# USING GRAPHIC ORGANIZER IN HELPING YEAR FIVE PUPILS TO COMPREHEND THE SMALL 'I'

## HIEW MEI PING

# UNIVERSITI UTARA MALAYSIA 2010

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## USING GRAPHIC ORGANIZER IN HELPING YEAR FIVE PUPILS TO COMPREHEND THE SMALL 'I'

#### ABSTRACT

Graphic organizers are structural tools that help readers organize thoughts. By using graphic organizers, pupils can experience words beyond pronunciation and display connections between ideas and concepts to improve comprehension. Graphic organizers help pupils sort, show relationship, make meaning, and manage data quickly and easily before, during, and after reading and discussion. As a result, pupils can display connections between ideas and concept, thus improving the text comprehension. The subjects were primarily Year Five pupils (n = 60) at a suburban school in Kota Kinabalu. The purpose of this study was to examine the effectiveness of using graphic organizers as a learning tool to help Year Five pupils organize thoughts and improve reading comprehension. Using a triangular approach to data collection, this 6 week study utilized a Pre-test and Post-test control group design and individual interviews to determine the effects of graphic organizers on pupils' achievement. The data suggests that using graphic organizers might have been one factor that aided pupils in the reading comprehension process. In addition, this study revealed that pupils believed that graphic organizers were helpful in allowing them to organize their thoughts after reading a story. A paired samples t - test determined significant difference in achievement between the groups. The experimental group improved in achievement at least as much as the control group.

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#### **CHAPTER I**

#### **INTRODUCTION**

#### 1.0 Introduction

English language being the 'second' language in Malaysian schools from primary to secondary level, has continually attracted the attention of the Education Ministry to upgrade the 'language skills' among pupils. To upgrade these skills, the Ministry in 2004 introduced literature small 'l' in the English subject in Malaysian schools. The small 'l' is referred to as primary school literature. The aims are to help and encourage pupils improve their English language through reading simple text and related materials. Some of the objectives of introducing small 'l' include : to instill reading habit, to enrich vocabulary, to enhance thinking skills, to promote cultural understanding in the Malaysian context, to provide lively enjoyable and high-interest readings and above all to improve English language proficiency of pupils in Malaysian schools (Curriculum Development Centre , 2004).

According to Bellanca (2007, p. 229), "Teachers who integrate graphic organizers into daily lessons can exceed this mandate [using research-based strategies] in ways that raise expectations for pupils comprehension to the highest degree". Some researches have shown that pupils cannot comprehend what they read because they do not know how to read effectively. "Readers need to understand the context and the structure of the text to understand the content, yet many pupils lack the necessary skills for text structure identification and comprehension of complex relationships among concepts, facts, and generalizations often found in social studies texts" (Ciardiello, as cited in Massey & Heafner, 2004, p. 32).

Despite these problems, some researchers have found that graphic organizer can help to increase reading comprehension. Katims & Harmon (2000, p. 280) have implemented graphic organizer with success, particularly at the middle school level. They believe, "Implementation [of graphic organizer]...indicated an academically significant increase in reading comprehension for all pupils, improve meta cognitive ability, attention to information contained in texts, and confidence in ability to grapple with ideas in authentic texts".

### 1.1 Background of the study

According to 'Curriculum Development Centre Ministry of Education' (2004, p. 4) children's literature can be defined as "the material created for and widely read, viewed and heard by children that has an imaginative element". In 2004 the Education Ministry decided that Children's Contemporary Literature should be taught in Year 4, 5 and 6. The rationale for this is to provide an early beginning and a foundation in literature. Pupils will develop and understand of other societies, cultures, values and traditions that help them in their emotional and spiritual growths. Finally it also serves as a follow-up to the structured reading program for secondary school pupils. The Ministry of Education has prepared modules for the teachers for teaching literature. These modules provide teachers with specific aims and objectives of teaching literature and also specific guidelines, exercises and activities for pupils to perform. However, these modules are not sufficient especially for teachers who have never been exposed to teaching small 'l'. Strategy such as graphic organizer may have additional benefits in teaching literature. As teachers depend totally on modules recommended by the Ministry of Education, which is their main source to teaching literature, it can be observed that teachers do not use graphic organizer while teaching literature in their schools and it is not a skill that is currently taught in schools. Reading problems often become one of the main causes of failures in schools. Even strong Year Three readers are not guaranteed future success; they are at risk for later academic problems if reading instruction is neglected in the middle and upper grades (Biancarosa & Snow, 2004). Reading problems cannot be expected to vanish without targeted intervention and over time the negative impact of reading difficulties intensifies, affecting pupils in a variety of ways. Although reading deficiencies may appear to be specific and narrow in the primary grades, they tend to become generalized over time, affecting cognitive development and overall performance in school (Fawson, 2000). Poor comprehension ability may be related to a lack of comprehension strategies, vocabulary, or background knowledge. As pupils progress through school, they must rely more and more on their ability to read increasingly varied and complicated content to acquire

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knowledge (Rubman & Waters, 2000). Secondly, in primary school, many pupils not just struggling readers, begin to read less outside of school and become more likely to develop negative attitudes about reading. These tendencies are most prevalent in struggling readers (Massey & Heafner, 2004).

As an English teacher teaching literature, I have decided to address this problem by applying graphic organizer in helping Year Five pupils to acquire better reading skills. As such this study is carried out with the intention to broaden mine and other teacher's knowledge on their effectiveness of using graphic organizer in helping Year Five pupils to comprehend the small 'l'. The effectiveness of graphic organizer in improving comprehension has been demonstrated with Year Five pupils in English as second language. Visual aids, such a graphic organizer, can be useful when engaging in the learning process as they allow pupils to better understand complicated information from expository texts. Graphic organizer help to teach pupils to organize difficult information (Almasi, 2003) by visually identifying significant relationships between key ideas and concepts (Fountas & Pinnell, 2006). These tools also assist pupils in identifying main ideas and supporting details from expository text. When pupils understand what they have read, they will be more prepared to internalize, rephrase, and transition that information into a coherent piece of writing (Willis, 2007).

Graphic organizer has been used as pre-reading and post-reading procedures. Furthermore, variations of a graphic organizer can be used to promote inferential thinking, a higher level cognitive skill that is necessary for comprehension (Rubman & Waters, 2000). Graphic organizer provides a practical means for helping children organize story content into coherent wholes. Graphic organizer is derived from integration of literal and implicit information about the main characters, events, and ideas presented in the story (Brunn, 2002). I concur with these authors that graphic organizer will be a better alternative for the pupils to remember the sequential of the plot in a story. Therefore my definition of graphic organizer is that it is a graphic representation of the elements including setting, problem, goals, events and resolution. Pupils will be able to remember the events in a plot using graphic organizer.

Graphic organizer can provide the basis for assessment strategies that inform teachers about both the pupils' comprehension of a particular text and their literacy knowledge. The graphic organizer should reveal the central ideas and should also capture the underlying relationships among events. Reading, however, does not occur unless an individual comprehends. Comprehension is the process whereby the readers construct meaning by interacting with the text and can be studied from different perspectives and approaches (Myers & Savage, 2005). Comprehension has been investigated in terms of reader's cognitive structures or schema. Comprehension has also been investigated for different types of text variables and types, including narrative and expository texts (Strong, Silver, Perini & Tuculescu, 2002, p. 8). One such area of research has focused on the reader's schemata for stories and the structure of stories to be comprehended, and is termed as graphic organizer.

## 1.2 Statement of the problem

After 4 years of reading literature in ESL classroom at the school being studied, more often than not, the literature components are seen as reading comprehension lessons. The teachings are mostly based on the dull talk and chalk methods, one-way teacher centered and mechanistic. Teachers need to apply methodologies which indirectly focus on individual task among pupils. Pupils are usually expected to listen and comprehend what is being taught, where literary items or texts are taught repeatedly, one after the other. There is hardly any active involvement, voicing of opinions or space for creative learning of the literary text.

At the onset of this investigation, some problems were encountered with the pupils. Pupils in this school had only limited instructions in English language, three hours per week using a direct instruction technique. Secondly, English being the second language and third language for some pupils, posed problems in comprehending the story structure. Pupil's writing and reading instruction in previous years have been limited to very basic contents in literature. More often they tend to structure words and sentences from the Malay language, thus deviating from authentic sentences structures. Also, they are always least motivated to read and write in English over their own language. They often think in Malay while constructing English sentences, thus distorting the meaning.

## 1.3 Objectives of the study

Graphic organizer is an excellent way to help pupils to see cause and effect, recall story events in sequential order, and understand story structure, thus improving their comprehension skills and understand literature better. The current investigation intends to meet the following objectives:

- 1)To investigate the effects of graphic organizer on the reading and comprehension skills of Year Five pupils.
- 2)To examine whether the pupils find graphic organizer helpful in enhancing their reading/comprehension skills.
- 3)To demonstrate the viability of introducing graphic organizer as a routine class-based instructional technique.

#### 1.4 Research Questions

This study addresses the following research questions concerning the relationship between graphic organizer and pupil's performance in comprehending the literature and improving their reading skills:

1)What impact graphic organizer has on Year Five pupils' performance in comprehending the small 'l' before and after intervention?

2)Would the Year Five pupils show a better understanding of the small 'l' after

intervention compared to those who received conventional reading instructions?

3)What are the pupil's perceptions toward introducing this technique and learning of literature through graphic organizer?

#### 1.5 Research Hypotheses

The hypothesis for this research is whether incorporating graphic organizer in teaching of literature in the classroom will enable pupils to comprehend/understand the text (literature) better. Like research questions, hypotheses narrow the purpose statement in mixed method research, but advance a prediction about what the researcher expects to find. Based upon previous research findings, elaborated in Chapter II it is predicted that graphic organizer will have a positive outcome on the subjects targeted for this research.

Null Hypotheses, the most traditional form of writing a hypothesis predicts that among a population there is no relationship between independent and dependent variables. In contrast, if a research predicts a relationship of difference among the variables from past research or explanations, alternative hypotheses may best the hypothesized to predict the direction of change or a relationship among the variables under investigation (Creswell, 2002, p. 131-132). Based upon the first and second research questions of this study, it is hypothesized:

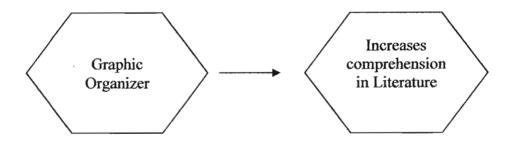
- Ho1 There is no increase reading and comprehension skills by the Year Five pupils before and after being instructed through graphic organizer.
- Ho2 There is no significant difference after intervention compared to those who received conventional reading instructions.
- Ho3 There is no significant difference in the pupil's perceptions towards learning of literature through graphic organizer.

The third research question is measured using interview as it involves a qualitative approach to data collection.

## 1.6 Research Framework

This study will involve and examine two main variables. The first is the graphic organizer which is the independent variable and the second, dependent variable, is the literature (reading) comprehension.

Figure 1.1. Graphic Organizer Increases Pupil's Comprehension in Literature



To support the independent variable, the subjects in this study are Year Five pupils. The dependent variable consists of the pupils' comprehension of a particular text and their literacy knowledge using graphic organizer. Within the study, the main dependent measure is to be the pupil's score on reading comprehension after the information on the story components was taught within 6 weeks, with the addition of graphic organizer, to help pupils in remembering the story components.

#### 1.7 Significance of the study

Learning to read and write in English as a Second Language can be a difficult and frustrating experience or a natural challenge, depending on the instructional approach. This study will attempt to answer key questions regarding graphic organizer for Year Five pupils in the subject of English as a Second Language. As reading is a critical skill for achieving excellence in academic pursuits, success in development of reading competence of children is therefore a vital process. This research and development on graphic organizer would provide an alternative approach to help pupils who are weak in comprehending literature. Besides, it will also contribute towards the expansion of knowledge and research in this area. If there is a positive relationship and a significant difference between graphic organizer and pupils' comprehension of literature, then teaching literature using graphic organizer would be an ideal skill to be introduced in the classroom.

