



**THE EFFECTS OF GRAPHIC ORGANIZERS ON EFL STUDENTS' READING  
COMPREHENSION**

GERMINTON GONZÁLEZ GUTIÉRREZ

UNIVERSIDAD ICESI

Cali. Colombia

2017



**THE EFFECTS OF GRAPHIC ORGANIZERS ON EFL STUDENTS' READING  
COMPREHENSION**

By

Germinton González Gutiérrez

Submitted to the Escuela de Ciencias de la Educación of  
Icesi University  
in Partial Fulfillment of the Requirements  
for the Degree of Master in TEFL

Research Advisor

Hector Fabio Biancha Ramirez, MA

## **Dedication**

This thesis is dedicated to my parents Disnarda Gutiérrez Osorio and Santiago González who supported me and gave me the strength to continue working on my personal and professional life. To my family for their unconditional love and support.

## **Acknowledgments**

I would like to express my gratitude to my supervisor Hector Fabio Biancha, MA and professor MA Maria Fernanda Puentes, MA for their useful comments, remarks and commitment through the learning process of this master thesis. Furthermore, I would like to thank professors from the Master's in the Teaching of English as a Foreign Language at Icesi University for helping me to become a better teacher. Also, I like to thank the participants in my study, who eagerly showed their willingness in this process. Finally, I would like to thank my loved and important ones, who have supported me throughout this process. I am and I will be grateful endlessly for your love.

THE EFFECTS OF GRAPHIC ORGANIZERS ON EFL STUDENTS' READING  
COMPREHENSION

2017

GERMINTON GONZÁLEZ GUTIÉRREZ

ICESI UNIVERSITY

COLOMBIA

## **Abstract**

“Reading is one of the four skills which is very important to gain knowledge and very essential for academic life” (Shabani, 2017, p. 548). As graphic organizers assist students in the comprehension of a text (Öztürk, 2012), this study reports a classroom-based action research project which describes the effects of graphic organizers as a reading strategy to identify the main idea and text organization for EFL students from a computer systems technician program in Cali. The study was conducted taking into account some social factors and individual factors that interfere in the learning process of the beginner EFL student participants. This study involved two implementation groups and two reference groups. The effects of graphic organizers were studied in the implementation groups through rubrics and semi-structured interviews. The reference groups were given the same material and activities but without the instruction of graphic organizers. After analyzing the collected data, it was found that graphic organizers helped students from the implementation groups improve their reading comprehension skill to a great extent. Also, it could be observed that students’ motivation increases and levels of anxiety decreased when using graphic organizers for reading comprehension. Additionally, findings also reported that the use of graphic organizers helped students to recall information and improve their oral skill at a very basic level. The results also showed that female students performed better than male students when reporting their understanding of the readings. Finally, it was observed that older women showed the greatest progress in their reading comprehension.

Key words: EFL, reading comprehension, graphic organizers, social factors, individual factors.

## Table of contents

<b>Chapter 1: Introduction</b> .....	<b>9</b>
<b>Chapter 2: Problem formulation</b> .....	<b>11</b>
Context.....	11
Problematic situation.....	12
Relevance .....	13
Research question .....	14
Objectives .....	15
<b>Chapter 3: Discussion on graphic organizers</b> .....	<b>16</b>
<b>Chapter 4: Literature Review</b> .....	<b>19</b>
<b>Chapter 5: Methodology</b> .....	<b>23</b>
<b>Stage 1: Planning</b> .....	<b>24</b>
<i>Problem identification</i> .....	24
<i>Problem solution</i> .....	24
<b>Stage 2: Acting</b> .....	<b>24</b>
<i>Selection of participants</i> .....	24
<i>Designing and application of instruments</i> .....	25
<b>Stage 3: Observing</b> .....	<b>27</b>
<i>Exploring students' perceptions</i> .....	27
<b>Stage 4: Reflecting</b> .....	<b>28</b>
<i>Analysis of data</i> .....	28
<b>Chapter 6: Research findings</b> .....	<b>30</b>
Graphic Organizers and students' reading comprehension .....	30
Students' perceptions.....	39
<b>Chapter 7: Analysis and discussion</b> .....	<b>47</b>
Effects of Graphic organizers .....	47
Taking into consideration individual factors.....	48
Social factors and the use of graphic organizers .....	51

<b>Chapter 8: Conclusions, recommendations, and limitations .....</b>	<b>53</b>
Conclusions .....	53
Recommendations .....	55
Limitations .....	56
References.....	57



## Chapter 1: Introduction

“Being able to understand what one reads is important for learning in school and for life in general” (Echeverri & McNulty, 2010, p. 108). According to Lika (2017), reading comprehension is a complex cognitive ability that integrates previous knowledge with the new information creating new schemas and perspectives. Therefore, reading comprehension is one of the most important language skills for EFL students since it supports their learning process. As mentioned by Gomez (2017) learners “construct knowledge based mainly on what they read” (p. 2). For instance, when reading, EFL learners “interact with the text, forming hypothesis, predictions and using their background knowledge to construct the meaning” (Sungatullina, 2016, p. 2).

However, in Fundacion Carvajal which is an institution linked to the Servicio Nacional de Aprendizaje (SENA), students have a very low proficiency level in English. They have not had much exposure to the target language and their developing of listening, writing, reading, and speaking skills in English has been slow. Since there is a lack of instruction on intensive reading, students have experienced difficulty in understanding the texts in English. This problem is because they have not learnt how to read meaningfully, and they lack reading strategies and motivation. In addition, students are used to the method of reading a text and answering questions with the help of the teacher without any further cognitive process. These issues do not allow them to really understand or comprehend the readings.

Since in Fundacion Carvajal students are used to the traditional method mentioned above, when reading they cannot engage with the texts or construct the overall idea of the readings, neither construct meaning. They can only examine and scan materials (Broughton, Brumfit, Flavell, Hill & Pincas, 2003), in other words, they do a passive reading, which does not provide a deep understanding of the texts. Therefore, in order for them to be able to do an active reading, which focuses on the

meticulous comprehension and understanding of the texts (Broughton et al., 2003), a new reading strategy to encourage them to better interact with the texts is needed.

As reading is a complex skill to develop and students usually struggle at the moment of understanding a text, in order to benefit their reading comprehension, this study proposes the implementation of graphic organizers which are according to Ellis and Howard (2005) “visual devices that depict information in a variety of ways” (p.1). These visual devices help learners understand the structure of the different texts they read (Broughton et al., 2003). For instance, when students use graphic tools, they are training themselves and creating meaningful relationships within the text, which is useful to develop their reading comprehension skill. Graphic organizers facilitate learners to connect, organize, and understand better the new information of the readings (McKnight, 2010; Parker, 2007).

This study contains a problem formulation chapter which includes the context, the problematic situation, the relevance of the study, the research question, and the objectives. After, it continues with a discussion about graphic organizers followed by the literature review about reading comprehension and reading strategies. Then, it presents the methodology, the research findings, and the analysis of data. In the last section, it includes the conclusion, the recommendations, and the limitations.

## **Chapter 2: Problem formulation**

### **Context**

This research study was carried out in the Distrito de Aguablanca in Cali, Colombia; an area of the city marked by violence, poverty, drugs, and displacement. The study took place specifically at Fundación Carvajal which is a non-profit organization promoting a better quality of life for disadvantaged neighborhoods such as the Distrito de Aguablanca. Fundación Carvajal works hand in hand with SENA, which is a Colombian public institution in charge of providing complementary and titled training programs. Fundación Carvajal and SENA aim to increase the working opportunities for everyone. The education offered is completely free aiming to reach these affected communities in some of the more critical areas in Cali.

A computer systems technician program is offered to those who have already finished their lower secondary school. This computer systems technician program includes a 180 hour six months English course. These 180 hours are divided into four stages: analysis (30 hours), planning (40 hours), execution (90 hours) and evaluation (20 hours). Fundación Carvajal makes different schedules every week; so, teachers do not have a regular schedule which makes the teaching and learning process more difficult.

The participants in this study are students who come from low social strata. Most of them have had to work from early ages to provide financial support for their families, some others became fathers or mothers without having any kind of work, and some are housewives that want to start to work.

It is notable that these students have a very low proficiency level in English, thus their reading comprehension is affected. There could be many possible reasons for this; for instance, their social context, their exposure to the target language, their educational background, their attitudes and motivation towards English, their reading habits, which can all be directly or indirectly related to their social context and background.

## **Problematic situation**

I noticed that students from this computer systems technician program need to read texts in English related to their technical program. These readings are informative and formative for their process of becoming systems technicians; nevertheless, they have little or no knowledge of English. They struggle at the moment of comprehending the readings due to the lack of vocabulary and lack of grammar bases; then, they are in an initial point in the learning of English. It gets further complicated as they do not appear interested or motivated in learning this second language. Therefore, there is a lack of effort or a positive attitude towards learning.

For some students, it was difficult to remember what was taught in the previous classes. Also, they did not have sufficient strategies to learn the second language or to read texts in English, they waited for the teacher to read with them and to explain the main ideas from the texts. Therefore, there was a need to make them aware of existing reading strategies that they could use in order to improve their reading comprehension skills. Moreover, the learning of English and the comprehension of the readings was seen as a difficult task since students were not familiarized with the second language and much less with reading texts in English.

There was a clear difficulty when learners tried to organize and comprehend the different texts they had to read; so, they did not know how to select the essential information from the readings, or how to read them, nor to comprehend them.

This research attempted to use graphic organizers as a reading strategy (Broughton et al., 2003) with the intention of enhancing students' comprehension of the readings related to their computer systems technician program.

## Relevance

This study contributes with a reading strategy such as graphic organizers to improve the reading comprehension skill in EFL learners from a computer systems technician program in Cali. As Byram, Gribkova, and Starkey (2002) recommend, it is essential to introduce changes in methods of teaching, the materials that are used in order to have a better process of teaching and learning. Tomlinson (1999) explains that teachers can modify three aspects of teaching: Content, Process, and Product. By using graphic organizers, teachers modify the product.

When reading, these students had to deal with many issues. For instance, unknown vocabulary, lack of reading strategies, demotivation, and anxiety. Therefore, these learners were required to have good experiences of reading to increase their knowledge and attitudes towards English. As they did not have enough competences in English, they needed to learn through various innovative strategies which facilitated their learning of the language and helped them reach goals easier. Besides, the use of reading strategies that interest them reinforces their L2 learning process and reading comprehension, not just for their technical program, but for their daily life and professional life in the future. In addition, this research can enrich the repertoire of reading strategies of other EFL teachers to improve their students' reading comprehension.

Students and institutions in general can take advantage of graphic organizers since it is a practical, innovative, easy, and motivational strategy that improves the learning and teaching processes by making the information and material worked in the classes meaningful. Besides, students can become better readers not just in English, but also in their L1.

## **Research question**

What is the effect of graphic organizers on students' identification of main ideas and text organization?

## **Objectives**

### ✓ **General objective**

To describe the effect of graphic organizers as a reading strategy to enhance students' identification of main ideas and text organization.

### ✓ **Specific objective**

- To identify if there was any enhancement in students' ability to recognize main ideas through the use of graphic organizers
- To establish if graphic organizers allowed students to understand the text organization.
- To explore students' perception about the effect of graphic organizers on their reading comprehension.

### **Chapter 3: Discussion on graphic organizers**

Ellis and Howard (2005) define Graphic Organizers as:

“Visual devices that depict information in a variety of ways. Most commonly, they employ lines, circles, and boxes, to form images which depict four common ways information is typically organized: hierarchic, cause/effect, compare/contrast, and cyclic or linear sequences. These images serve as visual cues designed to facilitate communication and/or understanding of information by showing how essential information about a topic is organized.”  
(p.1)

In addition, Parker (2007) states that Graphic Organizers are visual representations that help to gather and sort information. Moreover, they allow students to see patterns and relationships between the information given, and they also help teachers to figure out how students think. Some other names have been used to refer to graphic organizers such as: semantic maps, webs, concept maps, story maps, and semantic organizers. Parker claims that Graphic Organizers work by connecting several pieces of isolated information, hence students make connections and could assimilate new information into what they already know. Thus, “organizers record important pieces of information that students can connect with previous information and build upon for future information” (Parker, 2007, p. 5).

McKnight (2010) says that “Graphic Organizers are important and effective pedagogical tools for organizing content and ideas and facilitating learners’ comprehension of newly acquired information” (p.1). Then, these visual devices and representations might help and facilitate learners to connect, organize, and understand better the new information that is presented in the different texts they have to read.

The visual displays of Graphic Organizers allow students to link prior knowledge to new learning, which leads to a deeper level of understanding. While the facts are important, understanding the concepts related to the facts can enrich the learning process of the students.



Ellis (2001) identifies three advantages of using Graphic Organizers: 1) they make content easier to understand. 2) They allow material to be addressed at more sophisticated levels; 3) and they enable students to become more strategic learners. Once the student gains an organizational structure for a given topic, his/her reading, writing, and communication skills are likely to improve with the use of Graphic Organizers. As organization begins to make content information easier to understand, Graphic Organizers allow future information to be used at more complex levels.

When students learn from more than one way, they are able to interiorize the information in a better way (Gardner, 2006). So, the use of graphic organizers provides students with visual materials in order to strengthen the teaching and learning process in the English classroom.

McKnight (2010) and Ellis (2004) assert that graphic organizers help to see the relation between facts, information, and terms, which, I consider are important aspects at the moment of reading, understanding, and learning a new language. By using these devices, learners will be able to understand and memorize the content, as well as, to split up the precise information from the other that is not (Ellis, 2004); hereafter, the reduced information can be addressed to a more complex stage. Ellis (2004) also states that when students use graphic organizers, they improve their “reading and writing skills, communication skills, analytical, critical, and creative thinking skills” (p. 2).

Many activities can follow from organizing information on these “devices” as Ellis calls them. For instance, this information can be used in discussions, debates, to make connections and inferences, and to extend the understanding of main concepts, etc. (Ellis, 2004). As it is seen, graphic organizers are very useful for teachers and learners since teachers can provide students with new materials to improve their classes and make the learning meaningful. For students, these tools are even more beneficial as they can understand easier the information, the concepts and facts present in the different readings related to their computer systems technician program. Also, graphic organizers help learners to know the

structure of these texts, to pay attention to the more important and relevant information, to hold the information better, and to improve their creativity. These favorable aspects can be used to improve their reading comprehension.

