

ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL

Facultad de Ciencias Sociales y Humanísticas



“EFL STUDENTS’ OPINIONS ABOUT THE ONLINE AND PAPER-BASED READING PRACTICE IN AN ENGLISH LEVEL A1 (CEFR) COURSE OF A PUBLIC UNIVERSITY IN ECUADOR”

PROYECTO DE TITULACIÓN

Previa la obtención del Título de:

MASTER IN TEACHING ENGLISH AS A FOREIGN LANGUAGE

Presentado por:

ALBANIA JOHANNA CADENA AGUILAR

ALISON LILIANA HERRERA CONFORME

Guayaquil – Ecuador

2016

Acknowledgements

Thanks God for the completion of this master's thesis. Only due to His blessings, we could finish successfully.

We would like to acknowledge our family for their constant love and support. Their support has been unconditional during this year; they have given up many things for us to be at MTEFL; they have cherished with us every great moment and supported us whenever we needed it. And, we need to thank them in Spanish now... ¡GRACIAS FAMILIA!

Finally, our thanks go to all the people who have supported us to complete the research work directly or indirectly.

(Albania Cadena- Alison Herrera)

MASTERS SUPERVISORY COMMITTEE

MAP. Dennis Maloney

Title / Name

Committee Chair

MTEFL. Karen Yambay de Armijos

Title / Name

Project tutor

M.A. Graham Stagg

Title / Name

Evaluator

DECLARACIÓN EXPRESA

“La responsabilidad del contenido de este Trabajo de Titulación, corresponde exclusivamente al autor, y al patrimonio intelectual de la misma **ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL**”

Albania Johanna Cadena Aguilar
(Nombre del Estudiante 1)

Alison Liliana Herrera Conforme
(Nombre del Estudiante 2)

GENERAL INDEX

ACKNOWLEDGEMENTS -----	I
MASTERS SUPERVISORY COMMITTEE-----	II
DECLARACIÓN EXPRESA -----	III
GENERAL INDEX-----	IV
ABSTRACT -----	VIII
INDEX OF TABLES -----	IX
INDEX OF FIGURES.-----	X
CHAPTER 1 -----	1
1.1 INTRODUCTION -----	1
1.2 AIMS AND RATIONALE:-----	1
1.2.1 RESEARCH QUESTIONS:-----	2
CHAPTER 2 -----	3
2.1 INTRODUCTION -----	3
2.2 THE INSTITUTION, ITS STUDENTS, AND INSTRUCTORS -----	3
2.3 THE NEED FOR THIS RESEARCH PROJECT -----	3
2.4 CONCLUSION -----	4
CHAPTER 3: LITERATURE REVIEW -----	5
3.1. INTRODUCTION -----	5
3.2. READING -----	5
3.3. MODELS OF THE READING PROCESS. -----	5
3.3.1 Bottom-up models.-----	6
3.3.2 Top-down models. -----	6
3.3.3 Interactive models:-----	6
3.4. ENGLISH AS A FOREIGN LANGUAGE (EFL) READING STRATEGIES -----	7
3.4.1 Activate Prior Knowledge.-----	8
3.4.2 Cultivate vocabulary. -----	8
3.4.3 Teach for comprehension. -----	8
3.4.4 Increase reading rate: -----	8

3.4.5	Verify strategies: -----	9
3.4.6	Evaluate progress:-----	9
3.5.	BUILDING MOTIVATION -----	9
3.6.	PLANS FOR INSTRUCTION AND SELECT APPROPRIATE MATERIAL -----	9
3.7.	TYPES OF TEXT-----	10
3.8.	READING FLUENCY-----	12
3.8.1	Physical symptoms of slow readers -----	13
3.8.2	Features related to reading faster.-----	13
3.9	DIGITAL READING -----	14
3.9.1	Some features of digital reading -----	15
3.9.2	Digital Reading theories-----	17
3.10	DIGITAL READING AND ITS CONNECTION WITH READING FLUENCY-----	19
3.11	PAPER FORMAT READING-----	20
3.11.1	Paper format reading theories -----	21
3.11.2	Paper format reading and its correlation with Reading Fluency -----	23
3.12	RESEARCH STUDIES ON DIGITAL MEDIA -----	24
3.12.1	In support of digital reading -----	24
3.12.2	In support of paper format reading -----	25
3.12.3	A comparative study-----	25
3.13	DIGITAL AND PAPER FORMAT READING AND ITS CONNECTION WITH READING FLUENCY -----	26
3.14	CONCLUSION -----	27
	CHAPTER 4-----	28
4.1.	RESEARCH PARADIGM -----	28
4.1.1.	DEFINITION AND RATIONALE -----	28
4.1.2.	TYPE: ACTION RESEARCH-----	28
4.2.	DEFINITION AND RATIONALE -----	28
4.3.	METHODOLOGY STANCES -----	29
4.3.1.	PARADIGM OF THE STUDY: CONSTRUCTIVISM, ONTOLOGICAL AND EPISTEMOLOGICAL POSITIONS. -----	29
4.3.2.	METHODOLOGY -----	29
4.3.3.	HERMENEUTIC AND DIALECTIC METHODOLOGY-----	30
4.3.4.	RESEARCHERS' ROLE-----	30

4.3.5.	PARTICIPANT RESEARCHERS' ROLE -----	31
4.3.6.	ASCERTAINING THE WARRANT FOR THE ISSUES OF VALIDITY AND RELIABILITY. --	31
4.3.7.	DIGITAL AND HARDCOPY TEXTS-----	34
4.3.8.	INTERVIEW AND SURVEY-----	34
4.4.	TRIANGULATION -----	34
4.5.	ETHICAL CONSIDERATIONS-----	34
4.6.	METHODS OF DATA COLLECTION, SELECTION AND HANDLING. -----	35
4.6.1.	ENGLISH PROFICIENCY LEVEL TEST-----	35
4.6.2.	SESSIONS-----	35
4.6.3.	READING TIME -----	35
4.6.4.	LEXILE IN THE TEXTS-----	37
4.6.5.	RUBRICS -----	37
4.6.6.	INSTRUMENTS-----	37
4.6.7.	RESEARCH QUESTIONS -----	39
4.7.	SELECTION OF THE SAMPLE -----	39
4.7.1.	PARTICIPANTS AND ITS BACKGROUND-----	40
4.8.	ANALYSIS OF THE FINDINGS FROM THE INTERVIEW -----	40
4.8.1.	DATA CODING OF THE INTERVIEWS -----	40
4.8.1.1.	CODES-----	40
4.9.	CONCLUSION -----	41
	CHAPTER 5 -----	42
5.1	PRESENTATION OF FINDINGS. -----	42
5.2	FINDINGS FROM THE TEXTS-----	42
5.2.1	NUMBER OF WORDS AND TIME -----	42
5.3	FINDINGS FROM THE SUMMARIES -----	49
5.4	FINDINGS FROM THE SURVEY-----	53
5.5	FINDINGS FROM THE OBSERVATIONS -----	60
5.5.1	DESCRIPTION OF PARTICIPANTS -----	61
5.5.2	DESCRIPTION OF ACTIVITIES -----	61
5.5.3	DESCRIPTION OF INDIVIDUALS ENGAGED IN ACTIVITY-----	61
5.5.4	SEQUENCE OF ACTIVITY OVER TIME -----	61

5.5.5	INTERACTIONS	62
5.5.6	UNPLANNED EVENTS	62
5.5.7	PARTICIPANTS' COMMENTS	62
5.6	FINDINGS FROM THE INTERVIEWS -CODING	62
5.7	CONCLUSIONS	74
CHAPTER 6		75
6.1.	DISCUSSION OF FINDINGS	75
6.1.1.	Working with digital and print texts.	75
6.1.2.	Improvement of reading skills	77
6.2.	PERCEPTIONS STUDENTS HAVE ABOUT DIGITAL AND PRINT MATERIAL	79
6.3.	INTERRELATIONSHIP BETWEEN SUMMARIES, THE TIME AND NUMBER OF WORDS	80
6.4.	CONCLUSION	88
CHAPTER 7		89
7.1.	GENERAL CONCLUSIONS	89
7.1.1.	Observations.	90
7.2.	LIMITATIONS OF THE STUDY.	93
7.3.	FUTURE DIRECTIONS AND FURTHER AREAS FOR RESEARCH	94
REFERENCES		96
APPENDICES		105
Appendix A		105
Appendix B		106
Appendix C		108
Appendix D		110
Appendix E		112

Abstract

This action-research study tried to understand the students' opinions about the online and paper-based reading practice in English level A1 (CEFR) course of a Public University in Ecuador. In addition, it was intended to explore their reading skills, which involve their reading fluency.

Participants of this study were volunteers from two different A1 classes taught by both researchers. The students were asked to read four texts in their digital and hardcopy version and to write a summary. Moreover, the students were part of an interview, observations and had to fulfill a survey.

Main findings show that students who read texts in print perceived that their reading skills were better than those when reading digital material. Despite these findings, students were able to read more words in less time by reading digital material due to the tools that are at hand while using this format. Implications of this findings are discussed.

KEYWORDS

Reading, Digital reading, Paper-based reading, student perceptions, reading fluency

INDEX OF TABLES

Table 5.1	Average of the Summary (That's Incredible).....	50
Table 5.2	Average of the Summary (Culture Shock).....	51
Table 5.3	Average of the Summary (Kill Your Tv).....	51
Table 5.4	Average of the Summary (Celebrity Profile).....	52
Table 5.5	Commonalities in the Observations.....	60
Table 5.6	Perceptions about digital Reading.....	64
Table 5.7	Perceptions about reading faster in less time with digital reading.....	69
Table 5.8	Perceptions about paper format reading.....	69
Table 5.9	Perceptions about reading faster in less time with printed reading.....	74
Table 6.1	Digital Texts.....	76
Table 6.2	Print Texts.....	77
Table 6.3	That's Incredible.....	82
Table 6.4	Culture Shock.....	84
Table 6.5	Kill your TV.....	86
Table 6.6	Celebrity Profile.....	88

INDEX OF FIGURES.

Figure 5.1 PRINT - CELEBRITY PROFILE.....43

Figure 5.2 Digital - Celebrity Profile.....44

Figure 5.3 Print - Culture Shock.....45

Figure 5.4 Digital - Culture Shock45

Figure 5.5 Print - Kill Your Tv.....46

Figure 5.6 Digital - Kill Your Tv47

Figure 5.7 Print - That’s Incredible48

Figure 5.8 Digital - That’s Incredible.....49

Figure 5.9 Question 153

Figure 5.10 Question 253

Figure 5.11 Question 354

Figure 5.12 Question 454

Figure 5.13 Question 555

Figure 5.14 Question 655

Figure 5.15 Question 756

Figure 5.16 Question 856

Figure 5.17 Question 957

Figure 5.18 Question 1057

Figure 5.19 Question 1158

Figure 5.20 Question 1258

Figure 5.21 Question 1359

Figure 5.22 Question 1459

CHAPTER 1

1.1 INTRODUCTION

In Ecuador, the Law of Higher Education (Ley Orgánica de Educación Superior) establishes that students who finish their tertiary education need to have a B2 level according to the Common European Framework (CEFR). In order to achieve this goal, those students have to master the four skills: reading, listening, speaking and writing. (CELEX Teacher's Manual, 2013)

In fact, reading is a fundamental function in today's society, which involves constant changes that are later rejected or confirmed. In the reading process, a person does not read all the sentences in the same way, but relies on a number of words to get an idea of what kind of sentence is likely to follow (Paran, 1996)

Incidentally, the impact of digital media on reading has increasingly been the object of empirical and theoretical exploration. According to Liu (2005), the digital environment has begun to influence people's reading behavior due to the exposure to the growing amount of digital information available and the time that people spend reading digital media. On the other hand, O'Hara and Sellen (1997) argue that paper continues to be the preferred medium for a great number of students' reading activities since paper based materials have supported the use of independent reading and writing spaces. Moreover, this kind of material could be accessed concurrently and manipulated independently. (O'Hara and Sellen, 1997). In this chapter the authors will explain the aims and rationale of the study and research questions will be presented.

1.2 AIMS AND RATIONALE:

The general objective of this study is to explore students' views, through a survey and interviews, regarding the online and paper-based reading practice in an English as a Foreign Language (EFL) EFL English level A1 (CEFR) course.

As part of the specific objectives this study intended to:

1. To explore students opinions about online and paper-based reading practice through individual interviews and a survey.

2. To confirm students' opinions about their reading skills while using either online or print material.

In the curriculum of the university where the study took place, 23% of the students' grades are explicitly based on reading skills (CELEX Teacher's Manual, 2013). Furthermore, starting the new academic year 2017 students in this Public University will be involved in a new learning approach called Flipped classroom to achieve their B2 English level according to the Common European Framework (Call May 12th 2016 by Vice provost) By using the Flipped classroom approach, students will gain first exposure to innovative material outside of class by reading texts or watching lecture videos. They get this material online to begin working before the class time. Then, class time is spent in integrating that knowledge through strategies and techniques such as problem-solving, discussion or debates (Brame, 2013).

1.2.1 RESEARCH QUESTIONS:

In order to understand student's opinions and beliefs in depth, the researchers carried out a qualitative research, which intended to answer the following questions:

- a. Do learners feel that improvement of reading skills take place using either online or paper-based reading texts?
- b. What implications do learners perceive about online and paper-based reading texts have for developing reading skills in an EFL (A1) class?
- c. Does the format of the text students read influence the number of words they are able to read?

Chapter two offers a brief overview of the institution, its students and instructors which are involved in the study. Besides, the next section points out how the study relates to the larger issues and justify the reason for the study.

CHAPTER 2

2.1 INTRODUCTION

The study took place in prestigious Ecuadorian university where English is part of the curricula that students have to cover in order to graduate. This study was conducted with the permission of the academic coordinator of the Foreign Language Studies Center. She was interested in knowing about the results of this research since it will reveal valuable information. The study will provide key data for the new curriculum, which will start the following academic period 2017-2018.

2.2 THE INSTITUTION, ITS STUDENTS, AND INSTRUCTORS

In the Ecuadorian context, reading is one of the skills students find challenging in this university. A study we did last year about the perceptions of enjoyment of reading texts in the same university revealed that EFL students have reading problems even in their mother tongue (L1). As a result, when they intend to transfer those skills to the acquisition of a second language (L2) some problems showed up and that is one of the main reasons the institution would like to assist students with their reading skills.

It is worth mentioning, that the students of this university learn their L2 by developing the four main skills. Hence, teachers plan activities to encourage students to communicate meaning. For this study, the teachers were the researchers. The group of students belonged to an EFL English class with an (A1) level according to the Common European Framework (CEFR). Moreover, they attended English classes three times a week; each class lasted 2 hours.

2.3 THE NEED FOR THIS RESEARCH PROJECT

Hence, students in the university need to achieve the B2 English level, an academic requirement they have to comply in order to graduate

The Foreign Language Studies Center has started some pilot courses where students are immersed in the digital world. There are some online activities they have to complete before the next class. Students have to check their online platform to download material as pre- class assignments. For students, the transition from the L2 print to L2 digital material tends to be challenging and it required new skills and adaptation to the medium. Consequently, it is relevant to explore how the students feel about working with digital and print material and

guide them to further development of their reading skills.

2.4 CONCLUSION

The study is enlightening and helps students and teachers identify some problems students may have. It clarified some doubts that teachers had related their students' performance. In addition, students perceptions will guide teachers take some remedial actions.

The following chapter provides an overview of previous research related to the reading digital and hardcopy texts and introduces the conceptual framework for the action research described in this thesis.

CHAPTER 3: LITERATURE REVIEW

3.1. INTRODUCTION

This chapter examines the existing literature relating to the topic; this information was used to plan the study and to discuss the findings. There is a large body of work on the importance of the reading skill, the models of the reading process, reading strategies, types of texts and reading fluency, as well as the advantages and disadvantages of reading faster. The implications of digital reading and underlying theories about the correlation of digital reading with reading fluency will be also analyzed, along with the advantages and disadvantages of reading in the paper format reading. Finally, some studies done by other researchers will be examined.

3.2. READING

Anderson (1999) states that reading is a vital skill for English as a second/foreign language (ESL/EFL). Mastering this skill will allow learners to make greater progress and attain a better development in all the academic areas. The reading process is completely active; a result of this, is that meaning can be created. Meaning is not found on a printed page, nor is it only in the head of the reader. For that reason, it is necessary to activate the background knowledge and experience of the reader to be combined with the words of a reading text. This author also claims that readers need to have a clear goal in mind to start doing this activity and teachers are the ones who are in charge of encouraging their students to be part of the joy of reading. Furthermore, he highlights that there are some challenges that have to be considered by teachers when teaching reading in class, for example, how to use the strategies and the skills students have already incorporated in their L1 and guide learners to utilize them while learning their L2. Other issues to be considered are: developing vocabulary skills, improving reading comprehension, improving reading rate, teaching readers how to combine successfully the different strategies and how to monitor their own progress.

3.3. MODELS OF THE READING PROCESS.

Anderson also claims that every teacher is able to develop his/her own philosophy while teaching reading. He identifies the different models of the reading process to understand more deeply the reality of this skill.

The models can be divided in three categories: bottom-up models, top-down models and interactive models.

3.3.1 Bottom-up models.

These models depend on the information presented by the text. The information is processed in the following way, from letter features to letters to words to meaning. There is a special emphasis on the lower-level reading processes. Segalowitz, Poulsen & Komoda (1991) indicate that this lower-level consists of word recognition, visual recognition of letter features and their identification, the association of words to their semantic representation.

3.3.2 Top-down models.

Prior linguistic knowledge and level of proficiency in the second language are not only important; the rhetorical structure and the content area of the text are also important. These models are completely different from the previous ones. These high-level models are concerned with the integration of textual information. These models see the reader as being connected with the text. According to Carrell, Devine and Eskey (1988), in the top-down perspective of second language reading, the reader is not only an active participant in the reading process but also a subject who makes predictions and processes information; their prior experience or background knowledge plays a vital role in the process.

3.3.3 Interactive models:

These models combine elements of the bottom-down and top-down models. Effective readers are able to integrate efficiently these two models. Grabe (1991) says that fluent reading involves both decoding and interpretation skills.

There are other authors who support the importance of reading in the learning process of a second language. For instance, Harmer (2010) in his book presents very useful material for teachers who are willing to understand the reality of the classroom and need support to get the best out of their students. The author attempts to inspire teachers to expand knowledge in their learners effectively. In chapter 7, which is teaching reading, the author of the book claims that there are

different reasons for students to read. For instance, learners have to read for their careers, for study purposes or just for pleasure. Reading allows students to express their ideas clearly and make their acquisition process of the language faster and easier.

There are different reading levels and learners tend to struggle when dealing with them since they do not know how to use reading strategies (Harmer, 2007). The most difficult texts to read are the ones who belong to the authentic material group due to the vocabulary or complexity in their ideas. Moreover, these texts are not written especially for language learners but rather, intended for any competent user of language. As a result, it is recommended that the reading material on offer is appropriate for the student's level. By examining the texts that students have to read, there will be fewer possibilities to interrupt their normal learning process and learners will be able to learn how to use reading strategies with the proper texts that fulfill their reading needs.

Moreover, Harmer emphasizes that learners have to be able to skim a text and get the general idea while they are moving their eyes over it. However, if students try to gather all the details at this stage, they will get confused due to their concentration on specifics. In addition, learners have to be able to read for specific information and that is achieved when they can get a deep reading comprehension. This author encourages teachers to assist students in using these reading strategies by offering them diverse materials and activities. The main aim of the reading process is to empower students with high quality of reading strategies.

3.4. ENGLISH AS A FOREIGN LANGUAGE (EFL) READING STRATEGIES

Anderson (1999) uses the acronym ACTIVE to identify the six elements of his personal philosophy; a valuable tool to remember when teaching reading in an English as a second language/ English as a foreign language (ESL/EFL) reading class:

A: Activate prior knowledge

C: Cultivate vocabulary

T: Teach for comprehension

I: Increase reading rate

V: Verify reading strategies

E: Evaluate progress

Teachers have to keep in mind two further strategies which deal with the role of motivation and planning. In addition, these perspectives are connected with the appropriate reading material.

3.4.1 Activate Prior Knowledge.

McNeil (1987) suggests that activation of background knowledge needs to be initiated by specifying goals, asking questions and making predictions. Efficient readers tend to be more active. In contrast, poor readers are more likely to show passivity which is seen in their lack of predicting and monitoring activities.

3.4.2 Cultivate vocabulary.

Vocabulary is not something that can be developed overnight. It requires training and the vocabulary workouts need to be a part of an overall reading improvement program. Having a large amount of vocabulary does not mean that the person can read better. It is necessary to add a regular, steady study of vocabulary to any reading program to see the growth toward the goal of increasing the knowledge of words and understand how they work. Grabe (1991) stresses the important role of vocabulary as a good predictor of the overall reading skill.

3.4.3 Teach for comprehension.

Eskey (1986, cited by Anderson, 1999, p. 38) claims that “comprehension is always directed and controlled by the needs and purposes of an individual.” It is also said that comprehension takes place when students read what they find interesting and purposeful to them. There are two areas that influence thinking and these are the development of models of the reading comprehension process and the role of metacognitive awareness while reading.

3.4.4 Increase reading rate:

Students are sometimes involved in different reading tasks and they are not able to focus on them; that is why they do not comprehend what they are reading. The

main goal is to make students read fluently and automatically. Teachers should not put so much emphasis on accuracy that it impedes the development of fluency.

3.4.5 Verify strategies:

Garner, Macready, and Wagoner (1984, cited by Anderson, 1999, p. 70) claim that a strategy is made up of a series of activities and learners can achieve some of them, but not all. They point out that low proficiency readers need to be guided closely to teach them to recognize when a strategy is successful.

3.4.6 Evaluate progress:

Stoller (1986, cited by Anderson, p.88) claims that it is vital to make progress charts and graphs, this will motivate students to keep improving. It is necessary to have a record of the learners' progress and check it periodically with the student.

3.5. BUILDING MOTIVATION

Learners can read for pleasure or just to find some information. The more motivated they are, the clearer they will be in what they need to achieve when reading. Teachers play an important role and they have to select carefully the different procedures to increase their students' motivation. Baker, Dreher and Guthrie (2000) use the term "engaged reading" which refers not only to motivation, but to the joint functioning of motivation, conceptual knowledge, strategies, and social interactions during literacy activities. The engagement perspective has been appealing in the teaching reading process because it integrates the cognitive, motivational, and social dimensions of reading and reading instructions. Students can get engaged and become motivated readers when they read frequently for interest, enjoyment, and learning.

3.6. PLANS FOR INSTRUCTION AND SELECT APPROPRIATE MATERIAL

When selecting the material that suits the requirements of the students it is necessary to keep in mind their interests and needs. A good lesson plan can assist teachers in getting a better idea of what needs to be taught in a reading class.