#### 1.8 Limitations of the study

Many have made a lot of assumptions about pupil's literature based knowledge, but only a few have really investigated into the true nature of literature-based knowledge of the pupils in the country. I could only assume that one of the reasons for little attention given to this area of research could be due to the biggest challenge that would confront anyone who intends to involve in this kind of investigation. What I meant by the biggest challenge refers to the process of designing a research instrument that is graphic organizer, which will become the tool to gauge pupils' literature based knowledge. I admit that the process of designing the graphic organizer used in the present study is really complicated. For a novice researcher like me to take up this huge and difficult area of research would be a hard task especially if there is no guidance and useful insights received from a literature expert throughout the study. The main limitation of the study perhaps would result from the use of small research design, where few participants from one particular age groups are involved. This study is limited to Year Five pupils who are studying literature, aged 11 years old, schooling in SJK (C) Lok Yuk Menggatal which is located in the sub-urban area. Ideally, it would be interesting to involve as many pupils as possible especially those attending schools in the same area. Because of the limitation in the budget, the number of subjects had to be reduced. Nevertheless, the findings obtained in the study, to some extent could be generalized either to those pupils in the same area or to the whole population of the primary school pupils in the country. Another limitation is the pupils are weak in their English Language. They have poor vocabulary, thus making it difficult for them to generate ideas and express their understanding.

## 1.9 Operational Definitions

Two basic aspects will be explored in this study: First, an identification of targeted population of Year Five pupils in English as the second language; secondly, the fluency in reading by improving comprehension through graphic organizer. In the following section, some of the key terms frequently used in this study are described and defined.

Graphic Organizer : "Graphic organizer is structural tool that provide a framework for readers to form relations between prior knowledge and text information. It helps reflect on key concepts and vocabulary, and organize what they learned from reading text" (Vaughn & Edmonds, 2006). Related names for graphic organizer includes visual tools, thinking maps, mind maps, and concept maps (Hyerle, 2004).

Reading Comprehension : "Reading comprehension is the degree to which we understand what we read" (Kiefer, 2001). According to Duke (2002), reading comprehension is the "Understanding the rhetorical relations of texts is thought to be at the heart of the comprehension process of the text and of the writers' intention in the text". Development of the ability to read fluently and comprehend literature is very important for pupils in English as the Second Language. Effective strategies are the keys to enable pupils to become good readers with a well developed comprehension. Graphic organizer may hold promise for pupils in English as the Second Language.

## **CHAPTER II**

#### LITERATURE REVIEW

#### 2.0 Introduction

This chapter will provide a review of the literature concerning the use of graphic organizer in the literature classroom and how this particular strategy can assist Year Five pupils in comprehending the small '1'. The research literature can be divided into six categories: (A) definition of graphic organizer (B) types of graphic organizer in a literature classroom, (C) advantages of graphic organizer in comprehending small '1', (D) using graphic organizer in literature learning (E) reading comprehension, (F) advantages of comprehending small '1' in literature classroom and (G) previous researches on the effectiveness of graphic organizer in comprehending small '1'

As television, video game, cellular phone and computer screens capture the attention of young people, visual learning becomes increasingly important. In teaching literature, teacher selects graphic novels and illustration books over their approaching counterparts. Graphic organizer is a tool to arrange information in a visual form. According to Griffin, Malone and Kameenui (2001), graphic organizer is a structural tool that provide a framework for readers to form relations between prior knowledge and text information. It helps reflect on key concepts and vocabulary, and organize what they learned from reading text (Vaughn & Edmonds, 2006). Related names for graphic

organizer includes visual tools, thinking maps, mind maps, and concept maps (Hyerle, 2004). Over the last 30 years, research has shown the benefits of graphic organizer as instructional tools. The graphic organizer relates to the school and district goals of improving pupils' comprehension in learning literature. Baxendell (2003) claimed that the graphic organizer was a device that helped pupils make pictures and words meaningful.

#### 2.1 Definition of Graphic Organizer

Graphic organizer in each of these categories is "visual display that makes information easier to understand and learn literature" (Institute for the Advancement of Research in Education [I.A.R.E.], 2003, p. 11). As a result, pupils may experience greater academic success when working with graphic organizer. Teachers report that one of the main outcomes of using graphic organizer is that they provide a concrete system and model for proceeding through a problem that pupils would otherwise abandon when learnt literature because they have not developed their own organizational structures for persisting. An obvious reason for this advantage is that the visual structure reveals a whole view of the process and, importantly, an end point. (Hyerle, 2000, p. 51)

Visual tools can increase pupils' interest in learning English literature such as novels or short stories. In one study, Caviglioli and Harris, (2000) identified several strategies covered by using graphic organizer in teaching to maintain or increase

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pupils' involvement during the learning process. These interventions had a positive impact on student motivation:

- [A] ttention strategies for arousing and sustaining curiosity
- [R] elevance strategies to provide the importance and value of the learning
- [C] onfidence strategies to help learners believe they will be successful
- [S] atisfaction strategies which provide intrinsic and extrinsic reinforcement (as cited in Barranoik, 2001, para. 6).

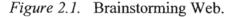
Graphic organizer may assist teachers with each of these strategies. Visual tools help pupils to focus on a task and provide "immediate rewards to pupils, especially those with attention and processing differences" (Burke, 2002, p. xxi).

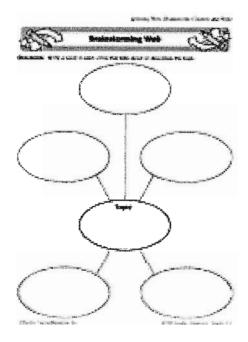
#### 2.2 Types of Graphic Organizers

Buzan (2000) categorized eight types of graphic organizers according to their purposes for learning. Graphic organizer comes in many different forms, each one best suited to organizing a particular type of information. The following examples are merely a sampling of the different types and uses of graphic organizers for example brainstorming web, spider map, chain or flow chart, compare and contrast matrix, problem and solution map, tree map, fishbone map and cycle map.

#### 2.2.1 Brainstorming Web

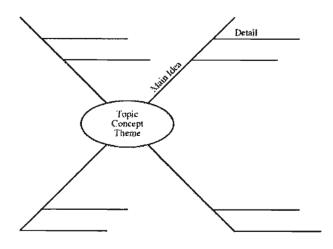
According to Buzan (2000), brainstorming web is a technique used to encourage creative problem solving. It is also useful when experiencing writer's block. Although it can be used by individuals, brainstorming web is most effective in groups where a variety of ages, professions, interests, perspectives and backgrounds are included in the process. During brainstorming, words, phrases, ideas and concepts relating to the problem are generated by the group. These are then used to create potential solutions. After discussion, one or more solutions are chosen and implemented. Brainstorming web helps pupils to generate new ideas, to shape ideas and remain focused on tasks.





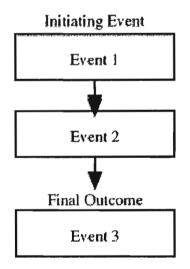
A spider map normally starts with a central idea with the attributes branching out from this central idea and supporting details of each attribute represented as branches from the respective attribute. Such maps can be used to show different aspects of a central idea and the supporting evidence for each of the aspects. When the information relating to a main idea or theme does not fit into a hierarchy, a Spider Map can help with organization. In the example shown in Figure 2.2, it is learning about the characteristics of the lapping process, pupils are encouraged to identify the advantages of this process, given the supporting facts.

#### Figure 2.2. Spider Map.



In a Flow chart, the information represented is serial, and there are discrete steps that must be completed in a predetermined order. In Figure 2.3, a flowchart is used to describe the steps in a special Machining process. By completing this chart, it will be easier for the pupils to see the flow or sequence of the machining process hence retaining this mental picture and information longer in their mind. The flowchart is also used to describe the stages of something (the life cycle of a primate); the steps in a linear procedure (how to neutralize an acid); a sequence of events (how feudalism led to the formation of nation states); or the goals, actions, and outcomes of a historical figure or character in a novel. A Chain or Flow Chart can help pupil to organize information according to various steps or stages.

Figure 2.3. Chain or Flow Chart.



## 2.2.4 Compare/Contrast Matrix

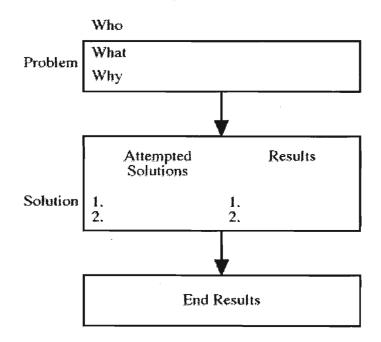
The Compare and Contrast Matrix is used to show similarities and differences between two things (people, places, events, ideas, etc.). A matrix represents relationships between different objects in the forms of rows and columns. It can be used to compare and contrast two or more items, as well as to list objects crossreferenced with the attributes of each object. In Figure 2.4, after learning about the honing (grinding) process, pupils are encouraged to construct a Matrix to list the functions of the different features of a honing process.

Figure 2.4. Compare/Contrast Matrix.

	Name 1	Name 2
Attribute 1		
Attribute 2		
Attribute 3		

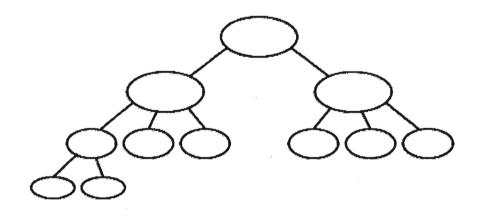
When information contains cause and effect problems and solutions, a Problem and Solution Map can be useful for organizing. The Problem / Solution Map is used to represent a problem, attempted solutions, and results.

Figure 2.5. Problem/Solution Map.



This graphic organizer is normally used to show classification or hierarchical relationships between different concepts. In the example shown in Figure 2.6, a Tree Map is used as an advance graphic organizer (Buzan, 2000) at the beginning of the learning object to provide pupils with the structure to organize the information presented in the learning object. Tree Map is also used to show causal information (causes of poverty), a hierarchy (types of insects), or branching procedures (the circulatory system). Organizing a hierarchical set of information, reflecting superordinate or subordinate elements, is made easier by constructing a Tree Map.

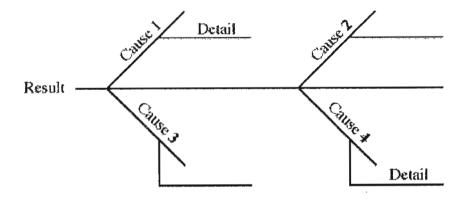
Figure 2.6. Tree Map.



## 2.2.7 Fishbone Map

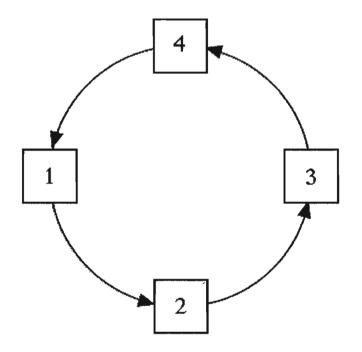
Fishbone Map is used to show the causal interaction of a complex event (an election, a nuclear explosion) or complex phenomenon (juvenile delinquency, learning disabilities). When cause-effect relationships are complex and non-redundant a Fishbone Map may be particularly useful.

Figure 2.7. Fishbone Map.



A Cycle Map is used to show how a series of events interact to produce a set of results again and again (weather phenomena, cycles of achievement and failure, the life cycle). A Cycle Map is useful for organizing information that is circular or cyclical, with no absolute beginning or ending.

Figure 2.8. Cycle Map.



# 2.3 Advantages of using graphic organizers to comprehend small 'l'

When pupils work with graphic organizer, the advantages can be significant. Since graphic organizer is visually-based, it is suitable for pupils with varying ability levels. While teachers may present graphic organizer differently to individual classes, they may use the same tool with pupils in both Adapted and Honors programs (Burke, 2002). Pupils with learning challenges or for whom English is a second language sometimes displays the greatest gains with graphic organizer. These pupils "often need and always benefit from tools that help them see what they read, that make the abstract more concrete" (Burke, 2002). At the same time, "gifted learners are especially served using graphic organizer, which enables them to rein in and organize their expansive thinking on novels" (Lambert & Carpenter, 2005, para. 7). Graphic organizer is highly adaptable for various activities, subject areas, and ability levels.

Graphic organizer can have a positive impact on reading comprehension (I.A.R.E., 2003). The reading comprehension skills of pupils in elementary and secondary schools improve with the introduction of graphic organizer. After studying the research literature on reading comprehension, the National Reading Panel (2005) in the United States declared that graphic organizer is one of the seven most effective teaching strategies for reading comprehension and literature learning.