## Chapter 4: Literature Review

When it comes to EFL reading comprehension, there is abundant literature indicating different strategies to improve EFL learners' reading comprehension. For instance, Liu, Chen, and Chang (2010) investigated the effect of computer assisted concept mapping learning strategy; Jalilifar (2010) explored the influence of cooperative learning techniques. Also, Nosratinia and Mohammadi (2017), Zhussupovaa and Kazbekovab (2016) examined the impact of metacognitive strategies on EFL learners' reading comprehension. Additionally, some studies have inquired into the effects of strategy instruction on EFL reading comprehension (Karizak & Khojasteh, 2016; Lopera, 2012). Furthermore, other studies have revealed that flipped classroom is a powerful strategy to improve English reading comprehension (Alhasani, Wan, & Masoof, 2017; Huang & Hong, 2016).

Similarly, a great deal of research has been done on the use of graphic organizers as a reading strategy to improve reading comprehension in EFL learners. The effectiveness of reading comprehension is based on how learners are aware of the texts organization to be able to better understand them and distinguish the important information from the less important (Grabe & Gardner, 1995). In order to identify main ideas and information in a coherent and logical way, the use of graphic organizers will provide some help (Parker, 2007; Mcknight, 2010).

Previous research has also shown that among reading strategies different types of graphic organizers can be used to significantly improved learners' reading comprehension at different levels of English (Bavizade, Gorjian, & Khoshakhlagh, 2015; Jiang, 2012; Merrifield, 2017). Also, in order to help EFL students understand the readings they have to deal with, it is necessary to use different reading strategies (Trabasso & Bouchard, 2002) to compare and examine specific reading comprehension strategies for EFL learners (Phantharakphong & Pothitha, 2014; Rang, 2011; Shabani, 2017). For my study I chose to focus on the previous research results that showed the effects of graphic organizers as a reading strategy.

According to Öztürk (2012) graphic organizers can be versatile and adaptable, and students can decide which are more appropriate to use or make in order to understand the structure of the texts. Öztürk found that besides helping to comprehend texts, graphic organizers also encourage cooperative work. Egan (1999) also points out from his findings that graphic organizers are particularly useful for students to work cooperatively in the classroom. Students from this research study like to work in groups as they feel more comfortable and safe by taking advantage of the support their classmates can provide. Also, group work increases interest and pleasure in students (Taqi & Al-Nouh, 2014). Furthermore, it is argued by some that learners' age of onset of acquisition (AOA) has a powerful effect on L2 proficiency (Johnson & Newport, 1989). Others argue that there is a diminishing in language learning abilities throughout life (Hakuta, Bialystok, & Wiley, 2003), and there are those who state that, regarding age, the learning process is extremely influenced due to plasticity of the brain (Al Ghabra, 2015). However, Slavin (2011) cited in Bavizade et al. (2015) affirm that visual learning is one of the most effective methods for teaching comprehension skills to students of all ages. In the context of my research study, students are between 18 and 48 years old; it can then be said that despite the wide age range in the group, graphic organizers, which are visual devices and representations are effective to teach and improve reading comprehension in these students who are all of different ages. Materna (2007) cited in McKnight (2010), stated that graphic organizers can be used for everyone in all grade levels and they help to stimulate students' attention thanks to their visual nature, and besides to foster students' attention, graphic organizers also enable a long-term memory and synthesis of new information.

Most EFL teachers have to face the lack of interest their students have in relation to reading (Phantharakphong & Pothitha, 2014) and the problem gets bigger in a language they do not manage very well. Something similar happens in this research study and its participants who are students in a computer systems technician program, and their attitude towards reading in the EFL class is not positive due to their low-level of proficiency in English. In view of this, we can then say that the application of graphic organizers can be a positive influence in the students'

attitudes towards reading in an EFL classroom (Mede, 2010). Similar to Mede (2010), Phantharakphong and Pothitha (2014) studied the development of English reading comprehension, and students' attitudes toward reading by using concept maps which is a type of graphic organizer and the results of their study showed that concept maps help to improve students' reading comprehension, oral retelling, motivation and attitudes towards reading and learning English.

In her thesis, Llumiquinga (2012) examined the effect of graphic organizers on EFL learners from an Ecuadorian university that due to the public school system did not learn much English structures or vocabulary. She found that using graphic organizers is an effective strategy to develop reading skill and increase students' level of satisfaction. Similar to Llumiquinga's findings, my research intends to reach significant progress in learners' reading comprehension as well as to make them feel pleased in the classroom, that is to say, to increase their 'satisfaction'.

Another study argues that graphic organizers can be used to improve reading comprehension in students raised in poverty (Merrifield, 2017) and as mentioned in the background and relevance of this research study, the participants in this research study come from low social strata backgrounds, which has limited their contact with the language in the past. As already said it is important to use different strategies for developing a better reading comprehension in EFL learners and even more important when those students are not motivated or live in a difficult context where they face all kinds of difficulties associated with their low social strata backgrounds.

Research on the effects of graphic organizers on improving students' reading skills has also been researched in the Colombian context where it is common to see a lack of reading comprehension skills and the absence of appropriate strategies to read in EFL learners. Gomez (2017) identified some of these difficulties in ninth graders from a state school and she addressed these problems by using graphic organizers to develop her students' reading skills in Content and Language Integrated Learning (CLIL). Gomez's study found that graphic organizers promote reading comprehension and the development of reading strategies. Mahecha, Urrego, and Lozano (2011) developed their research project at a state school too.

They implemented two reading strategies: text coding and double entry organizer and the results showed that those two reading strategies helped students improve their English reading comprehension and self-esteem.

Unlike the context in which Gomez and Mahecha et al. did their researches, Roa (2011) studied the impact of graphic organizers in the reading comprehension of eighth grade students in a private all-girls bilingual school. This study presented many positive results regarding the use of graphic organizers as a reading strategy; for instance, it indicated that graphic organizers improved reading comprehension in students almost any level and any age, graphic organizers also fostered the development of strategic reading by processing information skills, they developed students' metalinguistic awareness, and they provided opportunities to practice memory strategies.

Furthermore, in her study, Barraza (2014) used a computer software called interactive graphic organizers (IGOs) that provided graphic organizing support to improve the level of reading comprehension in a group of engineering students in an EFL classroom. Barraza found that the use of IGOs was effective to improve reading comprehension and also that graphic organizers are interesting and motivating tools for students; Echeverri and McNulty (2010) agree with Barraza when stating that graphic organizers are enjoyable, interesting, important and useful tools to improve reading comprehension. On the other hand, Avila and Gómez (2012) stated that among some reading strategies implemented in 2 elementary EFL courses, graphic organizers were not the most accurate as students considered them to be the more complex in application.

All the previous studies mentioned above have provided useful insight for my research by demonstrating the use of graphic organizers as a reading strategy to improve EFL learners' reading comprehension and by taking into account aspects such as motivation, age, social class, anxiety, attention and working memory as secondary aspects that were affected by the implementation of graphic organizers in the classroom.

## Chapter 5: Methodology

This was a qualitative study centered on classroom-based action research. It was conducted in 2017 from March to September. It was carried out in Fundación Carvajal, an institution located in Santiago de Cali that offers technical courses, including a computer systems technician program. The students in this course came from a low-social stratum from the *Distrito de Aguablanca* which is a large area located on the east side of the city and it is marked by violence, poverty, drugs, and displacement.

This classroom-based action research explored a common problem in a specific context in order to gain understanding, create meaning, and improve educational practices (Burns, 2005) focusing “specifically on the unique characteristics of the population with whom practice is employed and with whom some action had to be taken” (Mertler, 2009, p. 4), this is conducted by the teacher in order to reflect upon and evolve his/her teaching (Chamot, Barnhardt, & Dirstine, 1998); that is to say, to work towards the improvement and more effective outcomes for students by making observations and reflections on classroom practices (Burns, 2010).

Before starting this classroom-based action research study, some important ethical issues were taken into consideration in order to accomplish the requirements for ethical standards that involve human participants in research studies (Burns, 2010). A permission and approval from the institution to develop this study was obtained. Then, the participants were informed about the research and their consent to participate and not to disclose their identities were gotten.

In order to carry out this classroom-based action research a four stages study was planned.

## **Stage 1: Planning**

### *Problem identification*

As it could be observed, students struggled to understand the meaning of words, sentences, and paragraph as they did not know how to organize the information, or to summarize them in order to understand the main ideas of the readings. Thus, their reading comprehension was poor, and so their oral performance. These difficulties were due to the lack of reading strategies and also due to the traditional method of reading in which the teacher helped students to answer comprehension questions; hence, students were not able to go beyond and to have a meaningful reading comprehension process.

From there it was assumed, these groups of students needed to be exposed to activities that foster their capacities and make them feel comfortable and confident when understanding what they read in English. Besides, it was necessary to help them organize information from the readings, and to identify main ideas and supporting details in order to enhance their reading comprehension skills.

### *Problem solution*

Because of this problem it was necessary to find a strategy to supply their need. Taking into account their context, academic research was carried out and it was decided that the strategy to solve this problem could be graphic organizers.

## **Stage 2: Acting**

### *Selection of participants*

One hundred twenty-two participants within the age range of 17-48 were part of the study. These participants belonged to four different groups. Two groups were chosen to be the implementation groups in which graphic organizers were used and two other groups were chosen to be the reference groups in which graphic organizers were not used. Table 1 displays the number of participants of each group and their genders.



Table 1. Number of participants according to their groups and genders

<b>Groups</b>	<b>Total number</b>	<b>Female</b>	<b>Male</b>
Implementation 1	31	18	13
Implementation 2	32	25	7
Reference 1	25	12	13
Reference 2	33	15	18
Total number	121	70	51

*Designing and application of instruments*

Participants from the implementation groups received five hours training on graphic organizers to provide them with sufficient input as well as to show the benefits graphic organizers can offer for reading comprehension. Then, students were asked to structure their own graphic organizers every time they were exposed to the readings studied in class.

From March to September 2017 a total number of fifteen readings (see appendixes 1, 2, 3) either physically or in virtual format were studied in class. For each reading, participants were asked to do a passive reading, then an active reading and finally to structure their own graphic organizers with the relevant information from the texts. After every reading, students had to do oral presentations to explain what they had understood from them. A rubric was designed (see appendix 4) and applied to the four groups to analyze the results and to measure their progress. This rubric was a “coherent set of criteria for students’ work that includes description of levels of performance quality on the criteria” (Brookhart, 2013, p. 4), it examined the content, the organization of information and identification of main ideas.

The table below displays the readings for each session as well as the time spent on them. The participants from the reference groups were given the same

readings and were applied the same rubric, but without the instruction of using graphic organizers.

Table 2. Readings and total number of hours for all sessions in the implementation groups.

Session	Task name	Process of the sessions				
		Silent reading (minutes)	Intensive reading and structure of graphic organizers	Oral presentations (minutes)	Assessing reading comprehension through the rubric	Total of hours (approximately)
1	English nowadays	25	30	60	5	2
2	English in the professional field	25	30	60	5	2
3	Pros of a Career as a Computer Systems Technician	30	30	60	10	2.10
4	Essential Career Information	30	30	60	10	2.10
5	Education and Training Requirements	30	30	60	10	2.10
6	How to Make Your Skills Stand Out	30	30	60	10	2.10
7	Electronic Service Technicians (Household and Business Equipment)	45	30	60	10	2.25
8	Applying for a job	30	30	60	5	2.05
9	Applying for a job #2	30	30	60	5	2.05
10	Hardware verbs	30	30	60	5	2.05
11	How to solve the 10 most common tech support problems yourself	60	45	60	15	3
12	Downloads are taking forever	45	30	60	10	2.25

13	Pop-up ads are appearing on my desktop	60	45	60	15	3
14	My printer won't print	60	45	60	15	3
15	Troubleshooting Common Computer Problems	60	45	60	15	3
Total						36

### **Stage 3: Observing**

#### *Exploring students' perceptions*

Semi-structured interviews were applied to 15 participants to explore their perceptions about the use of graphic organizers as a reading strategy in order to verify whether their perceptions were in accordance with the results obtained from the rubrics, and thus, to enrich the data. This type of interviews is structured and organized, but also open (Burns, 2010), thus, the interviewer could explore in more detail the interviewee responses. This provided not only relevant information related to their motivation and attitude towards reading in English, but it also explained other individual factors that were useful for the analysis of the results obtained from this research study. The interviewees chosen were of different ages and gender as these groups were characterized to have young and older people as well as a great number of females and males. The participants were asked to give their opinion about graphic organizers, how they described the use of them in an EFL classroom, whether they considered this strategy useful or not, and were also asked about the positive or negative effects graphic organizers had on their reading comprehension in order to have a bigger picture of the findings and conclusions (see appendix 14).

## Stage 4: Reflecting

### *Analysis of data*

Finally, once the data was collected, it was analyzed by taking into account the rubrics from students' oral presentations during the fifteen sessions, the different graphic organizers they had structured or created, and the interviews done to some of them. This analysis was carried out through a teacher log since according to Burns (2010) it is exceptionally useful to capture significant reflections and events. So, this teacher log allowed to meticulously analyze students' performance in relation to their reading comprehension, and their feelings. In addition, it also examined the effects of the implementation of graphic organizers as a reading strategy. Hence, the information obtained was triangulated and provided a better insight and a more balanced picture for this research study. Thus, to give a precise description about the effect of graphic organizers on students' reading comprehension.

Table 3. Data collection procedure

STAGES	DESCRIPTION OF THE STAGE
<b>Stage 1: Planning</b>	<ul style="list-style-type: none"><li>• Problem identification and selection of the strategy to solve it.</li></ul>
<b>Stage 2: Acting</b>	<b>Selection of participants</b> <ul style="list-style-type: none"><li>• 122 participants within the age range of 17-48 were part of the study.</li><li>• Two implementation groups.</li><li>• Two reference groups.</li></ul> <b>Designing and application of instruments</b> <ul style="list-style-type: none"><li>• Input (how to make GOs).</li></ul>

	<ul style="list-style-type: none"> <li>• Creation of graphic organizers and oral presentations.</li> <li>• Rubrics to assess Reading comprehension.</li> </ul>
<b>Stage 3: Observing</b>	<p><b>Exploring students' perceptions</b></p> <ul style="list-style-type: none"> <li>• Semi-structured interview was applied to some participants from the implementation groups.</li> </ul>
<b>Stage 4: Reflecting</b>	<p><b>Analysis of data</b></p> <ul style="list-style-type: none"> <li>• Analysis of the results obtained from the rubrics and semi-structured interviews through a teacher log.</li> </ul>

## **Chapter 6: Research findings**

The purpose of this research study was to describe the effect of graphic organizers on learners' reading comprehension. In this chapter, the information obtained will be presented as follows. The first part of the analysis will identify if there was any enhancement in students' ability to recognize main ideas through the use of graphic organizers. The second part will establish if graphic organizers allow students to understand the text organization. Finally, to explore students' perceptions about the effect of graphic organizers in their reading comprehension. It is of great importance to mention that the analysis of the results of this thesis report was carried out through a teacher log.