Eskey (1986, cited by Anderson, 1999, p. 115) emphasizes that the main concern of reading teachers is to find or create a body of material that his/her students might find engaging to read.

3.7. TYPES OF TEXT

Text types are conventional ways of expressing meanings: purposeful, goal-directed language activities, socially recognized text types, which form prototypes of meaning in the social world (Kress, 1989). They also imply different ways of producing, distributing and consuming texts.

From the 15th century, many prominent writers, who felt responsible for the language and its innovations, dealt with lexical and syntactic gaps and created conventions for a great number of text types by making existing variation functional or by establishing new distinctions (Görlach, 2004). They stated when text types become conventionalized, the need for specific designations arises.

Furthermore, Knapp and Watkins (2005) argue that different types of text have distinctive characteristics, depending on what they are made to do. For example, a poem is characteristically different from a scientific description because each of them is doing a hugely different thing with language. According to the authors, texts can be classified and organised in a multitude of ways based on established conventions. For example, Shakespeare and Dickens belong to the “literary” convention, “factual” text refers to scientific procedures or a computer manual, and “The Simpsons” cartoon is considered a “media” text.

Biber (1991) draws the distinction between “genres” and “text types”. The author states that genres can be determined upon the basis of external criteria relating to the speaker's purpose and topic, whilst text types represent a classification of texts that share linguistic form. To clarify this point, consider an academic article about Asian history that represents formal and academic exposition in terms of the author's purposes, but whose linguistic form could be narrative and more similar to some types of fiction than to scientific or academic articles. The genre of the mentioned

text must certainly belong to academic exposition, yet its text type might be academic narrative.

Dorgeloh and Wanner (2010) discovered that repertoires of text and discourse types are inclined to contain narrative in addition to a small number of non-narrative types. The distinction between narrative and non-narrative texts is whether the strategy to contain temporal succession is used or not, and secondly if the text is built around participants. The authors state that a narrative is a type of text which can serve a maximal range of discourse functions such as entertaining, instructing, describing, explaining and judging different experienced or imagined situations. Nonetheless, non-narrative types of text appear in a vast number of genres: instructive text, recipes, computing pages on the internet, textbooks, and other scholarly genres.

According to Rothwell, Guijarro and Hernández (1998), five frequently cited text types are the narrative, expository, descriptive, argumentative and procedural types. These can be further classified based on the “dominant contextual focus” (Werlich, 1983), and may additionally be based on a correlation to forms and ranges of human cognition. The authors mention that “narrative” text focuses on factual and/or conceptual situations based on the interrelation of perceptions in time, dynamic verbs usually past tense, characters who perform actions; these characteristics are found in biographies, biographical notes, jokes, etc. The “descriptive” text draws its attention to a fact or situation in the spatial context according to the writer’s perception in space; this type of text is characterized by stative verbs in present tense, adjectives or noun phrases which identify the referent. In the “expository” text, the analysis and synthesis are vital elements to communicate the phenomena; this is related to the comprehension of concepts through differentiation or by synthesis (Werlich, 1983). Regarding “argumentative” text, the relations between concepts which derive from the cognitive process of judging, detecting similarities and contrasting are the focus of this type of text; an argumentative text refers to the process of supporting arguments. Finally, a “procedural” text focuses on the behavior, on the part of the text producer, and text receiver which is based on a cognitive skill: to plan future behaviour.

In most cases, texts are frequently hybrids, rather than being exemplars of one text type. For example, a novel will normally contain passages of description and fictional dialogue as well as narrative. Smith (1985) states that research has shown that a text type by means of linguistic features can be expressed better in terms of probabilities and quantification because it responds to specific discourse situations or generic events with external framework of coherence.

3.8. READING FLUENCY

Nation (2008) states, that learners have to be pushed to develop and foster their reading fluency. To do so, it is fundamental that students be given the opportunity to read material acquainted to them and without unfamiliar language features. Moreover, teachers can offer students different speed reading practice in word recognition and in reading for understanding. Nation names some interesting and good activities that can be used in a reading class such as speed reading, repeated reading, paired reading, scanning and skimming.

Now, it must be clear that learners need to read a lot. Nation (2008) mentions that native-speaking children like to read scary books, comics and cartoons, books about sports and magazines about popular culture. These kinds of materials are not usually found at school so it is a must to practice extensive reading and issue logs to be able to develop the reading fluency.

Nation (2008) points out that a skilled reader tends to read around 250-300 words per minute and makes around 90 fixations per 100 words. If a word is really long, the word can have 2 or even 3 fixations. Eye fixation is a great component in speed reading. Faster readers take in more words with each fixation. Consequently, they are able to read faster. Vocabulary and the familiarity with the text are related to the number of words the reader can process in each eye fixation. The length of these fixations varies a lot depending on how difficult the word or sentence is. Where words are not long the average jump is ten letters and during this jump eyes are moving so they cannot focus on individual items. A skilled reader makes around 15

regressions in every 100 fixations; these regressions occur because there were problems in understanding the text.

Urquhart and Weir (1998, cited by Nation, 2008, p. 63) claim that a person might not be doing careful reading, but rather some skimming and scanning, which is known as an expeditious reading.

It is notable that many non-native speakers of English and some native speakers are only able to read at speeds which are well below 300wpm (word per minute). In order to overcome this limitation a well-balanced language course should work on the strand of fluency. Learners can become more fluent if they get lots of practice with the language they already know. The fluency development needs to cover the four skills by having a great amount of input and output.

3.8.1 Physical symptoms of slow readers

According to Nation (2008) these physical symptoms are:

- Making fixations on units smaller than a word (word parts, letters, parts of letter)
- Spending a long time on each fixation or on some fixations
- Making many regressions to look back at what has already been read.

3.8.2 Features related to reading faster.

One of the drawbacks is that learners feel lots of pressure to go faster and that can be a source of stress. Consequently, pressure reduces the pleasure of reading. (Nation, 2008)

Research on reading has shown that increasing reading speed in one language can be beneficial to increase reading speed in another known language. There will be a transfer of training and confidence so the learner will start to read faster and better comprehend.

It has been suggested that reading much less than 100 words per minute can have negative effects.

Furthermore, reading fluency means that students have a solid bank of sight words on which they can rely and that are automatic. Fluent readers can then focus their reading on

understanding the message rather than decoding the text. Reading is decoding with comprehension. Fluent readers do both, as a result students read without thinking about how they are reading, and they understand what they are reading (Hults, 2003).

Shiotsu (2010) states the effect of memory is the most difficult aspect involved in measuring reading fluency. Hayne's research (1989, cited by Shiotsu, 2010, p. 38) demonstrates what happened when a reading text is removed from the reader's sight and the reader has to answer comprehension question, mostly on details, when they finish reading it. The author argues that remembering details in a text is an important result in the reading process because it is the only possible way to agree successful comprehension.

3.9 DIGITAL READING

Digital reading is considered the act of consuming texts on a digital device (i.e. e-reader, computer, tablets etc.) (Hutchison and Colwell, 2015). Reading in the digital age carries different implications for the student who wants to be a successful reader.

PISA results (2009) show that digital texts should not be regarded as deprived versions of printed texts. Digital technologies are constantly being improved and may eventually be comparable to high-quality printing technologies. Moreover, new publishing standards have been created by designers of digital documents to cope with the limitations inherent in the digital medium (consider, for instance, the increasingly popular web-based applications tailored to small screens). Therefore, digital technology has benefits for the reader compared to printed texts. When using digital texts readers are able to move within and across pages of text by navigating through texts. (OECD, 2011)

Sellen and Harper (2003, cited by Pearson, J., Buchanan, G., & Thimbleby, H. 2014) claim that when the personal computer appeared there were many chances to eliminate paper from everyday office-related tasks. In fact, twenty years on from this original prediction (Business Week, June 30, 1975), digital documents are

becoming more and more portable with the introduction of eReaders and mobile multi-function devices such as iPads.

3.9.1 Some features of digital reading

Today, it is feasible to download in an instant novels and articles which were once bound to paper. This has revolutionized digital reading. In fact, the use of digital documents has increased so much that in July 2010 it was announced that more Kindle books were sold than both paper and hardbacks for the top 10, 100 and 1000 best-selling books on the U.S. website amazon.com (BBC News, January 28, 2011; The New York Times, July 19, 2010).

Backing the usefulness of digital reading, Masayuki Teranishi, Yoshifumi Saito and Katie Wales (2015) highlight how effective the use of information and communications technology (ICT) has been in educational settings in Japan. Consequently, the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) as well as telecommunication industries has supported the use of digital appliances in their EFL classroom. Teachers and students are encouraged to read online newspapers, electronic encyclopedias, blogs and online journals. According to the study by the UK's National Literary Trust of the reading habits of almost 35,000 eight-to-sixteen year-olds in the UK (Coughlan, 2013), high levels of access to mobile phones, computers and tablets now means that reading is more likely to be conducted on screen than on the printed page. The tendency is to have more "digital natives", and they are learning how to deal with the additional cognitive load involved in digital reading.

Regarding to the new literacies, Cavanaugh (2006) states that teachers should incorporate information about technology into their curriculum to prepare students properly for the future. Furthermore, the International Reading Association (IRA) believes that the concept of literacy is changing because the web editors, presentation software, and e-mail are redefining the nature of literacy. They conclude that learners of the new literacies have the right to:

“Teachers who are skilled at using new literacies for teaching and learning;

A curriculum that integrates these new literacies;

Instruction that develops these literacies for effective use;

Assessment practices in literacy that include electronic reading and writing;

Opportunities to learn safe and responsible use of information and communication technologies; and,

Equal access to information and communication technology.”

On the other hand, some researchers argue that printed and digital reading texts each possess some exceptional features that result in important differences in the way texts are produced, displayed, organized and connected to other texts. In the Programme for International Student Assessment (PISA) document (2009), printed texts are considered as a relative permanence, and digital texts are actually dynamic and can be frequently completed, edited and updated. These differences have influenced the access, comprehension and uses of text in a wide variety of situations, ranging from education to work to personal purposes. Furthermore, it is essential to understand and assess the new forms of reading literacy that come with the practice of reading on digital displays. (Organization for Economic Co-operation and Development, 2009). Along similar lines, Pearson, Buchanan and Thimbleby (2014) argue that reading on screen causes a lot of problems: from hardware issues relating to screen size and resolution, to effective navigation and mark-up facilities. According to the author, the main reason for this is that paper offers numerous advantages over computer screens including ease of annotation, navigation, and flexibility of spatial layout.

The view that the introduction of digital media and the growing collection of digital documents have a profound impact on reading is in line with the development of digital libraries which “is participating in a general societal trend toward shallower, more fragmented, and less concentrated reading” (Levy, 1997). Several studies have explored reading in the digital environment though examining the evolution of reading or observing how people read documents (especially electronic documents) within a specific period of time. Liu (2008) analyzed reading behaviour in the digital environment and how people’s reading behaviour has changed over the

past ten years. The study shows an increasing amount of time spent on reading electronic documents, a screen-based reading behaviour is developing. The author concluded that digital reading behavior is described by spending more time on browsing and scanning, keyword spotting, one-time reading, nonlinear reading, and reading more selectively, while less time is spent on in-depth reading, concentrated reading, and decreasing continued attention. The common techniques that are done while reading print texts are annotating and highlighting, however, this “traditional” pattern has not yet transmitted to the digital reading conduct (Liu, 2008).

Computer use has grown exponentially since the invention of the microcomputer three decades ago. Digital technologies profoundly affect the shape, content, life cycle of texts and, the very nature of reading. (OECD, 2009)

3.9.2 Digital Reading theories

As learners increase their use of digital texts, digital reading theorists consider how electronic text affects reading performance and learning. Digital reading has been studied from different perspectives; reading and the aim of learning in digital contexts varies in terms of the approach, reading style, search, and concept mapping Cheek and Ortlieb (2014) explain the different theories of online reading skills and content acquisition techniques from online viewing of text. The first mentioned theory is the Information Foraging Theory (IFT), which was proposed by Pirolli (2007). It describes one’s behavior while reading online in everyday causal reading or for specific reading tasks within the web ecosystem. This theory assumes that people are biologically rational, and that reader information-seeking mechanisms and strategies adapt the structure of the information environments in which they operate. Its main aim is to create technology that is better shaped to users.

McAleese (1999) supports the claim of hypertext theory that challenges current reading practices and even our experiences of reading. A hypertext is defined as “text composed of blocks of words or images linked electronically by multiple paths, chains, or trails in an open-ended, perpetually unfinished textuality” (Hawkes, Murphy and Law, 2001). Carusi (2006, cited by Land and Bayne, 2011) assumes that hypertext’s format brings more freedom to readers than printed books, which are arranged in a preordained order that readers

must follow, and argues that readers are more active and less controllable due to the increased input they have into the hypertext. Consequently, they can choose their own path throughout the text and even be considered as “co-creators” of the hypertext (Carusi, 2006, cited by Land and Bayne, 2011). Percival (1989, cited by Hawkes, Murphy and Law, 2001) states that there are three issues in the implementation of a community hypertext information system: creating practical and user-friendly design and presentation of data, determining user need, and reading non-linear documents.

Digital reading requires abilities and tools, which will be used to locate, access, manipulate resources, and interpreting and evaluating the digital texts (Hill and Hannafin, 2001 as cited by Cheek and Ortlieb 2014). The mentioned components constitute the resource-based learning theory which underlies the fundamental principles of digital literacy skills (Cheek and Ortlieb, 2014). Hill and Hannafin (2001 as cited by Cheek and Ortlieb, 2014) propose the components of this theory as searching, processing, manipulating and communicating. The authors state that searching enables location of resources; processing provides cognitive support; manipulating, tests beliefs and theories; and, communicating, includes mechanisms for exchanging ideas. As students are exposed to a variety of text structures in digital mediums, there are different and meaningful ways that students may be prepared to conceptualize, understand, retrieve, and interact with these tools (Cheek and Ortlieb, 2014).

During the last years, Bootz (2006, cited by Knipe, 2007) has been working on a theory of reading in the digital environment. In his article, “Reader/Readers” he explains his approach which is adapted to percepto-cognitive theories about text. It implies that set of strategies for dealing with the text are provided to guide the reader in the interpretation of the text; the author states that if the reader understands the process of comprehension and cognition as the result of that process, he or she can be understood to develop a role in the act of reception. According to Bootz (2006, cited by Knipe, 2007), this percepto-cognitive approach is vital when reading digital texts because it engages the reader e with nonlinearity and opportunities for interaction providing a wide range of results. The theory establishes that a digital text should be

divided into four segments and takes into account three actors. Bootz (2006) describes how the text is created through a mental representation. Then, it is followed by an authorial process, which is transmitted by a reader process and ends with a new creation of a mental representation. The researchers suggest “double reading” strategy to understand the text better during this process. This implies the reader should reflect on the text after reading has taken place, taking into consideration everything as it happens. Consequently, he or she assumes dual roles, as performer and actor of the digital text and as a spectator of his/her own actions.

3.10 DIGITAL READING AND ITS CONNECTION WITH READING FLUENCY

It is common to think that learners in the twenty-first century are digital natives due to the digital age in which they are growing up, and would thus be more accustomed to and prefer e-books over hard copy text in books (Papa, 2014). Many authors argue that the reader friendly features of digital text, such as bookmarking, jumping to the Web for more information, and searching the text would lead to increased learning and comprehension (Papa, 2014)

According to Kerr and Symons’s research (2006, as cited by Papa 2014), the students reading performance between digital text and paper text is different. Reading speed was slower on the computer, but comprehension was higher.

Railean (2015) in her book “Psychological and Pedagogical Considerations in Digital Textbook Use and Development” summarizes the substantial differences between reading on screen and in print in three areas: cognitive, emotive and psychomotor. The author states that digital reading has changed the brain functionally. There is a relationship between the low level of information literacy skills and academic performance; learners generally read about 20 percent of the digital text on an average page, because they tend to employ a “screen- based reading behavior” when reading a digital text. This implies learners spending more time on browsing and scanning, keyword spotting, one-time reading, etc. and not on in-depth reading. Railean (2015) states that reading speed in reading digital texts is faster than printed text because it involves active reading and requires skills for reading digital text.

On the other hand, McIntyre, Hulan and Layne (2011) argue that there are many concerns with the skills students need in order to read online successfully. Learners who

already struggle with print and who come from all socioeconomic backgrounds may lack the reading speed and critical habits that are essential for effective reading on the Internet (Dalton and Proctor, 2008 as cited by McIntyre, Hulan and Layne, 2011). The authors state that readers have multiple cues to use for meaning-making when they read digital texts.

Kids can learn to read digital texts before hardcopy texts; many 3 and 4 year-old children can spend more than 30 minutes of uninterrupted time at the computer with a reading game. McIntyre, Hulan and Layne (2011) conclude that most of the time spent reading digital texts implies reading images with some print embedded in them because kids can learn words before they can decode them so the reading speed is affected by the digital text.

Finally, some authors study the biological aspect of reading digital texts. Masny and Cole (2012) state that there are many processes which are altered during the use of digital text. The short- and long-term memory processes are aligned when the readers tend to remember the addresses and sites for the collection of information such as *urls* rather than recalling of the information itself. In addition, there is an intensification in reading speed because the linguistic and visual processing centers of the brain take place in the process of reading digital texts. The brain registers more “background noise” when the reader is engaged in reading digital texts because the reader needs to understand what step he or she is going to do next and what visual data on screen is related to the required information.

3.11 PAPER FORMAT READING

Many factors influence reading preferences: availability of a print version, price of printing, time, and desired outcomes of the assigned task. Reasons for preferring print versions include factors such as less eyestrain and fatigue, the tactile aspects of holding and a printed work, better concentration, and the possibility to highlight and annotate the text. (Kurbanoglu, Boustany, Špiranec, Grassian, Mizrachi and Roy, 2016). Some studies agree that, when it comes to academic materials, students prefer to read “ink-on-paper”, especially for longer texts. In Kortelainen’s

research (2015), a questionnaire was sent to 18 universities in Finland and 600 responses were received. The results showed that a clear majority of informants preferred printed class readings. A high proportion (78%) of the subjects stated they could concentrate on material better when they read it in print. Some informants added comments in which they described how they got lost on the web, went to other websites, or read Facebook when reading online. In fact, sixty nine percent of informants in this study stated that they remembered information best when reading it in print because of the possibility to make their own notes on printed texts (Kortelainen, 2015).

Other authors state that the reading format preferences are driven by the circumstance of the material. The importance of a particular reading to the students is another evident contextual factor. Hence, the more important the material, the more likely a student will print it out or prefer it in print, especially if it is dense or difficult and demands greater concentration. Students also prefer their longer readings in prints, especially if it is more than ten pages long (Kurbanoglu, Špiranec, Grassian, Mizrachi and Catts, 2014).

On the other hand, writers have identified disadvantages of paper format reading. Kurbanoglu, Špiranec, Grassian, Mizrachi and Catts (2014) point out the additional drawback of carrying heavy books.

Other experiments with comparable print and e-dictionaries have found a significantly better performance by e-dictionary users (Jackson, 2013). In Nesi's study (2010, as cited by Jackson, 2013) students expressed that they preferred portable electronic dictionaries when reading with paper-based materials because of their accessibility and audio pronunciation features. Marchionini (2000, as cited by Liu, 2008) reports that learners may prefer reading texts on screen over reading on paper because of the ease in consulting a dictionary.

3.11.1 Paper format reading theories

“... a book is a book is a book. A reassuring, feel-the-weight, take-your-own-time kind of thing...” Garland (1982, as cited in Dillon, 1992)

There are many theories that support the view that paper is far superior and will never be replaced by screens. One of the most noticeable differences is the ease with which paper

can be manipulated and the difficulty of so doing with electronic text. Kerr (1986, as cited in Dillon, 1992) states that manipulation is an intrinsic part of the reading process for most tasks. Manipulating paper includes manual dexterity, using fingers to turn pages, keeping one finger in a section as a location aid, or flicking through tens of pages while browsing the contents of a document. Those skills are acquired early in a reader's life and they are transferable between all document types. (Dillon, 1992).

Another theory regarding print format reading is about the effects of typographical variation in cognitive process with printed texts. Vanderplas and Vanderplas (1981, as cited in Burke, Hartke and Shadow, 1989) found that with larger print, there were substantial progresses in verbal ability scores for adults in the range of 63 to 85; it means improvements in reading speed corresponding to increases in print size. Furthermore, this effect is based on legibility, or how well letters and words are perceived, and with the reading of continuous textual material. The management of those typographical factors intrinsic in letters and other print materials will affect ease and speed of reading (Tinker, 1963, as cited in Burke, Hartke and Shadow, 1989)

Researchers have also studied what students do to the print text when they read, for example highlighting part of the text, taking notes on the page or underlining vocabulary words. Sykes (2008) investigated the effect alternative print text designs have on adult learners with dyslexia, and what features of print text adults with dyslexia find desirable, usable, and useful when reading. He concluded that dyslexic readers consider a text more usable and legible when margins are big enough so there is room to take notes. Furthermore, the study explored what makes the text more useful and responsive to active reading strategies. The results show that students used numbering as a way to call out lists of important information; it means they knew what to take notes on or highlight, so they could know what is important. (Sykes, 2008)

3.11.2 Paper format reading and its correlation with Reading Fluency

There are many studies which have evaluated the effect of reading print texts on reading speed. Ryan (2013) measures the effect of font on reading speed. This study showed that the nominal sizes of printed text can be very misleading. On the other hand, Dillan (1992) argues that reading from paper is significantly faster than silent reading from screen. In his study, he reports that the evidence suggests a successful performance of between 20% and 30% when reading from paper format.

Diamond (2015) in his book about speed-reading compares a text when a student reads on a computer screen and in traditional print. The author and points out that speed-reading when reading a traditional text is certainly easier than reading on a computer. In addition, there are factors that probably contributed to readers' fluency: legibility and responsiveness. Responsiveness implies how the reading system responds to actions taken by the reader. In Haas's study (2013), the legibility of text had an effect on the reader's comprehension level and the speed rate was significantly better than the digital texts presented on a standard computer.

According to Hansen and Haas (1988, as cited in Haas, 2013) responsiveness has two components: the speed that the system responds to a reader's action and the speed that the response is completed. In the mentioned research, the responsiveness was high for print because eye and hand movements are well practiced and automatic for most experienced readers (Haas, 2013).

Fluency is considered as one of the foundational skills for effective reading comprehension. It implies the cognitive load of remembering what was read and the ability to make sense of the text; reading fluency relies on decoding ability, to decode quickly and with ease in order to be considered fluent. Skills such as fluency are important for reading print text. The reader can encounter amounts of unknown words (without a dictionary tool) and must make reading decisions quickly to understand effectively and use the information encountered (Eagleton and Dobler, 2012).