Teachers who include graphic organizer in their instructional practice can improve their pupils' academic performance. Teachers may also introduce graphic organizer to improve pupils' critical thinking skills in teaching literature. "The process of developing and using a graphic organizer has been shown to enhance pupils' critical thinking or higher order thinking skills" (as cited in I.A.R.E., p. 9). Specifically, the ability of pupils to organize information, recognize similarities, communicate prior knowledge, and categorize information is further developed by graphic organizer. For example, mapping provides one solution to the problem of how you can embed thinking skills into subject knowledge. Since the mid 1970s, the benefits of mapping have been almost entirely focused on its brain-friendly processes and its capacity for creativity. However, perhaps even greater benefit lies in the way the analytical and organizational skills needed to map in turn lead to the development of thinking skills. (Caviglioli & Harris, 2003, p. 70)

Graphic organizer is particularly effective tool for visual learners. With an astounding capacity to intake 36,000 images per minute, the human brain devotes 80-90% of its capacity to processing images (Hyerle, 2000). Even though most pupils have a visual learning style, pupils with other learning styles also benefit from graphic organizer. Hyerle (2000, p. 48) emphasizes the importance of visual learning for all pupils:

Even if we believe that some individuals are more kinesthetic, auditory, or visual learners or more global or analytic we need to consider research showing that each of us still processes for more information visually than through other modalities. We must help students use their visual strengths. For all learners, graphic organizer offers these benefits:

- Visual symbols are quickly and easily recognized
- Minimum use of text makes it easy to scan for a word, phrase, or the general ideas;
- Visual representation allows for the development of a holistic understanding that words alone cannot convey (Plotnick, 2001, para. 5)

# 2.3.1 Using Graphic Organizer in Literature Learning

Pupils may benefit from graphic organizer throughout the learning process as they:

- compose questions prior to the learning process (Loertscher, Koechlin & Zwaan, 2005)
- develop background knowledge (Loertscher et al., 2005)
- plan a search strategy (King, 2005)
- participate in a learning activity (Loertscher et al., 2005)
- record notes (I.A.R.E., 2003)
- process information (Alberta Learning, 2004)
- analyze findings (Loertscher et al., 2004)
- create outlines (I.A.R.E., p. 27)

Since graphic organizer is so adaptable, it is suitable for the non-linear inquiry process. "With brainstorming webs, pupils have self-generated, non-linear tools for activating fluent thinking, which reflects the holistic networking capacity of the human brain" (Hyerle, 2000, p. 51). Graphic organizer supports non-linear thinking patterns

and helps pupils to maintain their focus while working on an activity such as criticizes on a novel or short stories. Using graphic organizer "doesn't feel like concentration; it feels like involvement and interest. Mapping allows, even encourages, you to follow the flow of your thoughts. It supports what could be negatively interpreted as 'flitting around' however, the pupil has the intention of understanding the topic or stories, or of creating something new, and in this context 'flitting' around becomes an asset" (Caviglioli & Harris, 2003, p. 19). Pupils accustomed to switching between websites and text messages appear comfortable with this approach to learning.

Graphic organizer prepares pupils to work with new information. "Creative teachers are prescribing interventions to stem symptomatic information overload. One research-based remedy is the use of visual organizers to graphically improve understanding and increase learning" (Mowat, 2004, para. 1). When it is used effectively, graphic organizer allows pupils to work with information and increase the working memory space available to them (I.A.R.E., 2003). Graphic organizer encourages pupils to link concepts and ideas or themes in the novel or short stories they read. It enables pupils to connect new information with prior knowledge (I.A.R.E., 2003) and build their understanding of a topic. Developing these connections are very important to learning: "Meaningful learning involves the assimilation of new concepts and propositions into existing cognitive structures" (Novak, 1960, as cited in Plotnick, 2001, para. 2). Constructivist learning theory argues that new knowledge should be integrated into existing structures in order to be remembered and receive meaning. Concept mapping stimulates this process by making it explicit and requiring the learning to pay attention to the relationship between concepts. During the inquiry process, graphic organizer may deepen pupils' understanding of complex ideas in novel. "Representing knowledge in the visual format of a concept map allows one to gain an overview of a domain of knowledge" (Plotnick, 2001, para. 3).

Unlike a lecture organized in a linear format, a graphic organizer presents pupils with an overall view of a topic or stories. Graphic organizer allows pupils to "place new information inside a bigger picture" since "the whole and the parts that make up the whole are present at the same time" (Caviglioli & Harris, 2003, p. 16). Graphic organizer provides teachers with a means of conveying complicated information, developing ideas, linking new and old knowledge, and measuring pupils understanding (Plotnick, 2001). Throughout the inquiry process, pupils may work with an existing graphic organizer or create their own. Teachers have a vast number of graphic organizer to choose from.

Kiefer (2001, para 17) recommended that "When pupils are reading nonfiction for a research project or a class assignment, suggest that they use a three-column chart to guide their reading any type of graphic organizer, such as a story map or comparison chart, supports strategic reading and comprehension". Constructivist strategies lend themselves to situations where pupils create their own graphic organizer, a useful skill in lifelong learning. Forms of graphic organizer such as investigation guides, checklists, KWL charts (Know, Want to Learn, Learn), timelines and graphics can be used to record information. Mind maps and concept maps can organize information once it is collected (Robins, 2005, para. 33) Graphic organizer is available in both print and electronic formats. Pupils will experience greater success with a class assignment if "Concept mapping, mind maps or topic webs" (I.A.R.E., 2003, p. 45) are available to them. These tools provide pupils with an alternative to note-taking with pen and paper. Focus on Inquiry recommended that "For pupils with more inquiry experience" the teacher should provide a choice of notes or graphic organizer to record information" (Alberta Learning, 2003, p. 34). Pupils can categorize information efficiently using concept mapping. "The graphic organizer soon becomes a planning tool. Categorizing forces the pupils to see similarities and differences between their thoughts. It becomes clear where additional research and expression are needed" (Mowat, 2004, para. 11).

# 2.3.2 Strategies for introducing graphic organizers to teachers in teaching literature

"Effective teachers diffuse information literacy skills throughout the school curriculum. The teachers must provide leadership in the integration of information literacy and technology in all curriculum areas" (Koechlin & Zwaan, 2002, para. 11). Vaughn and Edmonds, (2006, para 2) asserted that "Today, it is becoming increasingly important that pupils be able to apply process skills to become more productive in many areas including in literature comprehension. Pupils must understand how to search for, analyze and synthesize information for use across a variety of settings in novel or short stories". Since graphic organizer may be utilized across the curriculum, teachers may discover that this tool provides them with an entry point for their literature subject to attract pupils more interested in learning literature. "Graphic organizer becomes a ticket to connect the teachers by showing them where graphic organizer might enhance their

instruction (co-ordination), designing lessons to increase pupils' understanding in literature comprehension (cooperation), and teaming with teachers to present the new skills (collaboration)" (Kim, Vaughn, Wanzek & Wei, 2004). Since graphic organizer is adaptable to a variety of curriculum areas and time frames, it is an ideal tool for teacher looking to develop their teaching process across the subject to "better prepare pupils to be lifelong learners and users of information" (Howe, 2000, para. 51). Pupils are more receptive to working with graphic organizer and the inquiry process when learning topics apply to their world. "Teaching pupils the problem-solving skills they will need to succeed in school and beyond will work best when pupils are presented with real or relevant problems. If the issue is engaging and perhaps personal to them or their interests, they will be more enthusiastic about working toward a solution like one that we need when understanding the plots of story" (Loertscher et al., 2005, p. 94).

After completing their learning activity, pupils may share their findings in one of many formats. The completion of a graphic organizer may be an activity on its own, or serves as an outline of a writing activity. "Pupils who build maps before they write set themselves up for success in drafting and revision" (Caviglioni & Harris, 2003, p. 20). A graphic organizer may also form the basis of an oral presentation. "Graphic organizers formatted on cards, charts, or overhead transparencies facilitate the comprehension of listeners in the audience" (Caviglioni & Harris, 2003, p. 20). The authors of Focus on Inquiry recommended that pupils evaluate the effectiveness of a graphic organizer after completing any class activity (Alberta Learning, 2004). During the inquiry process, teaching partners may introduce a particular thinking skill, such as comparing and contrasting, using a graphic organizer (Rankin, 1999). Kim et al. (2004) suggested that

collaborative partners "Define a culminating task one that will incorporate the skills and findings in a way that demonstrates pupils' understanding and requires the use of higher order thinking, instead of simple regurgitation of facts found." She suggested that Venn diagrams and compare and contrast graphic organizer fulfills this criteria. As pupils work through the learning literature process, graphic organizer assists them with more complex thinking tasks. "There are always some pupils who seem confused and frustrated when asked to do something like compare and contrast two cultures. That is why it is helpful to use graphic organizer – T-charts, Venn diagrams, and other simple tools that give pupils a visual framework for applying thinking skills to their learning literature process" (Rankin, 1999, para. 6).

Burke (2002, p. 102) suggested that when pupils explore three aspects of a literature topic, they are more likely to think critically. For example, if pupils are asked to compare three short stories (instead of only two), they are more likely to delve into the differences and similarities between them "and avoid the reductionist thinking that one story is good and another bad". Additional examples of graphic organizer relates to information literacy and higher-level thinking is contained in resources such as Ban those bird units: 15 models for teaching and learning in information-rich and technology-rich environments (Loertscher et al., 2005). Barranoik (2001) mentioned that class activity that demand higher level thinking skills hold increased value. A focus on understanding helps to ensure that the learning process is meaningful for pupils. Having become familiar with the thinking skills embedded in graphic organizer, pupils may transfer these skills to new situations. "Since many questions on literature learning process require pupils to interpret various charts, tables, graphs, and other visuals, pupils

who know how to construct and interpret visuals will do much better" (Loertscher et al., 2005, p. 24). Graphic organizer also impacts pupils' meta-cognitive abilities. Graphic organizer in all forms (brainstorming webs, organizers for specific activities, and thinking process maps) encourage pupils to develop meta-cognition and apply the thinking process associated with graphic organizer to problem-solving outside of the school environment (Hyerle, 2000).

Teacher can maximize their pupils' success with graphic organizer. The ability of their pupils to retain information and think critically is increased when they are given enough instruction and time to become familiar with a graphic organizer (I.A.R.E., 2003). Dye (2000) recommended that teachers, "Explicitly teach pupils the use of various graphic organizer and the purposes of each, so that they can make decisions about how to organize their own work later. Pupils need to decide how to organize their information". This task is easier for pupils when a demonstration and/or examples are Teachers have several options when introducing graphic provided (Burke, 2002). organizer. Depending on the needs of a class, and the time and resources available, teachers have the option of presenting graphic organizer on paper, overhead, or interactive whiteboard. Graphic organizer may be used "with whole-class instruction to show the connections among big ideas in the content areas, as well as to demonstrate writing and reading comprehension strategies" (Silver-Pacuilla & Fleischman, 2006, para. 13). Working with graphic organizer also involves the selection of content and keywords. Teacher can model the process of selecting keywords in story when introducing a graphic organizer to a class.

Koechlin and Zwaan, (2001, p. 102) have developed a rubric for teachers in developing their own graphic organizer. Graphic organizer fulfills all of the criteria listed by Koechlin and Zwaan to extend pupils' thinking, are created for a particular task, and show an "innovative use of graphic organizer". When pupils create their own graphic organizers, teacher can provide recommendations (Loertscher et al., 2005) to guide pupils through the activity. Teachers have an opportunity to share their understanding of graphic organizer with colleagues. Mowat (2004, para 20) discovered that "the use of graphic organizer such as Inspiration permits to teach the application and model effective delivery of instruction. Not only does the teacher receive the instruction, but the pupils, who are often quicker learners, do too. As the pupils work with the application, the teachers' confidence builds while they observe their pupils' understanding".

Graphic organizer is a valuable tool for the class learning process. Teachers have the opportunity to impact pupils' reading comprehension and critical thinking skills. Pupils will encounter an increasing quantity of information in the future (Reiko, 2006). Effective use of graphic organizer allows pupils to evaluate and organize information effectively, and develop problem-solving and decision-making skills. Teachers who model the use of graphic organizer to pupils during the learning process can achieve these goals.

# 2.4 Reading comprehension

"Learning is a constructive, cumulative, self-regulated, goal oriented, situated, collaborative and individually different process of knowledge building and meaning construction" (Lewin, 2003). Education should not just focus on basic skills, but also on more complex outcomes such as meta-cognition. Following a review of the research literature on vocabulary and text comprehension instruction, the National Reading Panel (2000) cited graphic and semantic organizer as one of seven categories of instruction that are the most effective in the improvement of reading comprehension.