### **Graphic Organizers and students' reading comprehension**

#### *From session 1 to session 5*

During these first sessions, it was identified that students from the reference groups struggled with the readings (see appendix 1). A constant supervision by the teacher was required. Students tried to understand the readings, but they found those readings to be difficult as they could not recognize the main ideas from the readings. In order to understand the readings; they decided to translate the texts and to copy the whole paragraph. This was not effective since at the moment of reporting what they had understood they just read aloud the paragraphs in English.

Through the analysis of the rubrics, it was evident that students from the reference group 1 (RG1) and the reference group 2 (RG2) did not comprehend the readings and were not able to explain clearly what they had understood from them as they did not identify the relevant information from the texts.

Students from the implementation group 1 (IG1) and the implementation group 2 (IG2) were struggling with the readings in English too; despite the fact they felt insecure about reading in English, they showed a great attitude towards the materials worked in class. According to the rubrics, students repeated the paragraphs from the readings, so they just read aloud; however, graphic organizers

allowed them to recognize more vocabulary since students could perceived isolated words and to distinguish them easily; for instance, they identified some verbs in the first sessions such as: repair, work, create, install and design (see appendix 5). Moreover, they were more motivated and showed a good attitude towards reading in class as graphic organizers were a different and helpful strategy for them to work on the readings.

Table 3. Findings from session 1 to session 5

Groups	Findings
<b>Reference groups</b>	<ul style="list-style-type: none"> <li>• Students had problems to understand the readings.</li> <li>• They translated everything, but they were not able to express their understanding about the readings.</li> <li>• They read aloud without understanding what they were saying.</li> </ul>
<b>Implementation groups</b>	<ul style="list-style-type: none"> <li>• They struggled to understand the readings.</li> <li>• From the observations done it could be perceived that students were more motivated and showed a better attitude towards the readings in English due to the use of graphic organizers.</li> <li>• By using graphic organizers, they started to identify more vocabulary (verbs related to their field of systems).</li> </ul>

*From session 6 to session 10*

Students from the reference groups (RG1, RG2) liked the English class; nevertheless, they did not pay the necessary attention to the readings. Students' performance was low in terms of reading comprehension as they did not identify the main ideas from the readings, neither the supporting details, so the information they presented was not accurate or well organized. They started to think they were not good enough to understand the readings in English. Then, they copied in their notebooks what they considered was important. They were not interested in going through the texts in order to understand them. Therefore, they repeated the same information that were on the readings.

The rubrics here showed that the content presented by the students were basic and without meaning, in other words, students presented irrelevant and inaccurate information from the readings. The way they expressed their ideas about the readings were unclear and misunderstood. These students were strongly demotivated as they felt they were not able to understand the readings neither to report them.

On the other hand, students from the IG2 group were more motivated in the class as they showed a good performance when reporting what was understood from the readings. Thorough the observation, it was possible to see that students from the IG1 group were motivated too, by implementing graphic organizers, they could organize the information in a logical way, the contents they presented were more accurate than before; but, most of them continued reading from their graphic organizers and showed high levels of anxiety. The rubrics then showed that students from the implementation groups understood better the different readings as they could prepare better the information from the readings by using their own graphic organizers, hence they were able to present the main ideas in a logical sequence.

It was also found that most of the women were worried about the esthetic of their graphic organizers, they used more drawings and colors to identify one idea from the other, and therefore, they were able to better differentiate the relevant information from the less relevant. Men tended to summarize more the readings in



their graphic organizers, they organized ideas in a simpler way; so, they could see the precise information needed to understand what they were reading (see appendix 6). Moreover, most students from the two implementation groups categorized the information in a hierarchical way. They were able to start to explain what they had understood from the more general information to the details.

Most students (73%) from the implementation groups could identify better the structure of the texts and thus the ideas from the paragraphs. Since they started to include more essential information to their graphic organizers they synthesized the information and made the understanding easier as well as the memorization of some verbs.

These students from the implementation groups (IG1, IG2) focused more in the readings. They organized the information better and studied what they had structured. Hence, when presenting their understanding of the readings they were able to talk about specific and important aspects from the readings at a basic level. They felt more confident and thereby more motivated. The rubrics applied showed better results in the processing of information, the identification of main ideas and the content was presented in a logical way. Nevertheless, some level of anxiety was identified when reporting the readings.

Since the content of the graphic organizers were more accurate, students were able to interpret them and comprehend the information better. In addition, they started to use many more words to express the main ideas. Also, they could recall information at the moment of presenting what they had understood.

Table 4. Findings from session 6 to session 10

Groups	Findings
<b>Reference groups</b>	<ul style="list-style-type: none"> <li>• Students were not motivated to read in English.</li> <li>• Students tended to read aloud without understanding.</li> <li>• Despite the fact they could identify more vocabulary than before, they did not organize the information in a logical sequence.</li> <li>• They were afraid to report what they had read.</li> </ul>
<b>Implementation groups</b>	<ul style="list-style-type: none"> <li>• They were strongly motivated to read in English by using graphic organizers.</li> <li>• Through the implementation of graphic organizers students were able to identify better the main ideas from the readings.</li> <li>• They started to organize better the information in their own graphic organizers.</li> <li>• The use graphic organizers to synthesize the readings in order to better understand them.</li> <li>• Graphic organizers allowed students to make connections between ideas.</li> <li>• Most women use draws and colors to identify better the important information in their graphic organizers.</li> <li>• Through the use of graphic organizers most men tended to summarize more the readings.</li> <li>• Students could recall information easily by using graphic organizers.</li> </ul>

*From session 11 to session 15*

Although there were many students in the reference groups who tried to work on the readings with the intention to understand them, there were others who did not commit to the activities that involved reading in English. For instance, in the RG1 group students were not motivated at all with reading in English. Most of them continued struggling at the moment of understanding the readings, for them, it was a difficult task; however, they started to understand the main ideas from the texts. Students from the RG2 group were a little more motivated. Nonetheless, the results obtained by analyzing their performance through the rubric were not positive as the majority of them received a low grade when demonstrating the understanding of the readings.

In the last sessions, students from the IG2 group made better graphic organizers (see appendix 7, 8) that depicted great information and that allowed them to report their understanding of the readings to the extent that they added extra information when reporting the readings. Also, through observation done, it was perceived that the pronunciation of the words and the formation of utterances were more accurate, they just had few mistakes in pronunciation; therefore, taking into account the observations and the results obtained from the rubrics, as well as some students' perceptions, it could be stated that graphic organizers improved oral skills in those students. In this group in which most of them were women it was evident an improvement of their reading comprehension. Furthermore, five older women between 40 and 47 year-old showed the most significant progress in this research study.

Students from the IG1 group started to identify the relevant information from the readings and began to take into consideration the details of the readings and make stronger relationships between the sentences. When reading they were able to recognize the information that could be useful for the understanding of what they had read. In the IG1 group, twelve students showed the most significant progress compared to the others when understanding the readings. Those twelve students were young males and females, they felt confident at the end of the course and

extremely motivated towards reading in English and with the English class in general. Unlike the IG2 group, most of the students from the IG1 group showed less confidence at the moment of presenting their understanding of the texts orally.

In the last sessions students prepared more adequate graphic organizers with the use of images and accurate information. Hence the content of what they reported from the readings were well worked and they included even more information. The latest readings became easier to understand despite the fact they were more complex and difficult to understand. Most of the students understood well the readings and were able to talk about them in a very basic way, they identified the main ideas and also the details from the readings. Also, it could be observed that students understood what their classmates were explaining.

The analysis of the rubrics showed that some students from the implementation groups could organize the information better than before, and presented it in a logical sequence, the main ideas and details were well identified, they were confident at the moment of demonstrating what they had understood. Also they were able to recall information from the readings when necessary. Although most of them were not able to get to their own conclusions from the readings, they showed a better understanding than the beginning of this course.

Table 5. Findings from session 11 to session 15

Groups	Findings
<b>Reference groups</b>	<ul style="list-style-type: none"> <li data-bbox="699 1373 1385 1465">• Students were still having difficulties to understand the readings.</li> <li data-bbox="699 1486 1385 1684">• Students from the RG1 group were not motivated at all when reading in English as they felt they were not able to comprehend the texts.</li> <li data-bbox="699 1705 1385 1854">• Students from the RG2 were more motivated; however, most of them did not show a deep understanding of the readings.</li> </ul>

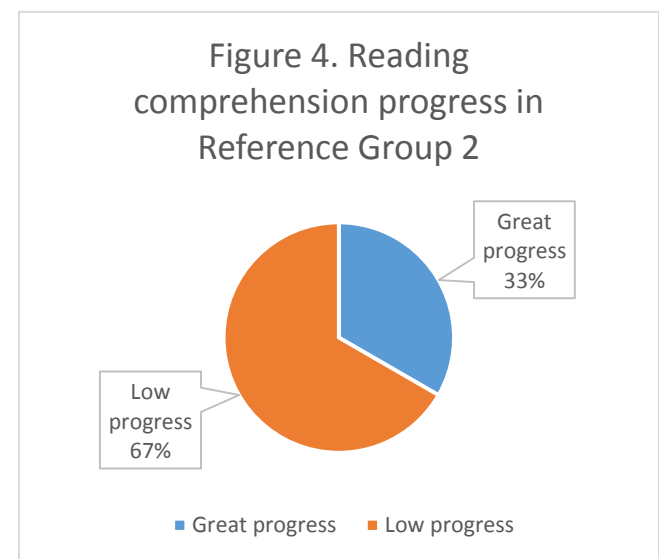
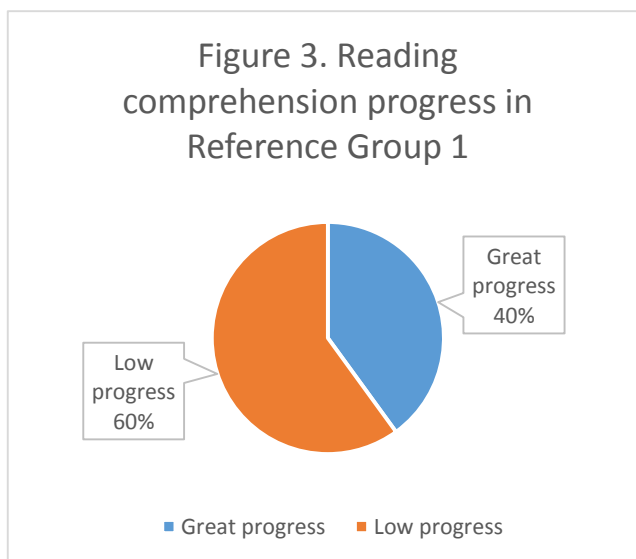
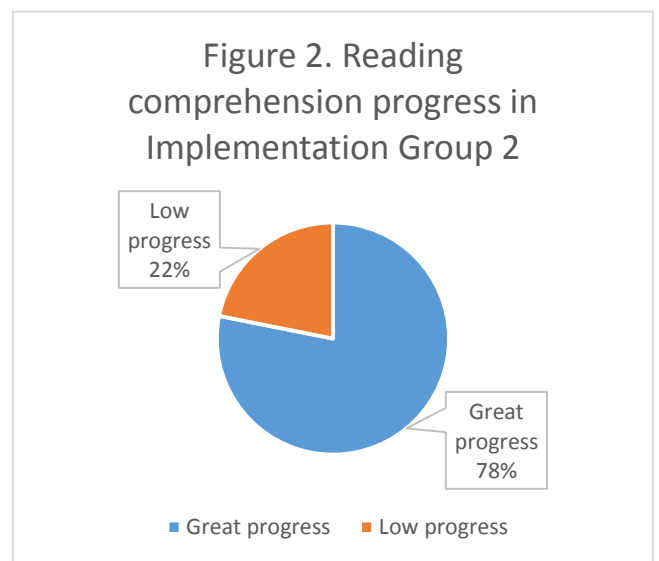
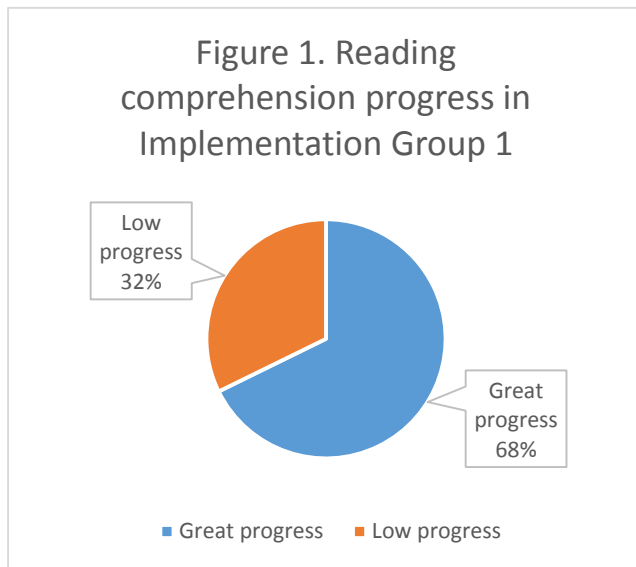
- 
- It was possible to observe that when reporting the understanding of the readings, they were nervous and anxious.

---

**Implementation groups**

- They improved the quality of their graphic organizers.
  - They increased their repertoire.
  - Students were more confident than before when talking in English about the readings.
  - Some students could produce their own utterances when presenting the understanding of the readings through their graphic organizers.
  - Graphic organizers allowed them to organize the information better.
  - They presented ideas in a logical sequence when placing them in their graphic organizers.
  - They identified the main ideas and details from the readings.
  - They showed an improvement in their reading comprehension by using graphic organizers.
  - Older women showed the greatest improvement in the development of their reading comprehension skills in this research study.
-

Figure 1, Figure 2, Figure 3, and Figure 4 show the performance of students from the implementation groups and reference groups in relation to the results obtained from the rubrics. Students' performance was divided in two categories: great progress and low progress in order to identify the effect of graphic organizers on the students from the two implementation groups which used graphic organizers as a reading strategy.



In conclusion, the collected data revealed that most students from the implementation groups (73% of students) showed great progress in their reading comprehension skills, and outperformed those from the reference groups (36% of students showed great progress). Graphic organizers allowed students from the implementation groups to establish relations and organization of ideas. Furthermore, through graphic organizers, students explained the readings more easily. They produced more understandable utterances at the moment of presenting what they had understood from the readings and they could recall information and vocabulary when needed. The use of graphic organizers also increased their creativity, since they used different designs to organize the information (see appendix 9, 10, 11, 12).

