

MOODLE-BASED WORKSHEETS TO ENHANCE READING COMPREHENSION

The Impact of Moodle-based Worksheets to Enhance Students' Reading Comprehension

Karoll Ramírez Castro

Thesis Director: María Fernanda Téllez Téllez

Universidad Externado de Colombia

School of Education

Masters' Program in Education with Emphasis on English Didactics

Bogotá D.C., Colombia

2017

---

Note of acceptance

María Fernanda Téllez Téllez, M.A.: Thesis Director

Julio César Gómez, PhD.: Juror

### **Acknowledgments**

I would like to express my gratitude to the people who supported me along this research process. First of all, I want to thank my thesis director, Professor María Fernanda Téllez, who generously helped me with her knowledge, advice, and patience. Additionally, I would like to thank all professors of the Master's degree program who contributed to my professional development and intellectual growth.

I would also like to highlight the support received from Professor Jairo López, Director of the Foreign Languages Common Area at Universidad Piloto de Colombia, whose experience and advice were fundamental for developing this research study successfully. Furthermore, I want to thank my students, for their generous cooperation, and for being a permanent inspiration to enrich the materials I developed in the pedagogical intervention.

Finally, I want to express my gratefulness to my family, but above all, to Freddy, my beloved partner, for all his profound affection, patience, and support throughout this process. He has been my driving force to become a better professional and a better human being.

**Abstract**

This research study aimed to determine the impact of a series of Moodle-based worksheets in reading comprehension development to promote the use of reading strategies. This project is linked to the Materials Development field of study of the Masters' Emphasis on English Didactics. This qualitative study, framed in action-research, was conducted with a group of undergraduate students at a private university in Bogotá, Colombia. I collected data through students' artifacts, a focus group interview, and tests. The findings showed that the use of appealing, organized and contextualized virtual reading worksheets could be useful to enhance students' reading comprehension through an adequate use of a series of reading strategies that fostered their vocabulary development. Besides, the study showed that Virtual Learning Environments, such as Moodle, provide significant opportunities for students to empower their language learning process, which in this case, adheres to reading comprehension.

**Keywords:** *materials development, reading comprehension worksheets, reading strategies, Moodle*

### Resumen

Este estudio de investigación tuvo como propósito determinar el impacto de una serie de guías de trabajo diseñadas en la plataforma virtual Moodle en el desarrollo de la comprensión lectora tendiente a fomentar el uso de estrategias de lectura. El estudio se relaciona con el campo del Desarrollo de Materiales en el énfasis en Didáctica del Inglés de la Maestría en Educación de la Universidad Externado de Colombia. Su carácter cualitativo se enmarca dentro de la investigación acción, desarrollada con un grupo de estudiantes de pregrado en una universidad privada en Bogotá, Colombia. Se recolectaron los datos a través de los artefactos de los estudiantes, una entrevista de grupo focal y pruebas de lectura. Los hallazgos obtenidos determinaron que el uso de guías virtuales de trabajo basadas en lectura, al ser contextualizadas, visualmente, presentadas de manera atractiva y organizada, pueden resultar de gran utilidad para el mejoramiento de la comprensión lectora de los estudiantes, a través del uso adecuado de una serie de estrategias de lectura que adicionalmente, influyeron en el desarrollo de su vocabulario. El estudio también encontró que Ambientes Virtuales de Aprendizaje tales como Moodle pueden brindar oportunidades importantes para que los estudiantes se apropien de su proceso de aprendizaje de una lengua que, en este caso particular, hace referencia a la comprensión lectora.

***Palabras clave:*** desarrollo de materiales, comprensión lectora, estrategias de lectura, Moodle

## Table of contents

Acknowledgments.....	iii
Abstract.....	iv
Resumen.....	v
Table of contents.....	vi
Introduction.....	1
Chapter I.....	3
Research Problem.....	3
Statement of the Problem.....	3
Research Question.....	3
Research Objectives.....	3
General objective.....	3
Specific objectives.....	4
Related Studies.....	4
Setting and Rationale.....	7
Chapter II.....	10
Literature Review.....	10
Materials Development.....	10
Motives to develop materials.....	10
Considerations when developing materials.....	11
Reading Comprehension.....	12
The process of understanding a text.....	13
Strategies for enhancing reading comprehension.....	14
Virtual Learning Environments.....	16
Defining VLEs.....	16
Pedagogical implications and attributes of VLEs.....	17
Chapter III.....	19
Methodological Design.....	19
Research Design.....	19
Approach.....	19
Type of study.....	20
Participants.....	21
Students.....	21
Teacher as a researcher and as materials developer.....	21
Data gathering instruments.....	22
Artifacts.....	22
Tests.....	22
Focus group.....	23
Instructional Design.....	23
Pedagogical intervention.....	24
Instructional objectives.....	26
Intervention as innovation.....	26
Theory of language and language learning.....	27
Methodological approach underlying the pedagogical intervention.....	28