"Reading comprehension is the degree to which we understand what we read" (Kiefer, 2001). When we pick up the newspaper and read about the latest election results, call up a web site and read directions on installing a new light switch, or grab a novel off the shelf of the local bookstore, we are using our reading comprehension skills to gather information from text. McCoy and Ketterlin-Geller (2004, p. 89) noted that, "To help students challenged by heavy reading requirements in content classes, text related demands must be reduced without compromising the content, breaking lessons up into smaller blocks of reading can be helpful to better reading comprehension". Smith (2003) found that "students perceptions of how well they feel they can accomplish certain reading tasks will influence how new information will be processed. An attempt to establish pupils perceptions of their learning curve can aid the teacher in developing strategies to help pupils gain confidence in their reading comprehension".

"Children's reading improves as the teacher provides appropriate and focused instruction in a small group setting. As children become better readers, their thirst for reading more books begins to grow" (LaMere & Lanning, 2000, p. 28). Enjoying literature is one of the joys of reading. The goal of the Holes Comprehension Companion is to "help teach reading comprehension in an enjoyable context, and to directly teach the skills instead of providing "practice" for a skill a student may not yet have" (Kiefer, 2001). Holes by Louis Sachar is a Newbery-winning novel that has a straightforward plot with flashbacks, clearly defined characters, and an intertwining of past and present personalities with neo-Shakespearean twists, as many seemingly insignificant details tie together. Holes lends itself to explicitly teaching comprehension skills such as understanding themes, inferences, and character and quote analysis.

There are more exercises than any single pupil should do. "Reading should be fun, don't let the comprehension exercises keep students from enjoying the story" (Kiefer, 2001). It may be appropriate to simply have a pupil complete a "learning log" every few chapters, or discuss questions and events instead of writing them down. The Holes learning log can be completed before or after other activities, and some pupils will find it much easier to do it one way or the other. However, "each reader's contribution will be different from that of others because readers are different in their shared knowledge, language skills, strategies and other personal characteristics" (Brunn, 2002).

"Understanding that words and sentences can have more than one meaning improves comprehension in learning literature by allowing readers to think flexibly about what the appropriate meaning may be in different novel or short stories" (Zipke, 2008). In addition, comprehension monitoring benefits from training in recognizing and reexamining the meaning of ambiguous sentences since pupils are taught to consider meaning and to reread the stories if necessary. Also "interactions between bottom up and top down processing of texts take place in the readers' minds, or between linguistic knowledge and world knowledge" (Grabe & Stoller, 2002). "To evaluate and regulate comprehension of text in learning short story, it is necessary to know that the words in a text can add up to more than one possible meaning and that context and alternative explanations need to be considered. This ability to reflect upon and manipulate language is crucial for reading" (Kiefer, 2001).

Constantinidou and Baker, (2002) pointed out that the "majority of the 1,000 most common words in English are multiply ambiguous". This refers to homonyms such as can, which sometimes means the ability to do something and sometimes refers to a metal receptacle. In addition to this type of lexical ambiguity in which a word has more than one meaning, multiple meanings can be created by structural ambiguities within syntax in the novel or short story that teachers teach. A sentence such as "The child talked about the problem with the teacher" is structurally ambiguous because "it is equally possible that the child talked with the teacher or that the child has a problem with the teacher" Constantinidou and Baker, (2002). In learning literature, all these possible meaning will automatically produced when pupils really comprehend on what they have read.

"Understanding the rhetorical relations of texts is thought to be at the heart of the comprehension process of the text and of the writers' intention in the text" (Duke, 2002). It follows that if readers can infer textual relations in less demanding texts, they may not be as successful when they have to read and learn from texts that are more demanding. Pupils need to think while they are reading. By using "modeling, coached practice, and reflection, teacher can teach their students strategies to help them think while they read and build their comprehension in learning novel or short story" (Zipke, 2008).

There are seven strategies to reading comprehension:

Draw on background knowledge as they read

- Make predictions as they read
- Visualize the events of a text as they read
- Recognize confusion as they read
- Recognize a text's structure or organization as they read
- Identify or recognize a purpose for reading
- Monitor their strategy use according to the purpose for reading the text

# 2.5 Advantages of comprehending small 'l' in literature classroom

Reading comprehension is the basis for pupil performance in all subjects. According to Duke (2002), graphic organizer helps pupils sort, show relationship, make meaning, and manage data quickly and easily before, during, and after reading and discussion. As a result pupils can display connections between ideas and concept, thus improving text comprehension. In fact, Myers & Savage (2005, p. 18) stated that pupils need to be able to read in the content areas for a number of reasons, "content literacy recognizes that reading is not simply a technical skill; pupils who are able to decode are not necessarily able to make inferences and arrive at common understandings of the content". Graphic organizer is a means for pupils to arrive at this end.

When we dip into the rich variety of novels, poems, and plays which constitute English literature we are reading works which have lasted for generations, or centuries, and they have lasted because they are good (Mastropieri, Scruggs, & Graetz, 2003). These works say something worth saying, and say it with artistry strong enough to survive while lesser works drop into obscurity. Literature is part of our cultural heritage which is freely available to everyone, and which can enrich our lives in all kinds of ways (Myers & Savage, 2005). When teachers teach literature, pupils automatically can understand the terms in order to comprehend the small literature itself. Once we have broken the barriers that make studying literature seem daunting, we find that literary works can be entertaining, beautiful, funny, or tragic. They can convey profundity of thought, richness of emotion, and insight into character. They take us beyond our limited experience of life to show us the lives of other people at other times. They stir us intellectually and emotionally, and deepen our understanding of our history, our society, and our own individual lives.

We can gain a lot from teaching and learning literature in many ways, but the most rewarding experiences can come in those moments when we feel the author has communicated something personally to us, one individual to another. Such moments can help validate our personal experience at a depth which is rarely reached by everyday life or the mass media. So why do we need to study English literature, instead of just reading it? Well, we don't need to, but when visiting a country for the first time it can help to have books by people who have been there before by our side. When we started to read and learning literature, particularly older works, we have to accept that we are not going to get the instant gratification that we have become used to from popular entertainment. We have to make an effort to accommodate to the writer's use of language, and to appreciate the ideas he is offering. Critics can help us make that transition, and can help fill out our understanding by telling us something about the social climate in which a work was written, or about the personal circumstances of the author while he was writing it.

# 2.6 Previous researches on the effectiveness of graphic organizers in comprehending small 'l'

Merkley and Jefferies, (2001) noted that, "It is important, however, that graphic organizers planning extend beyond construction of the visual to the deliberate consideration of the teacher's strategies to accompany the visual." Thus, instructional context is another determinant of the effectiveness of graphic organizers for improving learning, especially for ESL learners.

Hendricks (2009) examined graphic organizer as a way to illustrate organizations where teachers would be able to teach beyond just the facts. They conducted the study with two different middle school content classes; however, the same textbook was used. The instrument used in the study was Pre-test and Post –test. The goal of the study was to increase pupils' comprehension and retention through instructional modifications. In class A, the teacher used a traditional lecture format. In

class B, pupils used a graphic organizer as a visual display of material to connect prior knowledge with new learning. In both classes, the assessments included multiple choice or short answer questions. The researchers focused attention on open ended essays and scored using a scoring guide. The scores from the assessments were compared using the Pre and Post-test ; pupils who were presented with the visual material organized their thoughts better for the open-ended essays and short answer questions. The findings of the study was the Post-test scores was higher than the Pretest scores. Analysis concluded that when pupils received instruction and organized information from the text into a graphic organizer, they performed at a higher level while using higher order thinking skills. Findings indicated that pupils across different reading levels showed consistent improvement toward mastery.

Graham and Perin, (2007) conducted a research on the importance of developing writing skills in adolescents through the use of graphic organizer because many adolescents do not learn to write well enough in school to meet the demands of higher education or the workplace. The participants in this study were in grades 4 through 12 and they were evaluated on their writing abilities while teachers were also evaluated on the effectiveness of their instruction. The researchers concluded that a teacher's ability to effectively teach writing was instrumental in a pupil's ability to write at their grade level. This study supports the need for effective writing instruction and graphic organizers.

Arthaud and Goracke, (2006, p. 586), tried graphic organizer with a number of their struggling readers. They tried story-webbing, which is a graphic organizer

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"designed to assist the reader with organizing and remembering important details from the text". They found, "The result of the strategy used has been improved response to comprehension questions, increased amount of detail recall, and more enthusiasm for the reading process". These results were positive, showing a number of benefits from the use of a graphic organizer with struggling readers. Not only did the pupils comprehend better on what they read, but they were enjoying reading much more than before the study.

McCoy and Ketterlin, (2004, p. 88) provided further evidence that graphic organizer can help pupils with reading problems. "Overt identification of concepts and their characteristics and the deliberate use of graphic organizers reduce the reading comprehension demands placed on pupils with low abilities". They found that struggling readers have difficulty with the structure of textbooks and need extra assistance to make out the meanings of the text. They have found that graphic organizer is one essential part of their plan to make these pupils better readers (McCoy & Ketterlin, p. 90). But perhaps the most promising findings in their research is that "pupils across the spectrum of reading skills show consistent improvement toward mastery of higher-order thinking tasks when taught using the concept-based approach" (McCoy & Ketterlin, p. 92).

Cairne and Crowell, (2004) conducted a longitudinal study in which they followed a group of children from preschool through grade 3, regularly testing their ambiguity-detection skill and reading comprehension. They found that first and second graders' ability to detect lexical ambiguities for example understanding that there are two meanings embedded in a sentence such as "The man's nails were very sharp", was a strong predictor of their reading scores in the subsequent grade. The ability to detect structural ambiguities like recognizing two meanings in a sentence such as "The chicken was ready to eat", was found to emerge in second grade and to predict thirdgrade reading ability.

Boulineau, Fore, Hagan-Burke, and Burke (2004) studied a special education resource classroom for pupils with mild disabilities. The intervention was scheduled daily during the last half of daily reading time. Six elementary-aged pupils participated in this study. Each participant had a label of specific learning disabilities and was receiving special education services in an interrelated resource classroom. The research was implemented in three phases. During the baseline phase (Phase A), the teacher probed pupil's performance on story grammar elements without any instructional intervention. During the intervention phase (Phase B), the teacher delivered explicit instruction on story-grammar elements and modeled the use of a story grammar map for recording these elements. During Phase C, the teacher discontinued all story-grammar instruction. Repeated instruction was given at the end of each passage to determine the extent of pupil's correct identification of story grammar elements. The results of this study suggested that story-grammar instruction has shown an improvement on the participant itself. The identification of storygrammar elements via story mapping when reading narrative text increases after the The percentage of each participant of correct story-grammar elements intervention. increased from baseline to intervention conditions. The effects of the story-mapping procedure also appeared to maintain once instruction was terminated.

DiCecco and Gleason, (2002) conducted a study on the effectiveness of graphic organizer as a comprehension tool in relation to expository text. A Pre-test and Posttest format was used to determine whether graphic organizer assisted pupils in retaining knowledge from social studies specific material. The participants in the study included twenty four pupils who were divided into six instructional groups; three groups that would use graphic organizer in order to assist in essay writing and three groups that would not. The Pre-test scores are higher than the Post-test scores and it showed that there is a difference between the pupils who used the graphic organizer and the pupils who did not use the graphic organizer. The researchers concluded that the pupils who used the graphic organizer were better able to recall the knowledge as the graphic organizer served as cues for the retrieval and recall of information. This study supported the use of graphic organizer in a language learning classroom, since pupils were able to recall and retain more content-specific information when they used the graphic organizer to assist them.

Griffin, Malone, and Kameenui (2001) investigated two significant features of graphic organizer: (a) Does graphic organizer instruction facilitate comprehension, recall, and transfer of information contained in expository textbook? and, (b) To what degree is explicit instruction necessary for independent generation and use of graphic organizer by pupils? Five classrooms of fifth-grade pupils from one elementary school and two from another elementary school in a small, Midwestern city participated in this study. All participants were administered a 16-item, short-answer Pre-test to determine the equivalence of the treatment groups and identify any pupils who possessed prior knowledge of the content. Griffin et al. (2001) constructed nine

graphic organizers, one for each subsection of the chapter in the textbook, plus two final review graphic organizers. The purpose of the graphic organizer was to highlight important information within the text and not to provide extensive coverage of all the textual information. The results suggested that the participants in all groups performed comparably on acquisition and retention measures. However, when required to read and recall novel social studies content, participants receiving the graphic organizer and explicit instruction performed better on the measure of transfer than pupils who received traditional basal instruction. The graphic organizer aided the pupils in reading comprehension.