The IG2 group showed better attitudes and motivation in the class and also in the creation of their graphic organizers. Students from the IG2 group outperformed students from the IG1, but they both outperformed the two reference groups.

On the other hand, students from the reference groups improved very little their reading comprehension. Since they struggled during the whole course with the readings, it made them feel demotivated when dealing with these texts in class.

### **Students' perceptions**

The application of semi-structured interviews provided a bigger picture of the effects this strategy had on the students from the implementation groups. For instance, some participants from the implementation groups were asked about their opinions regarding graphic organizers and they answered:

- “...es una estrategia muy creativa... y muy asertiva...”  
[... is a creative strategy...and very assertive...]<sup>1</sup>

Students believed the use of graphic organizers was a good strategy, creative and assertive that allowed them to be in more contact with the readings and hence to better understand them. Others answered that they found this strategy useful

---

<sup>1</sup> Author's own translation November 3<sup>rd</sup>, 2017

since graphic organizers helped them to summarize, to organize, and to remember ideas and information from the readings.

- “...es un excelente método de aprendizaje porque en informaciones tan largas te ayuda a resumirlas, a organizar las ideas, a sintetizarlas y a recordarlas con mayor facilidad...”

[...it is an excellent learning method since it helps you to summarize, organize, synthesize, and memorize ideas from large information in an easier way...]<sup>2</sup>

Graphic organizers were a practical strategy since through their implementation students could understand the text and were able to say something about it. Some of them said they liked graphic organizers as they could understand the idea of the readings faster.

- “muy prácticos porque por medio de ellos podemos comprender un texto en inglés y expresar la idea más rápido”

[...very practical since through them we can comprehend a text in English and we can express the idea faster ...]<sup>3</sup>

All the participants that were interviewed agreed that graphic organizers were a strategy that helped to organize the information and to highlight the most important ideas from the readings and also its visual characteristics aided to the comprehension.

- “...es un facilitador...los organizadores nos ayudan a facilitar... las clases de inglés ya que las hace más prácticas...”

[... it is a facilitator...the organizers help us to facilitate...the English classes as they make the class more practical...]<sup>4</sup>

Through the use of graphic organizers students started to like the English classes and they felt comfortable. They uttered they could understand the different topics worked in class and they felt their level of English increased. Also it was mentioned in some interviews that graphic organizers provided a different dynamic in the



classroom. They stated that the use of graphic organizers changed the routines of the classes.

- “...es una estrategia para salir de la rutina de nuestras clases...”  
[...it is a strategy to get out of our class routine ...]<sup>5</sup>

Graphic organizers helped them to improve their comprehension and interpretation of the readings by relating the information with pictures, drawings, and so forth. Others said they would use this strategy in everyday activities since it was a dynamic and motivational strategy. Some stated that they did not know this strategy would work and that the organization of ideas was challenging, but later they believed they would recommend this strategy to improve reading skills.

- “...yo si lo recomendaría a otras personas para que por medio de este método...les sea fácil...la comprensión de textos en inglés...”  
[...I would recommend it to other people because through this method...  
...the comprehension of the texts in English... is easier]<sup>6</sup>

From the answers given by the participants, it was possible to identify some of the effects that graphic organizers had on them in relation to reading comprehension, oral skills, and motivation towards reading in English and others.

Some students said that graphic organizers helped their reading comprehension, their pronunciation, and to enjoy the English class.

- “...me ayudaron mucho a la comprensión de los textos, para la pronunciación también...”  
[...they helped me much to the understandings of the texts, also for the pronunciation...]<sup>7</sup>
- “...el efecto es muy positivo...porque yo entiendo y comprendo más fácil un texto en inglés...”  
[...the effect is positive...because I easier understand and comprehend a text in English...]<sup>8</sup>

Students stated that the use of graphic organizers improved their reading comprehension as they could organize their ideas better. By using this graphic organizers, they felt they increased a little their proficiency level in English. They also asserted that this strategy made less complicated the understanding. They stated they used few words to express an idea and they focused more in the important facts of the readings to be able to explain what was understood.

When talking about anxiety, they indicated they felt nervous at the moment of reporting orally the readings; nevertheless, graphic organizers made it easier to explain their understanding of the readings. Others said it helped them improve their confidence and attitudes towards English.

- “me sentí más segura al usar esta estrategia ya que por medio de sus representaciones graficas pude leer y organizar mejor las ideas...”  
[...I felt more confident at the moment of using this strategy since by its graphic representations I could read and organize better the ideas...]<sup>9</sup>
- “...Yo me sentía nerviosa de todas maneras, pero era más fácil usar la estrategia de los mapas para poder explicarlo...”  
[...I felt nervous anyway, but it was easier to use the strategy of mapping to explain...]<sup>10</sup>
- “...al momento de yo exponer ciertas lecturas...utilizando los organizadores gráficos...eres más seguro y rápido...”  
[...at the moment to present certain readings...using the graphic organizers...you are more confident and faster...]<sup>11</sup>

Students started to feel they could understand the readings in English more easily way. They felt they could learn and speak in English and acquire the reading skill by having control of the information.

- “...el inglés se me dificultaba bastante... pero con la ayuda de estos organizadores gráficos se me ha facilitado mucho...”

- [...English was really difficult for me...but with the help of these graphic organizers it has become easier...]<sup>12</sup>
- “...tu puedes ejercer mayor control y acordarte de esos elementos...”  
[...you can have more control and remember those elements...]<sup>13</sup>

It can be concluded from the interviews that graphic organizers were a reading strategy that increases students' reading comprehension skill as graphic organizers allowed them to organize, summarize, and recall information from the readings. Also, their motivation increased since they considered graphic organizers as an alternative to change the monotony of the classes and to make the learning process easier. Moreover, graphic organizers helped them to increase their confidence to present orally what they had understood from the readings; thus, the improvement of their oral skills and the reduction of anxiety levels. In addition, this strategy helped them to have more control of the information.

The interpretation of the collected data will be summarized in the following table.

Table 6. Triangulation process

	Categories	Observations	Results	Interviews
USE OF GRAPHIC ORGANIZERS TO ENHANCE READING COMPREHENSION	Reading comprehension	<p>Graphic organizers helped students to better understand the structures of the texts and they could identify main ideas in order to express them orally.</p> <p>Students started to synthesize and organize relevant and most important information from the readings.</p> <p>They started to use connectors to link ideas better.</p>	<p>Better organization of the information. Information presented in a logical sequence.</p> <p>Main ideas and details were well identified and developed.</p> <p>Development oral skills in a certain level.</p>	<p>Students felt they improved their reading comprehension skill.</p> <p>Graphic organizers allowed them to summarize and organize the information and also to improve their oral skills.</p>
	Individual factors	<p>Students showed high levels of motivation as they could achieve goals easily. It is linked with the attribution of success.</p> <p>They were able to recall information (working memory) as the visual characteristic of</p>	<p>Better attitudes and motivation in the class.</p> <p>Students could recall information and vocabulary when needed.</p> <p>They were more confident</p>	<p>Students stated they could recall information from the readings.</p> <p>Their motivation increased since they considered graphic organizers as an alternative to change the</p>

		<p>graphic organizers helped them to memorize and store information better.</p> <p>They managed better the levels of anxiety when reporting their understanding of the readings as they were confident about what they were saying.</p>	<p>at the moment of presenting.</p>	<p>monotony of the classes.</p> <p>They raised confident to present orally what they had understood from the readings.</p>
	Social factors	<p>Students' social background influences their reading skill in English as most of them came from public schools and did not have much exposure to the target language.</p>	<p>Their reading comprehension were almost in an initial point due to their social background.</p>	<p>They stated they have never been exposed to a different reading strategy like graphic organizers before. ...</p>
		<p>Students from different ages were engaged with the use of graphic organizers. Younger students really liked this strategy for reading.</p>	<p>Despite the fact all the students liked to use graphic organizers, the older ones took more advantage of this strategy as they showed</p>	<p>Younger students said they liked the strategy as it was new. Older learners stated they felt more confident and could learn</p>

			greater progress.	faster and easier.
		Women use drawings and colors to identify better the important information.  Men tended to summarize more the readings.	Women performed better than men at the moment of reporting what they had understood.	Men and women agreed that the use of graphic organizers helped to improve their reading comprehension skill and that it was a useful strategy.

During the implementation, as a result of the observation and analysis process done, it was necessary to give students, of the implementation groups, additional time to assimilate and understand this reading strategy, and also additional time to structure their graphic organizers since they started to include more relevant information and to organize better the ideas. This change promoted a better teaching and learning practice in the classroom.

## **Chapter 7: Analysis and discussion**

This research study aimed to describe the effect of graphic organizers on students' reading comprehension from a computer systems technician program at Fundación Carvajal (Cali-Valle del Cauca). The data collected showed that graphic organizers improved students' reading comprehension, therefore the results obtained need to be analyzed and discussed.

### **Effects of Graphic organizers**

In students' reading comprehension process, graphic organizers helped them to pay attention to the links of the texts and to decide what was important and to recognize how the ideas were related or connected. Students organize and reorganize the information in their graphic organizers, so when creating them, they could identify the main ideas and the text organization which allowed them to retain more information and understand better the readings. Hence, graphic organizers help students to process information and organize what is important, to identify the main ideas and supporting details as well as to make decisions about the best way to structure that information (Ellis, 2004). The findings of the study are supported by Suzuki (2006) who stated that graphic organizers are effective when students are asked to find key points and note information in the text. Also, these results were in line with the findings obtained by Gomez (2017) who indicated that graphic organizers allowed learners to analyze the texts, to select important information and to organize the content, and thus developing higher thinking skills to construct knowledge.

It seems from students' perceptions that when implementing graphic organizers to read in English it is possible to organize the information better and to identify the most important information from the less important;

- “es una gran estrategia porque nos ayuda a organizar... la información de una manera más simple y eficaz”

[...it is a great strategy because it helps us to organize...the information in a simpler and more effective way...] <sup>14</sup>

- “son muy útiles porque te ayudan a recalcar lo más importante de un tema... resalta lo que necesitas”

<sup>2</sup>[...they are very helpful because they help you to highlight the most important information of a topic...they highlight what you need...] <sup>15</sup>

To improve the learning context, it was necessary to provide these learners with a different strategy to benefit their learning process and to make it easier for them. Graphic organizers proved to be the solution to help students understand the readings they had to work on.

### **Taking into consideration individual factors**

Horwitz, Horwitz, and Cope (1986) proposed that a specific anxiety construct which they called Foreign Language Anxiety is responsible for students' uncomfortable experiences in language classes. Anxiety is the subjective feeling of tension, apprehension, nervousness, and worry (Spielberger, 1983, cited in Horwitz, Horwitz, & Cope, 1986). Since reading in English and understand what the readings are about was a difficult task for these students, high levels of anxiety could be perceived.

By observing things as they occur, we are better able to obtain a more accurate picture and interviewing participants afterwards, help us to check the accuracy of the impressions gained through observation. For instance, based on what was observed, students showed high levels of anxiety when presenting their understanding about the readings. By using graphic organizers, students from implementation groups started to handle better this levels of anxiety. Regarding the interviews, some students uttered that:

---

<sup>2</sup> Author's own translation November 3<sup>rd</sup>, 2017



- “...el inglés se me dificultaba bastante... pero con la ayuda de estos organizadores gráficos se me ha facilitado mucho...”  
[...English was really difficult for me... but with the help of these graphic organizers, it has been easier...]<sup>16</sup>
- “...tu puedes ejercer mayor control y acordarte de esos elementos...”  
[...you can exert more control and remember these elements...]<sup>17</sup>
- “...al momento de yo exponer ciertas lecturas...utilizando los organizadores gráficos...eres más seguro y rápido...los vas a decir con mayor fluidez...”  
[...at the moment of presenting certain readings...by using graphic organizers...you are more confident and faster...you are going to present in a more fluent way...]<sup>18</sup>

On the other hand, students from the reference groups continued presenting high levels of anxiety. As anxiety is linked with learners' expectations for success or failure, it was analyzed that students from reference groups put less effort into reading in English as they believed that no matter how hard they tried, they would still fail. Therefore, teachers must place more emphasis on their students' learning efforts rather than blaming their lack of ability.

Success and failure can influence academic motivation, learning achievement, and learning expectations (Thepsiri & Pojanapunya, 2010). Due to these reasons, students from implementation groups who experienced success in their reading comprehension, were strongly motivated when dealing with the readings worked in class. As they achieved the goal of understanding the readings, their expectations towards English were high. The contrary effect happened on those who experienced failure in the reference groups when trying to understand the readings and to orally report them.

Although the focus of this research study was to describe the effect of graphic organizers on students' identification of main ideas and text organization, from the data collected through the observations and interviews it can be said that graphic organizers enhanced students' attitudes and motivation. Motivation was evident as students showed enthusiasm in the different sessions, they participated actively, and put great effort to create their own graphic organizers. There are a variety of

statistical test procedures designed for collecting data and measuring students' attitudes and motivation. There are also a wide variety of excellent tools available to gather data on student perceptions. Qualitative analysis tools, such as student interviews, provide rich data that can reveal new insights and allow for flexibility and clarification of students' ideas (Slater et al. 2011). Attitudes cannot be observed directly but are demonstrated through actual behavior, students' opinions and responses reveal attitudes about both people and their language. Some ways to know about other people attitudes can be through questions; by asking or by observing reaction and by observing behavior. In this way, the interviews revealed that students' attitudes and motivation augmented. For instance:

- “...es una estrategia muy creativa... y muy asertiva...”  
[... is a creative strategy...and very assertive...]<sup>19</sup>
- “...es una estrategia para salir de la rutina de nuestras clases...”  
[...it is a strategy to get out of our class routine ...]<sup>20</sup>
- “...una buena estrategia para todas las clases...porque son clases más prácticas...porque los jóvenes quieren siempre algo más práctico, algo más nuevo...”  
[...a good strategy for the all classes...because the classes are more practical...because young people always want something more practical and new...]<sup>21</sup>

This result was parallel with the observation done by Tang (1992) who explained that the use of graphic organizers is recommended not only as support to teach reading in the English language, but also for the positive attitude the students show when using them. Also, Berraza (2014) helps to support this finding by mentioning two main strengths from the use of graphic organizers for reading comprehension, he claims graphic organizers are interesting and motivating tools for students.

