

Research article

A Jigsaw and Educational Game: Fun Learning Tools to Enhance Reading Skills

Eny Suspartiana

STIBA Malang

ORCIDEny Suspartiana: <https://orcid.org/0000-0003-3464-5280>**Abstract.**

This research aimed to investigate the use of a jigsaw and educational game to maximize the reading skills of sophomores. The researchers investigated 20 students to find out the combined influence of a jigsaw and educational game to enhance reading skills. The researcher distributed questionnaires and analyzed the data by combining qualitative and quantitative research methods. Using qualitative methods, the researcher investigated the students' attitudes towards reading three subjects by observing, taking notes and interviewing the students. For the quantitative data, the researcher investigated the students' ability in reading by distributing a test instrument to obtain the students' scores before and after they were exposed to the jigsaw and educational game in the Reading 3 class. The tests were taken from part of the TOEFL reading tests, chosen since the sophomores obtain TOEFL materials for their class. The combination of a jigsaw and educational game proved effective and fun as shown by the positive test results of the students: around 80% of the sophomores understood the reading texts better after implementation. The results therefore showed that if the researcher applied the strategy of combining the jigsaw and educational game, the students had fun learning activities and their understanding improved.

Keywords: jigsaw, educational games, sophomores

Corresponding Author: Eny
Suspartiana; email:
enysuspartiana@gmail.com

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1. Introduction

College students everywhere cannot be separated from reading. The text books they use are mostly in English. However, they find reading difficult since it covers many features and a lot of vocabulary items and idiomatic expressions that the readers are supposed to understand as well. This is also because they have to understand other aspect like translation, scanning, and skimming which can make the reading activity frustrating.

McLaughlin [1] believes that, "Good readers are strategic and take active roles in the reading process." There are many aspects to consider when someone wants to be an active reader. For learners of English, two primary hurdles must be cleared in order to become efficient readers. They need to be able to master fundamental bottom-up

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strategies for processing separate letters, words, and phrases, as well as top-down, conceptually driven strategies for comprehension. Brown [2] stated that improving the students' skill in reading may use the combination of jigsaw and educational game and even it could change the students' opinion that reading is a frustrating activity to be fun activities.

Jigsaw technique has been very popular since 1970's. Many teachers have used that technique to improve their teaching and learning process. There has been previous research done by some researchers in conducting the research with jigsaw technique. Mokowitz et al. [3] comes to a conclusion that the participant group found the training to be interesting but they did not give good result from the jigsaw effect. Ghazi [4] in his article in Reading Psychology had other opinion. He thought that reading attitude and reading achievement were positively internally related but not related to the perception of the Jigsaw II cooperative experience. Research done by Mengduo and Xiaoling [5] who used the Jigsaw strategy focusing on the language learners concluded that implementing jigsaw technique in the EFL classroom made it possible for the teachers to focus on language learners and thereby language learning became independent.

Refai [6] said his students in eleventh grade got a positive result in reading comprehension when jigsaw technique was applied in his class. Ratna [7] wrote that her students became more active when she applied the jigsaw technique in her class. Other research done by Mus'tain [8] gave good effects to the students' reading ability. Jigsaw gives a significant result to the students' reading ability.

In addition, other activities can be applied to make a learning activity fun and interesting, namely educational games. Educational game is a type of experiential learning where learner engages in some activity, looks back at the activity critically, abstracts some useful insight from the analysis and puts the results to work [9]. Educational game is 'instructional methods requiring the learner to participate in a competitive activity with present rules' [10]. The game that the researcher uses is guessing game. Guessing game involves an interaction between thought and language.

Based on those previous studies, the researcher believes that Jigsaw can give positive contribution as well as positive result. All studies above applied jigsaw technique without any combination with other technique. The researcher believes that if jigsaw is combined with other technique in this case is educational game; there will be much better result than those yielded through the application of single technique of jigsaw. The researcher combined jigsaw with educational game because she assumed that those two techniques would give much effect to the students' reading skill. The researcher also believed that she could improve the students' reading skill of the

students especially the executive class students of STIBA by combining those two techniques. Researcher assumed that with the jigsaw technique, she could explore the students' ability. Besides jigsaw, researcher also used educational game to motivate them to understand more the reading text.

On the other hand, the non-regular classes students are expected to be active readers since their supplementary materials in most of their subjects are mostly in English. Non –regular class students of STIBA were also expected to be active readers. Unfortunately, their activities during the working days (Mondays – Fridays) make them feel tired and exhausted to read and understand some reading texts in the classroom since they started studying since morning. Other reasons that might be possible to appear were that they felt they had limited vocabulary items, and they were not really good at interpreting ideas from the reading texts. Other reason besides those reasons was that they lack motivation in learning English. Therefore, as the consequences, their scores in Reading 3 subject were not really satisfying. Having taught the students for almost five years, the researcher found that students had difficulties in understanding the reading texts. Researcher concluded that based on the scores they got, and some other reasons above, the non-regular class students of STIBA needed to get special treatment to make them understand more about reading and make them enjoy reading during their learning in the classroom.