Simmons, Griffin, and Kameenui (2001) have conducted a study on pupils' comprehension using graphic organizer. The instruments used in the study were Pretest and Post-test. This study compares the effectiveness of three instructional procedures for facilitating sixth graders' comprehension and retention of science content: (a) use of teacher-constructed graphic organizers before text reading (Pretest), (b) use of teacher-constructed graphic organizers after text reading (Post-test), and (c) use of a traditional form of instruction consisting of frequent questions and text-oriented discussion interjected before, during, and after text reading. The results indicate that all three groups were comparable on daily probe measures and an immediate posttest; however, the pre-test outperformed the post-test on a delayed post-test measure. The overall results suggest that teacher-constructed graphic organizers, whether presented prior to or following textual reading, appear no more effective than traditional instruction in increasing sixth-grade children's comprehension and retention of science content-area information. The present findings fail to

corroborate previously documented advantages of graphic organizer treatments and suggest the need for further analysis of dimensions that coexist and potentially coact during graphic organizer instruction.

Alvermann and Boothby, (2000) have conducted a study on learning disabilities. Many pupils with learning disabilities experience difficulties with extracting relationships from expository text, especially if they are implicit. Results from studies with K—12 participants have been inconclusive regarding the potency of the graphic organizer as a comprehension tool. This study attempted to address some of the concerns with GO research by examining the effects of using graphic organizer with middle school pupils with learning disabilities to convey and cue relational knowledge, using a longer intervention and using written essays to assess the pupils' attainment of relational knowledge. The results lend support for using graphic organizer with pupils with learning disabilities to gain relational knowledge from expository textbooks. When factual knowledge was assessed via multiple choice tests and quizzes, no differences were found between treatment and control groups. As in contrast to other graphic organizer studies, the study failed to meet the objectives of the study.

Hyerle (2000) tested the effectiveness of two, computer-based knowledge mapping systems in a population of middle and high school pupils. Pupils either worked individually using an artificial web space to augment and revise knowledge maps or networked with one another across computers to collaboratively construct maps. Crawford and Carnine, (2000) examined the achievement level of 8<sup>th</sup> grade pupils using textbooks with graphic organizer to textbooks that did not have graphic organizer. The results showed that the pupils using the textbook with a graphic organizer scored higher than their counterparts on their tests. According to Eagen (1999), graphic organizer added to the realistic learning of the pupils and prompt them to become more active in their learning process. Hence, reading comprehension can be improved with the use of graphic organizer.

Three studies revealed that "graphic organizers are a helpful method for improving pupils retention and recall of information for both elementary and junior high pupils with learning disabilities, as well as upper elementary pupils" (I.A.R.E., 2003 p. 6). Pupils have displayed greater success when using graphic organizers than with some standard instructional methods including lecturing, question/answering, and linear note-taking.

## 2.7 Summary

One way to help make a curriculum more supportive of pupils and teachers is to incorporate graphic organizer. Graphic organizer comes in many varieties and have been widely researched for their effectiveness in improving learning outcomes for various pupils. I have focused this overview on applications of graphic organizer to comprehend small '1', with the expanding of the discussion into teaching literature in ESL classroom. A graphic organizer is a visual and graphic display that depicts the relationships between facts, terms, and or ideas within a learning task, verbalizing relationships between the concepts represented within the graphic organizer, providing opportunities for pupils input, connecting new information to past learning, making reference to upcoming text, and reinforcing decoding and structural analysis.

#### CHAPTER III

#### **RESEARCH METHODOLOGY**

## 3.0 Introduction

This chapter contains the study's research design and explanation on how it was carried out on the treatment group using the carefully chosen instruments to suit the graphic organizer learning methodology. The instruments used to carry out the data gathering are: the Pre-test, Post-test and interview.

## 3.1 Research Approach and Design

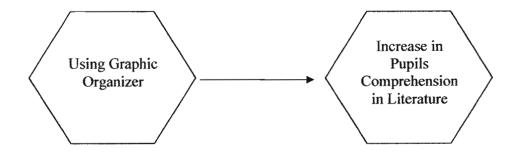
This study was based on a mixed methods design. According to Gay (2006, p. 490) "the purpose of mixed methods research is to build the synergy and strength that exists between quantitative and qualitative research methods." The type of mixed method here was an explanatory mixed methods design where quantitative data was collected first and then qualitative data was collected later to help explain or elaborate on the quantitative results. A mixed method study also offers triangulation. This was done through a collection of quantitative and qualitative data in order to understand or complement the research problem and the outcome in better context (Creswell, 2002, p. 512-515).

This design has a treatment group and a control group. In this design:

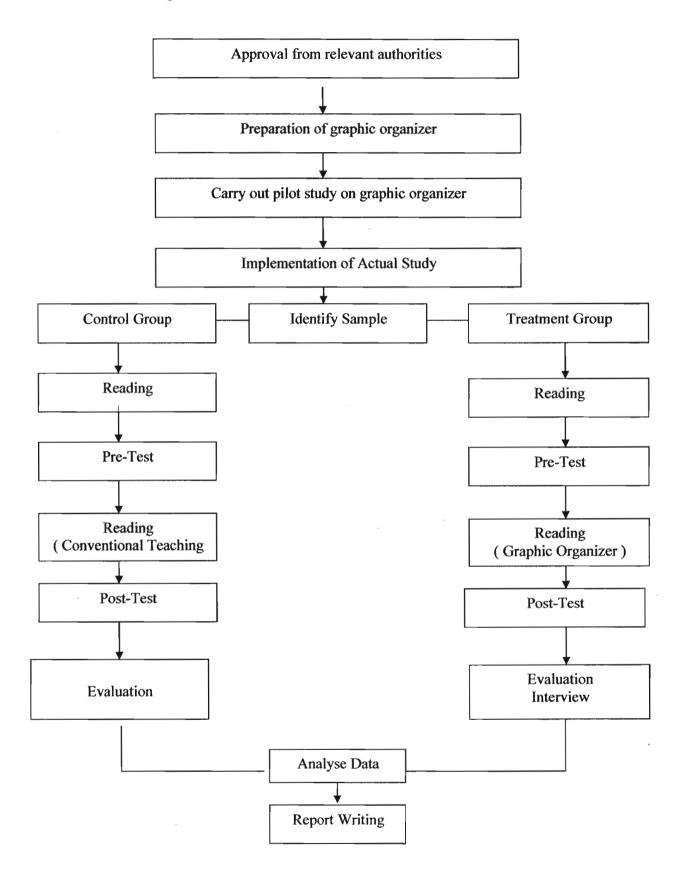
'The experimental group is evaluated, subjected to the experimental variable, and reevaluated. The control group is isolated from all experimental variable influences and is merely evaluated at the beginning and at the end of the experiment.' (Leedy, 1993, p. 301).

This study will involve and examine two main variables as shown in Figure 3.1 of the conceptual framework. The first was the graphic organizer which was the independent variable and the second, dependent variable, was the literature (reading) comprehension.

Figure 3.1. Conceptual Framework.



To support the independent variable, the subjects or pupils in this study were Year Five pupils with reading problems and poor in story/text comprehension through the use of standard Pre-tests. The dependent variable consists of the pupil's comprehension of a particular text and their literacy knowledge using graphic organizer. Within this study, the main dependent measure was the pupil's score on their Post-test after the information on the story components was provided within a framework of strategy instruction, with the addition of a graphic organizer, to help pupils to remember the story components. A sample of 60 Year Five pupils were divided into two groups, one being the control group (30 pupils) and the other treatment group (30 pupils). The average age of the pupils was 11 years. The pupils were familiar with the English Language subject and also have been exposed to literature component in Year Four. The study focuses on teaching short story namely "The Elves and the shoemaker". The short story chosen is part of the literature syllabus which is taught as a requirement for the English Language subject. The two groups of pupils were pretested; the treatment group was taught graphic organizer, while the control group continued with a normal teaching method, and then both groups were post-tested. Figure 3.2. Research Procedure.



The table 4.3.1 below was designed to record the evaluation procedures and

summarize how and when the four research instruments were applied and implemented.

Table 3.1

Weekly Activities During the Duration of the Study

Activities/Procedures
-Teacher taught both control and treatment groups.
-Teacher distributed worksheets to the subjects.
-Teacher gave the Pre-test for both groups.
In the Treatment Group
-Teacher introduced the graphic organizer.
-Teacher explained each components of the graphic organizer to the subjects.
-Teacher read the story followed by the subjects and pointed out the elements of the story ( characters, setting, event, problems,
solutions ) using graphic organizer.
-Teacher distributed worksheets to the subjects.
In the Control Group
-Teacher used the conventional method.
-Teacher read the story followed by the subjects.
-Teacher distributed the worksheets to the subjects.
In the Treatment Group
-Teacher read the story followed by the subjects.
-Teacher distributed the graphic organizer worksheet to the subjects for them to fill in the components based on the story.
In the Control Group
-Teacher used the conventional method.
-Teacher read the story followed by the subjects.
-Teacher distributed the worksheets based on the story.
-Teacher gave the Post-test to both groups.
-Teacher interviewed subjects from the treatment group for their perceptions and opinion of the graphic organizer.

The researcher was granted permission by the EPRD (Appendix A), the Education Department of Sabah (Appendix B), to carry out this study. The study took 6 weeks in total of the second semester of 2009. In the first week the researcher taught both the control and treatment group the story ' The Elves and the shoemaker' using the conventional method of instruction. At the end of the teaching session, then the pupils were given a set of Pre-test questions to be answered. The Pre-test is an important instrument which serves as the basis of data elicitation or the yardstick to measure the effectiveness of the methodology applied.

During the second to the fifth week, the control group was taught the short story 'The Elves and the shoemaker'' using the conventional method of instruction. For the treatment group, the same story was taught and the explication of the text was enhanced with the use of a graphic organizer. The researcher who was also the instructor provided the pupils a rationale for graphic organizer instruction and introduced pertinent background information. The researcher also briefly introduced and explained the major graphic organizer elements of (a) characters, (b) problems (c) goals and events, (d) solutions and (e) moral values. The researcher then provided the pupils with a model of graphic organizer identifying the problems and main characters in the story. The instructor recorded the problem faced by the main character on a graphic organizer note-sheet which was pasted on the white board. To make the graphic organizer more interesting the instructor used a graphic organizer game board. The graphic organizer should be introduced with questions. The questions used in this research were adapted from Tate (2003) and modified solely for the purpose of this research.

1. What is the story called?

2. Who wrote the story?

3. What do you see on the cover?

4. Where does the story take place?

5. Who are the other characters in the story?

6. What problem did the shoemaker and his wife have?

7. How did they manage to solve the problem?

During the final week of intervention, the researcher distributed a blank graphic organizer (Appendix E) to the pupils in the treatment group. The pupils were instructed to read the story "The Elves and the shoemaker" and fill in the blanks in the graphic organizer.

Conversely, the control group was taught using the conventional method without any treatment or exposure of graphic organizer. The teaching and learning centered solely around the teacher, which meant the teacher gave all the explanations about the story text and the pupils had to listen and comprehend. The teacher provided feedback without any discussion or further clarification on it. In short, the subjects in the control group had to listen in the literature classroom. In other words they become 'good passive learners'. Once both the treatment and control groups had undergone the teaching and learning process, their understanding of the short story were tested again with a set of Post-test questions. The test was conducted to evaluate the level of understanding of the short story. This was an important criterion in this research because it could determine whether or not utilizing the graphic organizer was effective or not in teaching literature, namely short story.

At the end of this 6 week study, 30 pupils were interviewed so the teacher researcher could better understand pupils' reactions towards using the graphic organizer to aid reading comprehension.

## 3.5 Population and Sampling

This study used a mixed-method research design to evaluate the changes in the subject's abilities in comprehending the literature. The subjects were Year Five pupils from a sub urban school. These Year Five pupils were selected because : a)pupils at this grade have already been exposed to the literature component in previous year,

- b)pupils at this grade have already developed some story reading skills and have some ideas of a story structure and text.
- c)pupils at this grade are encouraged to build their interest in reading and comprehension skills.

For the purpose of this study, the subjects were required to meet certain criteria such as have been exposed to literature in earlier grade (Year Four). To ensure that the subjects truly met the specified criteria, the selection of subjects was based upon their last term result ( Appendix C ). The results were assessed using a criterion developed by an expert school teacher trained in streaming the pupils according to their performance in final examination ( Appendix D ).

