

A SYSTEMATIC REVIEW OF GRAPHIC ORGANIZERS METHOD IN READING COMPREHENSION

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Abstract

This research aimed to review previous relevant studies to see the contribution of graphic organizers method in reading comprehension. This research was conducted using a systematic review qualitative research method. The object in this study were five previous relevant studies that have been selected using inclusion and exclusion criteria. The method used to collect the data in this study were internet searching (Google Scholar), manual searching, and Zotero software. The data was analyzed by thematic analysis. The results of the review showed that overall the students' achievement after applying graphic organizers had improved such as: (1) students more creative in make their own graphic organizers, (2) it help them to separate relevant details from what is fascinating but not necessary for instance, (3) store vocabulary, (4) summarize reading text, (5) students' confidence had improved, (6) the knowledge of student's text structure had improved and (7) deepen understanding. That's mean graphic organizers gives such a positive contribution to the students in reading comprehension.

Keywords: *Graphics Organizer, Reading Comprehension, Systematic Review*

INTRODUCTION

Reading has substantially positive impact, thus reading can be categorized as one of the necessary aspects if we want to learn and mastering English. Through the reading activity, people obtained information and they can enlarge their knowledge. reading is said to be a process of an personal identify and associating the form of sound and meaning obtained in order to interpret and study the meaning of word or sentence that has been read (Kennedie 1981:5). In reading the text, comprehension perform a crucial part. Comprehension is the aims of the reading process and that is the ability to get the point of the text McNamara (2007:4) defines reading comprehension as going beyond the word to comprehend the ideas and relationship between ideas expressed in the text. Graphic Organizer used to improve comprehension in reading. A graphic organizer is a teaching and learning method used to organize knowledge and ideas in an easy to understand and internalize format.

There has been a bunch of studies that supports and gives evidence to the systematic review of the use of graphic organizer related to reading comprehension. (Hasan Basri Kansizoglu, 2017; Dr. P. Arul Nehru, 2019; Ciullo and Reutebuch, 2013) A Synthesis of Research Graphic Organizers and Their Effects on the Reading Comprehension of Students with learning disabilities was reviewed by Ae-Hwa Kim, Sharon Vaughn, Jeanne Wanzek,

and Shangjin Wei in (2004), for instance, carried out graphic organizers interventions with upper elementary, junior high school, and high school students, indicating a lack of knowledge about how to use graphic organizers with younger students.

And based on the recommendation from the previous research which as the second field for the future research is to identify the types of students who can profit from using graphic organizers. By doing so, the researcher presented the systematic review or literature review of the previous studies related to the graphic organizer method in reading comprehension employed by teachers particularly to middle school to university students. In order to address a specific study query, a systematic review aims to collect all empirical data that meets pre-specified eligibility requirements.

METHODOLOGY

Research Design

The form of this research is a systematic review design. The systematic review is a synthesis of the literature study systematic, clear, comprehensive, by identifying, analyze, evaluate through data collection, data that already exist with an explicit search method, involve and a review process critical in the study. The systematic review is a type of literature review to collect secondary research and synthesize finding qualitatively or quantitatively secondary research means gathering data that already exist because it does not include talking directly with the human subject. According to Handayani (2017:12) a systematic review is a research that focuses on a specific question which is to identify, selecting, assessing, and synthesize the relevant studies.

The aim of systematic reviews is to include as comprehensive a list of published studies related to a specific subject area as possible (Ramdhani et al., 2014:49). In the systematic review, it is divided into two types, they are meta-analysis and meta-synthesis. A meta-analysis is a statistical procedure for combining numerical data from some separate studies, on the other hand Meta-synthesis is qualitative research that analyzes some of the data that has been collected and can draw conclusions from studies that have been done by describing all matters relating to the formulation of the problem. In this research, the researcher concentrated on meta-synthesis because the researcher aimed to analyze the relevant studies. It helped the researcher to conclude the information from many studies that relate to the same media.

The researcher used systematic review design because this research design is suitable with the purpose of this research, the researcher wants to see the contribution of graphic organizers in reading comprehension.