Connection of the pedagogical intervention with the research question .....	30
Instructional stages .....	31
Topic selection and development .....	31
Informed consent .....	32
Sensitization .....	32
Implementation of the materials .....	32
Worksheet sample .....	33
Chapter IV .....	39
Data Analysis .....	39
Data Analysis Procedure .....	39
Research categories .....	40
Boosting our knowledge through attractive, clear, and contextualized materials .....	41
Achieving impact through contextualized and meaningful materials .....	41
Attracting learners' attention through clarity and visual appeal .....	44
Reading strategies enhancing reading comprehension and vocabulary learning .....	47
Achieving progress in reading comprehension .....	47
Using strategies to help students improve reading comprehension .....	49
Realizing the importance of the role of reading in vocabulary learning .....	54
Using Moodle to support learning .....	58
Moodle's simplicity to facilitate learning .....	58
Chapter V .....	63
Conclusions and Pedagogical Implications .....	63
Conclusions .....	63
Pedagogical Implications .....	64
Limitations .....	64
Further Research .....	65
References .....	66
Appendices .....	77
Appendix A: Needs analysis .....	77
Appendix B: Consent Forms .....	80
Appendix C: Self-Assessment form .....	83
Appendix D: Focus Group Interview .....	85

## Introduction

In the context of higher education in Colombia, the use of Information and Communication Technologies (ICTs, henceforth) has played an increasingly important role in the teaching and learning processes. The use of Virtual Learning Environments such as Moodle has changed the way to approach contents and class activities. This research study aimed at exploring the impact that the design and implementation of a series of Moodle-based activities can have in undergraduate students' reading comprehension. I decided to work on this topic due to the relevance of reading as the main source of knowledge acquisition for students; and the exposure to demanding text comprehension and analysis tasks, in both English and Spanish.

In recent semesters, I observed that most students were not aware of learning strategies. This feature could affect their reading comprehension development. Furthermore, a series of inadequate habits might lead students to face obstacles when performing reading tasks.

As a language teacher, I am aware of the importance of designing materials to meet students' needs, interests and context. While proposing these materials, it is critical to consider the characteristics of this population that needs to enhance and strengthen language skills. The pedagogical intervention in this study included the design and development of contextualized worksheets focused on the development of reading comprehension through Moodle-based activities.

This document comprises five chapters. The first one presents the research problem, including the statement of the problem and related studies. The second chapter illustrates the theoretical constructs of the study with the literature review. The third chapter explains the methodological design that shapes the research, and instructional design. The fourth chapter describes the analysis of data and the findings. Finally, the fifth chapter socializes the



conclusions, pedagogical implications, limitations and feasible further research questions emerged from this study.

## Chapter I

### Research Problem

#### Statement of the Problem

I am currently working as a full-time English teacher in a private university in Bogotá, where I teach students from different majors in the same class group. For more than seven semesters, students have worked with both textbooks in the classroom and the Moodle platform, to develop different course contents and language skills.

Considering the experience abovementioned, and based on the analysis of class observation notes, archival documents, tests results, and the implementation of a needs analysis survey, I detected a series of inappropriate habits and the lack of suitable strategies that affected students' reading comprehension. Students were not aware of the use of certain routines and procedures that could help them work on a text efficiently, by capturing different elements that allowed an accurate understanding. This situation showed that they needed help in terms of proper use of language learning strategies that could help them improve reading comprehension. Therefore, the main concern was to inquire how the use of adequate reading strategies through virtual worksheets could have a positive effect on students' reading comprehension development.

#### Research Question

How do the development and implementation of Moodle-based worksheets based on reading strategies impact undergraduate students' reading comprehension?

#### Research Objectives

**General objective.** To explore undergraduate students' reading comprehension progress through the development and implementation of Moodle-based worksheets.

**Specific objectives.** (a) To analyze students' reading comprehension process when being exposed to the use of reading strategies. (b) To analyze the impact of virtual material focused on reading strategies on students' reading comprehension.