3.12 RESEARCH STUDIES ON DIGITAL MEDIA

3.12.1 In support of digital reading

The impact of digital media on reading has progressively been the object of experimental and academic exploration. According to Liu (2005), the digital environment has begun to affect people's reading behavior due to the increasing amount of digital information available and the time that people spend reading electronic media.

The author investigated in his research "Changes in reading behavior over the past ten years" about how people's reading behavior has changed by self-reported measures of their whole reading experience including academic reading and leisure reading. Survey questions and answering scales were used to collect information on the reading habits of 113 people aged between 30 and 45 years old from various organizations in the United States of America.

The results were that two factors increase reading time in participants: 1. Information explosion; and 2. Digital technology. The majority (83%) of subjects reported that the time spent reading electronically is increasing. Regarding reading strategies, over 80 percent of the participants stated a great rate of time spent on browsing and scanning. But, 90 percent of people reading a web page do not scroll down; this result was supported with qualitative data from interviews where they expressed that they do not have the patience to read every word. Participants stated that they merely skim and look for needed information while reading; 56 percent of the respondents noted that they read one time.

Liu (2005) concluded there is an increasingly digital environment and a greater use of a variety of strategies to deal with the information-abundant in the websites. On the other hand, the author argued that people tend to print out electronic documents, especially in-depth reading which involves annotating and highlighting.

3.12.2 In support of paper format reading

O'Hara and Sellen (1997) report a comparison of reading paper and on-line documents. The authors found out critical differences which have to do with the major advantages paper offers in the effective reading process. They argue that paper continues to be the preferred medium for a great number of students' reading activities since paper based materials have supported the use of independent reading and writing spaces. Moreover, authors claim this kind of material could be accessed concurrently and manipulated independently.

The qualitative study took place in the UK, and 10 participants were asked to summarize in 200-300 words a four-page article from a general science magazine. Five of them were randomly assigned to the "paper" group and the rest to the "online" condition. If they read the document on paper they summarized it on paper, and the same happened with the online class. In addition, the participants were interviewed and the sessions were video recorded.

The findings revealed that annotating and note taking while reading are important to analyze and comprehend the text. The results highlighted the major advantages that paper offers in supporting annotation while reading, quick navigation, and flexibility of spatial layout. They have also found out that there is a need for markings as a way of enforcing the comprehension of the texts. Regarding quick navigation, the results expressed the need to support quicker and more effortless navigation techniques such as using a hand to mark one's place in a document while scrolling or page turning with the other, or writing on one document while navigating in another.

3.12.3 A comparative study

Huang (2014) conducted a comparative "Online versus Paper-based Instruction: Comparing two strategy training modules for improving reading comprehension". This study investigates the effectiveness of online versus paper-based reading strategy instruction on EFL learners' reading comprehension. Fifty-seven university students with similar reading proficiency level were assigned to participate; both groups received reading strategy instruction in four aspects: Global, Problem solving, Support, and Socio-affective strategies.

One group received the instruction with paper-based material and other class with computer-based. The researcher divided the experiment into three parts four-hour intervention: before-reading (30 minutes), during-reading (90 minutes), and after-reading (60 minutes). After the pedagogical intervention, both groups completed a written recall in either L1 or L2 as a measure of reading comprehension.

Furthermore, a focus group was conducted with eight participants from the online reading group.

The results demonstrated that the online reading group overcame the paper-based class on overall reading comprehension. It is notable that the written recall scores of the online reading group (18.04) were better than the paper reading class (11.84).

Regarding to qualitative data, the interview revealed students' perceptions which were positive about the online reading support. They emphasized the use of online dictionaries access and the online highlighting function to facilitate vocabulary learning.

3.13 DIGITAL AND PAPER FORMAT READING AND ITS CONNECTION WITH READING FLUENCY

Taylor, Frye and Maruyama (1990) investigated the effects of time spent reading at school and at home on intermediate grade students' reading achievement in the USA. The participants were one hundred and ninety-five students in eleven classes from grades 5 and 6 who kept reading logs for four months. Students completed their reading logs at the end of each 50-minute reading class which were printed sheets. Participants were asked to record minutes spent on each type of reading and the number of words that they read in a set of time. They found out that students spend an average of 15.8 minutes of reading during the 50-minute reading class, and 15.0 minutes of reading per day at home. The results support that time spent reading in the classroom contributes significantly to growth in reading achievement but the effect of time spent reading at home on reading achievement growth was disappointing.

The researchers found out that the minutes of reading per day during reading class variable contributed to students' reading achievements which was measured by a standardized reading comprehension test at the end of the study.

3.14 CONCLUSION

Reading print material has been part of every student learning process. However, with the new globalized society, technology has been incorporated in different contexts and the educational field is one of them. Reading is one of the four language skills that is part of most general English programs, not to mention standardized English language examinations. Aside from the skill of being able to read itself - the ability to effectively decode and interpret a text - reading has been identified as an excellent way to extend a student's vocabulary (Konopak et al., 1987 & Krashen, 2003), encourage critical and creative thinking, and improve writing skills. Therefore, undeniably reading on a regular basis forms an important part of the process of learning English, or indeed, any foreign language.

This literature review highlights the findings of researchers regarding the topic of the study. We have included the most relevant aspects related to print and online reading material. This review supports the findings and is useful in analyzing the collected data. Reading print or digital material certainly influence students and their perceptions or beliefs. . We have tried to cover in depth their reality when reading.

The next chapter is about the research methodology used for this study; and how it has guided data collection, analysis and different assumptions related to the development of the research and the role of the researcher.

CHAPTER 4

4.1. RESEARCH PARADIGM

4.1.1. Definition and rationale

This chapter aims to offer a clear understanding about how students perceive the reading process using the different kinds of online and hardcopy materials. For that reason, considering the value of contrasting paper-based and on-line reading in a design perspective enable us to unravel the complexity of the design challenge and begin to make some better informed predictions about when and if it will ever be possible to expect a paperless future.

4.1.2. Type: Action research

This study can be classified as action research. According to Creswell (2012) action research involves systematic procedures used by teachers to collect data, in this specific case the data will be qualitative. This type of research has the vital aim of analyzing and solving educational problems in a specific educational scenario.

The finding of this action research will promote some practical changes in the curricula of an institution, which modifies some educational theories or approaches. The new findings will be shared with teachers who are facing the same problem and possible solutions will be offered.

O'Brien, R. (1998) claims that action research assists in practical problem-solving and expands scientific knowledge at the same time, as well as improves the competencies of the respective actors. This research needs a collaborative performance of the participants and researchers in an immediate situation. While getting feedback and information, the analyzed data aims at an increased understanding of a given social situation.

4.2. DEFINITION AND RATIONALE

We carried out this study to gain a more complete understanding of the students' reading skills and preferences in the university. The comparison between paper format and digital reading is especially important because, as part of a new curriculum design process, Foreign Language Studies Center has decided to use a

new pedagogical method called the flipped classroom. This method requires students to do more autonomous activities which include reading a lot of articles before attending a class. Consequently, it is necessary to analyze how the students perceive their reading skills when working with digital material because of its importance in their reading learning process. In addition, it is necessary to understand the students' perceptions about digital and print material because this information could be helpful in designing attractive reading activities. This research will help us to evaluate approaches that might work with individuals in educational settings.

This chapter discusses the philosophical assumptions in terms of: ontology, epistemology, and methodology; all steps that were carried out as part of the present study are then described fully.

4.3. METHODOLOGY STANCES

4.3.1. Paradigm of the study: Constructivism, Ontological and Epistemological positions.

The researchers intended to understand the reality under the constructivism paradigm for the ontological and epistemological positions. According to Guba and Lincoln (1994), constructivism represents "local and specific constructed realities" where social phenomena are products of meaning-making activities of groups and individuals.

On an ontological level, this study established that reading is an effective skill practice that allows researchers to immerse students in real life situations.

Furthermore, the epistemological position was based on subjective viewpoints; Guba and Lincoln (1994) pointed out that researchers and participants are linked. They construct knowledge together which will contribute to create valuable findings with a wide perspective about online and paper-based reading practice.

4.3.2. Methodology

The qualitative research was carried out considering the basic characteristic that this kind of research has: to explore the problem and develop a detailed understanding about it (Cresswell, 2012). The research questions were formulated. Next, data was collected from a small number of individuals to get the participants' view and analyze it. When reporting

qualitative findings, researchers have to use flexible structures and include the judgement, biases and values of the researchers.

4.3.3. Hermeneutic and Dialectic Methodology

We will use hermeneutic and dialectic methodologies, (Guba and Lincoln, 1994) which imply paying attention to the rhetoric which refers that individual productions can be elicited only by the interaction between the investigator and respondents through a consensus construction. The main objective of this methodology is to extract a consensus construction where the continuing communication with other points of view is the essential epistemological principle of the constructivist methodology (Guba and Lincoln, 1994).

The methodology used was hermeneutic because it enabled us to obtain detailed description and analysis of the particular situation within the specific community. McKay (2006) suggests the application of some specific procedures to perform the qualitative research into a foreign language classroom. This procedure contains the assumptions that classroom learning must be studied holistically, considering a variety of issues in a specific reality; this methodology guides the researcher to develop activities and collect the data, as well as examines the perceptions, beliefs and thoughts of EFL learners (McKay, 2006).

Based on the information above, this qualitative research tried to understand the students' perceptions of online and paper-based reading practice; and to analyze how students perceive that reading these kinds of texts has an effect on their reading skills. In order to generate data that is primarily in the form of words, the appropriate hermeneutical methods that were used were a semi-structured interview, observation notes and a survey.

4.3.4. Researchers' role

We needed to be with the students at all times when reading the digital and hardcopy material. This was really useful and enabled us to get valuable information while conducting the different observations. We took notes while doing the observations and this information assisted us in understanding much more the

perceptions of the students about digital and printed material.

4.3.5. Participant researchers' role

The Foreign Language Studies Center students participated voluntarily in this study; they committed themselves to be part of a test and participated in the reading sessions. They were asked to read the different texts in a specific time. Then, they followed correctly all the instructions and wrote the summary of the texts. Students' role in the survey and interview was the keystone of the study. They were active participants and allowed us to understand more in depth their reality when reading.

4.3.6. Ascertaining the warrant for the issues of validity and reliability.

a. Reliability

Lincoln and Guba (1985, p. 300) use the term "dependability" in qualitative research; this word corresponds to the notion of reliability.

Clont (1992) and Seale (1999) use the concept of consistency or reliability in qualitative research. They claim that the consistency of data is possible to achieve when all the process of the research such as: raw data, data reduction products, and process notes are verified. Moreover, to ensure reliability in qualitative research, it is necessary to examine of trustworthiness. Pilots and pre-pilots studies of the applied research instruments assist the research in confirming reliability.

b. Validity

Creswell & Miller (2000) suggest that the validity is affected by the researcher's perception of validity in the study and his/her choice of paradigm assumption. Therefore, some concepts of validity have been developed by many researchers. They have shown with these new terms quality, rigor and trustworthiness.

Mckay (2006) states that there are two types of validity in qualitative research. These are: internal validity which has to do with the credibility of the study and the external validity which is related to transferability. In this study the researchers achieved credibility by recording the interviews, surveys and observations to then collect the data to analyze it. According to Guba and Lincoln (1994), a credible study has to be line up with the ontology, epistemology and methodology; it must follow the good practice standards in qualitative

research. This information was gathered and presented in an unbiased manner. Furthermore, in order to get internal validity the researchers did constant observations during the study, used different sources of data like interviews, surveys and observations. Consequently, triangulation was possible to attain when researchers realized that the three sources used in the study allowed them to gather similar data. In addition, this data offered clear and precise answers to the research questions. Moreover, researchers discussed together about the study, design and their assumptions. Finally, students who took part in this study had the opportunity to check and verify the researchers' interpretation of the data.

Regarding transferability or external validity researchers intended to show a clear degree to which the findings of this qualitative study can be applied to other contexts (Guba and Lincoln, 1994). Other contexts with similar characteristics were taken into account and the findings of this research can offer some solutions or hints to those learning scenarios. To achieve this external validity, the researchers provided a complete description of the participants and the context where the study took place. Hence, possible readers of this study can determine to what extent the findings might be applicable to other learning contexts.

The students' perceptions were confirmed through the three mentioned instruments. In the survey, 57% percent of the participants agree with the statement that they do not mind reading hardcopy material when studying while the 66% percent of the interviewed group expressed their preferences for printed reading for academic purposes. It was corroborated with the observations, 25 students had levels of anxiety while reading digital texts and just 13 students when reading print texts during the eight sessions in the classroom.

Furthermore, most of the students expressed their preferences for reading printed material when studying. For example, 67% of the respondents stated that when they need to read a long passage on the computer, they usually printed out a copy. This is analogized with the fact saw through the observations where just 10 students got distracted when reading hardcopy material in contrast with 20 students

when reading digital format. In the interviews, 47% of the students perceived that they could focus better with printed texts because they do not have any distractors.

On the other hand, during the observations, it was seen that twenty-two (n=22) students when reading digital texts finished their reading tasks quicker than when reading paper-based texts. This is linked with the fact that 40% of students in the interview perceived they read faster digital material because of the use of extra tools such as dictionaries and translators. In addition, 40% of the participants who did the survey think that they can read faster when reading digital material.

Moreover, 66% of the students in the survey perceived that they do not mind reading digital texts for pleasure. This fact was confirmed when 17 students who did digital reading expressed their enthusiastic to read the text without academic purposes during the observations. In addition, 33% percent of the interviewees expressed their preference about finding free digital versions of some texts when they want to read for pleasure.

c. Pre Pilot and Pilot Study

In our study, a pre pilot and pilot study were carried out in order to confirm the validity and reliability of the texts, interview questions and survey statements. The texts, questions of the interview and statements of the survey needed to be analyzed in these two processes in order to discover unanticipated events. The material used in this study was previously read and corrected by a colleague English teacher who certified that there were no grammar or vocabulary inaccuracies that could prevent students from understanding them. After this, we presented the material to some students who were not part of the study, but had the same English level (A1).

According to McKay (2006) in order to increase the value of an instrument, it is necessary to pilot it. As a result, the researchers gave texts, the interview and the survey to a group of students who were similar to the group that was going to be part of the study. The main purpose was to find out what problems existed in the clarity of the directions and which items were confusing or difficult to understand.

4.3.7. Digital and Hardcopy Texts

For the pre pilot, (n= 5) students with CEFR English level (A1) who were not part of the study read the digital and hardcopy material and expressed their opinions about them. Based on their opinions and feedback, researchers had vital facts to modify or keep the information in the digital and hardcopy texts that were used in the research.

For the pilot, we worked with 40 students who read the digital texts and the printed material. After reading, they were asked to write a short summary. The majority were able to read and understand the texts without any problem. Thus, we were able to approve and use them in the main study.

4.3.8. Interview and Survey

There was a pre pilot with (n= 5) students for the survey and (n= 5) students for the interview. This pre pilot let the researchers take remedial actions before proceeding with the pilot which was carried out with (n= 10) students for the survey and (n= 10) students for the interviews. The students who were part of these pre and pilot processes had similar characteristics to the students who were part of the main study.

4.4. TRIANGULATION

According to Creswell (2012), triangulation will assist the researcher in corroborating evidence from different individuals. This ensured the accuracy of the study since the information was gathered by using different sources. Hence, this was achieved by using a semi- structured interview, observations notes and surveys.

4.5. ETHICAL CONSIDERATIONS

In order to carry out this study in the Foreign Language Studies Center, we sought and received permission from the departmental coordinator. After receiving this approval, we designed an informed consent form for the institution and the participants (Appendix A). The main aim of this document is to explain the general objective of this investigation, the instruments that will be used during the study, and the time that participants. The protection of the confidentiality is stated in this informed consent form as well. For the benefit of the

students and the institution, researchers can share the progress of the study if it is required. In the form, the researchers consulted the students the possibility to video tape and take photos during the study. Furthermore, the form states that students can verify if the data provided by them reflect their original opinions or beliefs.

4.6. METHODS OF DATA COLLECTION, SELECTION AND HANDLING.

4.6.1. English Proficiency Level Test

The participants took an EFL Standard Test to demonstrate their reading proficiency level. The test was provided by the English department where the study took place. The coordinator of the language center expressed that this test evaluates the four different skills and offers a clear view of the English level of the students.

In order to explore the opinions of learners, the researchers asked students to read and to summarize four passages from a popular course book face2face 2nd edition, pre intermediate level, which suited the English level of the students (A1 based on the CEFR) and was pertinent to their syllabus and course program.

4.6.2. Sessions

The sessions took place over 4 weeks. There were 4 types of texts: narrative, descriptive, expository and argumentative and every week students covered one digital and one printed format of the diverse types of texts. In the paper condition, subjects read the first document on paper and summarized it on paper using 50 words; in the digital condition, subjects read the document on-line and then they had to type a summary on-line using 50 words. We chose the task of text summarization because reading in order to write a summary is a strategy that requires a deep understanding of the text. Indeed, O'Hara and Sellen (1997) point out that some of the strategies used in summarization may also relate to the general process of text comprehension. Furthermore, Hsin-chou Huang (2014) considers that summarizing is a problem-solving strategy which helps the readers to deal with reading problems in understanding the text.

4.6.3. Reading Time

In order to analyze the amount of time used and the number of words read in different texts, we encouraged students to use a reading rate tracking technique, which was a record to

collect the numbers of words they read and the time they used.

In both versions (digital and print), the texts *Celebrity Profile* and *Kill your TV* were assigned a reading time of five minutes. Moreover, in these two versions of the texts, *That's Incredible* and *Culture Shock* had a time assigned of four and three minutes respectively.

This study was done with the 30 students who participated in eight reading tasks. Ho-Liang and Min- Huang (2013) use this technique in their study. The aforementioned researchers found that e-book reading is plausibly able to promote the student's retrieval as compared with reading printed books. It was interesting that they connected the numbers of words students read and the time they needed to do so with their preference in the material they read.

It was vital to keep in mind that speed reading is usually practiced by native speakers of a language, with reading rates for proficient readers reaching 600 or more words per minute (De Leeuw & De Leeuw, 1965). However, time reading (TR) (Champeau de López, 1993) is the reading of texts of equal length and equal lexical difficulty, regularly over a period of weeks or months. It can be assumed that reading speed will increase with practice as will comprehension (Atkins, 2009), although for some participants, this may not be the case. We intended to find out the kinds of material (online or paper based) students prefer to read and if there was a connection with the numbers of words they read and the time they spent reading those texts.

As previously indicated, students read 4 types of different texts, each of them was presented to the students in two versions: online and hard copy. As a result, students read 8 texts and while doing this the researchers asked them to fill in a reading rate record. This focused on the name of the text, the numbers of words the student read and the time the student used in doing so. While reading the texts, students were not interrupted and they did not have to complete any reading exercises after finishing reading. They just had to write a small summary of what the text was about, in order to show how much they were able to understand. Writing helped students integrate different sources of information and organize their thoughts.

Therefore, their thinking was more fluid, flexible, and tangible.

Learners who were part of the study were asked to read online and hardcopy texts in order to compare their perceptions of the use of online and paper-based reading texts. These texts aimed at covering different topics which will be appealing to students. The texts were similar in length and complexity to the types of texts they tend to read in their English courses according to CEFR.

4.6.4. Lexile in the texts

The parameters of “Understanding TOEFL® Primary™ Reading and Listening Score Reports” allowed the researchers to obtain an average of the numbers of words that an A1 level student is able to read. The TOEFL® Primary™ tests provide information about the English proficiency of young English learners in countries where English is not typically used in daily life. These measures are a good guide for students, teachers and parents when selecting reading material appropriate for a particular student’s English reading ability. Based on this, the articles that learners read in the diverse sessions had between 250 and 330 words.

4.6.5. Rubrics

According to Arter and McTighe (2001), a rubric is a particular format for criteria and the best way to cover the essence of what we, as teachers, look for when we are judging quality. As a result, the summaries that participants wrote after reading the texts were assessed by a rubric. This type of assessment was adapted from a generic rubric designed by the Writing Center of San Diego State University; and it was based on a holistic method in order to evaluate three aspects which are (1) accuracy of content, (2) comprehensiveness and balance, and (3) clarity and (4) readability. The rubric provides a description of four levels of performance (exceptional, acceptable, partial and little to no evidence) which assigns scores based on the mentioned criterion elements.

4.6.6. Instruments

The researchers used a semi-structured interview and a survey (Appendix B and C) to measure participants’ opinions about the use of digital and hard copy text in their reading practice. We were interested in knowing if their preference in the reading material had something to do with the numbers of words they were able to read. A semi-structured

interview was carried out with (n=15) students and detailed information was collected about reading digital and hard copy texts. Silverman (1993) states that these kinds of interviews are conducted based on relevant topics that generate specific questions. This means that not all of the questions are designed before the interview. This type of interview was implemented since it encourages a relaxed relationship between the interviewer and the interviewee.

Moreover, this method provides information about students' perceptions, attitudes, and beliefs, and it contributes to understanding the research participants' perspectives or experiences. In some cases, it was necessary to add extra questions to get much more valuable information from the students. Some of the students' answers invited the researchers to keep asking a bit more.

The questions selected for the interviews were based and adapted from the context of the present research from the literature review of a study conducted by Widmyer (2011). This research reports the students' perceptions of reading on paper and online and explores different methods in which teachers can use technology in the classroom in conjunction with reading. In addition, the present study was guided by research conducted by Liu (2005) about reading behavior in the digital environment which analyzes how people's reading behavior has changed over the past ten years.

The survey was conducted with (n= 15) students. It aimed at gathering their beliefs to supplement the reading perceptions. McKay (2006) states there must be a clear objective of the information the researcher intends to collect in a survey design. The survey used in this study included close-ended questions with the Likert- scale. Hence, students were asked to select one of several categories detailed in four numbers to answer some statements.

The focus protocol used in the research was taken and adapted from a study (Herath, 2010) which used this tool to explore online and offline reading and determine the differences between them while assessing the impact of the Internet and online environment on individuals' reading behavior

Furthermore, we used observations to understand fully the complexities of the research context, direct participation in, and examine the phenomena of reading through digital or hard-copy text. McKay (2006) states that the data collected must be descriptive in order to understand what happened and to contain objective accounts of what people say and do. In addition, observations helped the researchers to enhance aspects of an interaction that are subconscious and less likely to be described in interviews (Ritchie, Lewis, Nicholls and Ormston, 2013)

4.6.7. Research Questions

In order to understand students' opinions based on their reading skills when using online or print material in depth, the researchers carried out a qualitative study, which intended to answer the following research questions:

- a. Do learners feel that improvement of reading skills take place using either online or paper-based reading texts?
- b. What implications do learners perceive about online and paper-based reading texts have for developing reading skills in an EFL (A1) class?
- c. Does the format of the text students read influence the number of words they are able to read?