As it was possible to observe in the implementation groups, students improved their capacity to recall information from the readings by using graphic organizers. Graphic organizers helped students internalize what they were reading. Also, as graphic organizers made students create mental structures, it was useful to support them in remembering and connecting information. It can then be said that graphic organizers help students' working memory. For instance, Grabe (2009) stated that graphic organizers enhance recall of information and promote comprehension of texts. In order to reaffirm this finding, students claimed in the interviews that:

- "...es un excelente método de aprendizaje porque en informaciones tan largas te ayuda a resumirlas, a organizar las ideas, a sintetizarlas y a recordarlas con mayor facilidad..."  
[...it is an excellent learning method since it helps you to summarize, organize, synthesize, and memorize ideas from large information in an easier way...]<sup>22</sup>

### **Social factors and the use of graphic organizers**

During this research study was possible to analyze the influence that social factors had on students' reading comprehension. For instance, the effects of social class status are not abstract but strongly affect the lived experiences of participants in language education (Vandrick, 2014). Students from this computer systems technician program came from low social strata from the Distrito de Aguablanca. According to Crowe, Connor, and Petscher (2009) children who live in poverty often begin school with weaker language and literacy skills. Therefore, it could be stated that these students' English performance was affected as well as their reading comprehension skill due to the great disadvantages they had in this context. Through the analysis of the collected data it was perceived that students lacked background knowledge, which means that students' knowledge about English was little, so their reading comprehension was altered. However, the implementation of graphic organizers had an effect on their reading comprehension.

Slavin (2011), mentioned in Gorjian et al. (2015), stated that visual learning is one of the most effective methods for teaching comprehension skills to students of all ages. This assertion supports the findings obtained from the analysis of the rubrics and interviews, as it was clearly observed that young and old students enhanced their identification of main ideas and text organization by the use of graphic organizers. It could then be concluded by citing Roa (2011) that graphic organizers is a reading strategy that supports and enhances the reading comprehension process in students almost any level and any age.

Corpas (2013) said female students understand better the readings than males. It is due to the fact that they can get specific and general information, understand textual structure and deduce meaning from the context. The findings of the study revealed that women performed better than men since they put more effort on structuring their graphic organizers and use more details to support the main ideas. It can be observed how a female student organized her ideas by including some details that allowed her to explain better her understanding (see appendix 13). Also she includes a reflection at the end of the graphic organizer in order to have a bigger picture of the reading.

## **Chapter 8: Conclusions, recommendations, and limitations**

### **Conclusions**

As teachers, we must provide our students with strategies in order to make their learning process easier and meaningful. In view of this, in this research study it was essential to give students the opportunities to develop their reading comprehension skill through the use of graphic organizers. Accordingly, to answer the research question: What is the effect of graphic organizers on students' identification of main ideas and text organization? This study identified that graphic organizers enhanced these students' reading comprehension since "these tools allowed the learners to analyze the texts, to select important information and to organize the content...to construct knowledge" (Gomez, 2017, p. 65) that is to say that graphic organizers helped students to recognize the main ideas from the readings. After examining the effect of graphic organizers on these students, this study found that this reading strategy was very useful to organize the information, to summarize ideas, and also to give a visual display of the reading that leads to a better understanding of the text organization. Furthermore, students could recall information and vocabulary when needed, as graphic organizers help to remember what have been read in long-term memory (Rang, 2011).

Results so far have been very encouraging since graphic organizers make the understanding of the readings easier and help students to enhance their reading comprehension skills. Students stated that the use of graphic organizers augment their reading comprehension skills as they helped to summarize, organize, understand, and remember the ideas and information easily. According to students' perceptions, it was easier to extract the most important ideas from the text and structure them in a graphic organizer in order to understand better the readings.

Enhancing students' reading skills is a difficult task in a context such as the one in which the current study was carried out. However, these students from low social strata who have a low proficiency level in English are likely to really improve their reading comprehension skills by using graphic organizers.

This classroom-based action research has helped me to understand that students can have great progress as long as the teacher commits with their learning process and is able to identify the different issues in the classroom in order to address them with a proper solution, and hence, to enrich classrooms experiences. Regarding graphic organizers, future work is required to refine the instruction of graphic organizers to enhance students' reading comprehension skills and also their oral performance.

## **Recommendations**

Based on my research and findings, I would like to suggest the following for further research:

- Considering the fact that these students are IT orientated, the use of computer graphic organizers might give them a better and meaningful learning experience in the EFL class.
- Students should be given more training of how to structure graphic organizers as well as to have great deal of examples in order to make them feel more confident when doing or preparing their own.
- EFL teachers should have deeper training in graphic organizers to have better results when implementing this tool as a reading strategy.
- Further research should focus on the effect of graphic organizers on oral skills.
- Teachers should do observations in every session where graphic organizers take place. This could help to enrich findings.
- Further research should also consider to incorporate graphic organizers in subjects such as math, science, arts, and so forth.
- Teachers should give students time with their graphic organizers at home with the intention to give them the opportunity to apprehend the information they select and thereby to be more successful at the moment of talking about what they have understood.

## **Limitations**

When implementing graphic organizers for reading comprehension there could be some limitations teachers may encounter. For instance, students' learning styles. Some students may not be visual learners; hence this strategy may not suit their learning style. Moreover, the course design has many other different activities and contents the teacher must follow and has to work on. Therefore, the time of intervention of graphic organizers is reduced. Another limitation is students' English level and thereby students reading comprehension level. Finally, the complexity of the readings that may cause students anxiety and demotivation as they are able to deal with those kinds of readings.



## References

- Al Ghabra, H. (2015). *The influence of gender and age in SLA* (Master's thesis). University of Debrecen.
- Alhasani, H., Wan, F., & Masoof M. (2017). The effect of flipped classroom with peer instruction on ESL students' reading comprehension and engagement. Paper presented at the International Conference ICT, Society, and Human Beings, Malaysia.
- Avila, J., & Gómez, N. (2012). Improving reading comprehension skills through reading strategies used by a group of foreign language learners. *Revista Palabra*, 1, 18-31.
- Barraza, J. V. (2014). Using interactive graphical and technological strategies for EFL reading comprehension: A case study involving engineering students. *Colombian Applied Linguistics Journal*, 16(1). 29-39.
- Bavizade, K., Gorjian, B., Khoshakhlagh, S.(2015). Using discourse structure-based graphic organizers in developing efl learners' reading comprehension. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 8(4), 67-79.
- Borges, M., Wen, Z., & MacNeil, A. (2015). *Working memory in second language acquisition and processing*. Toronto: Bristol
- Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. Virginia: ASCD
- Broughton, G., Brumfit, C., Flavell, R., Hill, P., & Pincas, A. (2003). *Teaching English as a foreign language*. London: Routledge.
- Burns, A. (2010). *Doing action research in English language teaching*. New York: Rouledge.

Byram, M., Gribkova, B., & Starkey, H. (2002), *Developing the Intercultural Dimension in Language Teaching*. Council of Europe.

Chamot, A.U., Barnhardt, S., & Dirstine, S. (1998). Conducting action research in the foreign language classroom. Paper presented at the northeast conference, conducting action research, New York: National Capital Language Resource Center.

Corpas, M. D. (2013). Gender differences in reading comprehension achievement in English as a foreign language in Compulsory Secondary Education. *Tejuelo*, 17, 67-84.

Crowe, E., Connor, C., & Petscher, Y. (2006). Examining the core: Relations among reading curricula, poverty, and first through third grade reading achievement. *Journal of School Psychology*, 47(3), 187-214.

Dornyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge: Cambridge University Press.

Echeverri, L.M., & McNulty, M. (2010). Reading strategies to develop higher thinking skills for reading comprehension. *Profile*, 12 (1), 107-123.

Egan, M. (1999). Reflections on effective use of graphic organizers. *Journal of Adolescent & Adult Literacy*, 42(2), 641-645.

Ellis, E. (2001). *Content enhancement series: The LINCing routine*. Lawrence, KS: Edge Enterprises.

Ellis, E. (2004). Q&A: What's the big deal about graphic organizers? Retrieved from <https://mcsold1.monet.k12.ca.us/Academics/el712/Graphic%20Organizers/Q%20and%20A%20about%20G%20O.pdf>

Ellis, E., & Howard, P. (2005). Graphic organizers: power tools for teaching students with learning disabilities. *Graphic Organizers and Learning Disabilities* 1, 1-5.

Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford university press.

Eton, F. Churchill, Jr. (n.d.). *The role of working memory in SLA*. Retrieved from <https://www.tuj.ac.jp/tesol/publications/working-papers/vol-14/churchill.html>

Gardner, H. (2006). *Multiple intelligences: New horizons in theory and practice*. New York: Basic Books.

Gardner, R. C. (2001). Integrative motivation: Past, present and future. Retrieved from [publish.uwo.ca/~gardner/docs](http://publish.uwo.ca/~gardner/docs).

Gomez, C. (2017). *Developing reading comprehension through graphic organizers in CLIL* (Master's thesis). Universidad de La Sabana, Chía, Colombia.

Grabe, W. (2009). *Reading in a second language: Moving from theory and practice*. New York: Cambridge University Press.

Grabe, W., & Gardner, D. (1995). Discourse analysis, coherence, and reading instruction. *Lenguas Modernas*, 22, 69–88.

Hakuta, K., Bialystok, E., & Wiley, E. (2003). Critical evidence: a test of the critical-period hypothesis for second-language acquisition. *Psychological Science*, 14(1), 31-38.

Horwitz, K. Horwitz, M. Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70, (2), 125-132.

Huang, Y., & Hong, Z. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. *Education Tech Research Dev*, 64, 175-193.

Jalilifar, A. (2010). The effect of cooperative learning techniques on college students' reading comprehension. *Computers*, 38, 96-108.

Jiang, X. (2012). Effects of discourse structure graphic organizers on EFL reading comprehension. *Reading in a Foreign Language*, 24 (1), 84-105.

Johnson, J. Newport, E. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of ESL. *Cognitive Psychology*, 21, 60-99.

- Karizak, A.F. & Khojasteh, L. (2016). The effect of three kinds of reading strategies on EFL learners' reading comprehension and gender difference using think-aloud protocol. *International Journal of Applied Linguistics & English Literature*, 5(5), 6-14.
- Lika, M. (2017). Teaching reading comprehension strategies. *Academic Journal of Business, Administration, Law and Social Sciences*, 3(1), 196-204.
- Liu, P. L., Chen, C. J., & Chang, Y. J. (2010). Effects of a computer-assisted concept mapping learning strategy on EFL college students' English reading comprehension. *Computers & Education*, 54, 436–445
- Llumiquinga, M. (2012). *The use of graphic organizers to improve reading comprehension skills with students of i-ii intensive courses at espe – sangolquí – Ecuador, semester September 2010 – February 2011*(Master's thesis). Quito.
- Lopera, S. (2012). Effects of strategy instruction in an EFL reading comprehension course: A Case Study. *Profile*, 14(1), 79-89.
- Mahecha, R., Urrego, S., & Lozano, E. (2011). Improving eleventh graders' reading comprehension through text coding and double entry organizer reading strategies. *Profile*, 13(2), 181-199.
- McKnight, K. (2010). *The teacher's big book of graphic organizers*. San Francisco: Jossey-Bass
- Mede, E. (2010). The effects of instruction of graphic organizers in terms of students' attitudes towards reading in English. *Procedia Social and Behavioral Sciences*, 2, 322–325
- Merrifield, C. (2017). *Improving reading comprehension: for children living in poverty in a Tier 3 response to intervention group* (Master's Thesis). University of New York.
- Mertler, C. (2009). *Action research: teachers as researches in the classroom*. Los Angeles: Sage
- Nosratinia, M., & Mohammadi, E. (2017). The comparative effect of teaching metacognitive strategies and collaborative strategic reading on EFL learners'

reading comprehension. *International Journal of Applied Linguistics & English Literature*, 6(3), 158-167.

Öztürk, Ö. (2012). The effects of graphic organizers on reading comprehension achievement of EFL Learners. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 32, 37-45.

Parker, C. (2007). 30 Graphic organizers for reading. USA: Shell Education

Phantharakphong, P., & Pothitha, S. (2014). Development of English reading comprehension by using concept maps. *Procedia Social and Behavioral Sciences*, 116, 497-501.

Rang, K. (2011). Which reading strategy is more helpful for EFL readers, using graphic organizers or enhancing input? *The Journal of Asia TEFL*, 8(4), 111-133.

Roa, M.A. (2011). *Making connections: impact of graphic organizers in reading comprehension and summarization* (Master's thesis). Universidad de la Sabana, Chía, Colombia.

Robinson, P., & Mackey, A. (2012). Attention and awareness in second language acquisition, In Susan Gass and Alison Mackey (Eds.), (2012). *The rutledge handbook of second language acquisition*, (pp. 247-267). New York: Routledge.

Shabani, M. (2017). Study of the effect of dynamic assessment and graphic organizers on EFL learners' reading comprehension. *Journal of Language Teaching and Research*, 8(3), 548-555.

Slater, S.J. Slater, T.F. Bailey, J.M. (2011). *Discipline-Based Science Education Research: A Scientist's Guide*. New York: Freeman.

Stoicovy, C. (2004, April). Using retelling to scaffold English language learning for pacific island students. *The Reading Matrix*, 4 (1). Retrieved from <http://www.readingmatrix.com/articles/stoicovy/>

Sungatullina, D. (2016). Metacognitive awareness of TOEFL reading comprehension strategies. *SHS Web of Conferences*, 26, 1 – 8. DOI: 10.1051/shsconf/20162601046

Suzuki, A. (2006). Differences in reading strategies employed by students constructing graphic organizers and students producing summaries in EFL. *JALT Journal*, 34(1), 416-431.

Tang, G. (1992). The effect of graphic representation of knowledge structures on ESL reading comprehension. *Studies in Second Language Acquisition*, 14 (2), 177-195.

Taqi, H., & Al-Nouh, N. (2014). Effect of group work on EFL students' attitudes and learning in higher education. *Journal of Education and Learning*, 3 (2), 52-65.

Thepsiri, K., & Pojanapunya, P. (2010). Science and engineering students' attributions for success and failure in the EFL classroom. *The Journal of Asia TEFL*, 7(3), 29-57.

Tomlinson, C. A. (1999). *Differentiating instruction: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.

Trabasso, T., & Bouchard, E. (2002). Teaching readers how to comprehend text strategically. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 176–200). New York: The Guilford Press.

Vandrick, S. (2014). The Role of Social Class in English Language Education. *Journal of Language Identity & Education*, 13(2), 85-91.

Weiner, B. (1992). *Human motivation: Metaphors, theories, and research*. London: Sage.