Object of Research

The object of this research were the five relevant journals both national and international which connected with the topic that selected through the screening process by the researcher. In selecting the five relevant journals the suitability of the sampling strategy also supports the quality of the research. the researcher used purposeful sampling strategy. The aim of purposeful sampling is to select information-rich cases whose analysis can shed light on the research question (Patton, 2002:46). The strategy is chosen to get the appropriate documents that relevant to selected respond to the research question and how it relates to the inclusion and exclusion criteria.

Search Method for Collecting Data

In doing systematic review, the relevant studies play an important role and the researcher must find the studies by using the appropriate search strategy that will be searched the sources in detail. In order to find the proper sources, the researcher utilized internet searching, Zotero software and manual searching.

Data Analysis

Data analysis was an important aspect. In this research, the researcher used qualitative analysis. And the technique for analyse the data the researcher used thematic analysis. Thematic analysis should be seen as a foundation method for qualitative analysis. Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data (Braun & Clarke, 2006:79). Thematic analysis consist of six phase they were (1) Become familiar with the data. (2) general initial code (3) Search for theme (4) review theme (5) Define themes (6) Write report.

Research Findings

1. Improving reading comprehension of Iranian high school students via graphic organizers

Authors: Mahmod Hashemian, Bashir Jam, and Sahar Naraki

This research was an experimental research and aim to investigated the effects of graphic organizers on Iranian EFL learners' reading comprehension. There were two themes would be described below:

a. The implication process of graphic organizers

The participants were divided into two groups to ensure that the overall language proficiency of the two classes was the same. After finishing the test the teacher did the experiment, The instructor demonstrated the facilitative effect of graphic organizers to the participants in the first segment of the experiment and proceeded to teach reading comprehension using organizers in the subsequent sessions.. The participants were then given a text to read, and since they were unable to produce an appropriate graphic organizers, they were paired up. Finally, the instructor asked the participant to analyze the text to assess their comprehension.

b. The contribution of graphic organizers

In this study, it was discovered that graphic organizers helped L2 learners to build appropriate schemas by making linkages between new information, that after receiving graphic organizers' treatment, the students had improved in their knowledge of text structure as evidenced by the results, and that those who received graphic organizers expressed that the use of this strategy had boosted their confidence for reading, even complicated English text, it is proved by the result that shown after the students having the treatment. The immediate post-test mean score in group A (M=15.08) was higher than the mean score in group B (M=12.96)., indicating that using graphic organizers as a strategy for reading instruction was more effective than other strategies such as translation.

2. The effect of graphic organizers on L2 Learners' reading comprehension

Author: Maryam Heidarifard

This research aimed to investigated the effect of using graphic organizers on the reading comprehension of general education students.

a. The beginning activity

The researcher prepared the material that used, which consist of an OPT test, a pre-test, a critical thinking questionnaire, four different types of graphic organizers and a post-test. The participants were then given the OPT test determine their homogeneity. A reading comprehension pre-test was given to the participants which consisted of 15 questions adapted from a student's TOEFL test and was previously used to assess the participants' levels of reading comprehension.

b. The process during pretest until posttest

The time location for investigating was 10 week period. Then, the pre-test was given on the first day of a 10 week schedule for the result in pre-test score group A got (m=9.23) simultaneously, the score for group B was (m=9.58) meant that group A got lower score than B in the pre-test and for the post-test was offered to both groups A and B on the last day of the 10-week schedule.

c. The final result

Participant's performance on the immediate post-test, the researcher discovered that the mean score was higher in group A (M= 13.15) and group B (M= 11.25) and that there was a substantial difference in reading comprehension scores between groups B (those who got the conventional form of reading comprehension translation) and A. (those who did not receive the traditional method for reading comprehension translation). The participants also said that graphic organizers help them to break down the whole text into manageable pieces, in the process of completing a graphic organizers the students were deepening their understanding of the text, and by instructing using some different types of graphic organizers indirectly develop their thinking skills.

