre-test, post-test lacked validity, which makes the test scores couldn't exactly reflect students' progress after the implementation of jigsaw reading.

Kardaleska (2013) also employed pre-test and post-test so as to examine to what extent jigsaw reading lessons have positive effect on learners' reading skills. The researcher first implemented a pre-test to check students' levels of reading. The test was given to both experimental class and control class, one was taught through the jigsaw technique and one studied in the traditional way. After three months, all students from the two classes were required to take a post test in a similar format to the pre test. The test scores were then analyzed and demonstrated the increase in the mean scores of two classes. The findings helped Kardaleska (2013) confirm that there was a positive change in his students' reading comprehension after the jigsaw strategy was integrated in reading lessons.

Moreover, Adhami (2014) indicates that jigsaw learning could help learners develop their higher order of thinking. Adhami (2014) discussed Bloom's taxonomy in her study. According to the researcher, participating in jigsaw tasks means that students are developing their analysis, synthesis and evaluation skills. The interview findings conducted in the Adhami's study showed that her students recognized they worked a lot in jigsaw tasks, not only did they learn for their assigned part but they also had to listen to their peers, evaluate the ideas, synthesize the information and make questions to get deeper understanding of the full reading texts.

In short, the literature mentioned above helps me strengthen my inquiry questions; the jigsaw technique is feasible for teaching reading comprehension in my own setting. The following pages therefore aim to picture how my research project was implemented and how the research data are analyzed and evaluated as well.

#### III. DESCRIPTION OF THE INNOVATION

The innovation project was carried out at Bien Hoa Foreign Language School. It is one of the reputable language centers in Bien Hoa city which applying the student-centered approach to meet learners' expectations. In other words, learners have a right to decide their own learning goals and play a significant role in developing their English skills; thus, most learners find it comfortable and confident to attend English courses at our center. The class size is often small; there are from 15 to 30 students for each class. The research was implemented at a pre-intermediate classroom with 24 students from 14 to 17 years old and all of them are chosen as participants in the research. The curriculum is designed to cover four language skills and based on the book "American Headway" (Oxford University Press, 2006). The research lasted six weeks (from July 6<sup>th</sup> to August 10<sup>th</sup>). Accordingly, the jigsaw technique was integrated in reading tasks during the six weeks. Therefore, six lesson plans were designed according to Aronson's steps for a successful jigsaw classroom (2008). Each lesson lasted 45 minutes and the topics were all based on students' textbook.

#### IV. METHODS

#### **Data Collection Tools**

Firstly, questionnaires were delivered to all 24 participants in week 6. The questionnaire included two parts. The first one was a short description of the research and the second part consisted of 10 items which were designed with the Likert scale (strongly agree, agree, disagree and strongly disagree). All of the ten items were clearly presented to participants. They attempted to investigate students' opinions in the jigsaw lessons.

Secondly, to gain deeper understanding of students' perceptions on the jigsaw reading tasks, semi-structured interviews were exploited in the study. Accordingly, six students from six home groups were randomly chosen to be interviewees. Each interview lasted five to seven minutes and was tape-recorded. The interviews were in Vietnamese as it is easier for participants to express their various thought and share their ideas on the questions.

## **Ethical Considerations**

In general, most students were eager to be participants in the study and research data were successfully collected although there were some problems I encountered and had to solve when conducting this research. The reason is that I always took ethics in full consideration. Before collecting data, I had a formal discussion with my students in order to inform them the purposes of my study, how they could join in the research and how the findings would be published. Next, all participants were provided with consent forms. Because they are all teenagers, there were two consent forms.

One was used to ask for their parents' consent and one was for participants' willingness in the research. Importantly, I myself had to follow the informed consent rules. I always treated participants with respect and cared about their attitudes when collecting data. For questionnaire, I found that some students were scared of my power and they might say something untrue when evaluating the jigsaw tasks in class. To cope with this problem, I explained to all participants the questionnaire's aims and asked them to use anonyms in the questionnaire. Besides, when I randomly chose six students to join in the interviews. As first, two of them were hesitated to be interviewees; they told me that they were afraid of losing face if they could not do well in the interview. Hence, it was advisable for me to explain the interview's purposes, encourage them to join and ensure that all their answers were confidential. Indeed, considering ethical issues, I could easily collect data for the research. Moreover, the research data had to be analyzed and reported honestly because it was also unethical if the data were manipulated for the research's purposes and published differently.

#### **Data Analyses**

For quantitative data, the spreadsheet program allows researchers to enter columns and rows of students' name and their responses on questionnaire items; thus, the percentages of survey data could be easily calculated on the spreadsheets. In addition, some graphic forms such as charts, pies and tables would be presented in the study. Based on the descriptive statistics, I could gain an overview of students' responses on the survey.