4.7. SELECTION OF THE SAMPLE

Due to the purpose of the study, students took the reading section of this test English first (EF). The test was conducted with a group of 30 students to have a representative and unbiased sample.

The 30 participants became the total population of this study. It was a convenience sampling because these students attended a course at the researchers' place of work. This type of sampling involves the selection of the most accessible subjects, which relies on data collection from population members who are conveniently available to participate in the study (Marshall, 1996).

4.7.1. Participants and its background

Students who were part of this study had an English level (A1) according to the Common European Framework (CFR) and were doing their regular English courses at the Foreign Language Studies Center at an Ecuadorian public university. The students' age ranged from 20 to 25 years old. These students were currently attending the first semester of the academic year 2016-2017.

4.8. ANALYSIS OF THE FINDINGS FROM THE INTERVIEW

4.8.1. Data coding of the interviews

Number of participants: 30

Number of interviews made: 15

Number of interviews coded: 15

The semi-structured interview that was applied to participants includes fourteen open-ended questions. Bernard (1988) states that a semi-structured interview is best used when the researcher will not get more than one chance to interview the participant.

The open-ended questions were adapted from a doctoral dissertation from the Bowling Green State University done by Widmyer (2011). Furthermore, these questions were also based on a study, which investigates reading behavior in the digital environment by analyzing how people's reading behavior has changed over the past ten years. Liu (2005) carried it out for the Journal of Documentation Emerald in the United States of America.

4.8.1.1. Codes:

1. Preferences for reading:
 - a. Digital reading
 - b. Printed reading

2. Perceptions about digital reading
 - a. Lack of concentration
 - b. Discomfort when reading
 - c. Eyestrain

- d. Portability
 - e. Availability of the text
 - f. Information at hand
 - g. Speed rate reading
3. Perceptions about printed reading
- a. Concentration issue
 - b. Taking notes facility
 - c. Information at hand
 - d. Size and weight of the books
 - e. Accumulation of papers
 - f. Lack of dictionary
 - g. Speed rate Reading

The process of creating codes followed the model of top-down and bottom-up coding (Auerbach and Silverstein, 2003). The coding process begun with a “start list” of pre-set codes from the conceptual framework and previous studies, and another set of codes emerged from reading and analyzing the data. The objective of this model was to refine theoretical constructs in an organized way which was the basis for developing the analysis.

4.9. CONCLUSION

The results of the data analysis are presented in the following chapter. The data were collected and then coded in response to the problems posed in chapter one of this dissertation.

CHAPTER 5

5.1 PRESENTATION OF FINDINGS.

In this chapter, we describe the findings of the study by using graphs, tables and charts. We aimed to show precisely the data obtained from the participants' reading of the texts. Also, the findings show the number of words students read and the time it took them. . In addition, an average of the summaries grades was obtained to analyze the students' level of comprehension. The survey and the students' answers are shown in percentages.

5.2 FINDINGS FROM THE TEXTS

The participants read four different types of texts during the study. Researchers offered them the opportunity to read the same text in digital and print version during four weeks of the study. Two different genres of the texts were read per week. One print and one digital text were covered per week, as well. The time assigned for the reading varied according to the text.

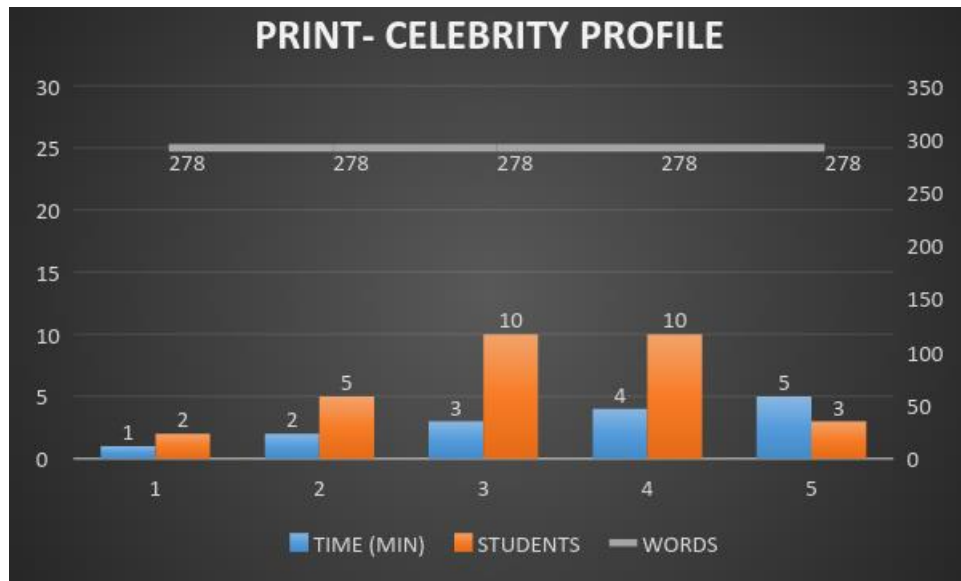
The texts belonged to four types of genres to give variety to the students: *Culture Shock* belongs to the expository genre, *That's Incredible* is part of the narrative genre, *Kill your TV* is classified as argumentative and *Celebrity Profile* fits in the descriptive genre. The readings had between 236-297 words.

5.2.1 Number of words and time

The data analysis focused on the number of words students were able to read and the time used in doing this activity.

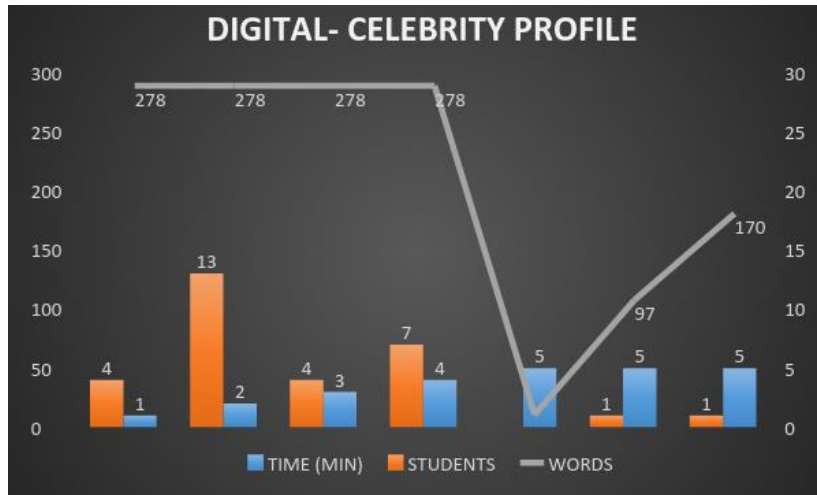
In both versions (digital and print), the texts *Celebrity Profile* and *Kill your TV* were assigned a reading time of five minutes. Moreover, in these two versions of the texts, *That's Incredible* and *Culture Shock* had a time assigned of four and three minutes respectively.

Figure 5.1 PRINT - CELEBRITY PROFILE



According to figure 5.1, the article Celebrity Profile in the print version has the following data. Ten students were able to read 278 words in four minutes and ten students used three minutes in reading the same number of words. Very few students ($n= 3$) used five minutes in reading the same 278 words. Two students used one minute in completing the reading and five students used two minutes in doing the same task.

Figure 5.2 Digital - Celebrity Profile



When contrasting the time used and the numbers of words read in the digital version of the same text. Figure 5.2 shows that four students did their reading in one minute and were able to read 278 words. Less than a half of the students ($n=13$) were able to read the same number of words in two minutes. Four students used three minutes in reading the article and were able to read 278 words. Seven students read this digital version in four minutes and read 278 words. Additionally, two students used the time assigned that was five minutes. However, one of them just read 97 words and the other student just read 170 words. These two students read fewer words, therefore they did not complete the reading.

Figure 5.3 Print - Culture Shock

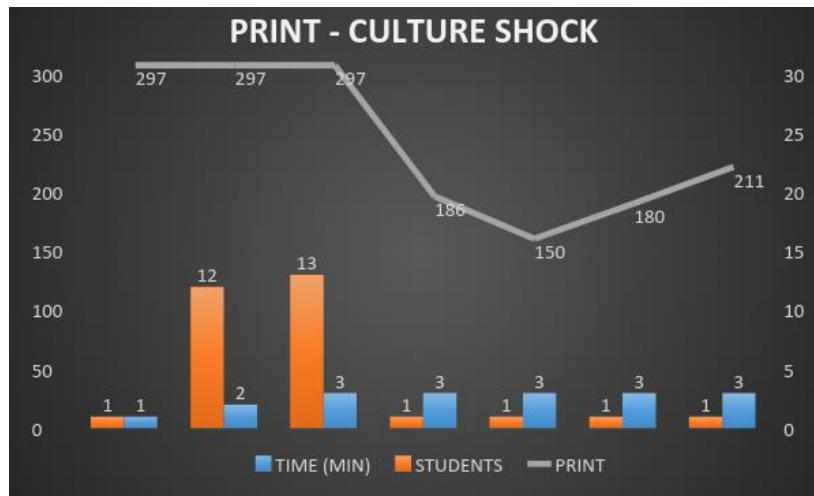


Figure 5.3, shows the data of the print version of the text Culture Shock, one student was able to read the complete reading in one minute. Less than a half of the students ($n=12$) read 297 words in two minutes. There were fourteen students, who spent three minutes in their reading, however one of them just read 211 words of the text and the other thirteen were able to read the 297 words. Three students were not able to complete the reading and just read 150, 180, 186 words respectively and they spent three minutes in doing the task.

Figure 5.4 Digital - Culture Shock

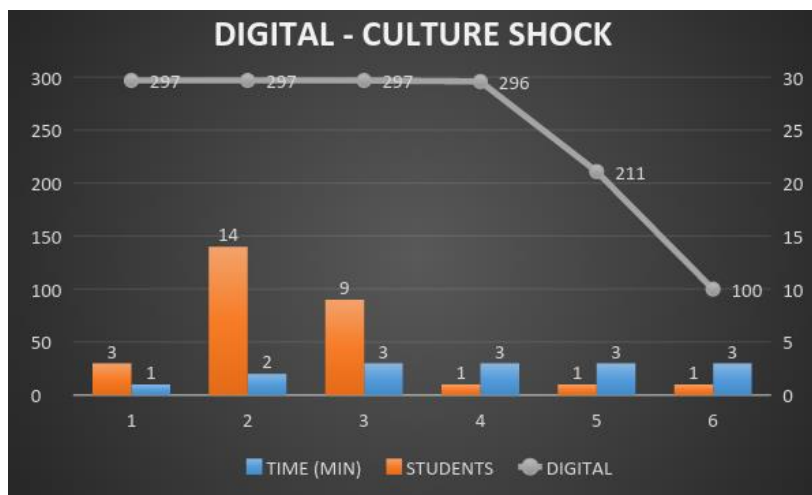


Figure 5.4 shows the analysis of the digital version of the text Culture Shock and as the chart shows, three students were able to read 297 words in one minute; less than a half of the participants ($n=14$) in the study were able to read 297 words of the text in two minutes.

One student spent three minutes and was unable to finish the reading and just read 100 words. Eleven students spent three minutes in their reading. However, there were two of them who just read 211 and 296 words respectively. The other nine students spent 3 minutes and were able to read 297 words.

Figure 5.5 Print - Kill Your Tv

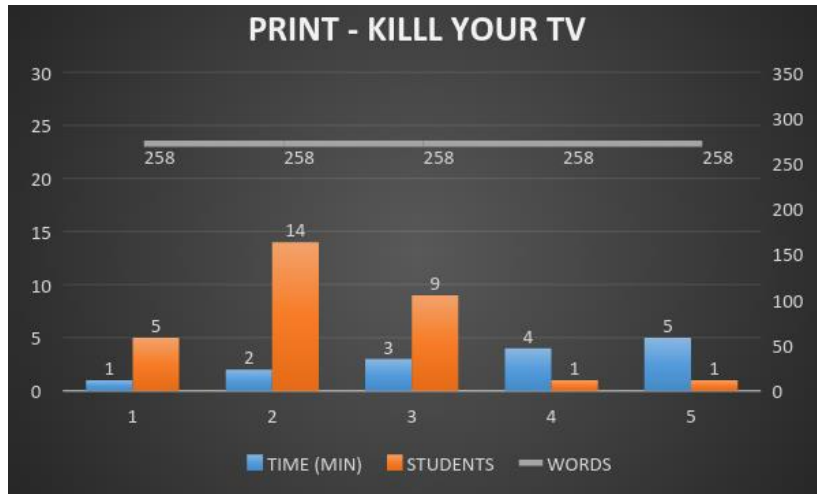
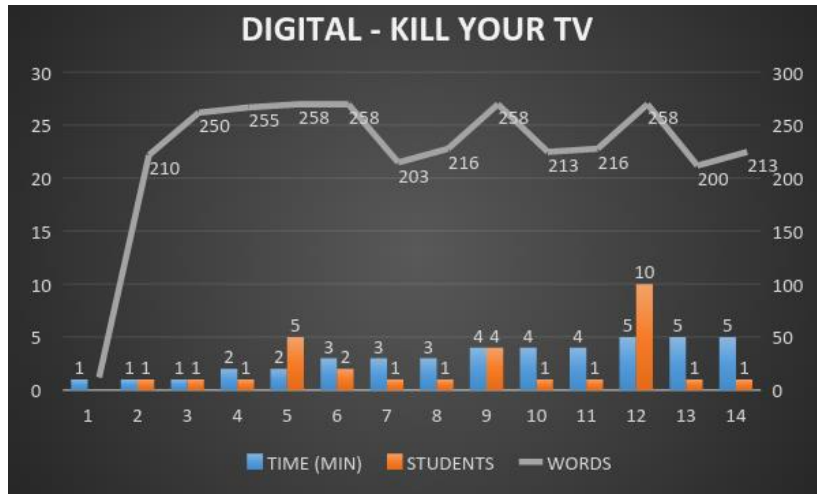


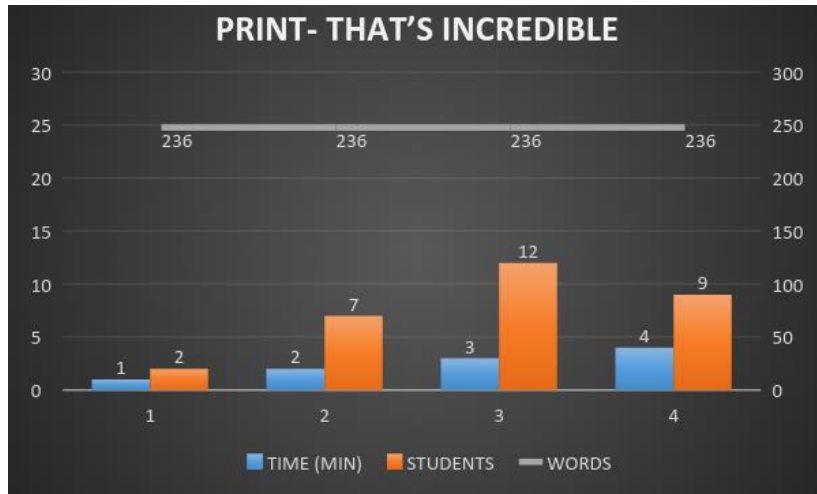
Figure 5.5 analyzes the data obtained from the print version of the text Kill your TV. The graph shows that fourteen students spent two minutes in reading the whole text, which implies 258 words. Five students were able to read the complete text (258 words) in one minute. Less than a quarter of the students ($n=9$) were able to read 258 words in three minutes. One student read 258 words in four minutes and one student read 258 words in five minutes.

Figure 5.6 Digital - Kill Your Tv



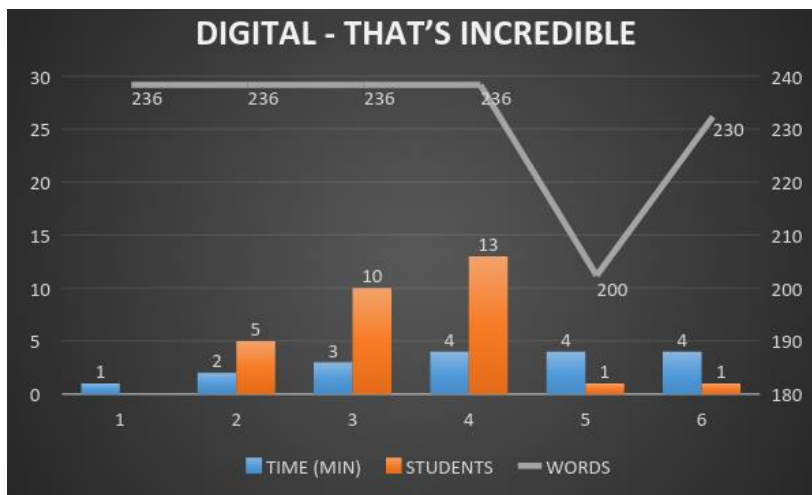
In figure 5.6, the analysis of the same text in digital version shows that two students spent one minute to read. One of them read 210 and the other 250 words respectively. Furthermore, six students spent two minutes to read. However, one of them just read 255 words, and other five students were able to read 258 words. Four students spent three minutes to read. Two of them read 203 and 216 words accordingly and other two participants were able to read 258 words. Moreover, six students spent four minutes to read. Nevertheless, two of them read just 213 and 216 words respectively and other four students read 258 words. There were twelve students in the five-minute average time, but two of them read less than 258 words; one read just 200 words and other student just read 213 words. The rest of participants were able to read 258 words.

Figure 5.7 Print - That's Incredible



According to figure 5.7, the data of the print text *That's Incredible* shows that two students read 236 words in one minute. Seven students read the same number of words in two minutes. Less than a half of the students ($n=12$) were able to read 236 words in three minutes. In four minutes, nine students read 236 words.

Figure 5.8 Digital - That's Incredible



In contrast, figure 5.8 that analyzes the digital version of the text *That's Incredible* shows that five students spent two minutes in reading 236 words. Ten students read the same number of words in three minutes and four minutes were spent by fifteen students. However, two of them were able to read just 200 and 230 words respectively, other thirteen students spent the same four minutes, but were able to read 236 words.

5.3 FINDINGS FROM THE SUMMARIES

Subjects reading both formats digital and paper-based were asked to create a 50-80 word summary of the source text. The summary should provide a clear description of the main points and ideas of the reading. The instructions were that they could mark the document in any way and they could make as many notes as they wanted. Subjects were told that they could not refer back to the article during the summary task.

The text summarization was applied as one of the students' tasks since, writing a summary is a skill that requires a deep understanding of the text. Indeed, O'Hara and Sellen (1997) point out that some of the strategies used in summarization may also relate to the more general process of text comprehension.

Participants (n=30) were asked to read four types of texts such as expository, descriptive, narrative and argumentative in digital and hardcopy format. After that, they wrote a summary about the article and the researchers graded the summaries separately in order to get reliable results. The scores were from zero to four using an adapted rubric for summary

writing applying the Holistic Method. The summaries and their scores have been analyzed and illustrated in the following charts.

Table 5.1 Average of the Summary (That's Incredible)

THAT'S INCREDIBLE				
	PRINT		DIGITAL	
TIME (MIN)	TOTAL OF STUDENTS	AVG	TOTAL OF STUDENTS	AVG
1	2	2.00	0	0.00
2	7	1.86	5	2.00
3	12	2.00	10	1.90
4	9	2.11	15	1.60

Table 5.1 reflects the number of participants who got the highest score in their summaries in print format (n=9) and in digital format (n=5). The averages were calculated over a total of participants (n=30) who provided writing summaries in two formats. 30% of the students from the print group got an average score of 2, 11 while the 50% of the digital group got 1, 60.

Table 5.2 Average of the Summary (Culture Shock)

CULTURE SHOCK				
	PRINT		DIGITAL	
TIME (MIN)	TOTAL OF STUDENTS	AVG	TOTAL OF STUDENTS	AVG
1	1	3	3	3.67
2	12	2.75	15	3.20
3	17	1.85	12	2.83

Table 5.2 illustrates the average of the summaries of the expository text. The participants with the highest scores were those who wrote a summary in digital format (n=3) with an average of 3,67. On the other hand, the 57% of the students who wrote the summaries in paper format got an average of 1,85 points; and, 50% of the digital group had an average score of 3,2.

Table 5.3 Average of the Summary (Kill Your Tv)

KILL YOUR TV				
	PRINT		DIGITAL	
TIME (MIN)	TOTAL OF STUDENTS	AVG	TOTAL OF STUDENTS	AVG
1	5	1.40	2	3.50
2	14	1.57	6	1.83
3	9	2	4	3
4	1	1	6	2.50

5	1	2	12	1.25
---	---	---	----	------

Table 5.3 reveals that the 47% of the participants who summarized the argumentative article in printed format got an average of 1, 57 while the 40% of the digital group had 1, 25. Furthermore, the highest average score was 3, 5 in the digital format summary, and in the hardcopy format was 2.

Table 5.4 Average of the Summary (Celebrity Profile)

CELEBRITY PROFILE				
	PRINT		DIGITAL	
TIME (MIN)	TOTAL OF STUDENTS	AVG	TOTAL OF STUDENTS	AVG
1	2	3	4	3.75
2	5	2.2	13	3
3	10	2	4	2.25
4	10	2.1	7	3
5	3	1.67	2	1.5

Table 5.4 shows noticeably that Celebrity Profile had the best score for the written summaries in digital format with 3,75 and the highest score in printed format with an average of 3. 67% of the participants from the print group got between 2 and 2,1 for their summaries while the 67% of the digital group had a mean of 3.