3. Using graphic organizers to improve reading comprehension skills for the middle school ESL students

Authors: Praveen Sam D & Premalatha Rajan

This study focused on the use of graphics as knowledge organizers by ESL middle school language learners while comprehending a passage for main idea, supporting details, facts, opinion, comparisons, and contradictions.

a. Starting stage

The researcher began the instruction by explaining what graphic organizers are and how to use them effectively while reading a text to the students in the experiment group. The students were also taught how to use various organizers for various types of passages. In the students activity, the students were asked by the researcher to learned a variety of existing graphic organizers and they also asked to started creating their own organizers the aims was to build their creativity and critical thinking. The researcher found several problems from the students, which They were able to understand the meaning conveyed in the paragraph or passage but they could not classify a paragraph into main idea, topic sentence, supporting details, etc.

b. The collaboration

The researcher was investigating whether the proficiency levels of the students in the experimental and regulated groups were the same or different before conducting the pre-test. A pre test was administered to all of the two classes during the first session of the experiment; the result of the pre-test demonstrated that the comprehension abilities of both groups were on the same level.

c. Good influence of graphic organizers

Active involvement of readers in constructing a graphic organizers provide them for deeper processing of the material, it was found that graphic organizers had multiple uses such as summarize reading text, organize and store vocabulary, decision making, and brainstorming. The post-test results indicate that the experiment group students gained in all five forms of reading questions as compared to the controlled group students.

4. Effects of discourse structure graphic organizers on EFL reading comprehension

Author: Xiangying Jiang

a. Beginning activity

The textbooks used in the college English program were from the twenty-first-century college English collection, with book 1 being use for fist semester students and book 3 being used for third-semester students. The students were asked by the instructor to filled the test in the reading passages in the book that given before.

b. Discourse structure graphic organizers process

The researcher met with the other two DSGO experimental group teachers a week before the semester began and equipped them with two 90-minute training sessions. A reasonable concern was that the time spent on DSGO instruction by the experimental group might negatively affect their learning of other language skills taught in the traditional curriculum. The analyses revealed that the experimental group's teachers diligently followed the DSGO lesson plans, and the lessons continued as expected using the DSGO instructional method. Each student look three tests to evaluate the impact of the DSGO instruction: a pretest, a posttest, and a delayed posttest. The analysis of the DSGO completion measure revealed a major instructional impact. The findings indicated that there was no major teacher impact on class success

5. The effects of graphic organizers and marginal L2 Glossing Training on the reading comprehension of ESP students

Author: Zahra Rostami Sarabi

a. Graphic organizers method

The use of graphic organizers also helps students generate linguistic representations. As a visual tool, graphic organizers help students process and remember content by facilitating the development of image. As a linguistic tool, text based graphic organizers also facilitate the development of logo gens thereby dual coding the information.

b. The process of Graphic organizers

A week before the procedure, the researcher conducted a regular reading pretest to ensure that all students were at the same level of reading comprehension. The reading pretest was given to all three classes a week before the start of the procedure. The researcher then randomly divided the classes into three groups. The researcher instructed the students to take the steps outlined below: (1) Carefully read the passages and extract the key concept and supporting sentences. (2) Draw a circle around the passage's skeletal ideas. (3) Create a hierarchical list of these definitions. (4) Draw a line between similar definitions. (5) Suitable graphic organizers should be drawn based on the passage's relationship. (6) Double-check the graphic organizers to ensure that it is as reliable as possible.

c. The efficiency of using graphic organizers

The means for each groups post-test are also shown in table. Those who received graphic organizers treatment got mean score (M=26.11), Marginal Glossing (M=22.26) and control group (M=17.45) it can be inferred that the graphic organizers had a higher mean score than the other two categories.