The sampling procedure used was of convenience sampling. The researcher decided to study the targeted group at a school only because the subjects were readily accessible and the researcher had received prior permission from the headmaster. This type of sampling is often termed as 'convenience sampling' because the participants are conveniently located to the researcher and are available for the study (Creswell, 2002, p.149). The subjects comprised of both males and females from different ethnic backgrounds. The samples taken into consideration were two classes of pupils from Year Five. To ensure there was no significant difference between the pupils in the treatment and control group, it was necessary to compare their monthly scores. The mean value for the control group was 32.67 and the mean value for the treatment group was 33.27. It was found that the mean difference between the treatment and control groups were similar in their English proficiency. The pupils were of almost same level of competence in the usage of English Language, based upon their performance in the monthly test held in May, 2009.

The Malaysian Ministry of Education, has prescribed three books for the primary five pupils. The books are 'The Elves and the Shoemaker', 'The Race for the Cup' and 'Changing Days'. The selected book 'The Elves and the Shoemaker' contained an identifiable main character that experienced a conflict or problem throughout the story.

For the purpose of this research, the prescribed short story 'The Elves and the Shoemaker' and other related materials were used. This short story and materials were used as teaching aids in the teaching and learning process and also for data collection. The short story and materials that meet the requirements for Year Five syllabus were :

- 1. The Elves and the Shoemaker retold by Margaret Nash. (Appendix F)
- 2. Worksheets devised for control group based on the story. (Appendix G)
- 3. Worksheets devised for treatment group based on the story. (Appendix H)

# 3.7 Research Instruments

There were three types of research instruments adopted and applied in this research. These include :

- 1. Pre-test
- 2. Post-test
- 3. Interview

The Pre-test and Post-test design involved two groups receiving different treatment and being compared in terms of performance in answering the comprehension questions. (Harkness, 2005). The Paired Samples t-test was used to compare the Pre-test and Post-test scores and to determine any significant differences. Pre-test (Appendix I) and Post-test (Appendix J) based on the story book taught were the main research instruments. The questions in the Pre-test and Post-test were adapted from Tate (2003). It is important to note that to maintain reliability in the Pre-test and Post-test, the questions were similar in structure, format and level of difficulty. The questions were based upon certain elements of story book such as the characters, events, problems, solutions and moral values.

The Pre-test and Post-test questions were adapted and designed by the researcher in consultation with other specialist teachers in the English Language. The rationale of using the Pre- and Post-test instrument was to compare the achievement of subjects before and after the treatment in an attempt to prove that the pupils achieved the set objectives of the current study. To ensure that the Pre- and Post-test of the story book were of equal standard and were testing the same skills the Bloom's Taxonomy was used in preparing and choosing the questions although most of the questions were found to be testing the pupils' knowledge. The researcher made sure that the number of questions for the different sections tested were the same for Pre- and Post test. This is important to give an accurate output on the performance of the subjects without any biasness.

Both the Pre- and Post-test consisted of four different sections. Sections A and B comprised 15 questions, which were purposely designed to check the pupils' understanding of the characteristics of the characters in the short story. Section A served to investigate the level of pupils' understanding of the main character in the short story, that is the shoemaker while in Section B was to test the understanding of the characteristics of the shoemaker's wife.

Section C was designed to test pupils' memory of the sequence of the short story. The pupils were required to understand and memorize the events of the short story in order to answer the questions. This section comprised of 10 questions with the sequence of events of the short story. Pupils are required to sequence the events of the short story. This section is crucial in analyzing whether or not pupils were able to remember the events of the short story. The scores gathered from both groups would indicate which strategy promoted more interesting and contributed towards pupils' ability to comprehend the short story.

Section D provided 12 Multiple Choice Questions. The pupils were required to make reference, interpretation and inference in answering these questions. This section was used to investigate the level of pupils' attention and comprehension of the whole short story after they were exposed to the short story.

The validity of the tests ( Pre-test and Post-test ) was maintained in a few ways. First was the content validity where the researcher who is also the teacher of the subject, made sure that the tests only measured what was taught during the teaching and learning process. The tests have content validity as they only tested what the pupils were exposed to. Pupils were taught, exposed and expected to know the essential features of the short story such as the cover of the story book, general understanding of the short story, characterization and moral values. These features are the core of short stories and address the aims of the Malaysia Ministry of Education, as quoted below:

3.10 Read and enjoy simple stories and poems and respond to them by talking about the people, animals and moral values in the story or poem and

3.11 Read simple texts and predict outcomes at a level suited to learners' ability

The reliability was maintained through the consistency of measurement in the Pre-test and Post-test which referred to the test having equivalent forms of reliability. The Pre- and Post-test measured the same variable with the same number of items, the same structure, the same difficulty level, and the same directions for administration, scoring and interpretation. Thus both the tests administered to the text taught were the same in every way. The number of questions in the level tested was the same for Pre- and Post-test. To maintain face validity, the two sets of test papers were similar in structure, format, and time allocation without any printing or grammatical errors. The Pre- and Post test were evaluated by the researcher and also by an experienced English teacher of the school who had taught English Language for 29 years. After the pupils have completed with the Post-test, structured interviews were conducted with 30 pupils from the treatment group whom were exposed to graphic organizer. According to Creswell (2002), "A structured interview is one in which the content and procedures are organized in advance. This means that the sequence and wording of the questions are determined by means of a structure and all interviewees are asked the same basic questions in the same order. Such characteristics may help to increase comparability of responses because it is more complete and controlled for each interviewee on the issues addressed in the interview."

#### 3.8 Pilot Study

The pilot study was carried out in a neighbouring school, SJK (C) Good Shepherd, Menggatal. Thirty Year Five pupils were chosen for the pilot study. The findings of the pilot study was analyzed qualitatively due to the age of the pupils and their possible difficulty with the instrument. Twenty eight out of thirty pupils were able to answer the pre-test questions correctly while only two pupils were not able to do so. The result showed that the instrument (Pre-test) was good and can be conducted in the research. During the interview session, the pupils were asked if they understand better using the graphic organizer. The answers revealed that most pupils agreed that the individual graphic organizer helped them to better understand the story. When asking about the sequencing of the story, twenty five out of thirty pupils felt story structure organizer enabled them to sequence the story correctly. Five pupils were unsure if it helped them. Next, they were asked if the graphic organizer improves their reading skill. Twenty seven of the thirty pupils felt the graphic organizer helped them to improve their reading skill while three pupils were unsure. When asked if the graphic organizer should be used in teaching literature, twenty two pupils agreed, six pupils were unsure and two stated that the graphic organizer did not help. The two pupils might have been confused by this question because of the way the question was worded. The researcher has to rephrase the Question 7 in the coming interview to make sure that the pupils should have to understand the question asked by the teacher.

#### 3.9 Summary

The teacher researcher collected data in multiple forms. By using triangulation, it allowed the researcher to enhance the validity of this study. By triangulating the rubric, and pupils interview the researcher may better understand the advantages of using a graphic organizer to help reading comprehension of the pupils.

#### **CHAPTER IV**

# FINDINGS AND ANALYSIS

## 4.0 Introduction

This chapter presents an analysis of data collection and a summary of the results. Analyses conducted on the data was used to answer the three research questions as stated below:

- What impact graphic organizers has on Year Five pupils' performance in comprehending the small 'l' before and after intervention?
- 2. Would the Year Five pupils show a better understanding of the small 'l' after intervention compared to those who received conventional reading instructions?
- 3. What are the pupil's perceptions toward introducing this technique and learning of literature through graphic organizers?

The first and second research questions were answered by testing the null hypotheses as stated below:

- Ho1 There is no increase reading and comprehension skills by the Year Five pupils before and after being instructed through graphic organizers.
- Ho2 There is no significant difference after intervention compared to those who received conventional reading instructions.

Ho3 There is no significant difference in the pupil's perceptions towards learning of literature through graphic organizers.

The data collected represented:

- i) Pre-test scores for the treatment and control groups
- ii) Post-test scores for the treatment and control groups
- iii) Interview interpretations

# 4.1 Data Analysis

The quantitative data collected from the pre-test and post-test were analysed using the SPSS 15 software. The qualitative data obtained from the interviews were analysed descriptively. The findings of both the quantitative and qualitative data are reported here.

## 4.1.1 Research Question 1:

What impact graphic organizers has on Year Five pupils' performance in comprehending the small 'l' before and after intervention?

This research question will be answered in the study by testing the following null hypothesis:

Ho1 There is no increase reading and comprehension skills by the Year Five pupils before and after being instructed through graphic organizers.

The inferential statistics used is the paired-samples T-test. The p value is set at <.05 which means that there is less than a 5% chance that the relationship between two or more variables occurred by chance. Therefore, it may be concluded that there is a 5 in 100 probability that the resulting difference happened by chance, and a 95 in 100 probability that the discrepancy in the scores is a reliable finding.

First of all the scores for the pre-test and post-test for the treatment group (Table 4.1) were compared to see whether there were significant differences in the scores. The pre-test and post-test scores are shown in the table below.

# Table 4.1

# Pre-test and Post-test for the Treatment Group

Pupil ID	Pre-test	Post-test	
Pupil T1	65	65	
Pupil T2	45	55	
Pupil T3	30	55	
Pupil T4	63	85	
Pupil T5	65	85	
Pupil T6	35	50	
Pupil T7	35	90	
Pupil T8	20	55	
Pupil T9	30	85	
Pupil T10	20	60	
Pupil T11	55	55	
Pupil T12	55	85	
Pupil T13	40	48	
Pupil T14	10	70	
Pupil T15	43	45	
Pupil T16	40	85	
Pupil T17	75	50	
Pupil T18	35	45	
Pupil T19	55	90	
Pupil T20	30	65	
Pupil T21	50	48	
Pupil T22	58	60	
Pupil T23	65	55	
Pupil T24	45	45	
Pupil T25	35	80	
Pupil T26	35	65	
Pupil T27	33	55	
Pupil T28	70	70	
Pupil T29	60	65	
Pupil T30	55	55	
Total	1352	1933	

Table 4.1 showed that the total score for the post-test is higher than the pre-test. From the total value, it is visible that there is an improvement in the treatment group after the intervention. The pre-test and post-test were compared using the Paired-Samples t-test. The results are shown in the table below.

## Table 4.2

Paired-Samples Statistics for the Pre-test and Post-test of the Treatment Group

		Mean	Ν	Std. Deviation	Std.
					Error Mean
Pair 1	Pre-test	45.07	30	16.31	2.978
	Post-test	64.43	30	14.77	2.697

The Paired-Samples t-test analysis (Table 4.2) indicated that for the 30 subjects, the mean score in the post-test was 64.43. The mean score in the pre-test was 45.07. The mean difference between the pre-test and post-test scores was 19.36. This showed that the post-test had a significant difference in contrast with the pre-test and this might be because after the intervention, the treatment group found it much easier to understand the short story and consequently could answer the post-test better.

Paired Differences							
	Mean	Std.	Std.	t	df	Sig.(2-tailed)	
		Deviation	Error Mean				
Pair 1	19.36	20.29	3.82	-5.08	29	.000	

Paired-Samples t-test for the Pre-test and Post-test of the Treatment Group

Using the data above (Table 4.3), the Paired-Samples t-test showed that the 2 - tailed significance was .000, p < .05, which leaves us to decline the null hypotheses Ho1. It can be concluded that there was a significant difference in the understanding of the small "l" by Year Five pupils after being instructed in the graphic organizer. By comparing the p value and the mean difference, the treatment group's post-test scores had increased significantly compared to the pre-test scores. In summary, the Paired-Samples t-test has shown generally that the treatment group which was exposed to the graphic organizer has improved their comprehension of the small "l".

**4.1.2 Research Question 2:** Would the Year Five pupils show a better understanding of the small 'l' after intervention compared to those who received conventional reading instructions?

This research question will be answered in the study by testing the second hypotheses. Ho 2 would be answered based on the analysis of the post-test scores of the treatment and control groups. The null hypothesis is presented below:

Ho 2 There is no significant difference after intervention compared to those who received conventional reading instructions.