5.4 FINDINGS FROM THE SURVEY

Figure 5.9 Question 1

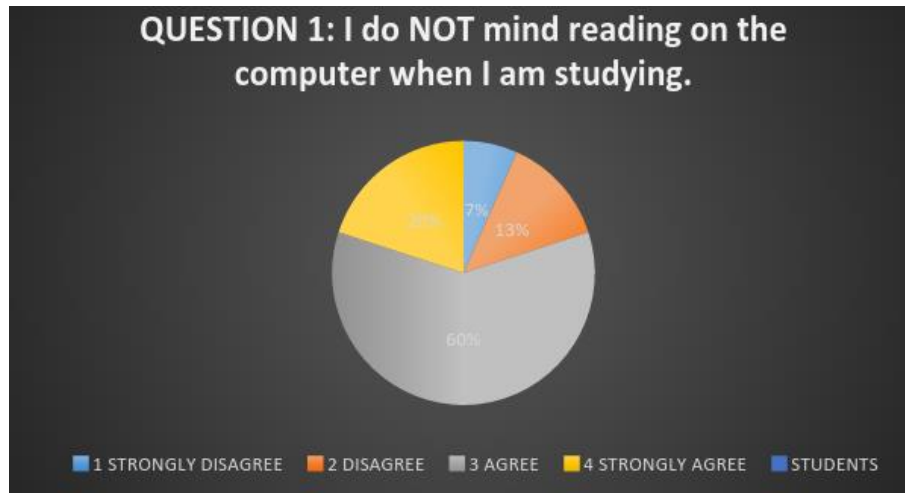
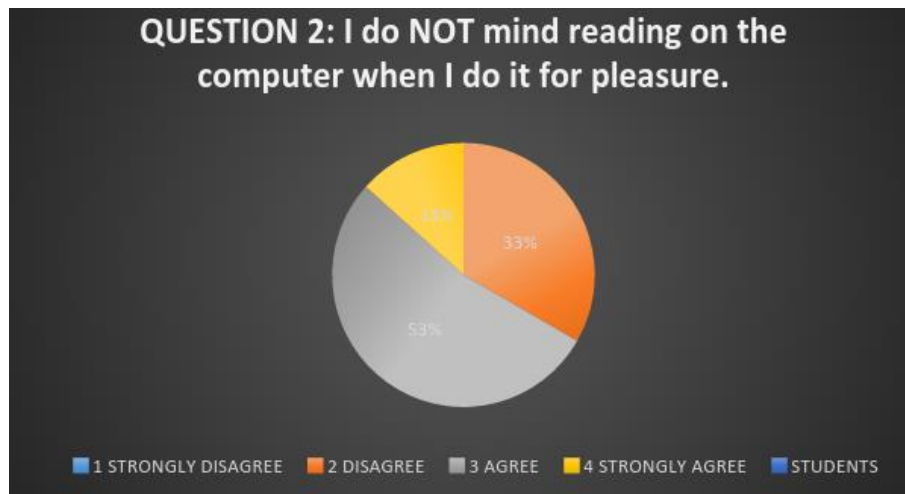


Figure 5.9 shows that in question 1, most of the students do not mind reading on the computer when studying. 60% agree. 20% of the students strongly agree. However, 13% disagree and there is a small percentage that strongly disagree with the question and that is 7% on the sample.

Figure 5.10 Question 2



As Figure 5.10 shows in question 2 most of the students (53%) agree when answering question 2. 13% of the sample strongly agree. On the other hand, 34% of the students say that they disagree with the question.

Figure 5.11 Question 3

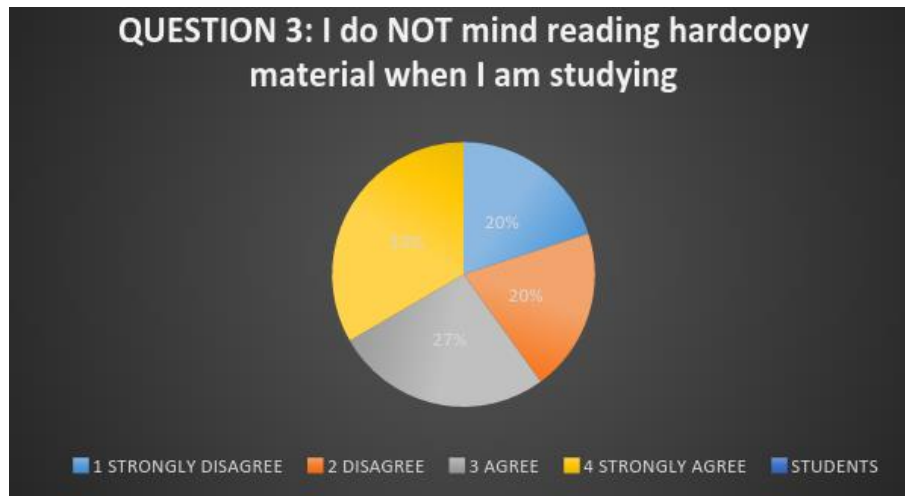


Figure 5.11 shows that 33% of the students strongly agree with the question 3. 27% of the students agree, 20% of the students claim that they disagree and 20% of the students strongly disagree.

Figure 5.12 Question 4

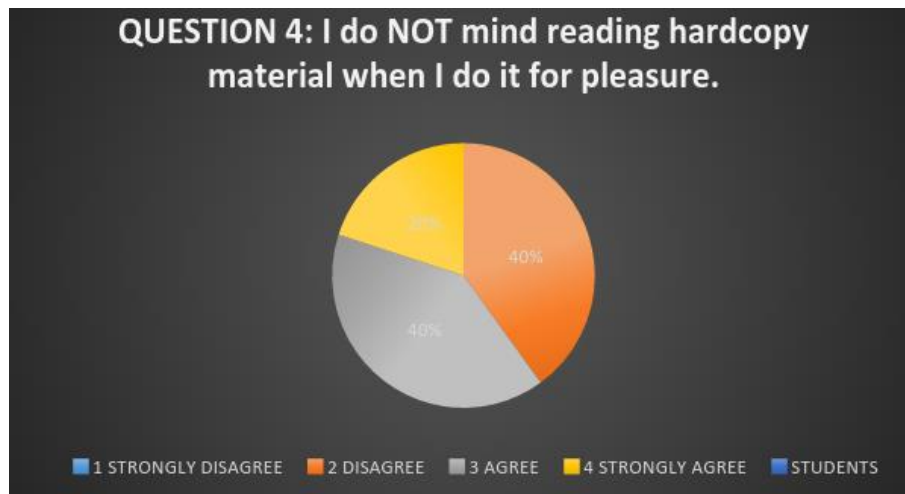


Figure 5.12 shows that when answering this question 40% of the students stand for the option agree and 40% of the students disagree. However, just 20% of the sample strongly agrees.

Figure 5.13 Question 5

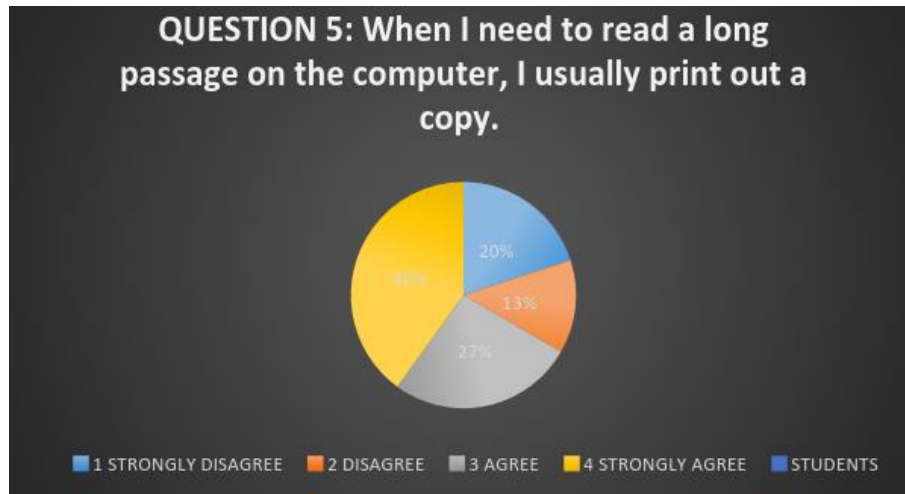
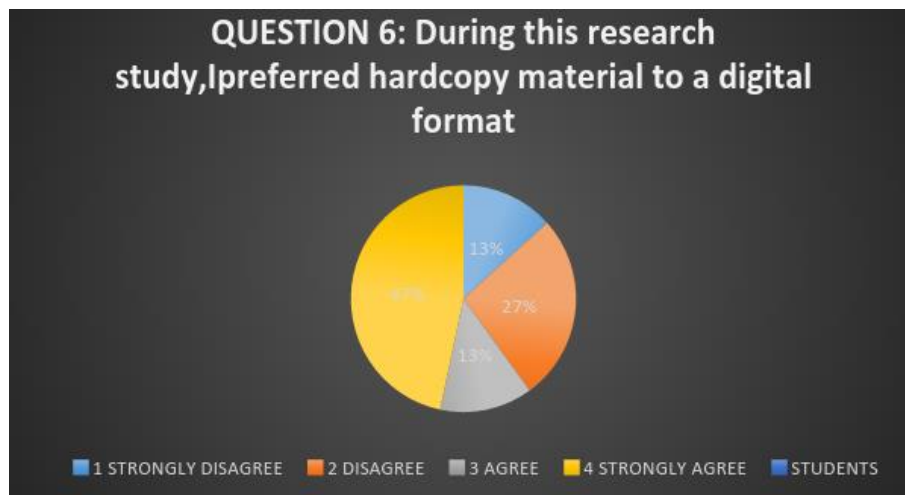


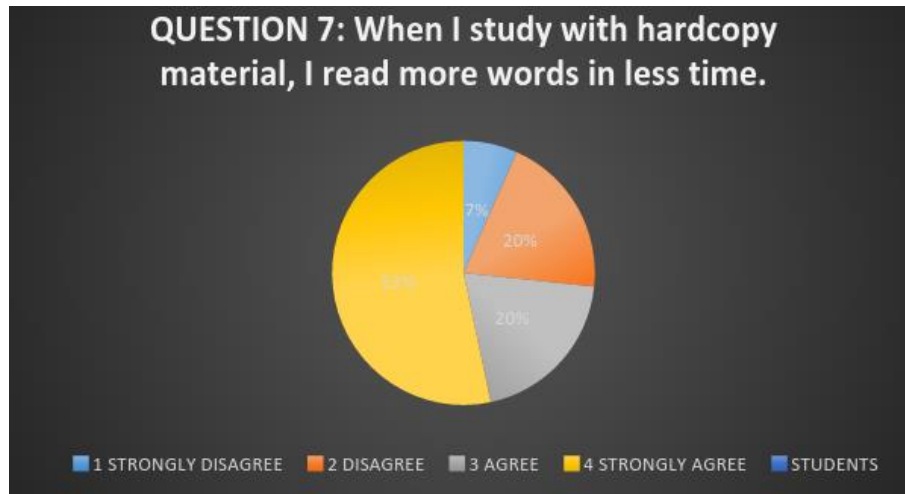
Figure 5.13 shows that in question 5; 40% of the students strongly agree. 27% agree. However, 13% of the sample stand for the option “disagree” and 20% of the students strongly disagree.

Figure 5.14 Question 6



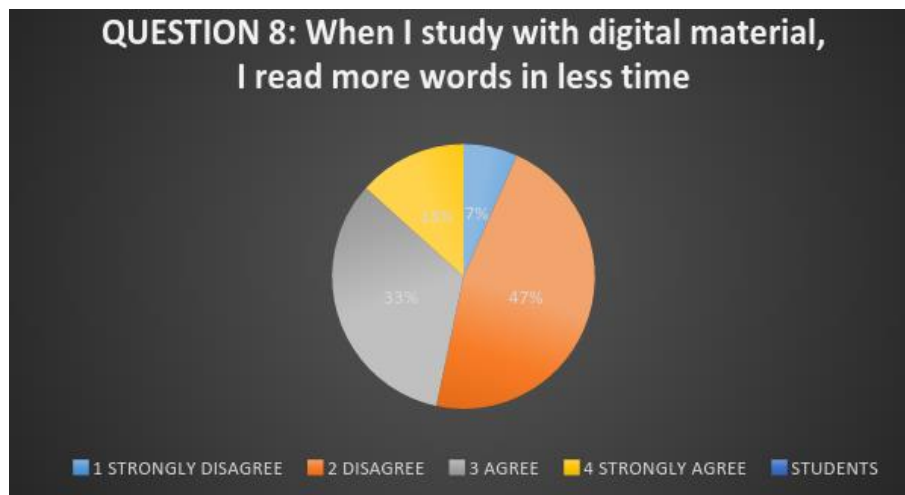
When students show their preference for the material they used during the study figure 5.14 shows that 47% of the participants claim that they preferred hardcopy material by saying strongly agree. 13% agree. On the other hand, 13% strongly disagree and 27% disagree.

Figure 5.15 Question 7



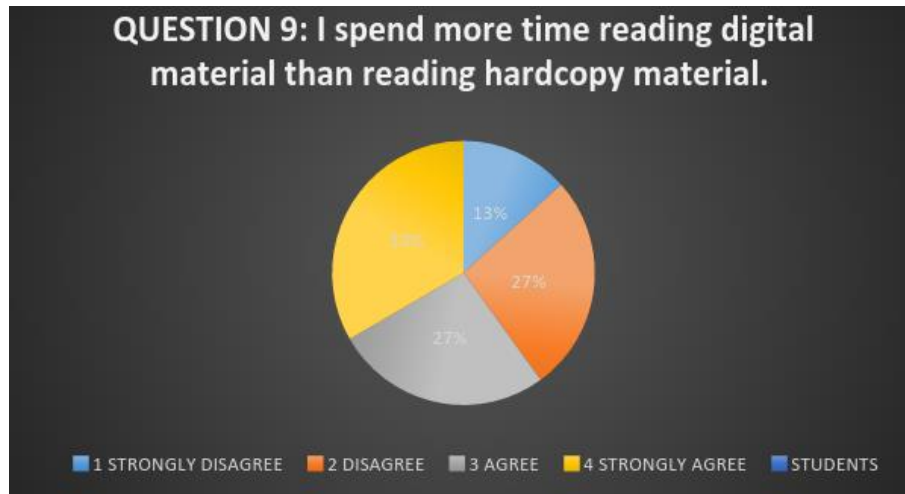
In figure 5.15, most of the students (53%) strongly agree with the question and 20% agree. Moreover, there were other perceptions because 20% of the students disagree and 7% of the students strongly disagree.

Figure 5.16 Question 8



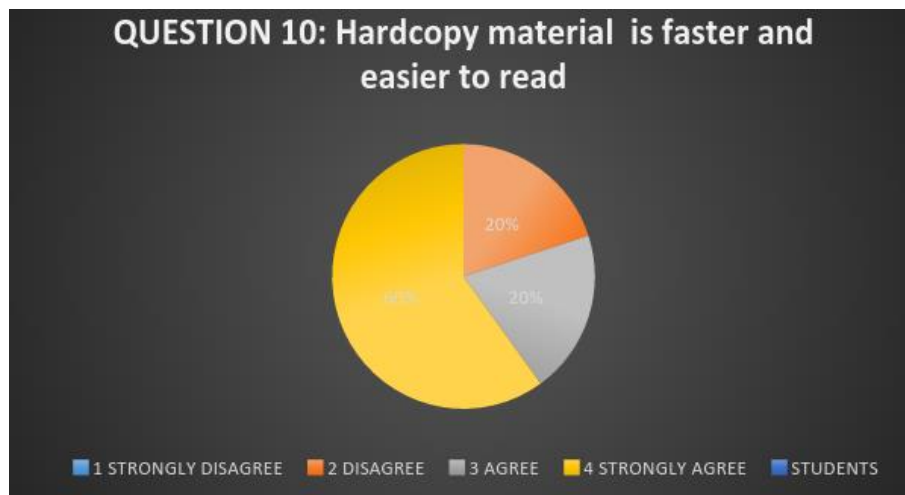
When analyzing question 8 figure 5.16 shows that, 47% of the students disagree with the statement. 33% of the students agree. 13% of the students strongly agree and 7% of this sample strongly disagrees.

Figure 5.17 Question 9



According to figure 5.17; 33% of the students strongly agree with the question. 27% of the sample agrees. When showing their disagreement 27% of the students disagree and 13% of the students strongly disagree.

Figure 5.18 Question 10



When talking about how easy and fast hardcopy material is when reading, figure 5.18 shows that 60% of the students strongly agree that hardcopy is faster and easier to read. 20% agree with this statement. However, 20% of the sample disagrees.

Figure 5.19 Question 11

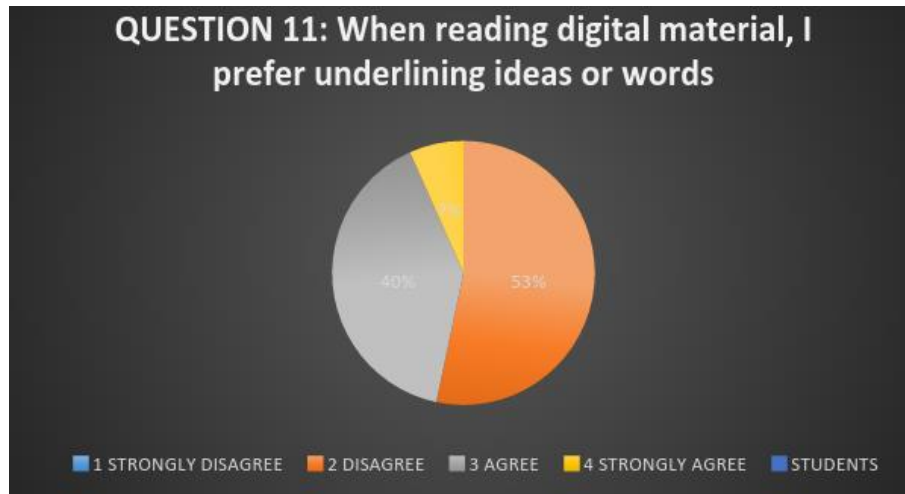


Figure 5.19 shows that 53% of the students disagree with the statement. 40% agree and 7% of the students strongly agree.

Figure 5.20 Question 12

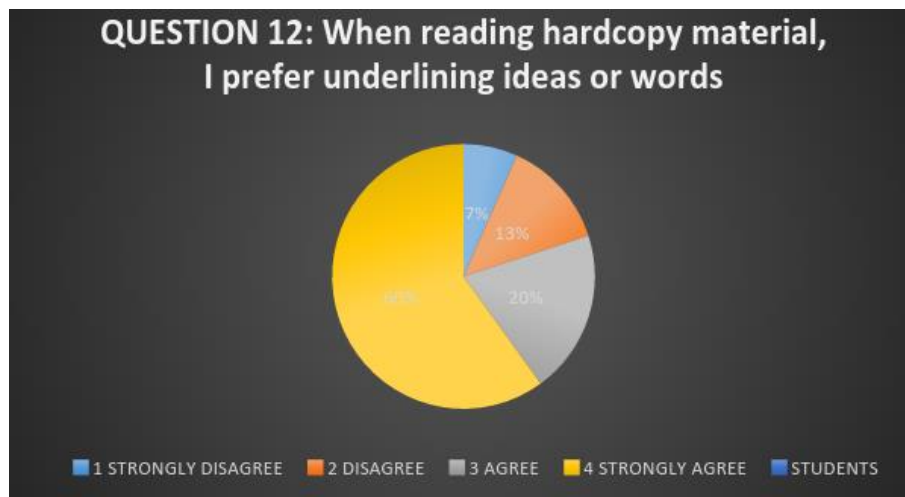


Figure 5.20 shows that 60% strongly agree with the statement. Less than half of the sample (20%) agrees. But 13% disagree and just 7% of the sample strongly disagrees.

Figure 5.21 Question 13

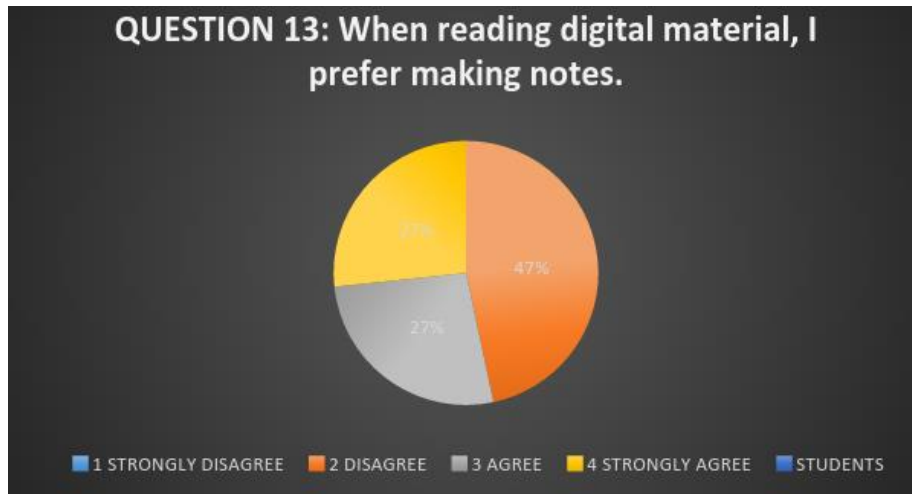


Figure 5.21 shows that students claim that they disagree in (26%) with the statement. 27% of the students strongly agree and just 27% agree.

Figure 5.22 Question 14

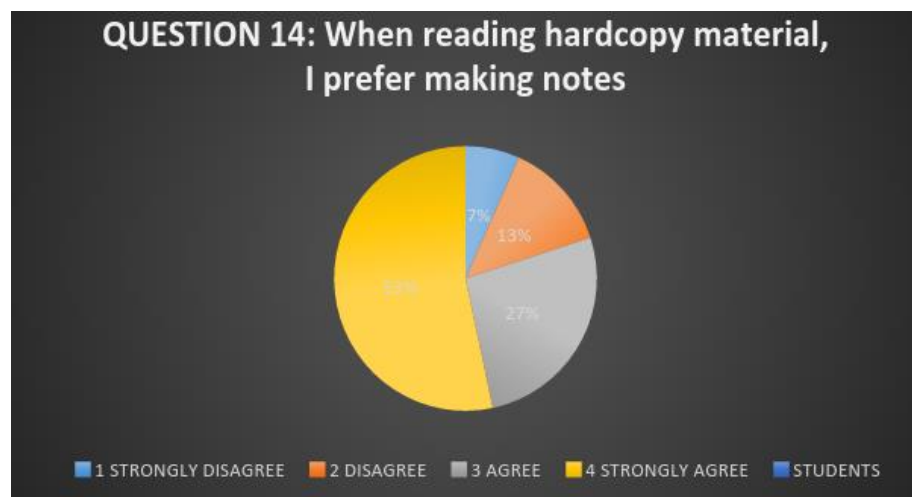


Figure 5.22 shows that 53% of the students strongly agree with the statement. Besides, 27% of the sample agrees. On the other hand, 13% of the students disagree and 7% of the students strongly disagree.

5.5 FINDINGS FROM THE OBSERVATIONS

Table 5.5 Commonalities in the Observations

COMMONALITIES IN THE OBSERVATIONS	DIGITAL TEXTS	PRINT TEXTS
<i>problems when summarizing</i>	17	25
<i>high levels of anxiety</i>	25	13
<i>getting distracted</i>	22	10
<i>using of online tools</i>	18	2
<i>challenge for enjoyment</i>	17	19
<i>taking notes</i>	15	23

Table 5.5 shows that 17 students had problems when summarizing digital texts. And 25 students presented the same problems when reading print texts. When anxiety comes, 25 students had high levels of anxiety while reading digital texts and 13 students when reading print texts. Moreover, students got distracted in the reading sessions, 22 students while reading online and 10 students while reading print texts.

18 students needed to use online tools while reading digital texts and 2 students used an online tool when reading print texts. Students liked challenge for enjoyment. Consequently, 17 students in the online session said this and 19 students felt the same when reading print material.

15 students needed to take notes when reading online and 23 students had to write down some ideas when reading print texts.