Weiner, B. (1994). Integrating social and personal theories of achievement striving. *Review of Educational Research*, 64(4), 557-573.

Zhussupovaa, R., & Kazbekovab, M. (2016). Metacognitive strategies as points in teaching reading comprehension. *Procedia - Social and Behavioral Sciences*, 228, 593-600.

# APPENDIX



## **Appendix 1**

### **Some readings from session 1 to session 5**

#### **English nowadays**

Nowadays, it is very important that a person is competent when it comes to the work sphere. This includes the capacity to communicate and perform different tasks by using a foreign language. English is a widespread language that allows and fosters the interaction and good relationships between nations, and therefore, enterprises. This is why it is essential to enhance the learning process for the future systems technicians so they can understand and cooperate not only in their social environment, but also in their work environment.

#### **Essential Career Information**

If you think that a career as a computer systems technician is something that you are interested in, you will need to be prepared to work with people as well as computers. Depending on your exact job title and assigned duties you may be responsible for a wide range of responsibilities. For example, you may be responsible for using diagnostic software programs to discover the causes of computer hardware problems. You may also be in charge of the installation, repair, cleaning and modification of all software and hardware systems in the company network.

If your career focuses on systems management, you may be referred to as a network or systems administrator. This position requires that you know how to design, install and support a firm's computer systems. In this case, you will also be responsible for the upkeep and maintenance of wide-area-and local-area networks, as well as Internet and intranet systems.

Salary Information: The average salary for a computer systems technician will vary based on the exact responsibilities that are assigned. For example, computer network support specialists earned an average of about \$66,000 in 2014, according to the BLS. In the same year, professionals who worked in network and computer systems administration averaged about \$80,000. The BLS predicted that computer support specialists occupations would see a 17% increase in employment between 2012 and 2022.

Retrieved from:

[http://learningpath.org/articles/Computer\\_Systems\\_Technician\\_Career\\_Profile.html](http://learningpath.org/articles/Computer_Systems_Technician_Career_Profile.html)

## Appendix 2

### Some readings from session 6 to session 10

#### How to Make Your Skills Stand Out

If you are looking to make your skills stand out to potential employers in a field that has a strong potential for growth, you will need to enhance your people skills as well as your technical skills. Even if you work more on the database management side of the profession rather than the technical support one, you will still need to interact with people daily. You may also consider pursuing professional certification, such as the Certified Network Systems Technician, Microsoft Certified Professional (MCP) or A+ credentials.

#### Other Careers to Consider

If you are looking for another option in the same industry that requires a similar amount of education there are other career options that you can consider. For example, you may be interested in a career as a software or electronic engineer. These positions generally require only a bachelor's degree in most cases and may not have as much customer service or support to issue. The salary potential for these engineers is also higher. For example, the BLS reported that in 2011 that software engineers who worked with computer applications earned an average of about \$88,000.

If office life does not seem for you, you may want to work behind-the-scenes in the computer world as a software developer or tester. This career can help you develop and implement new software applications. The average salary for systems software developers was about \$100,000 in 2011.

Retrieved from:

[http://learningpath.org/articles/Computer\\_Systems\\_Technician\\_Career\\_Profile.html](http://learningpath.org/articles/Computer_Systems_Technician_Career_Profile.html)

## Appendix 3

### Some readings from session 11 to session 15

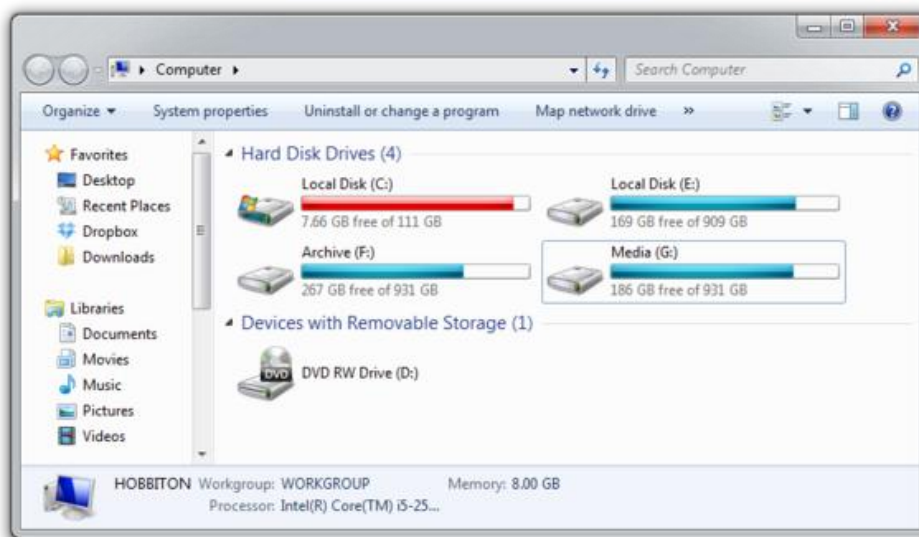
#### How to solve the 10 most common tech support problems yourself

Whether you're dealing with your dad's decade-old computer or your own custom-built gaming rig, troubleshooting PC problems is a part of everyday life. Before you make that \$50 support call, though, try your hand at homebrew tech support. We spoke to some of the best support reps in the business about the most common problems they fix—and how you can do it yourself.

#### My computer is too slow

The first step to fixing a slow computer is to verify that your machine is the actual source of the problem. Videos that seem to buffer forever, and websites that take ages to load, may not be your computer's fault. Geek Squad agent Derek Meister claims that many people mistakenly identify a slow system as the problem when "it's actually not the computer, [but] their broadband connection." See "Downloads are taking forever" below for instructions on how to use Speedtest.net to diagnose a slow connection.

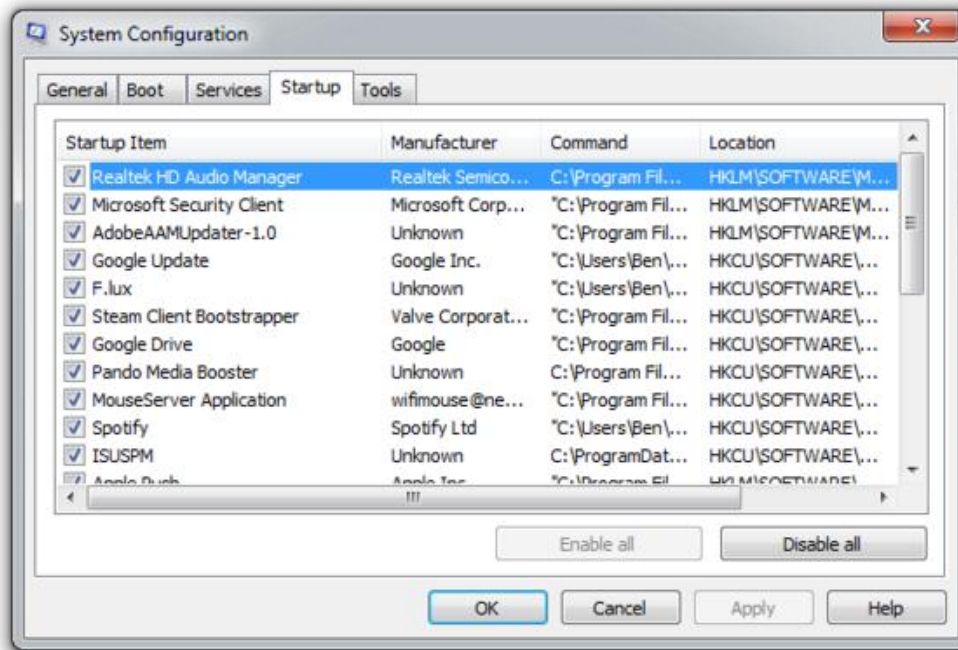
If the problem is your PC, check whether you have plenty of free space on the hard drive holding your operating system. Windows needs room to create files while your system is running. If your hard drive is maxed out, performance suffers. Now is the perfect time to clear some space.



If your computer's operating system resides on an overstuffed C: drive, clearing out some space could boost OS performance.

Microsoft's System Configuration tool is your next-best bet for tackling slow performance. Many applications launch automatically when your machine boots up, which can stretch out boot time—especially on older, slower PCs. Make a habit of trimming the startup items. Open the tool by pressing Windows-R, typing msconfig, and pressing the Enter key.

Checking the Startup Item and Manufacturer columns is the best way to figure out which potential performance-killers you can safely disable. Avoid messing with any of the services and programs that have Microsoft Corporation listed as the manufacturer. Items such as AdobeAAMUpdater, Google Update, Pando Media Booster, Spotify, and Steam Client Bootstrapper are all fair game. Regardless, err on the side of caution: If you're not sure what the program or service does, don't disable it.



Windows' System Configuration Tool lets you disable programs and services that automatically start when you boot your computer.

Once you've made all your changes, click *OK* and restart the computer. It should boot up quicker and feel noticeably faster.

Retrieved from:

<https://www.pcworld.com/article/2047667/how-to-solve-the-10-most-common-tech-support-problems-yourself.html>

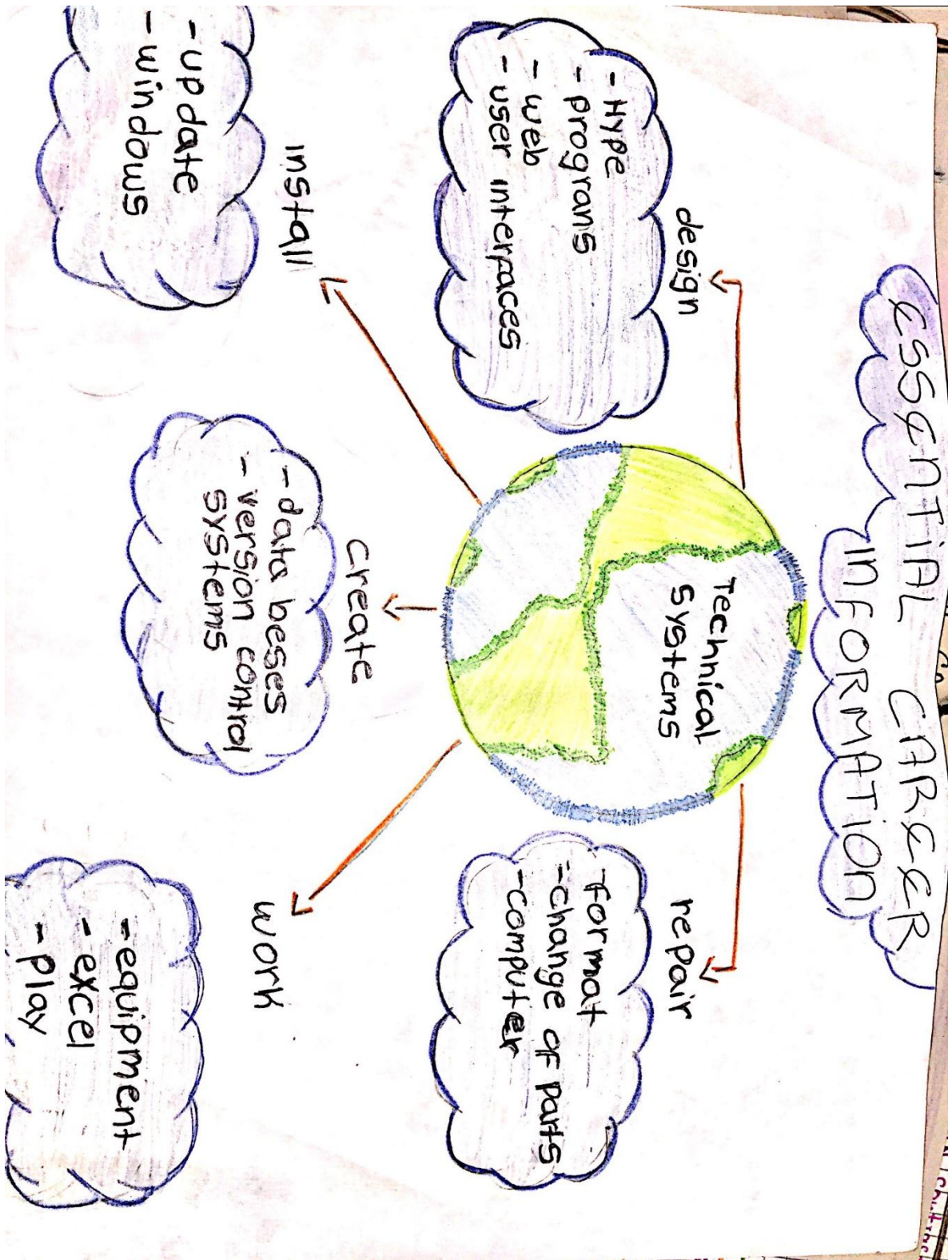
## Appendix 4

### READING COMPREHENSION RUBRIC

Category	Scoring Criteria	Total Points	Score
<b>Organization (10 points)</b>	Information is well prepared, informative, and effective.	5	
	Information is presented in a logical sequence.	5	
<b>Content (10 points)</b>	Accurate information.	5	
	Main ideas, facts and supporting details.	5	
<b>Comprehension (30 points)</b>	Identify the main idea and supporting details.	5	
	Exhibit the ability to identify sequential elements.	5	
	Can identify conclusions.	5	
	Can make connections and recall information from the reading.	5	
	Make inferences from the reading.	5	
	Show confident at the moment of reporting the understanding.	5	
<b>Score</b>	<b>Total Points</b>	<b>50</b>	