# Table 4.4

Pupil ID	Control Group	Treatment Group		
Pupil T1 28		65		
Pupil T2	30	55		
Pupil T3	20	55		
Pupil T4	15	85		
Pupil T5	25	85		
Pupil T6	35	50		
Pupil T7	73	90		
Pupil T8	40	55		
Pupil T9	38	85		
Pupil T10	25	60		
Pupil T11	40	55		
Pupil T12	28	85		
Pupil T13	25	48		
Pupil T14	53	70		
Pupil T15	50	45		
Pupil T16	35	85		
Pupil T17	35	50		
Pupil T18	30	45		
Pupil T19	45	90		
Pupil T20	63	65		
Pupil T21	40	48		
Pupil T22	65	60		
Pupil T23	40	· 55		
Pupil T24	45	45		
Pupil T25	95	80		
Pupil T26	60	65		
Pupil T27	20	55		
Pupil T28	30	70		
Pupil T29	55	65		
Pupil T30	10	55		
Total	1193	1921		

Post-Test Scores for the Control and Treatment Groups

Table 4.4 showed that the total sum of the treatment group post-test scores  $\sum =$  1933 was higher than the control group post-test scores  $\sum =$  1193. Once again by looking at the total value one can note that there was an increase in the treatment group post-test scores.

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1Treatment Post-test	64.43	30	14.77	2.70
Control Post-test	39.77	30	18.45	3.37

Paired-Samples Statistics of Post-test for the Treatment and Control Groups

The Paired-Samples t-test analysis ( Table 4.5 ) indicated that for the 60 subjects, the mean score on the treatment post-test was 64.43 was significantly greater at the p<.05 than the mean score in the control post-test was 39.77. The data analysed showed that the mean difference between the treatment and control groups post-test was 24.66 ( Table 4.6 ). This showed that the treatment group obtained a higher score. It can be interpreted that as the control group was not exposed to the graphic organizer therefore they did not do so well in their post-test.

Paired Differences						
	Mean	Std.	Std.	t	df	Sig.(2-tailed)
<u> </u>		Deviation	Error Mean			
Pair 1 Treatment Post-test Control Post-test	24.67	21.08	3.85	-6.41	29	.000

Paired-Samples t-test of Post-test for the Treatment and Control Groups

Using the data above in Table 4.6, the Paired-Samples t-test showed that 2 tailed significance was .000, p smaller than < .05, which leaves us to decline null hypotheses Ho 2. There was a significant difference in the understanding of the small "I" by Year Five pupils who were instructed in graphic organizer compared to those who received conventional method instructions. By comparing the p value and the mean difference, the treatment group post-test scores were found to increase significantly in contrast to the control group's post-test scores. It could also mean that the graphic organizer has helped the treatment group in comprehending the small "I".

**4.1.3 Research Question 3:** What are the pupil's perceptions towards introducing this technique and learning of literature through graphic organizers?

The researcher was allowed by the school authority to use the meeting room as it has comfortable chairs, air-conditioned and has a quiet surrounding. According to Creswell, (2002, p. 128) "the interview sessions should be held at a location free from distractions". However, despite the suitable physical environment, the researcher noticed that the interviewees were nervous. It was evident that this was the first time they had been interviewed.

The interview protocol was used to gather data for this research question. The interview protocol consisted of 7 items (Appendix K). "An interview protocol is a form designed by the researcher that contain instructions for the process of the interview, the questions to be asked, and space to take notes of responses from the interviewee" (Creswell, 2002, p. 222). All the thirty subjects in the treatment group were interviewed.

As mentioned earlier in the previous chapter the subjects were Year Five pupils. They have problems in expressing themselves fluently in English. As such most of their responses have grammatical errors and some use a mixture of Malay and English during the interview session. However, the transcript is being translated from Malay to English in this report. From the answers recorded in written notes, the pupils expressed their feelings and understandings of the graphic organizer. The following is a summary of the responses given by the interviewees. (Refer to Appendix L for more details on the interviewees' feedback.)

# 4.1.3.1 Graphic organizer helps understand better.

The first item asked by the interviewer was whether the interviewees found the graphic organizer interesting and the reasons for their responses. All of the thirty interviewees found the graphic organizer to be interesting. However they gave different reasons for doing so. Seventeen of them gave the reasons that graphic organizer was interesting because it helped them to understand the story easily.

For examples :

Pupil 6 : "Yes, because graphic organizer make me very easy to understand the story."

Pupil 8 : "Yes, because it is easy for me to understand the story."

Pupil 12 : "Yes, because I can know who the character and other component in the graphic organizer."

Six of them gave the reasons that by using the graphic organizer they were able to understand the plot and characters. One of them gave the reason that it was easy and simple. Two of them stated that they understood the characters and the components of the graphic organizer. Another two stated that the graphic organizer was good for them. One of them gave the reason that it was easy to remember. Another said "Yes, because it is best". Overall the interviewees found graphic organizer interesting because it allowed them to understand and comprehend the story easily. The interviewees also found that graphic organizer helped them in understanding the characters better and they could link the plot of the story using the graphic organizer. The interviewees could also grasp the story at a glance because the graphic organizer was framed in boxes.

## 4.1.3.2 Graphic organizer helps them easy to understand.

The second question asked by the interviewer was whether it was easy for the interviewees to understand the graphic organizer. They also have to give reasons for their answers. All the thirty interviewees agreed that it was easy for them to understand the graphic organizer. Majority of them gave the reason that they were able to comprehend better from the given story.

For examples :

Pupil 14 : "Yes, because I can understand the graphic organizer."

Pupil 17 : "Yes, because I can understand the story by graphic organizer."

Pupil 22 : "Yes, because it is easy."

Seven of them stated: "Yes, because they are well organized."

The interviewees implied that the graphic organizer allowed the given short story to be sequenced properly.

Pupil 11 stated: "Yes, because the frame of the subtitle in the component of the graphic organizer that I understand."

The interviewee implied that the subtitle listed in the graphic organizer made it easier for him to understand the graphic organizer. Pupil 9 stated: "Yes, because the skeleton (frame) story is available and so

simple."

The interviewee implied that since the short story was framed in boxes therefore it was very simple to understand.

It can be concluded that all the interviewees found the graphic organizer easy to understand.

#### 4.1.3.3 Goal is the easiest component

The third question asked by the interviewer was which part or component of the graphic organizer the interviewees found it easy to understand. The interviewees needed to give a reason for their choice. Fifteen of them felt that the part or component easy for them to understand was the 'goal'. The reason they gave was it was easy to find what the character want. For examples :

Pupil 1 : "Part/Component of the graphic organizer did I find is easy goal and main characters because is easy to me to memorize."

Pupil 3 : "The goal because it so easy what the character wants."

Pupil 18 : "Goal, because it is easy to find what the characters want."

Eleven of them found that the character component was easy. The following are some of the reasons given for their positive responses. For examples :

Pupil 4 : "Character, because we can know who is the main character."

Pupil 6 : " On part characters, because we only write their name that have in the book."

Pupil 15 : "Character, because it is easy to find the characters."

Pupil 24 : "Characters, because it is easy to find."

As noted from the above quotes, the interviewees just needed to write the names of the characters mentioned in the story. It was an uncomplicated task because they just needed to scan through the book to look for the names of the characters. Two of them found that the "events" component was easy because they can know how the events happened. However only one of them found the "moral value" component easy because he/she understood the moral value of the short story. One found the "Multiple Choice Questions" easy because it was easy to locate the answers.

# 4.1.3.4 Sequencing is easy

The fourth question asked by the interviewer was whether the interviewees found it easy to list down the sequence of "The Elves and the Shoemaker" using graphic organizer. All of the interviewees agreed that it was easy for them to list down the sequence of "The Elves and the Shoemaker" using graphic organizer. For examples :

Pupil 3 : "Yes, it so easy to list down using graphic organizer."

Pupil 6 : "Yes, if we use the graphic organizer, it easy to list down the sequence."

Pupil 8 : "Yes, it helps me to list down the sequence of the story."

Two of them gave good positive responses. For examples :

Pupil 4 : "Yes, because through using graphic organizer it will be simple and easy to write out."

Pupil 9 : "Yes, I found easy because the sequence was describe a step by step."

The above quotes showed that the interviewees found the graphic organizer has simplified the short story and sequentially it was easier to understand the short story. Since they are not proficient enough in their English Language, reading or writing short and simple sentences is an effort. They also stated that the sequence of the short story can be described step by step and this has helped them to understand the short story better.

#### 4.1.3.5 Improve reading skills.

The fifth question asked the interviewees whether they think graphic organizer has improved their reading skills. Once again all the interviewees confirmed that graphic organizer has improved their reading skills.

For examples :

Pupil 2 : "Yes, graphic organizer has improve my reading skills."

Pupil 7 : "Yes, the graphic organizer are improve my reading skill."

Pupil 15 : "Yes, graphic organizer has improved my reading skill."

However, three of them gave a weak reason. For examples :

Pupil 4 :"Yes, I understand the story better using graphic organizer."

Pupil 5 : "Yes, it is right because there is a subtitle."

Pupil 25 : "Yes, because graphic organizer easy to memorize."

They might have misunderstood the question. Another two of the interviewees gave a convincing reason that their reading skill has improved because the short story

was written in the frame form. It makes reading uncomplicated and helped in understanding the short story for them. For examples :

- Pupil 1 : "Yes, because the graphic organizer can improve my reading skills because it easy to read it."
- Pupil 9 :"Yes, because the graphic organizer written briefly and easy to understand."

# 4.1.3.6 Understand the story.

The sixth question asked the interviewees whether they understood the short story "The Elves and the Shoemaker" better using graphic organizer. Again all the interviewees affirmed that they understood the short story "The Elves and the Shoemaker" better using graphic organizer. Nine of the thirty interviewees gave justification of their knowledge of the short story. For examples :

Pupil 4 : "Yes, because graphic organizer made me understand easier."

Pupil 6 : "Yes, graphic organizer make me very easy to understand the story."

Pupil 16: "Yes, I can understand 'The Elves and The Shoe Maker.'

However, two of them gave satisfactory rationale. For examples :

Pupil 9 : "Yes, because it arrange in order and it so simple."

Pupil 12 : "Yes, because it explained all about the story 'The Elves and the Shoemaker.'

The above quotes indicated that the graphic organizer is in proper lay out and it is easily comprehensible. The boxlike frames in the graphic organizer made the explanation of the short story in an orderly manner that really helped the interviewees to understand the short story better.

## 4.1.3.7 Should graphic organizer be used in teaching literature

The final question asked the interviewees for their opinions whether they think that graphic organizer should be used in teaching literature. Once again all the interviewees agreed that graphic organizer should be used in teaching literature. Fourteen out of the thirty interviewees answered positively with reasons. For examples :

Pupil 6 : "Yes, graphic organizer can be used in teaching literature."

Pupil 7 : "Yes, the pupils will easy to understand in teaching literature."

Pupil 11 : "Yes, because student will easy to understand using graphic organizer in teaching literature."

Five out of the interviewees revealed they would find it easy to comprehend the graphic organizer in their literature class. One particular interviewee gave an interesting comment. For example :

Pupil 9 : "Yes, because it more attractive and not feel bored."

This was an unusual response. The interviewee found that the graphic organizer was attractive and he does not feel bored learning literature. This statement brought to the interviewer's attention that the pupils were very attentive during the lessons. To sum up, from the data collected and analyzed from the interview, it can be concluded that the subjects in the treatment group have a positive perception of graphic organizer. Thus, the research question 3 has been answered. The qualitative data obtained from answers of the interview questions clearly showed how the subjects in the treatment group, who have been exposed to graphic organizer for a period of 6 weeks, have a positive perception of graphic organizer. In view of this it can be concluded that graphic organizer should be used in teaching literature in a classroom environment.

# 4.2 Summary

The findings of both the quantitative and qualitative results showed that the treatment group has shown a great improvement in their understanding of the small '1'. After being exposed to graphic organizer the treatment group could understand better the story line. The feedback received from the interview confirmed that the graphic organizer made it easier for the subjects to comprehend the small '1'.

#### **CHAPTER V**

#### **DISCUSSIONS AND IMPLICATIONS**

# 5.0 Introduction

In this chapter, the findings of the current study would be discussed and summarized. The researcher will endeavour to conclude the importance of this study besides making some recommendations and suggestions.

The mixed methods research design was applied to find out the effectiveness of graphic organizer in helping Year Five pupils to comprehend the small 'l'. A comparison between conventional literature-based reading instruction was made using two groups of pupils namely treatment and control groups.

To obtain more accurate picture or result on the effectiveness of graphic organizer, qualitative data from interviews were used by the researcher. These qualitative measures turned out to be useful in this study as it complemented the data obtained from the quantitative measure regarding the performance of both groups as a result of different teaching methodologies. The results of this study are summarized in the following sections and addressed the research questions concerning the relationship between the graphic organizer and pupils' ability in comprehending the literature and improving their reading skills.