DISCUSSION

There were five studies have been reviewed by the researcher by using thematic analysis, where firstly, the researcher created codes in each study that relate to the research question and made it become categories. Then, from the categories, the researcher made the themes to be displayed in this research. The researcher named the journals as journal 1 (Hashemian 2014) journal 2, (Sam & Rajan 2013), journal 3 (Sarabi 2012), journal 4 (Heidarifard 2014), and journal 5 (Jiang 2012). The result of the review that have been conducted, there are several similarities and differences between on study to another. The researcher found several similarities and differences among the study Firstly the researcher would discuss from the differences of each journals, Graphic organizers had positive contribution in all journals that

reviewed, but each journal has specific contribute in each journal. in journal 1 mentioned that graphic organizers aided L2 learners in developing effective schemas by connecting new knowledge. improved in the knowledge of the text structure and the students' confidence in reading had boosted. Meanwhile, in journal 2 found that after applying graphic organizer their thinking skills was develop, and supported by Lyer (2019) thinking is the base all of cognitive activities or processes and is unique to human beings. They got easier to break down the whole text into manageable text and five types of reading question such as identifying the main idea, finding supporting details, dealing with vocabulary, making inferences, and fact & opinion had improved proved by the result. Journal 3 specifically the students became active in constructing graphic organizers, the student's understanding deepens, graphic organizers helped to summarize reading text, organize and store vocabulary, helped in problem solving, decision making, and brainstorming.

In journal 4 the contribution of graphic organizers proved by the result that showed the significant improvement, supported by the students statement that they had more confidence while reading in English, they also said started to read better in L1 means that graphic organizers helped reading comprehension not only for foreign but also in native language. Meanwhile journal 5 also declare the same thing that student had more confidence after applying graphic organizers.

From the similarities side the studies conducted by journal 1 and journal 4 both were in the same level which high school level. Before the experiment, these two studies similarly conducted homogeneity test, journal 1 was using NET(Nelson English Test meanwhile journal 4 was using OPT (Oxford Placement Test)the homogeneity test was really important the aim was to make sure that the students were also homogeneous, as stated by Pauwels *et al* (1998:51) homogeneity testing is the highest importance for the certification of reference materials, as it should demonstrate the validity of the certified values and their uncertainties in the analysis of individual units or portions therefore. Next in journal 1, students were tasked with developing their graphic organizers, since they were unable to build enough graphic the teacher draw the graphic on the board then the students were asked to discuss the text in order to assess their understanding. Meanwhile in journal 4' all the graphics made by the teacher, not the students which meant the first research better in terms of student involvement in learning rather than the second research in which students were more involved and it gives benefit such train their creativity and critical thinking, Paul 1990 in Sanders (2011:42) point

out that critical thinking is disciplined self directed thinking which exemplifies the perfection of thinking appropriate to a particular mode or domain of thought. At the same time Sam & Rajan (middle school 2012) in their research the students also more involved which the researcher familiarize them about graphic organizer and how to use it in this research the students were also taught how to use various organizers for different types of passages, which is a positive thing. The last two journals that have been reviewed were university level, as a university students, it should be as if in terms of making graphics it is no longer the job of the teacher but it has become common place for students who are more active and creative because they were already university students and in Sarabi's (journal 3) research did that. In Jiang's study a quiet different with the others, in his study specifically investigated the effects of a 16-week reading instruction program with discourse structure graphic organizers on the development of English reading comprehension on EFL students. In this study the researcher involved the instructors to help him give the instruction for the students and from the finding it was discovered that DSGO training substantially enhanced discourse comprehension as assessed by the DSGO completion task and that the effect lasted for & weeks after the instructional treatment.

According to five included studies reviewed, there were three studies which stated that students were involved in creating graphic organizers, means that in teaching learning process the involvement of the students affect the improvement rather than just observing without practicing.

CONCLUSION

The researcher founds the studies by using a search engine was Google scholar, the search strategy yields eighteen thousand five hundred studies. Those studies were chosen based on inclusion and exclusion criteria. It was screened and from the result of screening it would be reviewed. This systematic review has included 5 studies that fulfil the criteria and published journal form. Those studies discovered the use of graphic organizers method in reading comprehension especially from middle school to university students. To reviewed the studies, the researcher used thematic analysis. The researcher created codes, categories, and themes in each study because each study had a different level of education and different theme.

Based on the review, the use of graphic organizers was successful in students' achievement, students more creative in make their own graphic organizers, it help them to separate relevant details from what is fascinating but not necessary for instance, store vocabulary, summarize reading text, students' confidence had improved, the knowledge of student's text structure had improved and deepen understanding. It can be concluded that graphic organizers have positive contribution in reading comprehension.

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