## **Appendix 5**

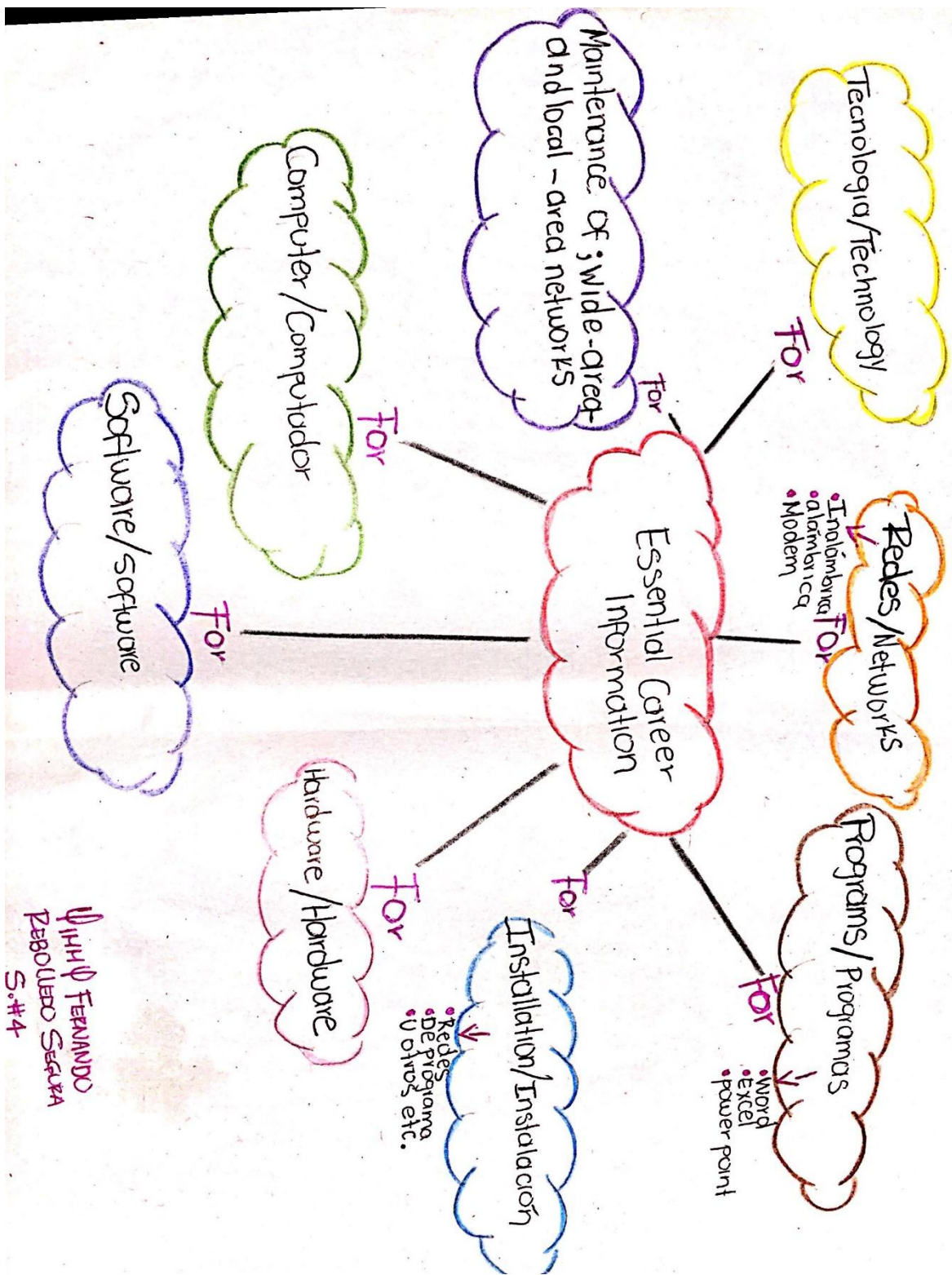
### **Student's graphic organizers**



Appendix 6

Student's graphic organizers



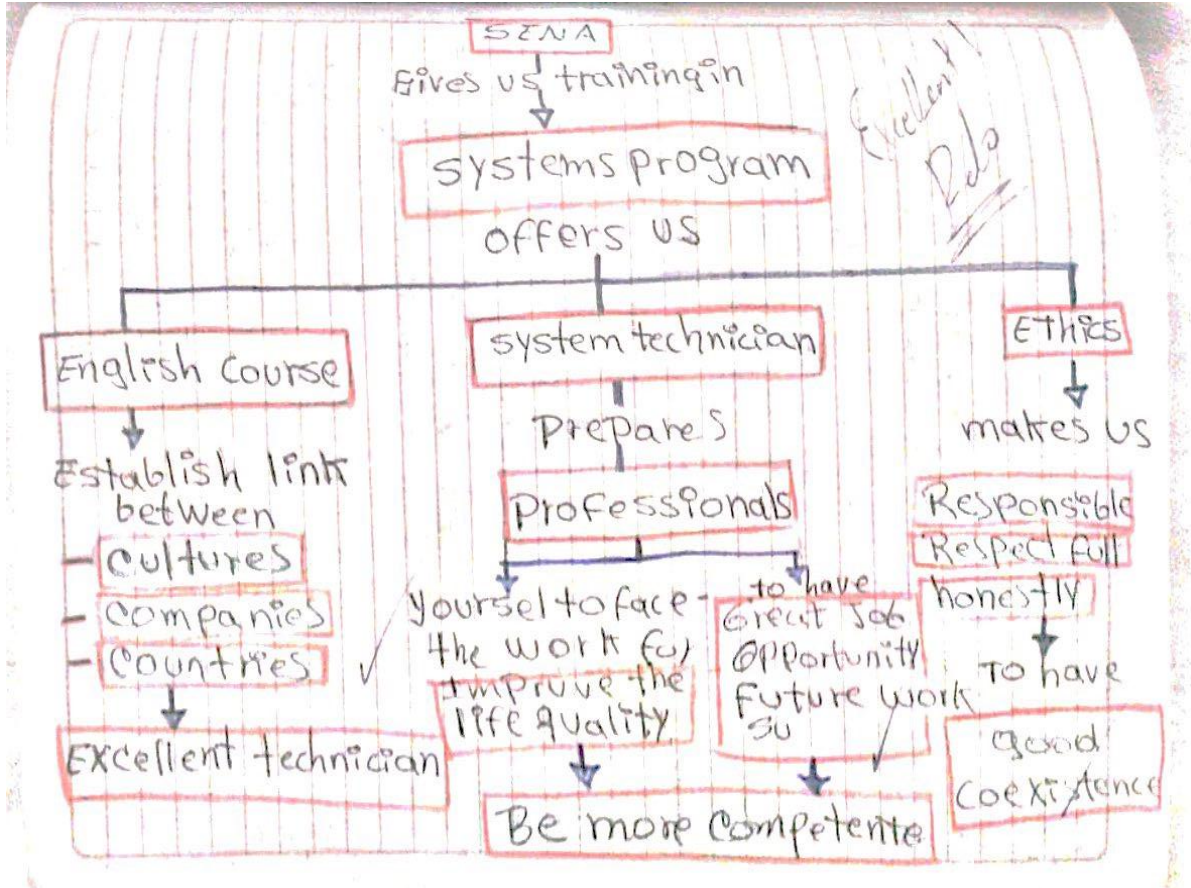


WILLIAM FERNANDO  
 ZEBOLVEDO SEGURA  
 S.#4

Appendix 7

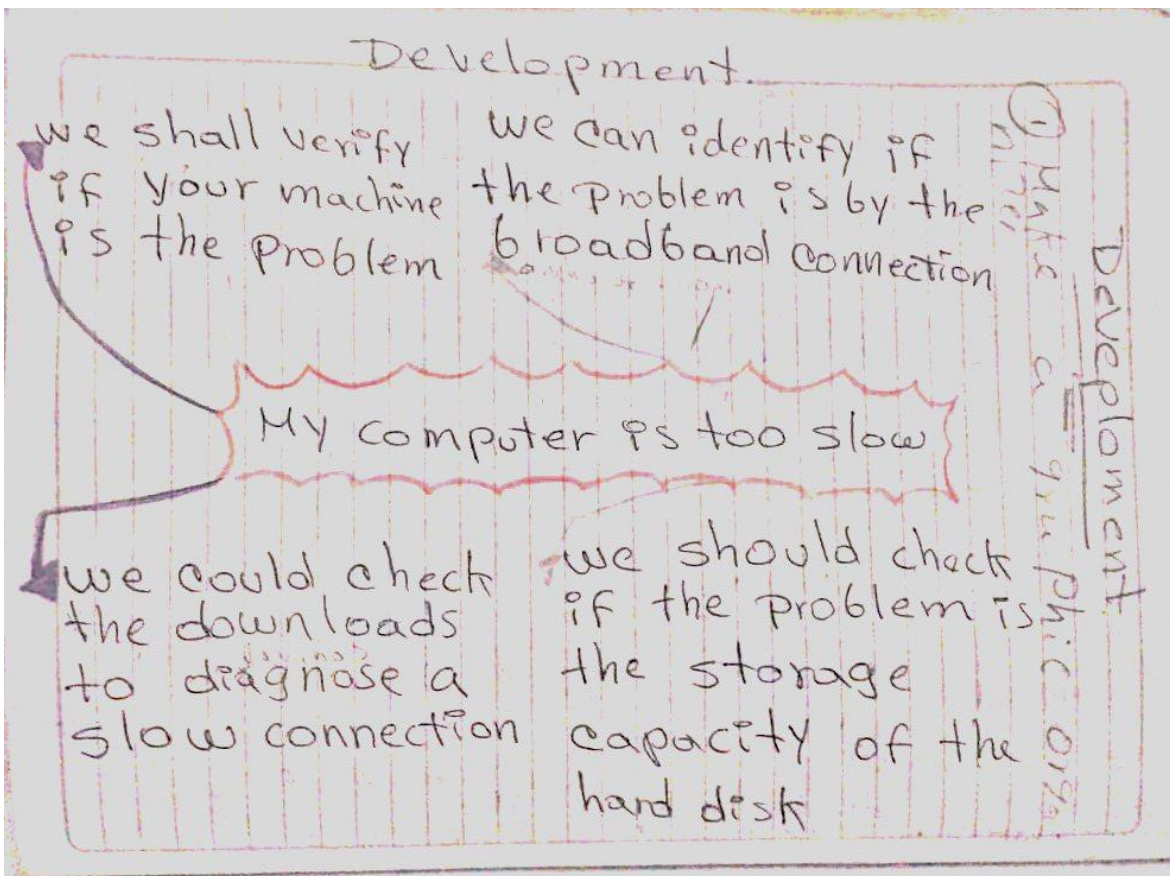
Student's graphic organizers





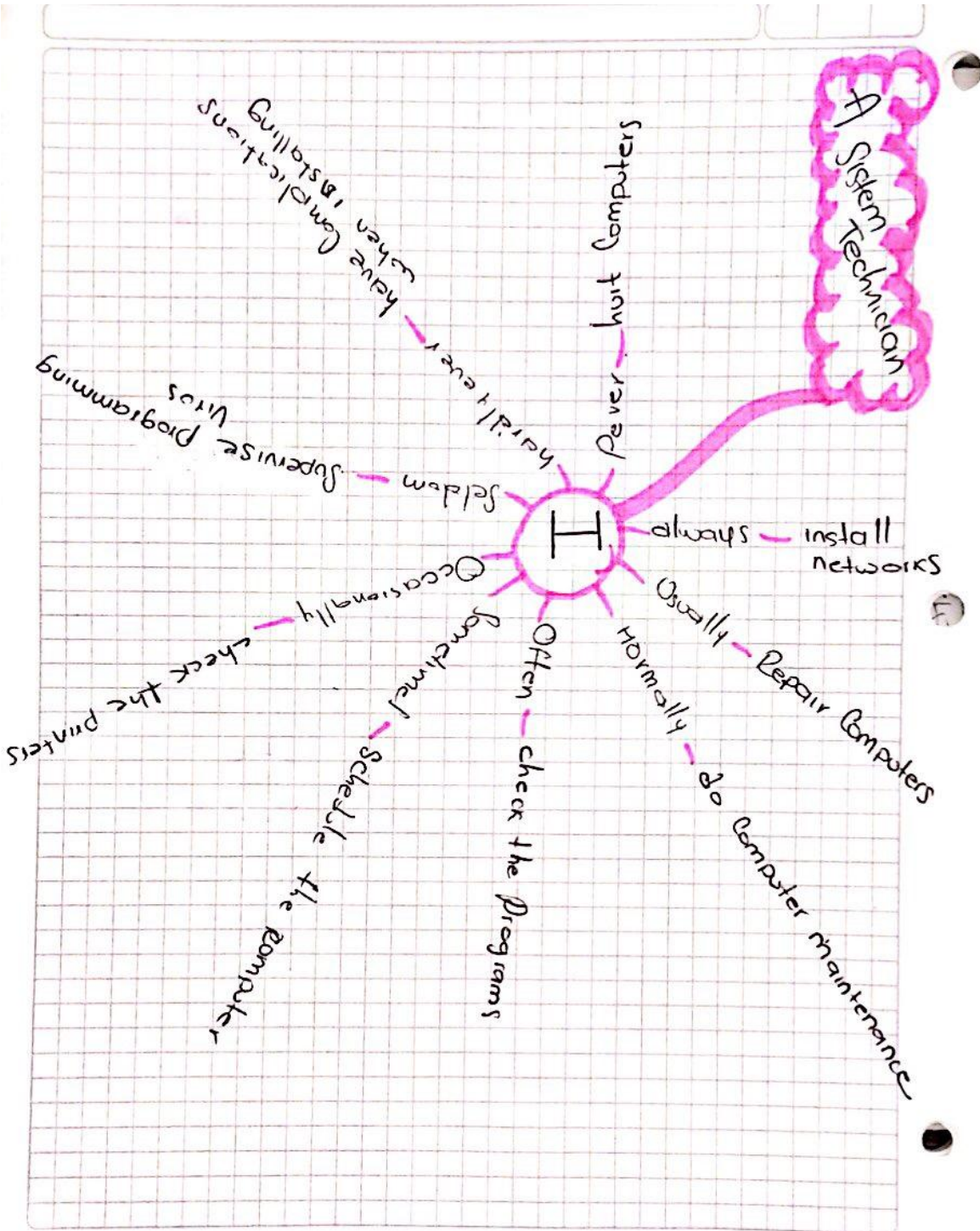
Appendix 8

Student's graphic organizers



Appendix 9

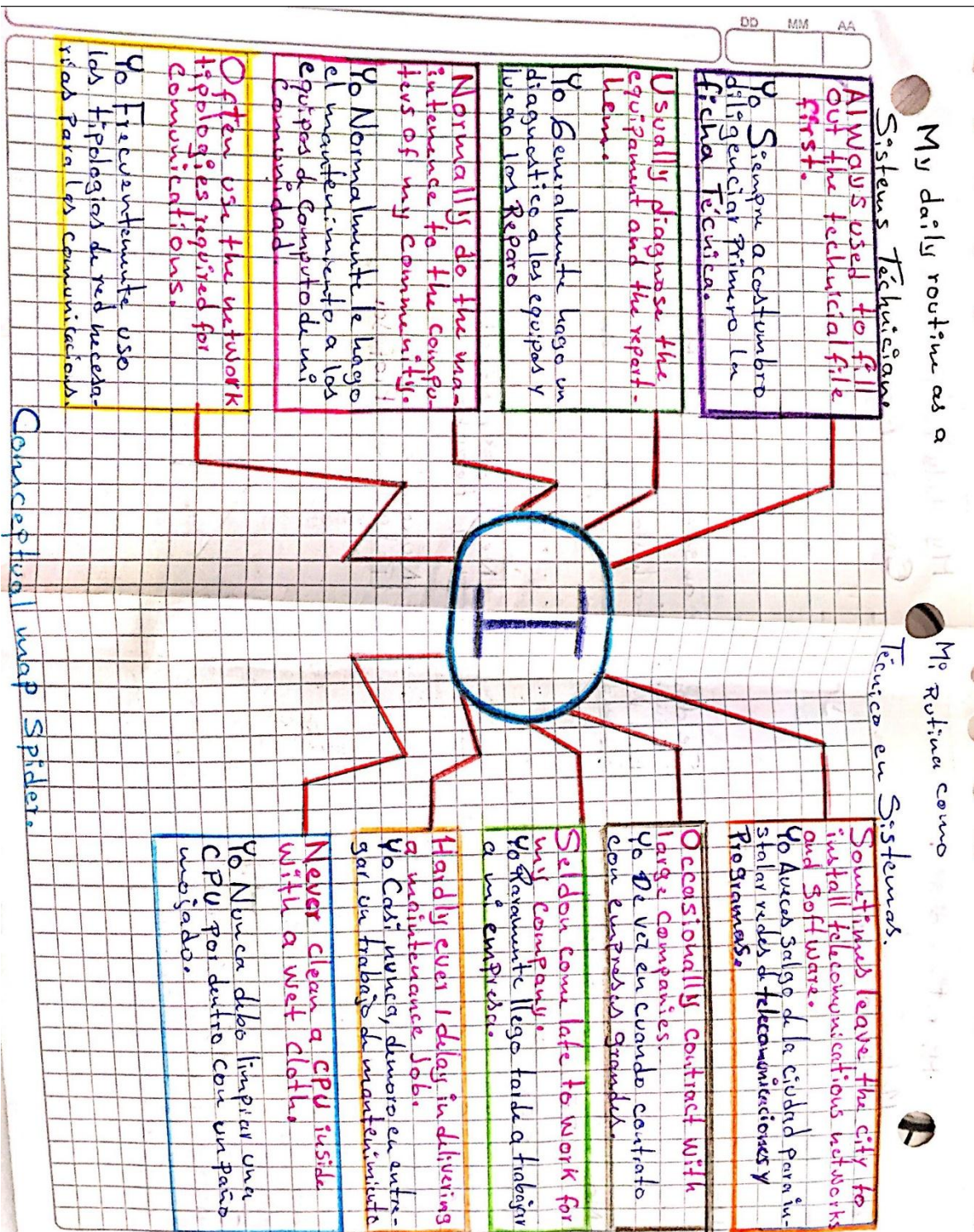
Student's graphic organizers



Appendix 10

Student's graphic organizers

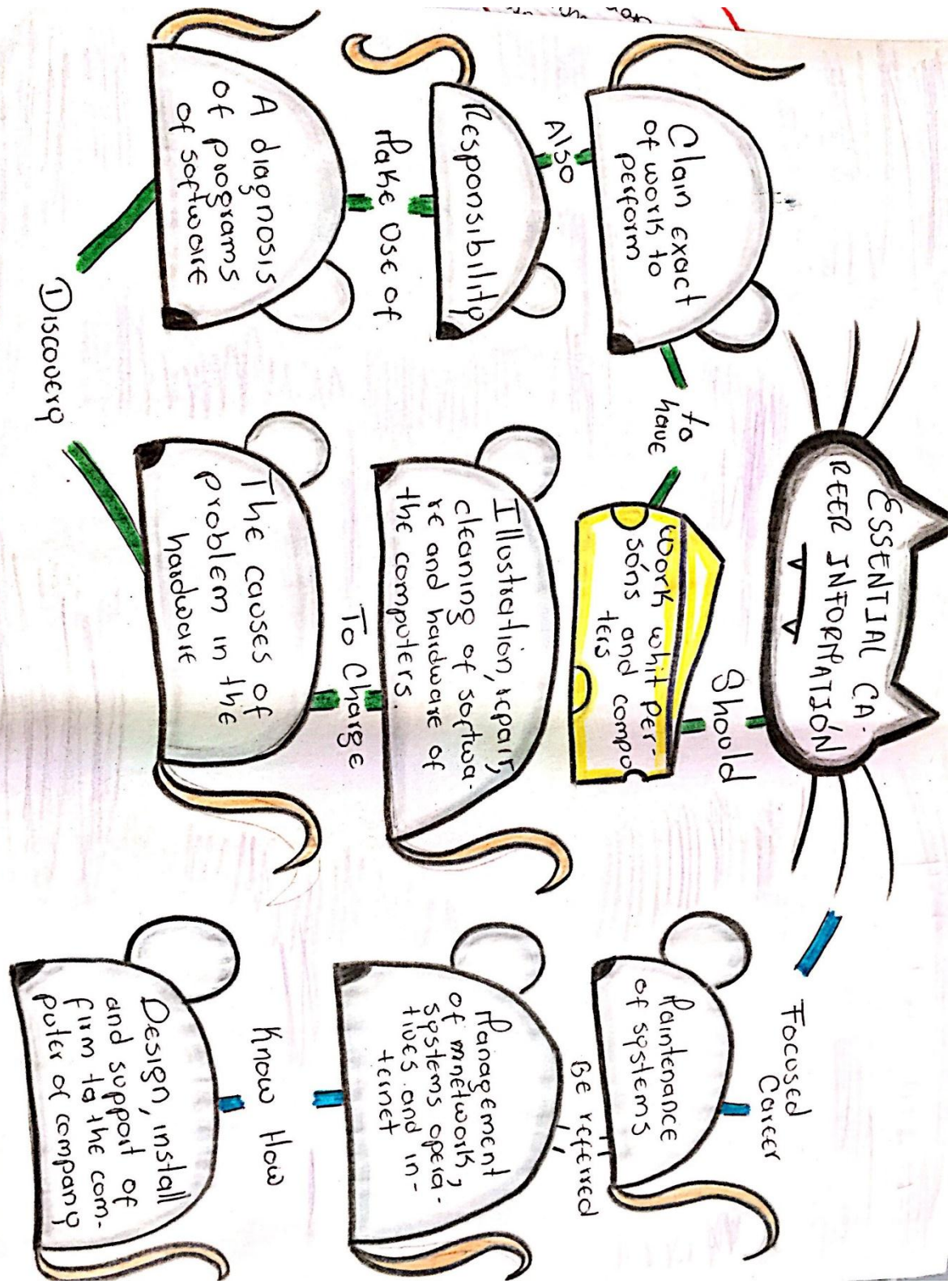




Appendix 11

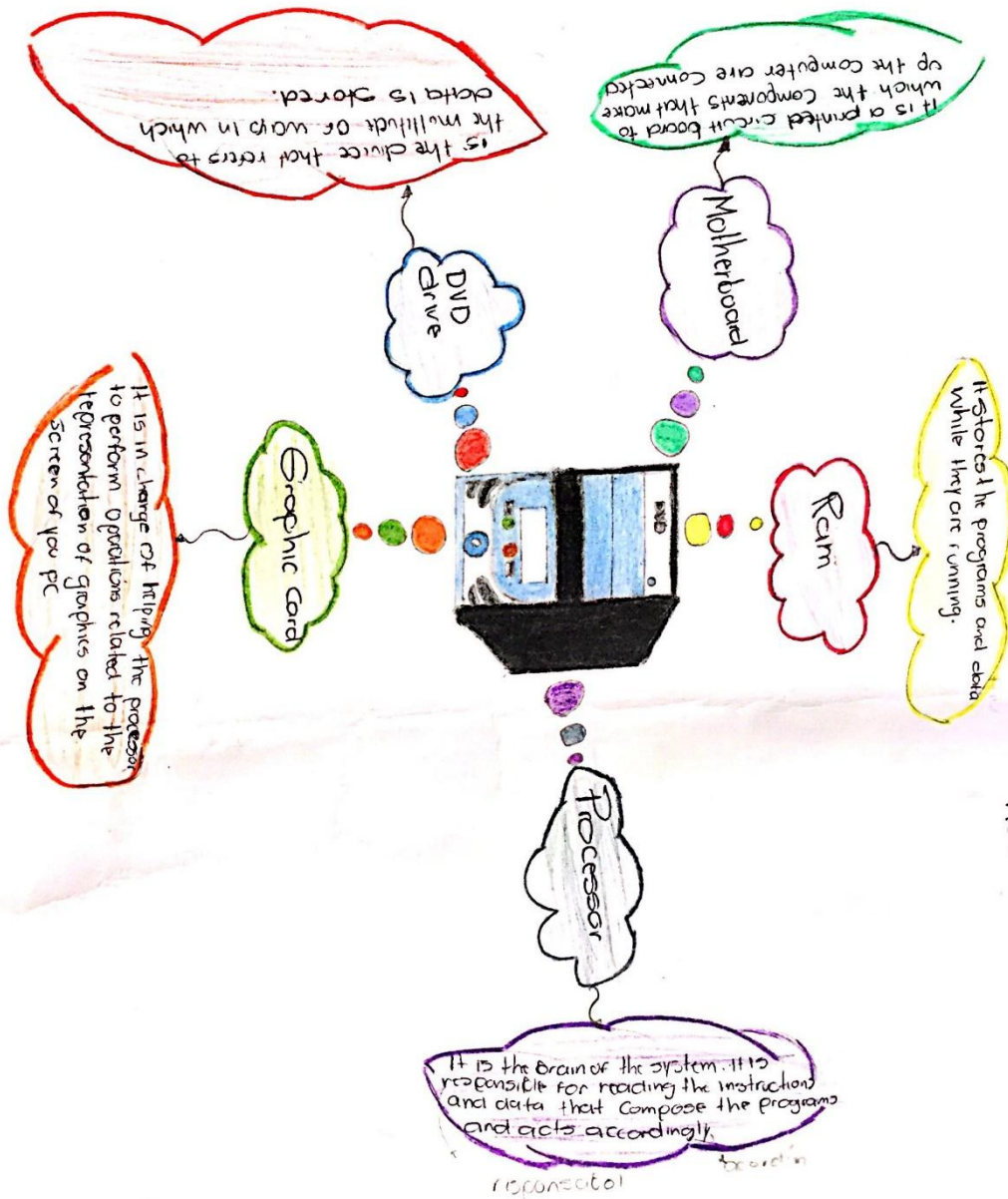
Student's graphic organizers





Appendix 12

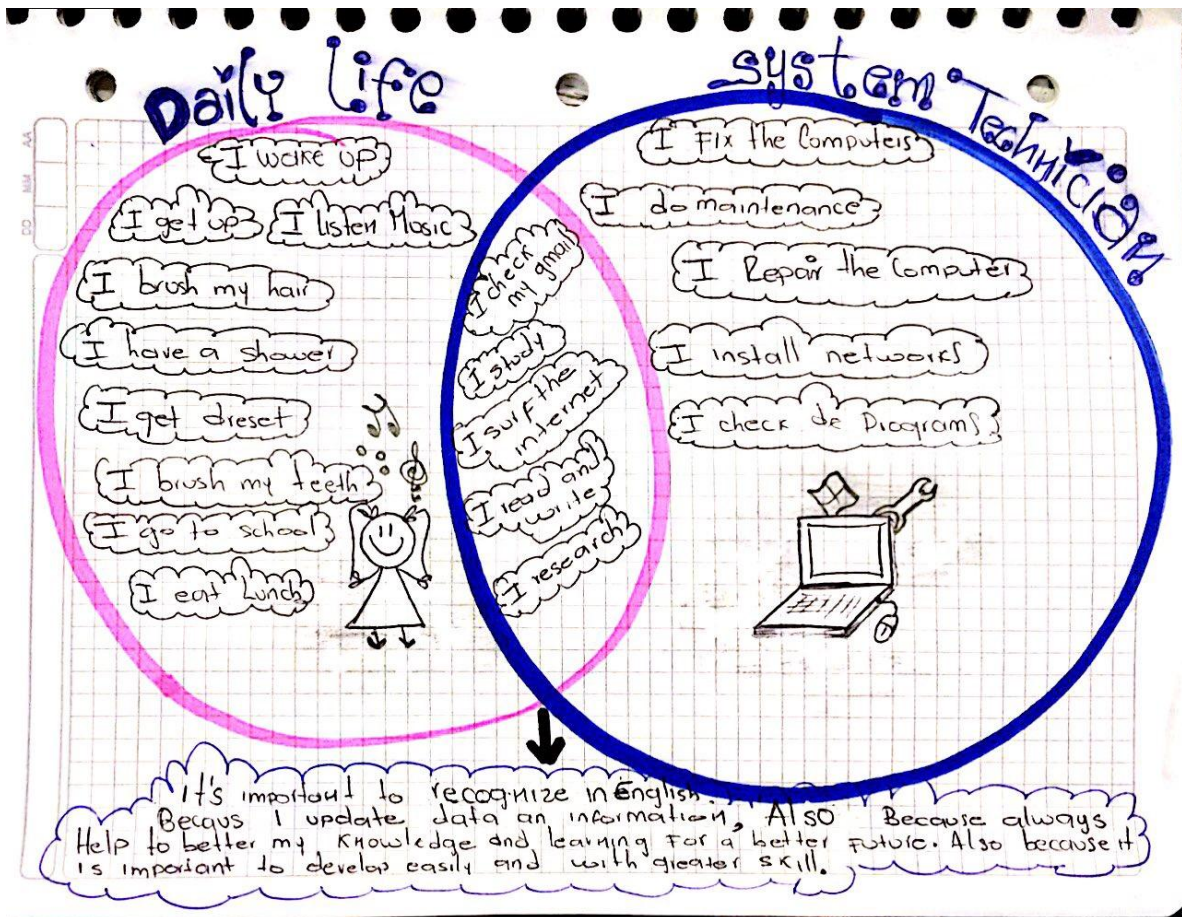
Student's graphic organizers



Appendix 13

Student's graphic organizers





Appendix 14

**Semi-structured interview**  
**Students' perception about graphic organizers**

Length: 5-10 minutes

Primary goal: To explore how students felt by using graphic organizers as a reading strategy.

---

**Questions:**

- What is your opinion about graphic organizers?
  - Why?
- How would you describe the use of graphic organizer in the English class?
  - Why? Would you like to use for other purposes?
- How did you feel by using this reading strategy?
  - Would you recommend this strategy?
- Could you tell me positive and negative effects of graphic organizers on your reading comprehension?

Thank you for your time

Note: Additional follow-up questions were asked, as appropriate, with each participant.