

The Effects of Using Graphic Organizers in English Reading Comprehension

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Abstract

Graphic organizers are used in English teaching and learning process to help the students explore knowledge better. It refers to the way that the students use graphic organizers in English reading comprehension. The purpose of this review paper is to introduce some of useful graphic organizers and consider the effect of them on students' reading comprehension ability. The result of the previous studies show that there is a significant role in utilizing graphic organizers in reading text teaching. The students who are taught by using graphic organizers are better than the students who are taught using conventional strategy. The students perform better on reading approach quality in terms of content, vocabulary, and mechanics. It can be counseled that graphic organizers have a significant effect on students' reading comprehension quality. It is effective to be used in order to help the students read better. The students are successful in generating the ideas of the text and it can create a social community. We recommend for the future researchers to realize various graphic organizer models into research.

Keywords: *Effect, graphic organizers, English learning, reading comprehension*

1. Introduction

Reading plays a fundamental role in knowledge acquisition. According to Leipzig (2001), learning to read is a complex process drawing upon numerous skills that need to be developed at the same time. Many young English language learners meet difficulties in English phonics, vocabulary, English grammar, story retelling or reading comprehension question (Yanhui, 2013). As a consequence, most people have come to agree that effective teachers integrate both skills and meaning into a standard reading instruction program recently. However, "constructing an integrated and effective reading program is challenging" (Leipzig, 2001). Moreover, in psychology and education, student's visual

perception process is the subject being interested by many researchers. Graphic organizers are some of the most effective visual learning strategies for students and are applied across the curriculum to enhance learning and understanding of subject matter content. They are particular techniques that readers use to improve their reading skills. In a variety of formats dependent upon the reading task, graphic organizers facilitate students' learning by helping them identify areas within a broad topic. They also help the learners make connections and structure thinking. Research shows that readers visualize what they truly understand (Nagy, 1988). In addition to helping students organize or systemize their thinking, graphic organizers can act as instructional tools. Teachers can use graphic organizers to illustrate a student's knowledge about a topic or section of text showing areas for improvement. For more graphic organizer examples including webs, concept maps and mind maps.

2. Theoretical frameworks

Research on graphic organizers grows out of the reading strategies where consist of various learning styles. Different types of reading strategies can differentially influence on students' reading comprehension (Yanhui, 2013) such as graphic organizers and semantic strategies. A graphic organizer is a visual display (Ausubel, 1960) that demonstrates relationships between facts, concepts or ideas. Graphic organizers are spatial representations designed to facilitate the teaching and learning of textual material (Mark, 2011). They are also informally used as a term to describe all visual learning strategies such as concept mapping, webbing, mind mapping.

Concept maps graphically illustrate relationships between two or more concepts and are linked by words that describe their relationship. Concept maps are applied effectively in various fields with different languages. For example, researchers (Tatjana, Hilbert & Alexander, 2007) analyzed individual

differences between learners with respect to the learning processes and developing a strategy for teaching concept mapping. There are various uses of concept mapping (Christina, 2007) like traditional concept mapping (requires students to abstract key information, link it with a name relationship and indicate directionality), mental concept mapping (encourages students to ask the question about content knowledge while mapping in their heads), electronic concept mapping (asks students to use Inspiration software for sharing broad concepts).

Webbing is a brainstorming method that provides structure for ideas and facts. Brainstorming webs provide students with a flexible framework for idea development, organizing and prioritizing information. A web is a visual map that shows how different categories of information relate to one another. Webs are typically used by students, teachers and professionals as brainstorming strategies for developing and connecting ideas.

Mind mapping is a visual representation of hierarchical information that includes a central idea surrounded by connected branches of associated topics. A mind map allows students to imagine and explore associations between concepts (Martin, 2010). Mind mapping is used as a visual form of note taking that offers an overview of a topic and its complex information, allowing students to comprehend, create new ideas and build connections. Students may begin with a central idea and expand outward to more in-depth sub-topics through the use of colors, images and words in their mind mappings. It is mostly justified by the theoretical fact of schema, which are underline the graphic organizers in reading strategy. Piaget (1952) defined a schema as “a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning”. He emphasized the importance of schemas in cognitive development and described how they were developed or acquired. However, he did not mention the relationship between schema theory and education directly although later researchers indicated that schema can be applied to teaching and learning. According to schema theory, knowledge will be created in an organizational patterns when the newly learned materials are integrated to learners’ existing knowledge. Therefore, it is significant to instruct students to gain meaningful learning which leads to comprehension in reading (Malahat, 2017).