Observation is the systematic description of the participants' activities in the natural setting (Marshall and Rossman, 1989). The researchers applied participant observation which is inherently a qualitative and interactive experience in order to collect a wider range of data and gain an intimate knowledge of the area of study (Spradley, 2016).

These descriptions were constructed by observing during the reading activities. Taking notes during the observations enriched researchers' understanding of the observed activities. The most important implications are presented:

5.5.1 Description of participants

The majority of the subjects (n=25) during the first digital and paper-based text took some notes while reading. They marked very quickly (n=18) and linked with the current reading (n=7). Their markings include highlighting, underlining, and making notes in the margin. Students commented that marking is a way to rely heavily on the context of the original document.

5.5.2 Description of activities

Reading the text, writing the start and finish time, counting the number of words and summarizing the document were the four main activities during the study.

Students (n=22) when reading digital texts finish their reading tasks quicker than paper-based texts; and they did not have any inconvenient with the SIDWEB platform.

During the paper format activity, participants (n=25) took more than 12 minutes to finish the reading task including summary. Most of them (n=18) use their cellphones to look up for the meaning of a word.

5.5.3 Description of individuals engaged in activity

Students (n=17) who did digital reading, they expressed their enthusiastic to read the text by focusing only on it. On the other hand, 18 participants used Internet to find out tools such as dictionary, translator, etc.

During the paper-based reading, 20 participants took notes and highlighting the text in order to summarize the main ideas. Although, 12 students struggled when summarizing because they asked for help and commented their uncomfortable to read; they showed empathy and enthusiastic to keep record of time and number of words of the reading texts.

5.5.4 Sequence of activity over time

All the students (n=30) started their reading task at the same time, 28 of 30 students kept their record of reading digital and paper-based texts. After that, they summarized the texts

in 5 minutes. Twelve students spent 5 minutes to do the summary while 18 students spent more than 10 minutes to finish their summaries. After that, seven students asked about how to count the number of words of texts while 18 participants used online tools naturally without asking for permission.

5.5.5 Interactions

During the reading sessions, students had a number of interactions. For example, when working with print texts, students did not have the necessity to talk too often. They tended to grab the piece of paper and moved eyes while reading. So 8 students asked questions to the student that was next to him/her and 2 out of the 8 students raised their hand to ask a question to the teacher. On the other hand, while reading digital texts 20 students needed to talk to the student that was next to him/her. 18 students used online tools to check vocabulary and 10 students raised their hand to make a question to the teacher.

5.5.6 Unplanned events

Teachers needed to provide some extra sheets for students to take some notes when reading the print texts. (n=9) students asked for an extra piece of paper to write down some ideas, and 2 of them asked for a highlighter marker. However, when working with the digital texts there were no unplanned events.

5.5.7 Participants' comments

When working with print texts, there were 16 students that shared some ideas after the sessions. They expressed themselves about the reading they had to do on that day. Most of their comments were related to the difficulty of the activity and how they were able to perform it. Moreover, when reading digital texts 13 students shared some comments related to the process they follow to write the summary and the difficulties they had in understanding the texts.

5.6 FINDINGS FROM THE INTERVIEWS -CODING

1. Participants' preferences for reading

a. Preferences for digital Reading

The participants (n=5) perceived satisfaction, usefulness, and behavioral intentions regarding reading digital books. For example, Lorena's comments were:

Lorena: "Digital because I understand easier and faster. I read faster."

The participants were aware that they read easier and faster digital texts because they have supplemental tools which help them to understand better the text. Among four other participants who commented on the digital texts as a new alternative when they cannot find certain books in paper format, Lorenzo expressed her opinion about it:

Lorenzo: "Because digital texts are another alternative when we don't have the written texts, we have the digital version and it allows us greater ease of acquiring certain books or precise things that are on the web."

Additionally, one participant, Carlos, stated that reading digital material has become a habit for him since he entered the university.

b. Preferences for printed reading

This study found out that students' perceptions were different when analyzing digital reading and printed reading. 66% percent of the interviewed students articulated their preferences for printed reading; the main reason is feeling comfortable and having information at hand.

Diana: "*Printed texts because I feel they are more comfortable and easier. If I want to move, I can take it with me or if I want to turn the pages. They seem more comfortable.*"

More specifically, several of the participants (n=10) commented that they can take notes, highlight and underline, which improve their level of concentration and give them more confidence when reading paper format text.

Maria: "The person feels confident when reading printed texts. I can focus, I felt more focused on reading"

A general sense of relaxation is most likely to be associated with reading printed texts. Many interviewees (n=10) expressed that they felt reading paper format really comforting. A significant quote comes from Ariel.

Ariel: “I love printed books; I enjoy reading on the bus. What I like is that if I am traveling, I take my book and I have fun reading.”

1. Perceptions about digital reading

The qualitative data from the interview session revealed students’ positive and negative perceptions about digital reading. The most positive feedback from students was the availability of digital texts, while the most negative aspect from students was the lack of concentration.

Table 5.6 Perceptions about digital Reading

PERCEPTIONS	FRECUENCY OF RESPONSES OF THE PARTICIPANTS
Lack of concentration	6
Discomfort when reading	8
Eyestrain	8
Portability	6
A vailability of the text	5
Information at hand	6
Read more words in less time	6

a. Lack of concentration

The perception of the participants is about the poor concentration skills in dealing with digital reading. Respondents (n=7) also described how they got lost on the web, went to other websites, or read Facebook when reading digital texts. José stated,

José: “In digital texts there is a lower concentration when reading, there is a bit of distraction on the computer or with the tablet or phones. One disadvantage is that I need a lot of concentration, with digital texts I need more time; I am more likely to get distracted”

Other participants (n= 7) believe this lack of concentration is caused by the way of reading digital texts which implies copy and paste information without thinking and analyzing the material. Reyna mentioned,

Reyna: “Digital material does not force us to think because we tend to copy-paste.”

Furthermore, 33% of interviewees focused on the content of the text and its relationship with the length of it. Several commentators stated that they get tired and lose concentration when reading long digital texts. Daniela noted,

Daniela: “Honestly, I do not like digital texts, eh...I dislike that as time passes when I have read, and the text is long I get tired and lose concentration; I get distracted and no longer want to continue reading. Or if I read, I do not concentrate as much as I do with a printed text.”

b. Discomfort when reading

Students expressed about how important physical setting is when reading on computers or while using digital devices. Students said many times (n=8) that they just could not get comfortable while reading digital texts. Lola remarked:

Lola: “As you are reading, sometimes long texts are uncomfortable ... if I have it in a cellphone sometimes I get tired to hold the device with my hands or whatever.”

Each student had developed certain habits and behaviors that are associated with reading texts, with strong preferences for where they wanted to be and how they want to be physically positioned when they read. Christian added,

Christian: “Perhaps the fatigue because digital texts are read using a computer or tablet, well I use a tablet. Mmm..., it is tiring. There is no comfort for sitting or lying down.”

Four participants, commented about the way that many readers skim digital texts, most of them think that scrolling down a text in an electronical device is uncomfortable and takes time. One participant pointed out:

Pablo: “When I read on the computer for example I have to scroll down the pages and then turn them. It seems uncomfortable and it takes me time.”

c. Eyestrain

In the interviews, 53% percent indicated that prolonged reading on glossy self-illuminated screens can cause eyestrain, headaches and blurred vision. They also commented on how these symptoms affect their reading performance when reading for long hours in front of computers or electronic devices. Gladys mentioned,

Gladys: “It is difficult to see on the computer to read for a long time, if I spend a lot of time on the computer, that hurts my eyes and I get headaches, if the text is long, I get tired at the computer, monitor glare causes me eyestrain”

Other participants suggested that when they read on a screen, reading is more demanding physically and mentally. The reading process has become into an uncomfortable activity. Jenny stated,

Jenny: “The disadvantage is related to many students’ eyes then we get tired and stop doing a pleasure reading and then it becomes something uncomfortable...”

Some students expressed that eyestrain is associated with the need of more time to read digital texts. There is a constant worry about eyestrain and repetitive strain injury. For example, Dayanara said:

Dayanara: “I need more time to read in the digital version because ... first, because of the clarity of the screen...”

d. Portability

Most of the participants expressed that they have embraced digital texts for their convenience and portability. Six out of fifteen students ranked portability as a factor which influences their reading experience with digital texts. Lorena commented,

Lorena: “It becomes easier not to carry papers anywhere. When I'm in a place, I take my mobile or my computer, I open the document and it is ready to read.”

Likewise, portability is certainly a very important strength for digital books. Students told us that much of the digital reading are done during their commute to and from the University. If they have to read a large paper book, they would find it too heavy to carry around and too cumbersome to open for reading in public transport. One student remarked, Gladys: “For example, I have to walk carrying heavy books in my bag. Sometimes in the cellphone you can also save a lot of documents to read them all the time.”

This characteristic of digital texts is related to the accessibility which implies having easy access to this type of texts anytime, anywhere with a portable laptop or electronic device and wireless. Lorenzo indicated,

Lorenzo: “What I like is that I have an ease and comfort of reading from any place.”

e. Availability of the text

This study has found that participants like the access provided by online electronic resources, 33% percent of the interviewees expressed their preference about finding the free digital version of a text which implies saving money and time.

Diana: “If you have the digital material, you save money because you don’t buy the book.”

Another positive aspect related to availability of digital texts is the variety of books or texts that can be found on the web. Students determined the amount of content links that they can encounter.

Christian: “Well, I like this reading material because in the digital texts we can find varieties of books for academic purposes itself related to the subjects”

It is important to highlight that the availability of digital texts through the Internet influenced the academic performance of the students.

Jenny: “An advantage of reading digital texts is that if they are academic material I can copy exactly. The book helps me in my homework or research, without typing too much.”

f. Information at hand

One of the students' perceptions was that there is a necessity for speed in a digital reading task. 40% percent of the interviewees stated the link between the amount of information on the web and easy access to them. It helps them to enhance appropriate information into their learning process.

Gladys: "What I like is that for example if I'm reading and I want to study I can find extra information online. I can look for more texts"

Another advantage of having information at hand is the short time required to access it. Many students (n=6) commented about the help of extra digital tools when they read digital texts. For example, Pablo highlighted:

Pablo: "I like it, in the sense that ... when there is something to do quickly, digital tools help a lot. Sometimes the number of pages or letters already have the information at the right time."

According to the interviews, information at hand implies the quick and easy access to the content. While students doing this digital reading task, they indicated that they have the opportunity to understand what is available online, how to search, how to determine what is relevant or not for the task.

g. Speed rate reading

The study found out that students (n=6) perceive they read more words in less time with digital texts because of many reasons. Three out of six students expressed they read faster with digital texts because of the use of extra tools such as dictionaries and translators which help them to understand better the text. For example, Ariel said

Ariel: "I read more words in less time while doing the reading online... as I said previously when reading online I can use more tools to understand what I am reading."

Other reasons are they felt more comfortable; consequently, participants can read faster and focus better when reading digital texts. Lorena commented,

Lorena: "Digital, I feel that reading... I read faster and understand faster than in print."

Table 5.6 shows the main reasons about reading faster in less time with digital texts according to the perceptions of the participants (n=6).

Table 5.7 Perceptions about reading faster in less time with digital reading

PERCEPTIONS	FRECUENCY OF RESPONSES OF THE PARTICIPANTS
Using dictionaries and translation software	3
Focus better on the text	1
Read faster and comfortable	1
Habit of reading digital texts	1

2. *Perceptions about printed reading*

The study found out that most of the perceptions about paper format reading were positive such as concentration issue, taking notes facility and information at hand. On the other hand, some negative aspects were determined in the interviews related to the size and weight of the books, the accumulation of papers and the lack of dictionary when reading printed texts. The perceptions are shown in table 5.7

Table 5.8 Perceptions about paper format reading

PERCEPTIONS	FRECUENCY OF RESPONSES OF THE PARTICIPANTS
Concentration issue	7
Taking notes facility	10
Information at hand	6
Size and weight of the books	7

a. *Concentration issue*

Participants of the interviews were aware that they could focus better with printed texts because they do not have distractors and encourage learners to keep reading. Because of these preferences, participants (n=7) consistently said that when they really want to dive into a text, they read it on paper.

Daniela: “Because, for example in the printed text I only focus on reading, what is written and what I am reading.”

In addition, participants commented they could focus on a single page of a paper book without losing sight of the whole text. Lorenzo stated the following,

Lorenzo: “It would be in printed version, because I have more concentration. Because I go directly to the book, and I don’t have to see anywhere else.”

Similarly, some of the other participants perceived the increase of concentration as positive, important and pleasant to their academic performance. A significant quote comes from Daniela,

Daniela: “I prefer to study with paper format because I do not get distracted and I'm just focused on what I do. For example, if I study with a book in the tablet, I may open the chat or whatever. I do not focus one hundred percent on what I'm doing.”

b. *Taking notes facility*

Several participants (n=10) of the interviews stated the importance of taking notes in order to emphasize the main ideas of the paper format texts. They explained that taking notes is one of the most effective techniques used while reading, as a way to engage with the printed text and aid the learning process.

Christian: “In the printed material because I just grab a pen and write down where I want, as I want ... I understand my handwriting ... instead in the digital texts I can also do this but, it is faster to write with a pencil.”

Another point of view was that taking notes let participants use their hands, and it allow them to understand better what they write.

Yesenia: “In print, because I can write with my letter, while in digital I get confused.”

Ten participants agreed that taking notes help them to improve and understand the vocabulary in a text. Their experience with taking notes in paper format texts has been useful for their vocabulary.

Diana: “With printed because if I, as I said, if I have a word that I do not know then I write it down then I look up for the meaning and I write it down too. So, I can match the word to its definition.”

c. Information at hand

Participants (n=7) stated that reading a printed text let them carry the material where they go. Consequently, this benefit helps for more in-depth reading; also, students can review the content and analyze the text. Three participants commented on their impression of having information at hand.

Christian: “I like that we can handle this material easily, we can underline, write. We have everything at hand.”

Diana: “What I like is that I always have the material at hand and if I need anything so I can review it...”

Reyna: “I like it because you can handle it well, we can manipulate it; carry them with us; lend it to a colleague.”

Most of the students highlighted that reading a paper text requires different skills in handling documents. 53% of the interviewees prefer to print out electronic documents for reading for academic purposes.

d. Size and weight of the books

Reading from a hardcopy, of course, corresponds to the tactile quality of traditional books. Student responses revealed a rejection for the physical aspect a book provides. Diana expressed her concern for the weight of printed material.

Diana: "...what disgusts me is that sometimes ... is that the reading material like books are heavy and that is annoying."

47% percent of the participants believe that carrying hardcopy books is a negative experience. The variety of sizes and weights of the paper format texts affect the experience of reading. An interviewee, Gladys, commented.

Gladys: "What I dislike is that books are heavy to carry. For example, if I want to read two books I have to put them in my bag and that is tiring."

e. Accumulation of papers

The perceptions of the participants (n=5) is that accumulation of papers is one of the disadvantages of reading hardcopy texts because it involves harmful practices to the environment. Some eco-friendly printing opinions were mentioned during the interviews:

Diana: "Well I can say that an advantage (of digital reading) is that it helps to reduce the ecological footprint because the paper that is not spent then it is reduced, that is an advantage."

Five participants believed that having too many papers causes a stressful situation and it is necessary to spend time in order to organize them by categories. We have included some representative participants' comments on the common perceptions about accumulation of papers:

Christian: "Well, what I dislike is the accumulation of papers."

Pablo: "Even my room is full of printed books and I have to categorize them by topics."

Yesenia: "Too many sheets and that it is a heavy burden when I put them in my bag, so better in digital."

f. Lack of dictionary

Some participants (n=5) expressed their negative perceptions about the lack of dictionaries when reading printed texts. They expressed there is a correlation between dictionary use and reading performance. Alex commented,

Alex: "...And I dislike that the student understands the text, but not very quickly. Because of the lack of the tools."

The lack of dictionary when reading hardcopy material is perceived as a disadvantage. They commented that there was a disruption in the process of reading, having or showing a lack of knowledge about a particular word brings inability to read partially. Two exemplary remarks from participants are presented by Gladys and Reyna:

Gladys: "What I dislike is that I need a teacher if I do not understand anything."

Reyna: "I need more time in printed version, because ... if it's in English, I do not understand words, I'm standing there, and I need ... I mean, modify and find the answer of the word."

g. Speed rate reading

Participants expressed their satisfaction about reading more words in less time during the research. Seven participants agreed they need less time when read printed texts. 57% percent of this group stated that it is easier to concentrate with hardcopy material, there are no distractors and this allows readers to interact with the material more. Some descriptive remarks are presented by Christian and Maria:

Christian: "In printed material I read in less time. Because I can focus ... I just grab the paper and start to read."

Maria: "Printed material, because it is easier to read printed texts and I do not get lost between the lines."

In addition, taking notes is a factor that influences reading fluency with hardcopy materials. This technique improves their comprehension and reading speed of the text as we can see from Yesenia's comment:

Yesenia: "In print, because I can read faster and I can take notes while I am reading."

Table 5.8 illustrates the main reasons about reading more words in less time with printed texts according to the perceptions of the participants (n=7).

Table 5.9 Perceptions about reading faster in less time with printed reading

PERCEPTIONS	FRECUENCY OF RESPONSES OF THE PARTICIPANTS
Focus better on the text	4
Taking notes about main ideas	1
Easy to read	2

5.7 CONCLUSIONS

Chapter six opens the discussion of findings, it shows the discussion of the results that were found in relation to both the research questions and existing knowledge.

CHAPTER 6

6.1. DISCUSSION OF FINDINGS

Conducting this study was a titanic task, it involved different steps that were covered properly to get the data that was going to be analyzed. As teachers of the students who were part of the study we were with them at all times and this gave us the opportunity to know more the reality in depth. Students let us know special details that used to be taken for granted. This information allowed us to broaden our knowledge to keep working for the benefit of the students in their learning process.

In order to understand this reality in depth, we carried out a qualitative research, which intended to answer the following research questions:

- a. Do learners feel that improvement of reading skills take place using either online or paper-based reading texts?
- b. What implications do learners perceive about online and paper-based reading texts have for developing reading skills in an EFL (A1) class?
- c. Does the format of the text students read influence the number of words they are able to read?

6.1.1. Working with digital and print texts.

During the study, the students had the opportunity to read 4 types of texts in digital and print version. The texts were appealing to them and students claimed that the topics were attractive. Some students preferred a special kind of text for different reasons. In the interview they were asked for their preference when reading the different texts and they named diverse reasons for their election. For instance, the length of the text, the main topic, some new information that was eye-catching and the engagement they have with the text. There are four major texts types: narrative, expository, descriptive, and argumentative and procedural (Rothwell, Guijarro and Hernández, 1998); and, they have specific aspects which work in a certain communicative situation. The reader conventionally focus only on this specific factor that is Werlich called “dominant contextual focus”. (Werlich, 1983)

When talking to the students most of them said that the layout of the text helped them in

reading and understanding the main idea. They also mentioned that the pictures in the different texts assisted them in getting a clearer idea of what the reading was going to be about.

As table 6.1 shows in the digital version the texts that students preferred reading were *Culture Shock* and *That's Incredible*. The former belongs to the expository genre, whose main objective was to convey and inform some special features and habits in certain parts of the worlds. 5 students chose this text as one of his/her favorite.

The other text that offered students pleasure while reading was *That's Incredible*. This text is part of the narrative genre and its main goal was to narrate the most surprising coincidences that occurred in a particular time. 5 students chose this text as one of his/her favorite.

Table 6.1 Digital Texts

TEXTS	GENERES	PREFERENCES
<i>Culture Shock</i>	Expository	5
<i>That's Incredible</i>	Narrative	5
<i>Kill your TV</i>	Argumentative	2
<i>Celebrity Profile</i>	Descriptive	3

According to table 6.2 that analyzes the preferences students have in the print version, there is one text that had the highest level of preference among the students. The text was *Culture Shock*. This text belongs to the expository genre, whose main objective was to convey and inform some special features and habits in certain parts of the worlds. Therefore, we can infer that students had a special interest to know more about other cultures and they find enlightening to read about the way to behave in other parts of the world.

Students stated that for them it is easier to understand texts that present information by using examples and precise vocabulary to make the reader understand a specific topic.

Table 6.2 Print Texts

TEXTS	GENERES	PREFERENCES
<i>Culture Shock</i>	Expository	7
<i>That's Incredible</i>	Narrative	4
<i>Kill your TV</i>	Argumentative	0
<i>Celebrity Profile</i>	Descriptive	4

6.1.2. Improvement of reading skills

The data collected in the interview revealed that students felt more comfortable when reading print material. They stated that when studying they need to print out the material. They also feel more confident with print material when reading since they have the material with them at all times. For example, 1 student claimed that the city is dangerous so using his mobile phone on the bus is impossible. That is why he has always his papers with him.

Moreover, students highlighted several times that they are used to taking notes while reading print material and then they use these notes to review for their quizzes or exams. In the interview, 1 student said that while writing she can develop a mental process and in this way she learns and understands better. Students also found underlining or highlighting ideas in print helps them focus. In the interview, 10 students agreed on the fact that taking notes in print let them be more focused. As a result, their level of concentration is better and they felt that their reading skills improved a great deal. Likewise 47% of the students in the survey supported the findings above by choosing the option “strongly agree” showing in this way that they preferred reading print material during the study. In addition, the survey revealed that 60% of the students preferred underlining ideas or words when reading print material.

A finding that calls our attention is that students take into consideration lots of factors when reading. For instance, the place and the position where they read is a must to be considered. In the interview 8 students pointed out that they have discomfort when reading digital material since they have to hold a device in their hands. Another aspect they revealed

was that the monitor brightness prevents them from reading for a long time. Hence, they tend to feel tired when working at the computer or with their tablets. For instance, 53% of the students in the interview said that eyestrain is a limitation when reading digital material. The monitor brightness makes them get constant headaches and blurred vision.

Before starting this study, we thought that this new generation was completely into computers and electronic devices. However, during the study there were some findings that allowed us to get a clearer frame of the students' preferences while reading. Digital natives are considered the learners of the twenty-first century due to the digital age in which they are growing up; it implies that this group of students thinks and learns differently than any generation that has come before. This generation have a high digital confidence and digital skills, and they prefer e-books over hard copy text in books (Papa, 2014). Nevertheless, students in this study perceived that reading on the screen demands lots of effort and that is why digital reading is becoming an unpleasant activity to them.

60% of the students in the survey agreed on the fact that reading print material is easier and faster and this is supported by what they said in the interviews. They claimed that they are used to reading print material due to the reading learning process they had during their school and high school. Students recognize the tendency of reading online and they are aware of the benefits they can receive from the digital world. Hence, they stated that it is a need for them to develop much more their reading skills when reading digital material so they are willing to start reading properly.