To help the students solve their problems in reading, the researcher needed to conduct a study to help students' increase the reading scores and make them enjoy learning Reading 3 subjects. The technique of the presenting game for adult classes with reading texts is really fun method of teaching English. The technique gave good effects on the students' understanding the reading text. Therefore, the researcher proposed jigsaw technique in giving the treatment due to the students' characteristic in learning. They enjoy something that is done in-group. They also enjoy games for fun to refresh their mind after studying something serious. It happens in all of the researcher's classroom activities when teaching them. They are adults, but they still enjoy games. Adults still have 'child-like' behavior [11]; therefore, they still enjoy games. Ali et al. [12] have opinion that conducting game in teaching will explore the students' interests, and motivation to learn a language more.

Educational game in this study is quiz educational game. The purpose is to explore their understanding much more information related to the reading texts in Reading 3 subject with a fun activity. Researcher used game to encourage them and to motivate them to be active in learning. With educational game, the students would learn the subject enthusiastically.

2. Method

The researcher used classroom action research to solve her problem related to her teaching in Reading 3 subject. Suyanto and Sukaryana [13] say that Classroom Action Research is form of various activities as one of the efforts made by a teacher or practitioners that is conducted to improve an unsatisfactory condition, or to increase learning community in the classroom. The characteristics of the classroom action research are: (1) it is done by the teacher; (2) it starts from the factual problem that appears in the teaching and learning process; (3) there are some actions which are needed to improve the teaching and learning process and (4) it can be done collaboratively. Kemmis and McTaggart [14] stated that action research occurs through a dynamic and complementary process, which consists of four essential moments: planning the action, implementing the plan, observing the action, and reflecting on the observation.

The researcher used classroom action research to get the real result of the students understanding in the reading texts in Reading 3 subject. She distributed a test as a preliminary study to know the students' ability in reading. From the result, the researcher applied the jigsaw and educational game in the classroom for four sessions. The researcher got the quantitative data from this research.

The design of the classroom action research has 4 (four) stages, namely 1) planning, 2) implementing, 3) observing, 4) reflecting. If these are successful, researcher need to stop the action and continue to make conclusion and report. If the action is not successful, the researcher modifies or revises some parts of the teaching strategy, and goes to the next circle until it becomes successful. In her research, the researcher did only 4 (four) stages since she got the better result from the students of Reading 3.

In the planning step, the researcher prepared the materials for Reading 3 and for the pretest and posttest. Researcher used TOEFL reading materials for the pre-test and the post test. Besides selecting the materials, the researcher also prepare the lesson plan for teaching the materials by using two strategies namely jigsaw and educational games. In the next stage (implementing), the researcher implemented the two strategies in her classroom for Reading 3 subject. The researcher applied both strategies jigsaw and educational games in the pre teaching, whilst teaching, and post teaching with reflection in each session of the teaching. Around 20 (twenty) students took part.

In implementation stage, the researcher applied Jigsaw in teaching reading to the students of students with an average sized class (10 to 20 students) that are divided into competency groups of four to six students, each of which is given a list of subtopics to research. Individual members of each group then break off to work with the "experts"

from other groups, researching a part of the material being studied, after which they return to their starting group. In addition, applying the Jigsaw, the researcher applied Educational game is a type of experiential learning where learner engages in some activity, looks back at the activity critically, abstracts some useful insight from the analysis and puts the results to work [7]. In her research, the researcher used quizzes to recall the students' skimming and scanning activities in answering the questions followed the reading texts. The researcher did the observation by seeing the student's responds and activities. It was done to see if the techniques run well or even it made the students get more difficulty. This activity was ending by reflecting to see whether the circle needed to be continued or finish.

3. Findings

The researcher did this current research because her students in Reading 3 class found that Reading 3 difficult. In addition, the reading questions that follow the reading text make them frustrated. The result of the Reading 3 test was not satisfying; therefore, the researcher did this research with aims to enhance the students' reading scores and to give a fun learning in Reading 3 class.

The first step done by the researcher was distributing the questionnaires to the students as the preliminary study to find out the students' attitude towards Reading 3 class. The result showed that 100% of the students in that class did not like reading since the reading texts were difficult for them and the reading activities were boring. The next step, the researcher gave the reading tests as the pretest to the students, and the result showed that 90% of the students got low scores (under 70 out of 100) on the tests. Then, the researcher did the CAR in her classroom applying the two strategies namely jigsaw and educational games to solve the students' problems.

The researcher applied the strategies (jig saw and educational games) in her class for 4 (four sessions). After applying those strategies, she distributed reading texts with some questions as the post test. The reading texts were taken from the TOEFL reading texts. Almost 80% of the students got better scores. It is also supported by the student's respond. Most of them were happy and active to do the reading activities. It means that the students enjoyed doing the reading tests and they also had better understanding; therefore, they could answer the questions much more easily.

The result of the students' scores can be seen from these tables below:

From the table, we can see that there was different result from the pretest score and the post test scores. It means that the combination strategies worked. The students

understood reading texts better than before. From twenty students, almost 90% of the students got good results in the post test. The researcher could say that the strategies were useful to enhance the students' reading skill especially in Reading 3 subject. The researcher can say that these strategies proved effective by combining some qualitative data (test results) and the quantitative data.

4. Conclusion

The researcher can conclude that by combining two strategies (jig saw and educational games), she can enhance the students' scores in Reading 3 subject. The problems faced by the students related to the vocabularies items, scanning, and skimming in reading are not a burden anymore. They enjoyed reading activities in the classroom, therefore; their scores were higher than those of the pretests (before they got the strategies).

The researcher can recommend the other researchers, or teachers who teach Reading 3 in their class can try these strategies. Furthermore, students who have problems in Reading 3 subject can also enjoy these strategies.

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