# 5.1.1 The impact of graphic organizers on Year Five pupils' performance in comprehending the small 'l' before and after intervention

Graphic organizer demonstrated that there was a significant impact on the Year Five pupils' performance in comprehending the small 'l' after intervention. The treatment group's Pre-test and Post-test performances were compared using a story text. The means of the Pre-test and Post-test were compared and the result showed a significant difference in the Post-test scores which means the subjects after intervention performed considerably better in reading comprehension. It was concluded that the subjects in the treatment group demonstrated an improvement in their Post-test scores compared to the Pre-test scores. This finding is similar to a study conducted by Hendricks (2009). Hendricks conducted a study to find out the best strategies that could be used to increase pupils' comprehension and retention through instructional modifications. Graphic organizer was used as a visual display of material to connect prior knowledge with new learning. The instrument used in Hendricks's study was similar to this study, namely Pre-test and Post-test. The scores from the assessments were compared using the Pre and Post-test. The finding of Hendrick's study was the Post-test scores was higher than the Pre-test scores. Pupils who were presented with the graphic organizer organized their thoughts better for the open-ended essays and short answer questions. Graphic organizer helped pupils to learn and visualize mentally in the lesson. Graphic organizer also provided a means for pupils to better organize information in expository text. The results of this study showed that there was an increase in the number of comprehension questions they answered correctly after reading a specific text.

This similar finding was supported by Boulineau et al. (2004). Boulineau et al. have conducted a study at a special education resource classroom for pupils with mild disabilities. The teacher probed pupil's performance on story grammar elements using story grammar map. The results of this study suggested that storygrammar instruction has shown an improvement on the participant itself. The identification of story-grammar elements via story grammar map when reading narrative text increases after the intervention. The study conducted by Boulineau et al. also proved that visual displays of information, such as graphic organizers, may help pupils who have learning disabilities bypass their difficulties with organizing and recalling verbal information, thereby enhancing their reading comprehension. The finding of Boulineau et al.'s study revealed overall positive outcomes across the studies.

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This finding was supported by DiCecco and Gleason (2002). DiCecco and Gleason have conducted a study on the effectiveness of graphic organizer as a comprehension tool in relation to expository text. A Pre-test and Post-test was used to determine whether graphic organizer assisted pupils. The Pre-test scores are higher than the Post-test scores and it showed that there is a difference between the pupils who used the graphic organizer and the pupils who did not use the graphic organizer. The researchers concluded that the pupils who used the graphic organizer were better able to recall the knowledge as the graphic organizer served as cues for the retrieval and recall of information. DiCecco and Gleason supported the use of graphic organizer in a language learning classroom.

Contrary, Simmons et al. (2001) have conducted a study on pupils' comprehension. Simmons et al. have investigated on pupils' comprehension using graphic organizer which was in contrast with this study. The instruments used in the study were Pre-test and Post-test. Simmons et al. compare the effectiveness of three instructional procedures for facilitating sixth graders' comprehension and retention of science content. The scores in Pre-test and Post-test show no significant. The overall results suggest that there was no increasing in sixth-grade children's comprehension and retention of science content is a failure in using graphic organizer on pupils' comprehension.

# 5.1.2 Show a better understanding of the small 'l' after intervention compared to those who received conventional reading instructions

Year Five pupils who are instructed in graphic organizer showed a better understanding of the small 'l' compared to those who received conventional method instructions. The researcher compared the treatment and control group's Post-test. The mean scores of the Post-test of the treatment group were higher than that of the control group. The treatment group demonstrated a significant improvement when evaluated using the two types of instrument tests. It was concluded that the graphic organizer had a positive impact on the understanding and comprehension of small 'l' when applied to Year Five pupils. Crawford and Carnine, (2000) have examined the achievement level of  $8^{th}$  grade pupils using textbooks with graphic organizer to textbooks that did not have graphic organizer. The results showed that the pupils using the textbook with a graphic organizer scored higher than their counterparts on their tests. Graphic organizers were used as instructional strategies to enhance the critical thinking skills of the pupils through brainstorming activities, Venn diagrams, webs, affinity charts, story maps and flow charts. Researchers reported positive effects on the use of graphic organizers to improve pupil critical thinking skills on the 8<sup>th</sup> grade pupils studied.

The finding was supported by Graham and Perin, (2007) who examined on the importance of developing writing skills in adolescents through the use of graphic organizer to improve pupils' writing skills by using graphic organizer. Griffin et al. (2001) further supported the finding of the study. The researchers examined whether the graphic organizer instruction facilitate comprehension, recall, and transfer of information contained in expository textbook. They also investigated on the degree which is explicit instruction necessary for independent generation and use of graphic organizer by pupils. The samplings in Griffin et al.'s study were similar to the samplings in this study, both samplings were from Year Five pupils. The results suggested that the participants in all groups performed comparably on acquisition and retention measures. Significantly, the participants who were receiving the graphic organizer and explicit instruction performed better on the measure of transfer than pupils who received traditional basal instruction. The graphic organizer aided the Year Five pupils in reading comprehension.

Alvermann and Boothby, (2000) have conducted a study on learning disabilities. Many pupils with learning disabilities experience difficulties with extracting relationships from expository text, especially if they are implicit. Results from studies with K—12 participants have been inconclusive regarding the potency of the graphic organizer as a comprehension tool. This study attempted to address some of the concerns with graphic organizer research by examining the effects of using graphic organizer with middle school pupils with learning disabilities to convey and cue relational knowledge, using a longer intervention and using written essays to assess the pupils' attainment of relational knowledge. When factual knowledge was assessed via multiple choice tests and

quizzes, no differences were found between treatment and control group. As in contrast to other graphic organizer studies, Alvermann and Boothby's study failed to meet the objectives of the study.

# 5.1.3 Pupil's perceptions toward introducing this technique and learning of literature through graphic organizers

Year Five pupils' perceptions towards learning of literature through graphic organizer were also examined. In a qualitative study the pupils from the treatment group were interviewed for their perceptions after being exposed to graphic organizer. Questions 1 to 7 in the interview aided the researcher in providing qualitative data relevant to this research question. The responses given by the interviewees of the treatment group were very positive. All pupils indicated that it was easy for them to understand the graphic organizer. They could comprehend the short story better after using the graphic organizer. They also felt that it was easy for them to list down the sequence of events after being taught the graphic organizer. They also found the graphic organizer framed in boxes simplified the short story by using simple and short sentences which made it easy for them to grasp the short story. Based on the arguments above, it showed that the Year Five pupils' perceptions towards graphic organizer were considerably improved and they accepted the concept of graphic organizer.

#### 5.2 Implications of this Study

Both the qualitative and quantitative results have strengthened the notion that graphic organizer was a useful method in the teaching of the small 'l' in ESL classroom. The most important implication of this study was on the success of the Year Five pupils in an ESL classroom. It suggested that graphic organizer has improved their understanding of a story, and hence the reading and comprehension skills.

The second implication was that Year Five pupils were able to recall most components of the short story after intervention. The theoretical basis of the graphic organizer is the schema theory. A graphic organizer is a visual display of the structure of a typical story. It can be used to help the pupils organize information in the short story, like a road map that guides pupils in processing information and helps them expand their story schemas.

Using a graphic organizer as teaching tool in comprehends the small 'l' text is by making the patterns clear. "With brainstorming webs, pupils have selfgenerated, non-linear tools for activating fluent thinking, which reflects the holistic networking capacity of the human brain" (Hyerle, 2000, p. 51). Additionally, Bellanca (2007, p. 234) reminds teachers that the "report states that graphic organizers are one of the seven most effective ways to improve reading comprehension". Today, educators are increasingly realizing the value of teaching for understanding-dealing with fewer topics but teaching them in such a way that pupils not only learn the content itself thoroughly but also appreciated the reasons for learning it and retaining it in a form that makes it usable. Tate (2003, p. 28) says, "Using systematic visual or semantic graphs regarding the content of reading passages facilitates memory and content area achievement". Graphic organizers can be a tool to increase their reading comprehension and achievement in primary school.

The third implication of this study was that as the findings indicated, longer time was needed to allow the subjects to understand the story frame in detail. Time factor was essential and it influences the effectiveness of graphic organizer. It was inferred that the longer the subjects were exposed to graphic organizer, the better their achievements will be. This was proved when the subjects in the treatment group performed better in the Post-test after being exposed to graphic organizer for only six weeks. Their achievements could be enhanced further if they were exposed to the graphic organizer for a longer period of time, up to two months or more.

The fourth implication of this study could be its application in a classroom environment. Graphic organizer is an instructional strategy that provides pupils with a visual guide about the basic story structure and the relationships between the story elements. Teachers are encouraged to incorporate this strategy in their literature subject. This strategy is especially recommended when the teacher is looking for ways to increase pupils' comprehension from a story or text. When reading story or text, many pupils do not know how to retrieve useful information from a story text. Myers & Savage (2005, p. 18) promote the idea of helping pupils comprehend what they read ( content literacy ) by "using a variety of methods". In particular, they want readers to realize that reading in the content areas is "not simply a technical skill". It is something in which pupils need extra assistance. Caviglioli and Harris, (2003, p. 70) believe that " greater benefit lies in the way the analytical and organizational skills needed to map in turn lead to the development of thinking skills". In a classroom environment, "Representing knowledge in the visual format of a concept map allows one to gain an overview of a domain of knowledge" (Plotnick, 2001, para. 3).

# 5.3 Recommendations for Future Research

The significant outcome of this research is that graphic organizer was successfully applied in helping the pupils in comprehending the small 'l'. This strategy has not been researched with respect to ESL in any research project to date in Malaysia. The result of this research lends strong support to future investigations in this area.

When determining possible research directions for the future, it is important to consider not only the ideas coming from the current study, but those ideas mentioned in previous studies which would be applicable to this type of The research suggestions include : applying the intervention to research. classroom research, promoting generalization to different types of materials, and determining possible long term maintenance. Another area that could be investigated into is the intervention using other stories as the one used here were on 'The Elves and the Shoemaker', 'The Race for the Cup' and 'Changing Days'. A graphic organizer can be an integral component in the process of connecting new material to prior knowledge. It encourages pupils to display information in clear and concise manner. Also, it eliminates extraneous information that tends to confuse young learners. Vaughn and Edmonds, (2006, para 2) asserted that "Today, it is becoming increasingly important that pupils be able to apply process skills to become more productive in many areas including in literature comprehension".

Teachers may be willing to conduct research in the classroom especially single subject design, because it can be easy to manage. Obviously the teachers would need training in the intervention techniques. From there they would need to learn how this information could be integrated into their daily program. Teachers would have an opportunity to provide feedback on the effectiveness of the intervention, as well as the pupils' interest in the instruction. It would be important that further research is conducted to investigate the effectiveness of the intervention, possibly with pupils in a mixed ability classroom.

#### 5.4 Conclusion

In conclusion, this study has investigated the effectiveness of using graphic organizer in helping Year Five pupils to comprehend the small 'l' by including the best suggestions of past research studies, while attempting to eliminate problems evident in those studies. The overall design of the study included specific Pre-test, Post-test and interview as instruments. The data analysis lends support to the notion that graphic organizer can be taught as an aid to reading comprehension and that graphic organizer is an appropriate method for that instruction. The graphic organizer helps the pupils to arrange thoughts and new information in a concrete manner. These pupils "often need and always benefit from tools that help them see what they read, that make the abstract more concrete" (Burke, 2002).

A successful and rewarding reading experience includes at least three features. First and most important, a successful reading experience is one in which the reader understands what he reads. Of course, understanding may take more than one reading, it may require the teacher's assistance or that of other pupils, and it will often entail the reader's active manipulation of the idea in the text. Secondly, a successful reading experience is one that the reader finds

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enjoyable, entertaining, informative, or thought provoking. Not every reading experience will yield all of these benefits, but every experience should yield at least one of them. Finally, a successful reading experience prepares the pupil to complete whatever task following the reading.

Teachers need to meet pupils where they are and then challenge them to go further. One way to do this is to provide opportunities for pupils to connect literature with their lives and interest, encouraging them to select their own literature and to respond in their own unique ways. The results of the study has presented information on the possible improvements to the instruction strategy, some recommendations and future research directions. It comes with sufficient data to support the success of this intervention. It is an exciting prospect for a researcher to compile information from various sources into a study which improves on previous research. However, this study is only the first step in, hopefully, a new research pathway.

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