Students who were part of the study had had the opportunity to work in their regular classes with digital material and some of them perceive that reading online is a weakness for them. As a result, they need more guidance to deal with online readings. Students were always willing to collaborate in the study because they knew that some possible remedial actions could be taken in order to improve the teaching process of the L2 at the language center.

Some of the students who were part of the study had difficulty in reading due to their weak reading skills. As a result, they expressed their beliefs and perceptions to get assistance in order to develop those mentioned skills.

On the other hand, we realized that in the four week-time students had to work with online and print material their reading skills improved a bit after each reading. Nation (2008) mentions that improving reading skills is possible only if the teacher provides the students different material to work with. The keystone of this reading process is to offer continuous practice to the students. If the study had lasted more than four weeks, they could have had more opportunities to practice. This is a good sign for teachers who are interested in implementing the flipped classroom approach in the English department where the study took place since the survey showed that 60% of the students do not mind reading digital material for study purposes. So there are a great deal of opportunities to exploit and expands reading skills in students.

6.2. PERCEPTIONS STUDENTS HAVE ABOUT DIGITAL AND PRINT MATERIAL

When talking about the speed rating, students said that they were able to read more words in less time when using print material because they felt that their level of concentration was higher. 7 students out of the 15 in the interview stated that having paper in their hands make them focus on what is necessary. Consequently, the survey revealed that 53% of the students were able to read faster when using print material.

On the other hand, students said that carrying their books is really tiring and that is why 6 students in the interview claimed that it is much better to have the information stored in a device like a cellphone or computer. This gives them the opportunity to read what they need anywhere and at any time. In the survey 53% of the students agreed on that fact that it is ok for them to read online for pleasure and 60% have a positive perception about reading online for academic purposes. So students have no problem at all to be immersed in the digital world to read.

While doing the observations, we became aware that when selecting appealing topics to read, students got engaged easily. After the reading sessions some of them tended to speak

aloud and said that reading for a short time a text let them improve their reading skills, especially when reading hardcopy material. Moreover, in the interviews some students asked the interviewer to propose the English department to keep working with digital and print material during the semester. Few students complained about the lack of technology at home or some money issues that prevent them from reading more online.

The data collected in the interviews and the survey allowed us to have a better understanding about the preferences of students when reading. With these results we can offer some suggestions or pieces to advice to teachers who will be part of the flipped classroom approach, which demands from the students a lot of autonomous work. Hence, several reading opportunities can take place. Regarding the new literacies, Cavanaugh (2006) states that digital education needs teachers who proliferate and improve digital tools will increasingly differentiate student outcomes.

According to Woody, Daniel and Baker (2010), students prefer textbooks to e-books for learning despite the ubiquity of computers and interactive technology in their lives. In this research, the authors demonstrated that in spite of the ability to easily access supplemental content through e-books via hyperlinks and other features, students were more likely to use special features in print books than in e-books.

6.3. INTERRELATIONSHIP BETWEEN SUMMARIES, THE TIME AND NUMBER OF WORDS

One of the objectives of the pedagogical intervention was to request a summary from the students after reading the different types of texts. The participants had to write the summary in digital and printed format. All these summaries were analyzed. The summaries were assessed by a rubric which was based on three aspects (1) accuracy of content, (2) comprehensiveness and balance, and (3) clarity and readability. (Appendix E)

Furthermore, the participants filled out a reading log in order to measure their reading fluency. The reading logs include the time when they started and finish reading and the number of words they read in a set of time. According to Eagleton and Dobler (2012), reading fluency is as an important factor in student reading success because the reader can find amounts of unknown words (without a dictionary tool) and must make reading decisions

quickly to understand effectively. Consequently, reading log is an instrument which enhances students' self-awareness of their reading process and tracks their reading speed and accuracy with repeated readings through practice.

The interrelationship of the identified items was the average score of the summaries, the spent time to read a text and the number of words read in a text. These aspects have been discussed in the two formats of each text, digital and printed, and were identified in the samples (n=240) were made by thirty participants.

Related to the digital texts, the time used in reading them varied according to the type of texts. There was an average of minutes used in each texts. For instance, culture shock (expository) was read in exactly 2 minutes, that's incredible (narrative) students used an average of 3.33 minutes, kill your Tv (argumentative) was read in an average of 3.66 minutes and celebrity profile (descriptive) was read in an average of 2.66 minutes.

This shown that the digital text that needed the most time to be read was kill your Tv and the digital text that was read in less time was culture shock. Students in the interviews chose culture shock as one of their favorite.

When analyzing the time used in reading the print texts, it is seen that there was an average used in reading them. For example, culture shock (expository) was read in an average of 2.53 minutes, that's incredible (narrative) students used an average of 2.93 minutes, kill your Tv (argumentative) was read in an average of 2.3 and celebrity profile (descriptive) was read in an average of 3.23 minutes.

These results shown that the text that needed most of the time to be read was celebrity profile and the text that needed the less time to be read was kill your Tv. Even though students said in the interview that they found really interesting the text culture shock.

Table 6.3 shows that the highest average score of the summaries from the narrative text was 2,11 in printed format done by the 30% of the participants, while the 17% of the students got the highest average score in the digital format which was 2,00. According to the rubrics, a score of two implies that the summary is considered good enough to convince the grader that the writer understood the article partially well. These results are related to the time

(4 minutes) that the 30% of the printed group used to read the narrative text. On the other hand, the digital group, which got the highest score, needed just two minutes to complete the same reading task. Many factors may influence reading task such as reading preference, less eyestrain and fatigue, the tactile aspects of holding and a printed work, better concentration, and the possibility to highlight and annotate the text. (Kurbanoglu, Boustany, Špiranec, Grassian, Mizrahi and Roy, 2016). In Kortelainen's research (2015), the results showed that students could concentrate on material better when they read it in print, and remember information best when reading it in print because of the possibility to make their own notes on printed texts (Kortelainen, 2015). This idea matches with the 47% of the participants of our interviews who expressed their satisfaction about reading more words in less time with printed texts during the research.

Table 6.3 That's Incredible

<i>THAT'S INCREDIBLE</i>								
<i>TIME</i>	<i>PRINT</i>				<i>DIGITAL</i>			
<i>(MIN)</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>
<i>1</i>	<i>2</i>	<i>2</i>	<i>236</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>236</i>	<i>0</i>
<i>2</i>	<i>7</i>	<i>7</i>	<i>236</i>	<i>1.86</i>	<i>5</i>	<i>5</i>	<i>236</i>	<i>2</i>
<i>3</i>	<i>12</i>	<i>12</i>	<i>236</i>	<i>2</i>	<i>10</i>	<i>10</i>	<i>236</i>	<i>1.9</i>
						<i>13</i>	<i>236</i>	
<i>4</i>	<i>9</i>	<i>9</i>	<i>236</i>	<i>2.11</i>	<i>15</i>	<i>1</i>	<i>200</i>	<i>1.6</i>
						<i>1</i>	<i>230</i>	

Table 6.4 shows that the expository text was the favorite article in digital and printed format according to the 34% and 47% percent of the participants who were interviewed. Despite this they got the lowest average score (1, 85). The majority (17) of participants used

three minutes to read it in print format, On the other hand, the 47% of the digital group needed two minutes to do the reading task and got an average score of 3,2 which is considered as an acceptable summary with excellent accuracy. These outcomes confirm what Werlich (1983) stated about expository texts; the analysis and synthesis are vital elements to communicate the phenomena in this type of text. Preferences are not enough to comprehend or synthesize the components of an article.

In addition, the use of dictionaries and other online support materials may influence the reading task and the scores of the summaries. The 50% percent of the participants who perceived they read more words in less time with digital texts consider that the use of extra tools such as dictionaries and translators helped them to understand better the text. Some studies report that learners prefer reading texts on the screen over reading on paper because the ease in dictionary lookup (Marchionni, 2000, as cited by Liu, 2008) (Nesi's study, 2010, as cited by Jackson, 2013)

Table 6.4 Culture Shock

<i>CULTURE SHOCK</i>								
<i>TIME</i>	<i>PRINT</i>				<i>DIGITAL</i>			
<i>(MIN)</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>
<i>1</i>	<i>1</i>	<i>1</i>	<i>297</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>297</i>	<i>3.67</i>
<i>2</i>	<i>12</i>	<i>12</i>	<i>297</i>	<i>2.7</i>	<i>15</i>	<i>14</i>	<i>297</i>	<i>3.2</i>
		<i>13</i>	<i>297</i>			<i>1</i>	<i>292</i>	
		<i>1</i>	<i>186</i>			<i>9</i>	<i>297</i>	
<i>3</i>	<i>17</i>	<i>1</i>	<i>150</i>	<i>1.85</i>	<i>12</i>	<i>1</i>	<i>296</i>	<i>2.83</i>
		<i>1</i>	<i>180</i>			<i>1</i>	<i>211</i>	
		<i>1</i>	<i>211</i>			<i>1</i>	<i>100</i>	

Regarding table 6.5 that shows data of the argumentative text with 258 words, 47% of the students read the printed article in two minutes and obtained an average score of 1,57 while the 40% of the participants from the digital group used five minutes to complete the reading task. They got 1, 25 as average score. The rubric considers that a summary with a grade of one is a weak writing task which reflects the reader could not understand the content of the text.

This data revealed that students struggle with certain types of texts and setting a limit of time could be a drawback because the learners feel lots of pressure to go faster and that can be a source of stress. In fact, 47% of the participants who did the survey showed their preference for the hardcopy material they used during the study; and, the 27% of the students

strongly disagree with this statement. These results agree with Hulst's point of view (2003) who states that reading is decoding the text with comprehension and being a fluent reader is reading without thinking about how they are reading, and they understand what they are reading which is reflected through the summary.

Table 6.5 Kill your TV

<i>KILL YOUR TV</i>								
<i>TIME</i>	<i>PRINT</i>				<i>DIGITAL</i>			
<i>(MIN)</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>
						0	0	
<i>1</i>	<i>5</i>	<i>5</i>	<i>258</i>	<i>1.4</i>	<i>2</i>	<i>1</i>	<i>210</i>	<i>3.5</i>
						<i>1</i>	<i>250</i>	
						<i>1</i>	<i>255</i>	
<i>2</i>	<i>14</i>	<i>14</i>	<i>258</i>	<i>1.57</i>	<i>6</i>	<i>5</i>	<i>258</i>	<i>1.83</i>
						<i>2</i>	<i>258</i>	
<i>3</i>	<i>9</i>	<i>9</i>	<i>258</i>	<i>2</i>	<i>4</i>	<i>1</i>	<i>203</i>	<i>3</i>
						<i>1</i>	<i>216</i>	
						<i>4</i>	<i>258</i>	
<i>4</i>	<i>1</i>	<i>1</i>	<i>258</i>	<i>1</i>	<i>6</i>	<i>1</i>	<i>213</i>	<i>2.5</i>
						<i>1</i>	<i>216</i>	
						<i>10</i>	<i>258</i>	
<i>5</i>	<i>1</i>	<i>1</i>	<i>258</i>	<i>2</i>	<i>12</i>	<i>1</i>	<i>200</i>	<i>1.25</i>
						<i>1</i>	<i>213</i>	

Table 6.6 shows that the summaries of the descriptive text obtained the highest scores from the four articles which were read during the study. Regarding the print format, 83% of the participants got an average score between 2 and 2, 2 within a set of time of three and four

minutes. The 57% of the students from the digital group got an average score between 3 to 3,75 using one and two minutes to do the reading task.

It is important to highlight that students spent less time in reading digital texts which corresponds to Liu's study (2008) who concluded that screen-based reading behavior is characterized by spending more time on browsing and scanning, keyword spotting, one-time reading, nonlinear reading, and reading more selectively. These results show that less time is spent on in-depth reading and more time is dedicated to look for precise information in the digital texts in order to complete a task.

On the other hand, most of the participants (n=25) who read the print version wrote an acceptable summary. The article of 278 words has a moderate length according to the Lexile of an A2 level established by the CEFR. This situation agrees with the theory of Kurbanoglu, Špiranec, Grassian, Mizrachi and Catts (2014) who state that students prefer longer readings in print format, especially if it is more than ten pages long because they demand greater concentration.

Table 6.6 Celebrity Profile

CELEBRITY PROFILE

<i>TIME (MIN)</i>	<i>PRINT</i>				<i>DIGITAL</i>			
	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>	<i>TOTAL OF STUDENTS</i>	<i>STUDENTS</i>	<i>WORDS</i>	<i>AVG</i>
<i>1</i>	<i>2</i>	<i>2</i>	<i>278</i>	<i>3</i>	<i>4</i>	<i>4</i>	<i>278</i>	<i>3.75</i>
<i>2</i>	<i>5</i>	<i>5</i>	<i>278</i>	<i>2.2</i>	<i>13</i>	<i>13</i>	<i>278</i>	<i>3</i>
<i>3</i>	<i>10</i>	<i>10</i>	<i>278</i>	<i>2</i>	<i>4</i>	<i>4</i>	<i>278</i>	<i>2.25</i>
<i>4</i>	<i>10</i>	<i>10</i>	<i>278</i>	<i>2.1</i>	<i>7</i>	<i>7</i>	<i>278</i>	<i>3</i>
						<i>0</i>	<i>0</i>	
<i>5</i>	<i>3</i>	<i>3</i>	<i>278</i>	<i>1.67</i>	<i>2</i>	<i>1</i>	<i>97</i>	<i>1.5</i>
						<i>1</i>	<i>170</i>	

6.4. CONCLUSION

Brief conclusions from this study are presented in this final section. Chapter seven summarizes the thesis, points out limitations of the current work, and also outlines directions for future research.

CHAPTER 7

7.1. GENERAL CONCLUSIONS

This action research study attempted to understand the preferences of students while reading digital or print material. It was necessary to know how the students perceive their reading skills when reading and comprehend some of their needs to help them to develop their reading skills.

During the study the students were collaborating actively and their opinions and beliefs were really useful for us.

Despite students' connection with technology, we observed that it was a bit complicated to read digital material. The interviews allowed us to know more the students' reality and they revealed facts that teachers tend to take for granted such as: ?.

When analyzing the interviews and the survey, the data showed that most of the students are not into the digital world for diverse reasons. They manifested that they prefer reading print material for academic purposes. However, when they read for pleasure, it could be in either form. Furthermore, the results from the texts revealed that students spent less time in two digital texts (celebrity profile and culture shock). However, students took less time in two printed texts (kill your TV and that's incredible). Hence, the format of the text may not have an important impact in the speed reading rate, it would be necessary to deepen which other factors influence on the speed rate of the students.

Another conclusion is that the highest average of the summaries come from the digital texts. Even though students perceived that they are able to read better print texts and this fact matched the information provided in the interviews done previously. Participants mentioned that one of the advantages of the digital texts is that they are more available tools to decode the message.

The participants felt a bit frustrated at the beginning since they had some inconveniences when reading the texts. Then they realized they were able to read and understand the texts better in the end.

The average score of the summaries showed that students understood the digital texts when they were reading, even though they felt that they read much better with print material.

Moreover, the findings helped us to comprehend much of what we observed in the reading practices of the participants. For example, we understood students' reasons for always marking up and reviewing their notes on paper, preferring reading important documents from paper. Also, we noticed that although they spend less time reading digital documents, they prefer reading paper-based format.

Furthermore, we examined the students' perceptions about the contrast paper-based and digital reading specifically linked to reading fluency. By doing so, we can begin to unravel the complexity of both formats, and begin to make some better-informed predictions about the effect of the medium (paper-based and digital) on students' perceptions about reading.

7.1.1. Observations.

In the first week, students were scared of reading online and printed material since they were not familiarized with reading a text and then write the number of words they were able to read. Moreover, they realized that they lack reading strategies when reading these kinds of format texts. Furthermore, summarizing the texts made them feel frustrated since they had problems in putting in writing what the main ideas of the texts were. They tried to talk to each other just to confirm that what they understood was correct. In that moment, we encouraged students to write what they really understood from the texts.

At the beginning, students struggled understanding the texts. They needed to have some tools to read the text. For example, they requested to use online tools as online dictionaries or google translator most of the times. As a result, they felt overwhelmed when they had to read the online texts and they were not able to cope with the text. It was easy to notice the expressions on their faces. The first day, they thought that reading was easy. Afterwards they comprehended that developing their reading skill was important. They also understood that practice was the key to become a better reader.

Regarding paper-based texts, the researchers observed that there was a strong connection with text summarization and the reading task which involves reading in order to write. For example, participants spent a great deal of their time reading and condensing information, whether it was from their own notes or what they remembered about the text. In the paper-based condition, it was observed that most of the students transfer the information that they read and edit the copied text due to lack of supplementary tools such as dictionary, digital sources, etc.

In fact, student's anxiety was high in the first two weeks when reading the online texts. They wanted to show that they were able to read in English. However, as their teachers we were able to see that students are not used to reading this kind of texts. Students got distracted easily when they were working at the computer. In fact, we had to ask them to stop opening other sites as Facebook or Twitter. That was a great temptation to them. Furthermore, it is important to mention that we were also able to see that they were able to overcome the limitation they had when reading online texts and practice was the keystone for them. For instance, when doing the fourth reading of the online texts they tended to be faster and the summaries were much better. After the sessions, students got together and had some informal conversations where they told their classmates how they did the activity. We took advantage of these informal conversations to gather valuable information. We were able to collect their reactions to the reading sessions. After the second week, they showed a great interest in reading more online texts.

In addition, in the first and second week, students had five minutes to read the online texts and it was very common for them to finish reading the article in the fourth minute. Some of the students needed five minutes to read and just few students did not finish their online articles. This delay in reading made them feel behind and they wanted to quit. On the other hand, they were willing to be part of the study so they decided to stay to see if they could learn something from the experience.

In contrast, summarization on paper was relatively demanding and detracted from the reading task compared to digital summarization which was effortless and smoothly integrated with reading. It is important to highlight that many participants felt that it was important to annotate in the source documents. The digital condition did not provide enough flexibility to do this; it did not support the richness of annotations on papers. It was detected that students

in both conditions took notes on separate documents. Participants who read paper-based texts took notes frequently and was interleaved with reading.

Then in the third week the time for reading was reduced, they had four minutes to read and that forced them to be faster readers and finally in the fourth week they had three minutes to read the online articles. This reduction in time was shocking at the beginning, but later they understood the importance in doing this. 25% of the students enjoyed to be challenged in the study and this offered them this opportunity.

In addition, it was observable that looking over the hardcopy texts was characterized by automaticity. Most of students handle the pages naturally with two hands minimizing disruption between reading the text when finishing one page and starting another. For example, students used one hand to keep hold of a page while searching through the text while marking or highlighting with other hand. Two-handed manipulation offered the opportunity of a better interaction such as writing while moving a page closer to read. Participants used tactile qualities to support skimming and scanning strategies and to calculate implicitly document length.

In the fourth weeks, students were more relaxed when reading online material since they got used to reading it. They started to develop scanning strategies and that assisted them in getting a better understanding of the texts. Writing summaries in the last two weeks was a more enjoyable experience to them. They realized that keeping simple was the best way to express themselves.

Based on the observations during the last weeks of the study, when students read on paper could hold the texts in their hand and this made easier the navigability and the absorption of the information in the texts. It seemed that participants liked to have as much control over the texts as possible, to highlight with pens, easily write notes to themselves in the margins, etc. Due to these preferences, it was observed that students consistently really dived into the texts when they read it on paper. Furthermore, it was observed that hardcopy readers used reading strategies like underlining, highlighting and taking notes more often than reading digital texts.

Using observation sheets (Appendix D) allowed us detecting the reading techniques used by the participants, examining the classroom dynamics regarding

reading tasks, and learning about student perceptions and beliefs about reading hardcopy and digital texts. Using this observation technique, the researchers had a better understanding of students' perceptions about reading texts in different formats and its interrelationship to the time spent, number of words and summarization.

7.2. LIMITATIONS OF THE STUDY.

Generalizability of the results in this research study is a limitation. The participants in the study came from different schools in a university. Although the number of participants (n=30) is the amount recommended in academic contexts, the application of the results have to be contextualized to the particular setting. . The study explores the preferences of the participants for using a particular medium for a particular task (reading text).

Another limitation is the responses students selected on their survey which is criticized by some researchers. Nielsen (1999, as cited by Spencer, 2006) argues that dishonesty may limit the report of measures although anonymity of the instruments may reduce it.

The study and part of the results were based on a self-reporting reading log. With reading logs, a student takes notes about the time and number of words while reading. Hence, results might vary. Students may respond differently in atypical situations or circumstances. With self-reported data, there was no way to assure all data were completely accurate or truthful. There will always be the chance of inaccuracies and limitations with this type of data.

Another limitation is the preferences for the type of texts; the material was selected based on intensive reading which involves specific aims and tasks. Some of the participants may have not been interested in the four types of text we selected for this study, and this could have affected the enjoyment of the reading activity.

Moreover, different emotions of the participants like fatigue, boredom or anxiety may have affected their performance in the reading sessions. There are diverse reasons for these emotions like the academic overload of work students had at that time, personal problems, or some sickness. To some extent, these factors may have affected the result of the correlation between the student's motivation in reading digital and hardcopy texts and their writing performance (summary) in the study because they were asked to do these activities at the same time.

7.3. FUTURE DIRECTIONS AND FURTHER AREAS FOR RESEARCH

The study generated a large number of questions about the students' perceptions of reading digital and hardcopy texts in the EFL classroom. Further research include the relationship between the type of textbook (print and digital) used in a course and the academic performance of the students of that course. This study has demonstrated that most of the participants are still using hardcopy material to study. However, it has no conclusive data to show the interrelationship between the uses of specific type of text with the academic success of the students in an English course.

A study with a larger population at the undergraduate level could contribute with a conclusive research. Therefore, with a large and accurate data set, researchers could find out the pedagogical situation in the higher education regarding students' preferences of reading digital and printed material.

Many learners referred to the preference of reading printed text for academic purposes but the lowest scores of the summaries came from that type of text. It would be useful to investigate this as a potential topic on writing fluency and its interrelationship with the use of dictionaries and translators. This situation was one of the most repeated codes from the interviews. This study has not shown an in-depth analysis about the relationship of writing summaries and the use of supplementary materials such as dictionaries and translators.

Due to the lack of studies about digital and paper-based reading related with reading fluency, future researches might examine whether these formats of texts could help improve students' performance. Also, researchers could explore if text format cause effects accrued from knowing the characteristics of the reading task, such as reading speed, type of text and student perceptions about the format.

Regarding the transferability of this qualitative study, the researchers described in detail the perceptions of 30 students from A1 level of a public university when reading digital and paper-based texts, and particularly their interrelationship with the time spent and number of words when doing the reading task. This study showed conclusions as to why certain text formats might have affected the students' perceptions when reading, but it is unable to generalize the findings to all A1

undergraduate students from Ecuadorian universities. However, from the level of detail the researchers provide, readers can take certain aspects of this action research and apply them to other contexts and situations.