### **Related Studies**

The general topic of this research study is the development and implementation of a series of worksheets on the Moodle virtual platform to generate a positive outcome in students' reading comprehension. Three theoretical constructs underpinned the current study: Materials Development, Reading Comprehension, and Virtual Learning Environments. It was possible to find some local studies accounting for these concepts and coinciding with this type of setting.

Regarding the abovementioned constructs, Bautista (2011) studied the impact of the implementation and the use of Crime-science materials – Explosives – based on the Cognitive Language Learning Approach on reading comprehension development in students of an undergraduate program, called “Technical Professional in Explosives”, in a State institution in Bogotá, Colombia. The students belonged to the English for Specific Purposes (ESP) course. Through Action Research methodology, she used field notes, students' artifacts, progress reviews, surveys, and some photographs as data gathering instruments. The researcher observed that students recognized the relevance of ESP in their professional lives and reinforced their reading comprehension by using learning strategies and performing self-evaluation activities. This research work relates to the current one, in terms of the use of learning strategies for enhancing reading comprehension. Although it is true that Bautista's work paid special attention to ESP, both studies share the same academic context (higher education) and proposed activities that helped students get familiar with learning strategies for reading comprehension.

Likewise, Alfonso (2014) conducted an action research study about the use of metacognitive strategies and its impact on the enhancement of reading comprehension in undergraduate students. She worked with a group of twelve students ascribed to the Tourism program in a public university in Bogotá, Colombia, attending three week hour sessions of English instruction. To collect data, she used questionnaires, field notes, and checklists. The researcher found that university students could resort to metacognitive strategies (planning, monitoring, problem-solving and evaluating), to improve reading comprehension and promote autonomy and self-reflection. This study, as well as my own, worked on reading comprehension at university level, by exploring different learning strategies and providing material design innovations to meet the needs of this population. Besides that, she analyzed the possibilities that metacognitive strategies offer to improve the readers' general process.

In addition, Lopera (2012) conducted a study about the impact of reading strategy instruction on a group of nursing students in a public university in Medellín, Colombia, who took an EFL reading comprehension course. The author adopted the case study research methodology and used reading comprehension tests, field notes, and questionnaires as data collection instruments. The study concluded that the use of reading strategies helped students increase their confidence when solving reading tests, reduced dependence on dictionaries and enhanced their knowledge regarding the use of strategies. I found this study relevant, as it included tests that showed students' progress, regarding the use of specific reading strategies.

Following the same line of work, Pachón (2013) described the influence of learning strategies awareness to enhance vocabulary for reading comprehension. The researcher developed a qualitative case study with students of the Tourism program in a public university in Bogotá, Colombia, by using tests as the instrument to collect data. In her study, she observed that

students' higher awareness of the use of learning strategies in vocabulary-development activities allowed them to increase autonomy, reflection capacity, and confidence when reading as they evidenced their progress in the reading comprehension level. This study is closely related to mine regarding the population, college students who face challenges with reading comprehension, affecting their general academic performance and their scores in standardized tests like the Key English Test (KET), the Preliminary English Test (PET), and SABER PRO exam.

On the other hand, it is worth mentioning Bedoya's (2014) study who addressed reading comprehension development in Virtual Learning Environments. Throughout a case study, she explored students' autonomy in a virtual course. The participants belonged to a group of graduate students ascribed to different academic programs in a public university in Colombia who had taken a 120-hour Moodle-based reading comprehension course aimed at developing students' reading skills in a highly specialized academic context. The researcher observed different aspects (students' motivation, commitment, self-confidence, and independence) that were closely related to autonomy during different stages of the course by using questionnaires, forums, and interviews as data gathering instruments. The results showed that factors like the platform, the course design characteristics, and the role of the teacher determined the level of autonomy students assumed. This research study enlightened interesting insights on undergraduate students' perceptions of reading comprehension virtual tasks, which is a modality implemented in my research setting.

Finally, it is valuable to mention that Junca (2012) explored strategies and activities to help students enhance their reading comprehension skills and to guide them to become strategic readers through a qualitative case study. He conducted the study in a Public Accounting Program in a private university in Bogotá, Colombia. By using surveys, students' artifacts, and interviews as data collection instruments, he found that comprehension improved when students used

specific strategies, when they reflected on their own learning process, and linked the texts with their lives; and consequently, they developed critical thinking. I found this strategic reading focus appealing and useful, in terms of the teaching context in which his study and mine involved college students who need effective guidance to cope with their reading comprehension challenges. This case study is highly focused on strategies, and according to what I had observed in my teaching experience, it turns into a helpful resource for students to succeed in their academic and professional lives.