3. Previous studies

In recent years, researches stated that graphic organizers are used as a reading strategy instruction that offers many effectivenesses for developing comprehension with independent readers (Anina, 2016), which help students engaged their reading by practicing their skills, applying strategies and

building background knowledge. Kristin (2010) documented that graphic organizer helped students have comprehension improvement over time, students with higher levels of verbal ability, metacognition, and prior knowledge showed the largest improvements. The results of the intervention with reading conditions in Kristin’s research (2010) stated implications for explicit reading strategy instruction which has often been reserved for students with the lowest levels of verbal ability, metacognition, and prior knowledge. Following Nancy and Ellen:

“Graphic organizers allow teachers and students to summarize and evaluate information into visual models that can be used quickly and easily. They also help students record and recall information, see relationships, use appropriate language, and comprehend concepts. Teachers can use graphic organizers to prepare lessons and guide student achievement. Graphic organizers make learning manageable and fun.” (2007, p.119)

A graphic organizer guides the learner’s thinking as they fill in and build upon a visual map or diagram. Karla (2011) examined that incorporating graphic organizers are effective into students’ critical thinking skills and comprehension of nonfiction texts as well as using graphic organizers is constructivist, allowing the students to create their own understanding of the information. Graphic organizers play a great role in learning strategies which include translating words expressed in linear form into visual structures. increase students’ ability to learn to reject the arguments. This studies indicated that graphic organizers are some established cognitive tools to promote learning and help students with differing learning styles.

In previous studies, researchers explored the cognitive processing engaged in by the participants when they engage in the graphic organizer tasks (Anina, 2016; Anne, 2012; Kristin, 2010; Malahat, 2017). They indicated that reading with the graphic organizer strategy, as opposed to re-reading the passage, lead to significant improvements in both recall and text structure sensitivity (Anne, 2012). The findings of these studies suggested that an intervention can exert a positive impact of graphic organizers on learners’ reading competence. The reading comprehension skills as well as reading competence of students in elementary schools (Anne, 2012; Kristin, 2010; Yanhui, 2013), secondary schools (Malahat, 2017; Mark, 2011) and universities (Nancy & Ellen, 2007) improve with the introduction of graphic organizers.

In summary, the graphic organizers have various implements for application in teaching and learning reading comprehension. The results of mentioned previous studied showed that graphic organizers were effective in helping the students to improve their reading competence and overall use of reading strategies. It was also successful in helping the students at every ages and flexibility in the curriculums gain awareness of their learning language, improve metacognition, critical thinking and become more independent in their learning. However, the graphic organizers should be used for teaching certain concepts in reading comprehension when students have reached the appropriate stage of cognitive development

4. Types of graphic organizers

Five graphic organizers are as samples which supply teachers with techniques that assist them with planning by providing tools for designing curriculum, implementing instruction and facilitating assessment. The teachers will use these graphic organizers in their reading teaching appropriate to the study program of English for non-major students. The teachers can decorate these samples according to each lesson to promote students to learn reading comprehension excitedly and actively.

4.1 KWL chart

A KWL (see Figure 1) chart is the table with three columns: What I Know, What I Want to Know, What I Learned. This organizer promote students to draw on what they already know about a subject and encourages them to make connections. The KWL chart engages each student in the learning process. "After reading, it gives students a place to reflect on what they have learned" (Anina, 2016).

| K What I K now | W What I W ant to Know | L What I L earned |
|---------------------------------|--|---------------------------------------|
| | | |

Figure 1: KWL chart

4.2 5W's and H

"5W's and H" organizer (see Figure 2 as an example) is used for finding key information. Students use this organizer during their reading as a note-taking tool, organize their thoughts and check their comprehension after reading. This organizer

gives students a space to collect key information about a subject.

| | |
|-------------------------------|---------------------------|
| Take note Subject..... | |
| Who? | Where?..... When?..... |
| What happened? Why? | How did it end? |

Figure 2: 5W's and H

4.3 Fact or Opinion

Distinguishing fact and opinion is an important skill for developing readers' competence. Fact or opinion (see Figure 3) organizer is used for identifying and differentiating fact and opinion. The students need to identify factual statements supported by evidence and opinion statements that are expressions of a person's beliefs. This organizer helps students determine if interesting information is fact or opinion, which is useful in prereading or

| | |
|-------------------|-------------------|
| | |
| 1. Caption: | 2. Caption: |
| | |
| | |
| Label: | Label: |

review the text.