References

- Anderson, N. J., & Cheng, X. (1999). *Exploring second language reading: Issues and strategies*. Boston, MA: Heinle & Heinle. Retrieved July 1, 2016 from <http://www.tesl-ej.org/wordpress/issues/volume4/ej13/ej13r7/?wscr=>
- Arter, J., & McTighe, J. (2001). *Scoring rubrics in the classroom: Using performance criteria for assessing and improving student performance*. Corwin Press. Retrieved September 16, 2016 from books.google.com.ec/books?isbn=0761975756
- Atkins, A. (2009). Timed reading: Increasing reading speed and fluency. *JALT*. Retrieved July 13, 2016 from <http://jalt-publications.org/archive/proceedings/2009/E099.pdf>
- Auerbach, C., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. NYU press.
- Baker, L., Dreher, M. J., & Guthrie, J. T. (Eds.). (2000). *Engaging young readers: Promoting achievement and motivation*. Guilford Press. Retrieved from books.google.com.ec/books?isbn=1572305355
- Biber, D. (1991). *Variation across speech and writing*. Cambridge University Press. Retrieved from books.google.com.ec/books?isbn=0521425565
- Burke, E. F., Hartke, D., & Shadow, L. (1989). *Print format effects on ASVAB (Armed Services Vocational Aptitude Battery) test score performance: Literature review* (No. AFHRL-TP-88-58). AIR FORCE HUMAN RESOURCES LAB BROOKS AFB TX. Retrieved September 13, 2016 from <http://www.dtic.mil/dtic/tr/fulltext/u2/a211745.pdf>
- Carrell, P. L., Devine, J., & Eskey, D. E. (1988). *Interactive approaches to second language reading*. Cambridge University Press. Retrieved from books.google.com.ec/books?isbn=0521353602

- Champeau de Lopez, C. (1993). Developing reading speed. In *English Teaching Forum* (Vol. 31, No. 1, pp. 50-51).
- Cheek, E., & Ortlieb, E. (2014). *Theoretical models of learning and literacy development* (Vol. 4). Emerald Group Publishing. Retrieved August 24, 2016 from books.google.com.ec/books?isbn=1783508221
- Clont, J. G. (1992). *The concept of reliability as it pertains to data from qualitative studies*. Paper Presented at the annual meeting of the South West Educational Research Association. Houston, TX.
- Creswell, J. (2012). Collective Qualitative Data. In Educational research: *Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed., pp. 30-264). Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall. Retrieved July 13, 2016 from <http://www.scis.nova.edu/~nasutif/MCTE690-syllabus-summer2003.pdf>
- Creswell, J. W. & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-131. Retrieved August 1, 2016 from http://sci-hub.cc/10.1207/s15430421tip3903_2
- De Leeuw, M., & De Leeuw, E. (1965). *Read better, read faster: a new approach to efficient reading*. Penguin Books.
- Diamond, C. (2015). *Speed Reading - How To Read Faster and Remember Everything?* Retrieved September 10, 2016 from books.google.com.ec/books?isbn=0549525998
- Dillon, A. (1992). Reading from paper versus screens: A critical review of the empirical literature. *Ergonomics*, 35(10), 1297-1326. Retrieved September 11, 2016 from <http://sci-hub.cc/10.1080/00140139208967394>

- Dorgeloh, H., & Wanner, A. (Eds.). (2010). *Syntactic variation and genre* (Vol. 70). Walter de Gruyter. Retrieved from August 12, 2016 from books.google.com.ec/books?isbn=3110226472
- Eagleton, M. B., & Dobler, E. (2012). *Reading the web: Strategies for Internet inquiry*. Guilford Press. Retrieved September 10, 2016 from books.google.com.ec/books?isbn=1462507026
- Görlach, M. (2004). *Text types and the history of English* (Vol. 139). Walter de Gruyter. Retrieved August 7, 2016 from books.google.com.ec/books?isbn=3110197162
- Grabe, W. (1991). Current developments in second language reading research. *TESOL quarterly*, 375-406. Retrieved August 1, 2016 from <http://sci-hub.cc/10.2307/3586977>
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194). Retrieved June 12, 2016 from http://www.gdufs.biz/10-guba_lincoln_94.pdf
- Haas, C. (2013). *Writing technology: Studies on the materiality of literacy*. Routledge. Retrieved September 7, 2016 from books.google.com.ec/books?isbn=1136687556
- Harmer, J. (2007). Teach Reading. In *How to teach English* (6th ed., pp. 99-110). Harlow: Pearson Longman. Retrieved July 13, 2016 from <http://sci-hub.cc/10.1093/elt/ccn029>
- Hawkes, L., Murphy, C., & Law, J. (2001). *The Theory and Criticism of Virtual Texts: An Annotated Bibliography, 1988-1999* (No. 14). Greenwood Publishing Group. Retrieved September 1, 2016 from books.google.com.ec/books?isbn=0313312249

- Herath, C. (2010). How do we Read Online: *The effect of the Internet on reading behaviour*. Retrieved June 12, 2016 from <http://researcharchive.vuw.ac.nz/bitstream/handle/10063/1443/thesis.pdf?sequence=2>
- Huang, H. C. (2014). Online Versus Paper-based Instruction: Comparing Two Strategy Training Modules for Improving Reading Comprehension. *RELC Journal*, 45(2), 165-180. Retrieved June 13, 2016 from <http://sci-hub.cc/10.1177/0033688214534797>
- Hults, A. (2003). *Developing Reading Fluency, Gr. 3, eBook: Using Modeled Reading, Phrasing, and Repeated Oral Reading* (Developing Reading Fluency Series). Creative Teaching Press. Retrieved July 31, 2016 from books.google.com.ec/books?isbn=1591989957
- Hutchison, A., & Colwell, J. (2015). *Bridging Technology and Literacy: Developing Digital Reading and Writing Practices in Grades K-6*. New York: Rowman & Littlefield. Retrieved August 1, 2016 from books.google.com.ec/books?isbn=1442234962
- Jackson, H. (Ed.). (2013). *The Bloomsbury companion to lexicography*. A&C Black. Retrieved September 10, 2016 from books.google.com.ec/books?isbn=1441114157
- Knapp, P., & Watkins, M. (2005). *Genre, text, grammar: Technologies for teaching and assessing writing*. UNSW Press. Retrieved from books.google.com.ec/books?isbn=0868406473
- Knipe, E. (2007). *Bridging the gap: Writing, reading, and critiquing digital poetry*. ProQuest. Retrieved September 2, 2016 from books.google.com.ec/books?isbn=0549369384
- Konopak, B., Sheard, C., Longman, D., Lyman, B., Slaton, E., Atkinson, R., & Thames, D. (1987). Incidental versus intentional word learning from context. *Reading Psychology*:

An International Quarterly, 8(1), 7-21. Retrieved June 13, 2016 from <http://scihub.cc/10.1080/0270271870080103>

Kortelainen, T. (2015, October). Reading Format Preferences of Finnish University Students. In *European Conference on Information Literacy* (pp. 446-454). Springer International Publishing. Retrieved September 7, 2016 from http://scihub.cc/10.1007/978-3-319-28197-1_45

Krashen, S. (2003). *Explorations in Language Acquisition and Use: The Taipei Lectures*. Portsmouth, NH: Heinemann

Kress, G. (1990). Linguistic processes in sociocultural practice.

Kurbanoglu, S., Špiranec, S., Grassian, E., Mizrachi, D., & Catts, R. (Eds.). (2014). *Information Literacy: Lifelong Learning and Digital Citizenship in the 21st Century: Second European Conference, ECIL 2014, Dubrovnik, Croatia, October 20-23, 2014. Proceedings* (Vol. 492). Springer. Retrieved September 7, 2016 from books.google.com.ec/books?isbn=3319141368

Kurbanoğlu, S., Boustany, J., Špiranec, S., Grassian, E., Mizrachi, D., & Roy, L. (Eds.). (2016). *Information Literacy: Moving Toward Sustainability: Third European Conference, ECIL 2015, Tallinn, Estonia, October 19-22, 2015, Revised Selected Papers* (Vol. 552). Springer. Retrieved September 7, 2016 from books.google.com.ec/books?isbn=3319281976

Land, R., & Bayne, S. (Eds.). (2011). *Digital difference: Perspectives on online learning* (Vol. 50). Springer Science & Business Media. Retrieved September 1 from books.google.com.ec/books?isbn=9460915809

- Liang, T. H., & Huang, Y. M. (2014). An Investigation of Reading Rate Patterns and Retrieval Outcomes of Elementary School Students with E-books. *Educational Technology & Society*, 17(1), 218-230. Retrieved July 2, 2016 from http://ifets.info/journals/17_1/19.pdf
- Lima, C. Masayuki Teranishi, Yoshifumi Saito and Katie Wales (Eds) *Literature and Language Learning in the EFL Classroom* London: Palgrave Macmillan, 2015, 329 pp. ISBN 978-1137443656. Retrieved August 24, 2016 from <http://clelejournal.org/wp-content/uploads/2016/06/CLELEjournal-4.1-Book-Review.pdf>
- Liu, Z. (2005). Reading behavior in the digital environment: Changes in reading behavior over the past ten years. *Journal of documentation*, 61(6), 700-712. Retrieved June 17, 2016 from <http://www.emeraldinsight.com/doi/abs/10.1108/00220410510632040>
- Liu, Z. (2008). *Paper to digital: Documents in the information age*. ABC-CLIO. Retrieved September 11, 2016 from books.google.com.ec/books?isbn=1591586208
- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522-526. Retrieved June 16, 2016 from <http://sci-hub.cc/10.1093/fampra/13.6.522>
- Marshall, C., & Rossman, G. B. (1989). *Design qualitative research*. California: Sage.
- Spradley, J. P. (2016). *Participant observation*. Waveland Press.
- Masny, D., & Cole, D. R. (2012). *Mapping multiple literacies: An introduction to Deleuzian literacy studies*. Bloomsbury Publishing. Retrieved September 6, 2016 from books.google.com.ec/books?isbn=1441186956
- McAleese, R. (1999). *Hypertext: theory into practice*. Intellect books. Retrieved August 28, 2016 from books.google.com.ec/books?isbn=1871516285
- McIntyre, E., Hulan, N., & Layne, V. (2011). *Reading instruction for diverse*

classrooms: Research-based, culturally responsive practice. Guilford Press.

Retrieved from September 6, 2016

books.google.com.ec/books?isbn=1609180569

McKay, S. (2006). Researching Teachers and Learners. In *Researching second language classrooms* (pp. 37-57). Mahwah, N.J.: Lawrence Erlbaum. Retrieved June 21, 2016 from books.google.com.ec/books?isbn= 1135604401

McNeil, J. D. (1984). *Reading comprehension: New directions for classroom practice.* Scott, Foresman and Company, 1900 East Lake Ave., Glenview, IL 60025.

Nation, I. S. P. (2008). *Teaching ESL/EFL reading and writing.* Routledge.

Nielsen, J. (1999). Voodoo usability. Retrieved March, 18, 2002.

O'Brien, R. (1998). An overview of the methodological approach of action research. *Faculty of Information Studies, University of Toronto.* Retrieved June 16, 2016 from <http://web.net/~robrien/papers/xx%20ar%20final.htm>

O'Hara, K., & Sellen, A. (1997, March). A comparison of reading paper and on-line documents. In *Proceedings of the ACM SIGCHI Conference on Human factors in computing systems* (pp. 335-342). ACM. Retrieved August 15, 2016 from <http://131.107.65.14/en-us/um/people/asellen/publications/reading%20paper%20and%20online%2097.pdf>

Organisation for Economic Co-operation and Development. (2010). *PISA 2009 assessment framework: Key competencies in reading, mathematics and science.* OECD.

Papa, R. (2014). *Media Rich Instruction.* Springer International Publishing. Retrieved September 3, 2016 from books.google.com.ec/books?isbn=3319001523

Railean, E. (Ed.). (2015). *Psychological and pedagogical considerations in digital*

- textbook use and development*. IGI Global. Retrieved September 3, 2016 from books.google.com.ec/books?isbn=1466683015
- Redston, C., Cunningham, G., & Clementson, T. (2013). *Face2face Intermediate Teacher's Book with DVD*. Cambridge University Press
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage. Retrieved August 21, 2016 from http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Ritchie_2003.pdf
- Rothwell, A. D., Guijarro, A. J. M., & Hernández, J. I. A. (Eds.). (1998). *Ensayos de Análisis Del Discurso en Lengua Inglesa* (Vol. 50). Univ de Castilla La Mancha. Retrieved August 2, 2016 from books.google.com.ec/books?isbn=8489958394
- Ryan, S. J. (2013). *Retina*. London: Saunders/Elsevier. Retrieved September 13, 2016 from books.google.com.ec/books?isbn=1455737801
- Schwalbe, W. (2012). *The End of Your Life Book Club*. Vintage. Retrieved August 2, 2016 from books.google.com.ec/books?isbn=0307961117
- Seale, C. (1999). Quality in qualitative research. *Qualitative Inquiry*, 5(4), 465-478. Retrieved August 15, 2016 from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.460.3511&rep=rep1&type=pdf>
- Segalowitz, N., Poulsen, C., & Komoda, M. (1991). Lower level components of reading skill in higher level bilinguals: Implications for reading instruction. *AILA review*, 8(1), 15-30.
- Shiotsu, T. (2010). *Components of L2 reading: Linguistic and processing factors in the reading test performances of Japanese EFL learners* (Vol. 32). Ernst Klett Sprachen.

- Retrieved August 19, 2016 from
http://www.langtoninfo.co.uk/web_content/9780521157278_frontmatter.pdf
- Silverman, D. (1993). *Interpreting qualitative data: methods for analysing qualitative data*. Retrieved June 21, 2016 from books.google.com.ec/books?isbn=1446200205
- Sykes, J. (2008). *Dyslexia, design and reading: Making print work for college students with dyslexia. A qualitative interaction design study*. ProQuest. Retrieved September 17, 2016 from books.google.com.ec/books?isbn=0549525998
- Taylor, B. M., Frye, B. J., & Maruyama, G. M. (1990). Time spent reading and reading growth. *American Educational Research Journal*, 27(2), 351-362.
- Tinker, M. A. (1963). *Legibility of print* (No. Z250 A4 T5).
- Widmyer, L. (2011). *Second Grade Student Perceptions of Online vs. Paper Text Reading* (Doctoral dissertation, Bowling Green State University). Retrieved July 31, 2016 from [file:///C:/Users/User2/Downloads/bgsu1309994659%20\(2\).pdf](file:///C:/Users/User2/Downloads/bgsu1309994659%20(2).pdf)
- Woody, W. D., Daniel, D. B., & Baker, C. A. (2010). E-books or textbooks: Students prefer textbooks. *Computers & Education*, 55(3), 945-948. Retrieved September 7, 2016 from <http://sci-hub.cc/10.1016/j.compedu.2010.04.005>

Appendices

Appendix A

INFORMED CONSENT FORM

The general objective of this study is to explore students' opinions about online and paper-based reading practice through individual interviews and a survey.

The instruments we have planned to use to collect data are: 1) administer a Cambridge Placement Test before the study, 2) provide exposure to paper based and digital readings over four week period with four different text types: narrative, descriptive, expository and argumentative, 3) an interview of no more than 20 minutes and a survey.

By signing this form, you will voluntarily be part of this study. However, you can choose not to participate before or after the research has begun. It is important to note that your participation will not affect your academic performance in any way or result in any benefit. The researchers will respect the identity of the participants; it will be remained anonymous at all times.

We thank you in advance for your cooperation and we are at your disposal to clarify any queries you may have.

You can contact either Ms. Alison Herrera Conforme or Ms. Albania Cadena Aguilar. Emails: aliliher@espol.edu.ec or alcadena@espol.edu.ec

Telephone: 2269-145

I have read and understood the document and I accept all conditions.

Name in print

Subject's Signature

Appendix B

Interview

TESIS: EFL Students' opinions about the online and paper-based reading practice in an English level A1 (CEFR) course of a Public University in Ecuador.

Nombre del Entrevistado: _____

Fecha de la entrevista: _____

Preguntas semi-estructuradas de una entrevista adaptada de un reporte sobre la comparación de la lectura en texto impreso y digital por Widmyer (2011) para su tesis doctoral en el College of Bowling Green State University: Percepciones de los estudiantes de segundo grado sobre la lectura de documentos impresos y digitales; y de un estudio sobre el comportamiento del individuo en relación a la lectura dentro del ámbito digital durante los últimos años por Liu (2005) para el Journal of Documentation: Comportamiento lector en la era digital: cambios en el comportamiento lector durante los últimos diez años.

Liu, Z. (2005). Reading behavior in the digital environment: Changes in reading behavior over the past ten years. *Journal of documentation*, 61(6), 700-712.

Widmyer, L. (2011). *Second Grade Student Perceptions of Online vs. Paper Text Reading* (Doctoral dissertation, Bowling Green State University).

En esta breve entrevista, lo invito a compartir sus impresiones generales acerca de la lectura de diferentes tipos de textos en versión impresa y digital en el cual usted participó en el curso por las últimas semanas, y algunas sugerencias que usted pueda tener para mejorar dicha práctica de lectura.

1. ¿Qué tipo de texto le gustó leer durante el estudio, textos impresos o digitales? ¿Por qué?
2. ¿Qué le gusta y disgusta de los textos digitales para fines académicos?
3. ¿Qué le gusta y disgusta de los textos digitales para la lectura por placer?
4. ¿Qué le gusta y disgusta de los textos impresos para fines académicos?
5. ¿Qué le gusta y disgusta de los textos impresos para la lectura por placer?
6. ¿En cuál de las dos versiones (digital o impreso) usted necesita más tiempo para leer?
7. ¿En cuál de las dos versiones (digital o impreso) usted leyó un número mayor de palabras en menor tiempo? ¿Por qué?

8. ¿En cuál de las dos versiones (digital o impreso) usted prefiere tomar anotaciones? ¿Por qué?

9. ¿En cuál de las dos versiones (digital o impreso) usted subraya o resalta ideas o palabras? ¿Por qué?

10. ¿Con qué frecuencia usted imprime las versiones digitales de los textos? ¿Para qué?

11. ¿Cuáles son las ventajas de leer textos digitales en comparación con textos impresos?

12. ¿Cuáles son las desventajas de leer textos digitales en comparación con textos impresos?

13. ¿Qué tipo de textos digitales le gustó leer durante el estudio?

Culture shock (expository)

That´s incredible (narrative)

Kill your tv! (Argumentative)

Celebrity profile (descriptive)

14. ¿Qué tipo de textos impresos le gustó leer durante el estudio?

Culture shock (expository)

That´s incredible (narrative)

Kill your tv! (Argumentative)

Celebrity profile (descriptive)

Appendix C

Survey

Student's name: _____ Genre: _____

Direction: Listed below are statements about some preferences people have when reading. 4 numbers follow each statement (1, 2, 3 and 4), and each number means the following:

1 means “strongly disagree”

2 means “disagree”

3 means “agree”

4 means “strongly agree”

Choose the number that best fits your answer.

1. I do NOT mind reading on the computer when I am studying. _____
2. I do NOT mind reading on the computer when I do it for pleasure. _____
3. I do NOT mind reading hardcopy material when I am studying. _____
4. I do NOT mind reading hardcopy material when I do it for pleasure. _____
5. When I need to read a long passage on the computer, I usually print out a copy. _____
6. In the study, I preferred hardcopy material to a digital format. _____
7. When I study with hardcopy material, I read more words in less time. _____
8. When I study with digital material, I read more words in less time. _____
9. I spend more time reading digital material than reading hardcopy material. _____
10. Hardcopy material is faster and easier to read. _____
11. When reading digital material, I prefer underlining ideas or words. _____
12. When reading hardcopy material, I prefer underlining ideas or words. _____
13. When reading digital material, I prefer making notes. _____
14. When reading hardcopy material, I prefer making notes. _____

Glossary

Hardcopy: Printed material

Don't mind: It is ok

TEXTS USED IN THE STUDY	kill your TV	Celebrity Profile	That's incredible	Culture Shock
Which digital text did you like reading in the study?				
Which hardcopy material did you like reading in the study?				

Appendix D

Observational Protocol

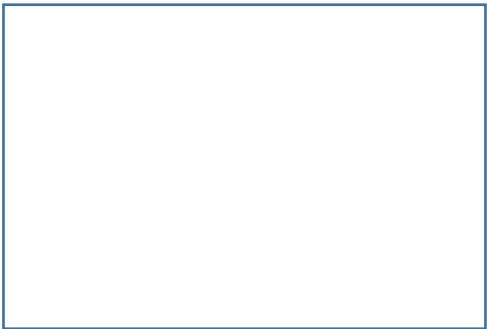
Date: _____

Time: _____

Length of activity: _____ minutes

Site: _____

Participants: _____

Descriptive Notes	Reflective Notes
<p>Physical setting: visual layout</p> 	<p>Reflective comments: questions to self, observations of nonverbal behavior, my interpretations.</p>
<p>Description of participants</p> <p>Description of activities</p> <p>Description of individuals engaged in activity</p> <p>Sequence of activity over time</p> <p>Interactions</p> <p>Unplanned events</p> <p>Participants comments: expressed in quotes</p>	<p>Reflective comments: questions to self, observations of nonverbal behavior, my interpretations.</p>

The researcher's observation of what seems to be occurring	

Taken from Portland State University

<https://www.pdx.edu/studentaffairs/sites/www.pdx.edu.studentaffairs/files/qualprotocols.pdf>

Adapted by Alison Herrera and Albania Cadena.

Appendix E

Rubric for Summary Writing Using Holistic Method

San Diego State University

	<p>The criteria for a summary are:</p> <ol style="list-style-type: none"> 1. Accuracy of content 2. Comprehensiveness and balance 3. Clarity and readability
4 Exceptional	The summary meets all the criteria. The writer understands the article thoroughly. The main points in the article appear in the summary with all main points proportionately developed. The summary should be as comprehensive as possible and should read smoothly. Sentences should be clear without vagueness or ambiguity.
3 Acceptable	The summary should still be very good, but it can be weaker than a 4 summary in one area. It may have excellent accuracy and balance but show occasional problem in sentence structure. It may be clearly written but be somewhat unbalanced or less comprehensible than a 4 summary or show a minor misunderstanding of the article.
2 Partial	The summary must have strength in at least one area of competence, and it should still be good enough to convince the grader that the writer has understood the article partially well. The summary typically is not written well enough to convey an understanding of the article to someone who has not already read it.
1 Little to no Evidence	The summary is weak in all areas of competences, either because it is so poorly written that the reader cannot understand the content or because the content is inaccurate or seriously disorganized.

Retrieved from http://go.sdsu.edu/dus/ctl/files/03801-Oct8_rubrics.pdf

It was adapted by Alison Herrera and Albania Cadena