For qualitative data, three techniques of coding were used for analysis including: open coding, axial coding and selective coding (Ary, Jacobs, & Sorenson, 2010). Accordingly, I first read through interview transcripts several times, and then I highlighted key issues or anything that made impression on me. It was essential to break down the data into chunks or statements to easily put them into categories. It was advisable to systematically arrange the data from broad categories to sub-categories to show connections between them and to find out other themes related to the research questions.

#### V. RESULTS

# **Results of Survey Questionnaires**

As the questionnaire is composed of ten items, item 1 aims to explore students' ideas on the task instruction, item 2 to item 6 attempt to collect students' opinions on jigsaw activities, item 7 and 8 show students' responses on reading materials, item 9 examines students' opinions on post-reading activities and the last item investigates students' attitudes toward jigsaw cooperative learning. The findings of these items are respectively presented as follows:

75 % of students agree that instructions given by the teacher are clear enough and they understand what they have to do in the jigsaw tasks. It is a good signal when 6 of 24 students (25%) strongly agree about this. It also means that jigsaw reading tasks are not too difficult for students to get closed to and they can understand learning steps to complete a jigsaw task.

Secondly, it is essential to get students' feedback on group processing such as how they work on the tasks, how they interact with their partners and whether they enjoy the jigsaw tasks or not. The findings of item 2 to items 6 are summarized in the following table:

Feedback	Agreement (%)
Understand the reading texts more easily when discussing with others.	87.5
Some individuals were too dominant in expert groups.	66.7
Enjoy sharing with home groups what learnt from the reading texts	95.8
Make questions to clarify the knowledge received from group members.	29.2
Be happy when working with different home groups every lesson.	37.5

# Table 2. Students' feedback on group processing

23 students (95.8%) agree that they enjoy sharing with their teammates what they have learned from the reading texts; 87.5% of students approve that it is easier for them to understand the content of reading texts when discussing with others. However, there are some students who are too dominant in group discussion, which makes others feel

uncomfortable to work with; thus, just 37.5 % of students are willing to change their home group every lesson. Besides, the researcher reflects on why there are only 29.2% of students making questions to clarify the knowledge they received from their group members. Whether students are too shy to make questions or the reading texts are not difficult for them to understand. Thus, the next items aim to investigate students' opinions on reading materials.

There are 54.2% of students agreeing that the reading topics are interesting enough to discuss. Besides, 8 students (33.3%) strongly agree that they are interested in these reading topics meanwhile the rest of students (12.5%) disagree about this point. Furthermore, item 8 focuses on the sections that students are assigned to read. The results show that 91.7% of students find it not too difficult to read the texts and only two students (8.3%) disagree about this. In other words, most reading texts employed in the lessons are interesting enough and suitable for students' language ability.

In the post-reading stage, students are asked to do some follow-up activities or some quizzes related to the reading texts to check their understanding of the given material. Therefore, it is indispensable to examine the effectiveness of these activities through students' attitudes. The following chart shows students' ideas about post-reading activities.

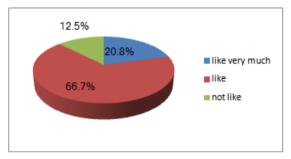


Chart 1. Students' opinions on post-reading activities.

Last but not least, the last item is designed to explore students' ideas on jigsaw cooperative learning. It is supposed that English teaching and learning should encourage cooperation and shared-responsibility among students; jigsaw is considered as a useful way to enhance cooperative learning environment. Hence, it is necessary to examine to what extent students agree with this viewpoint, whether students can recognize the importance of cooperative learning through jigsaw tasks or not. The finding of this item is demonstrated below.

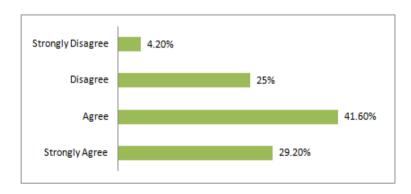


Chart 2. Students' attitudes toward jigsaw as a cooperative learning technique

# **Results of Interviews**

Interviews aim to elicit students' views on reading and jigsaw reading tasks. The researcher talked closely to six students who were randomly chosen from six home groups. From the interviews, the researcher finds out the following comments.

All six interviewees consider reading as a difficult subject. Most of the students agree that they often feel bored in reading class, partly because they are not patient to read when encountering new words or difficult grammar structures, partly because they do not like the tedious atmosphere in reading class. However, only one student reveals that she enjoys reading although it is a difficult subject. Her problem is that she does not know how to learn reading well. Besides, they also admit that they would like to learn through playing and experiencing things because they are all teenagers. They themselves are so familiar with Grammar-Translation method in high school that they would like to learn in various ways.