Figure 3: Fact or opinion

4.4 Venn Diagram

A Venn diagram (see Figure 4) can help students compare and contrast two characters, settings, events, or other literary elements. This simple graphic organizer highlights similarities and differences, making it easy for students to think about how they organized the information. Students can share and compare the information on their Venn diagrams by drawing or writing shared traits in the center where the circles overlap and in each circle.

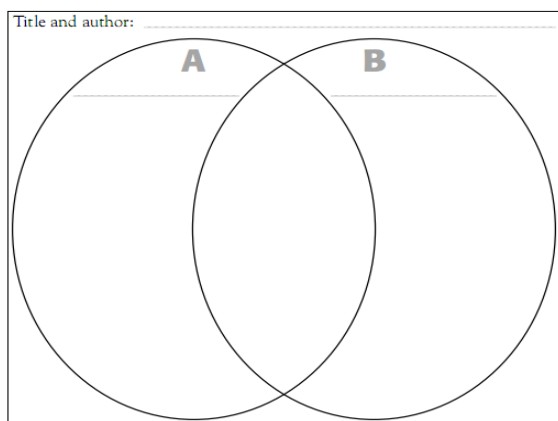


Figure 4: Venn diagram

4.5 Main Idea and Details

The main idea and details (see Figure 5) graphic organizer helps students sort out the main idea and the smaller details that support that main idea. It works best with nonfiction texts such as magazine articles, biographies, and textbooks. As documented in the book of Anina (2016), students can use this organizer while they are reading to take notes and organize their ideas and after reading to recall the important information.

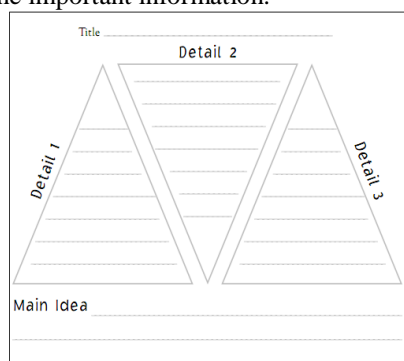


Figure 5: Main idea and details

5. Using graphic organizers

As mentioned in the research of Malahat (2017), there are three stages in constructing a new learning strategy. The first stage is modeling; at this stage, the teacher will demonstrate the students how to a strategy and its role in learning. After reading the passage, the instructor will draw a graphic organizer on the board to help students know how to write stage by stage the relevant information in order to have visual knowledge about the passage. In the second stage, guided practice, students will be asked to share suggestions for what to add to each section with the class and explain the reason for it. Then the teacher will ask them to organize the text in groups under the teacher's instruction and supervision. In the last stage, independent application, the students will be asked to apply graphic organizers individually. At the end of each session, the students have to answer related tests. The instruction in the

control group will be basically followed traditional principles. The students in this group will be asked to read the text and answer the following reading comprehension questions of the passage.

6. Conclusions

Teachers and students use graphic organizers with tools, concepts, and language to organize, understand, and apply information to achieve a variety of purposes and outcomes (Nancy & Ellen, 2007) after intervention. The main purpose of using graphic organizers is that it will help first year non-major English students increase their reading comprehension competence. Students can use graphic organizers as tools to visualize and organize information in reading tasks effectively. Moreover, because graphic organizers are used as prompts for students to fill in the blanks, graphic organizers provide many benefits to students who use them including: helping students structure reading content organize essential concepts and ideas, encouraging students to make decisions, making it easy for students to classify ideas and communicate, allowing students to examine relationships, guiding students in demonstrating their thinking process and increasing critical thinking.

Graphic organizers are effective on students' reading class. In the reading class, the students may be assigned to generate their reading comprehension through graphic organizers. It helps the students generate the ideas, sequences of the text order, and have better idea organization including main idea, supporting ideas or details. The application of graphic organizers also creates the social community for the better learning environment. When some of the students have difficulties in drawing the graphic organizers, other students can help them to identify the problems. It is effective to help the students compose a paragraph through reading. The graphic organizers are then, suggested to be used in reading class. Besides, there have been considered some predicted weaknesses in using graphic organizers; one of them is when the students only use one model of graphic organizer. The students do not want to try other model of graphic organizers which are provided in the examples. We recommend for the educational researchers to realize various graphic organizer models into reading class.

The participants in the experimental group will outperform their counterparts in their use of strategies with graphic organizers as a result of the training. They will understand the important role of graphic organizer in reading assignments and the importance of the organization of a composition. Besides, the students may pay attention to vocabulary and grammar. As a result, the effect of the graphic organizers will still maintain after the intervention. Last but not least, it is expected that the

graphic organizers will be successfully implemented in teaching and learning environment at university and the study will have important contributions to graphic organizers research.

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