When asked about jigsaw reading tasks in class, haft of the interviewees show their enjoyments about the topics. According to them, it is easy to get deeper understanding of the reading texts if its topic is attracting and interesting. Therefore, engaging students in reading topics is an indispensable stage for a successful lesson. Moreover, group processing is also a key factor in the jigsaw technique. Indeed, it is a good signal that most students feel comfortable in group discussion although they do not like a few dominant students. They comment that reading sections are quite short for them; it is not difficult to understand the sections because dominant or excellent individuals often explain strange phrases and difficult points for others to understand together. Two students also share that they even debate in expert groups when members cannot reach an agreement. However, when coming back the home groups, they have more ideas to share with others and they also learn more information from their partners. After the jigsaw reading tasks, they like reporting their group work in front of the class and answer questions together. Importantly, some interviewees hope that the teacher should value students' work by giving more feedbacks and marking their work. According to them, each team has different effort, the teacher should give marks for those who complete the task well. Indeed, these students' responses should be taken in full consideration because they are helpful for the researcher to evaluate the effectiveness of the jigsaw technique.

#### VI. DISCUSSION

During the six weeks of implementing the innovation, the researcher has found that there are many factors influencing a successful jigsaw reading lesson. In order to use the jigsaw technique effectively, not only does it require the teacher to have proper teaching methods, but it also depends on other aspects like teaching and learning context, materials and students as well. For teaching methods, it is advisable to follow Aronson's steps (2008); for instance, Meng (2010), Adams (2013), Adhami (2014) successfully apply these ten steps in their study and have positive impact on their students. My six lesson plans for the innovation are therefore well-designed in Aronson's way; however, there are some problems occurring when following all the steps in these lesson plans. Some slow-level groups could not fulfill their group discussion by the allotted time while others worked on the task more quickly and then they were talkative in class. Hence, complying with the prepared steps is a good way to conduct a lesson but it does not mean depending much on the lesson plans. The teacher should be flexible with the time such as spending more time in helping slow-level groups and focusing on the report stage.

The survey results present that 54.2% of students agree that reading topics are interesting enough to discuss and 33.3% strongly agree that they are interested in these reading topics. Moreover, 91.7% of students find it not too difficult to read the texts. In other words, most reading texts used in the lessons are interesting enough and suitable for students' language levels. In fact, to prepare good reading texts for a jigsaw activity, it takes the teacher more time to find ones which can be divided into four sections with equal length and levels of difficulty. This is also one feature of jigsaw reading materials, which makes jigsaw tasks different from other kinds of reading activities. Another factor influencing the success of a jigsaw reading classroom is teaching and learning context. After this innovation, I strongly agree with Johnson (2005) that teacher should not blame everything on the teaching context; if it is not perfect, teacher must find the way to maximize its strengths and minimize its limitations. For instance, my research setting is in my own class with 24 students. Although the class consists of more than 20 students, I could easily divide them into six home groups. In addition, my classroom lacks teaching equipment like projector and speaker so I borrowed from the school; certainly, it was time-consuming and a little complicated. However, I could implement jigsaw tasks with enough teaching materials and equipment. In other words, the jigsaw technique can be feasible for my own setting in particular and for Vietnamese teaching context in general.

Importantly, another key factor that is indispensable for a successful lesson is students. Apparently, they can provide teacher with valuable comments on the lesson; by this way, teacher can adjust teaching methods and design classroom activities that meet students' expectations. In this study, my students' responses toward jigsaw reading tasks are taken seriously. Through survey and interview, the researcher can get closed to students and somewhat gain their attitudes and opinions about jigsaw reading tasks. It is lucky that 95.8% of students enjoy sharing with their teammates what they have learned from the reading texts; 87.5% of students agree that it is easier for them to understand the reading texts when discussing with others. Some findings from the interviews also show that students even debate in expert groups when they cannot reach an agreement, and then coming back home groups, students have more ideas to discuss and they also learn more information from their partners. Apparently, jigsaw activities are beneficial in generating meaningful interactions among students. Reading becomes a common task that students have to work together to find out new knowledge, they cannot wait for teacher's explanation all the time and the teacher is no longer centered in class. The survey results present that 66.7 % of students are dominant in group activates. They are those who like showing their ability and initiating group discussion. In other words, if the reading topics and the lessons are not interesting enough, there are not more than haft of the students actively engaging themselves in such group activities. Therefore, much work outside Vietnam definitely confirms that the jigsaw technique is useful for language teaching and learning. For instance, Bafile (2008) concludes when a jigsaw task is designed well, it must be engaging and challenging, then "students enjoy wrapping their minds around a problem. Since they are working in groups, no kids have to sink or swim on their own, they have the help of their peers." (p.68) Obviously, this is one of the positive teaching and learning styles that the jigsaw technique can bring about. Although my innovation is not a very successful case, at least, it helps change the traditional teaching method and engage students in reading lessons. It is believed that this study can somewhat fill the gap in the literature. It is hoped that the research results can be useful for other work related to the topic so that there will be more and more research about the jigsaw strategy in Vietnamese teaching and learning context.

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