### **Setting**

The current study took place in a private higher education institution where I work with undergraduate students from different academic programs (Mechatronics Engineering, Graphic Design, Architecture, and International Business). English as a Foreign Language is one of the classes they must take as part of their study plan. The Common European Framework of Reference for Languages CEFR (2001) B1 level is one of the requirements students must achieve to graduate. The Foreign Language Department of the university has implemented a General English syllabus mainly focused on the development of language skills (reading, writing, listening, and speaking), which is composed by five levels, with two class sessions per week (2 hours each session). This syllabus also aims to help students with Cambridge KET and PET tests preparation. The textbooks used for this purpose are “Objective KET” (for levels 1 and 2) and “Objective PET” (for levels 3, 4 and 5), both published by Cambridge University Press. Beyond the activities, the teachers working in this program require additional materials to reinforce students’ language skills, especially in terms of digital material, uploaded on the Moodle platform.

**Rationale**

The students selected to participate in the current study belonged to level three. After analyzing their needs, I decided to work on the design of materials on Moodle since this is the institutional virtual platform adopted to work its academic digital contents. On basis of the results of some tests, I observed that students found reading comprehension quite complex, as they did not have good reading habits. They showed permanent dependence on the teacher, and faced difficulties to understand unfamiliar words. On the other hand, there were times when the input provided was not comprehensible enough (Krashen, 1981), as the complexity of the text did not suit their language level. These situations generated a negative impact on their results, and lowered their motivation to accomplish these reading tasks. Regarding these circumstances, I designed and implemented a series of virtual activities to help students enhance their reading comprehension by using reading strategies (McNamara, 2006).

The theoretical principles that frame this research study and the materials development of the pedagogical intervention are the ones proposed by Tomlinson (2003, 2011), Núñez, Téllez, Castellanos and Ramos (2009), and Núñez, Téllez, and Castellanos (2013). In this regard, this study aimed at providing some input to the research line on Materials Development to encourage the use of reading strategies to improve reading comprehension in undergraduate students through virtual worksheets.

This research study turned to be an important contribution to me as a researcher, to the institution, and of course, to the students. First, it helped me expand my possibilities to create effective and well-based materials from a deep reflection on my students' real needs (Núñez & Téllez, 2015). Second, it helped the Foreign Languages Department strengthen its content

structure on the Moodle Virtual platform by promoting innovative activities that motivated students to reinforce their reading comprehension.



## Chapter II

### Literature Review

The main purpose of this research study was to analyze the impact of Moodle-based worksheets in the development of reading comprehension of undergraduate students through the work with reading strategies. Having this in mind, the leading constructs for this analysis were Materials Development, Reading Comprehension, and Virtual Learning Environments.

#### Materials Development

Having in mind that students need help to succeed in their learning process and increase their motivation, language teachers should think about the pertinence of class materials used with their students by reflecting on the importance of creating and adapting contents and activities according to students' context. In this sense, Tomlinson (2011) affirmed that Materials Development (MD henceforth) "refers to anything which is done by writers, teachers or learners to provide sources of language input and to exploit those sources in ways which maximize the likelihood of intake" (p. 2). Likewise, in the light of Núñez and Téllez (2009), MD refers to a set of actions whose aim is to enhance both teaching and learning processes. These actions involve the design and/or adaptation of units, lessons, activities, among others. Proposing, designing, and implementing teachers' own materials would help them optimize the classroom work and exploit the best of students' potential. MD constitutes a field of study that according to Núñez and Téllez (2015), centers its action on the outcome that materials produce in the process of teaching and learning English as a Foreign Language (EFL henceforth).

**Reasons to develop materials.** There are relevant reasons for teachers to develop their own materials. Teachers, in general, feel that the activities offered by textbooks cannot fulfill students' interests and needs, and sometimes they do not correspond to learners' socio-cultural

and academic context. Concerning this, Núñez, Pineda and Téllez (2004) contended that the teaching experience makes teachers experts in recognizing those factors in the classroom to be more sensitive to the circumstances that surround the ‘real life’ of our teaching setting.

Identifying students’ context and needs is one of the first and most important steps for proposing effective and pertinent materials.

Accordingly, there are some additional reasons to draw teachers’ attention to MD, like the ones discussed by Ramos and Aguirre (2014). The first one is that teachers can relate research and innovation through MD; secondly, MD helps teachers promote inclusion in the classrooms; and thirdly, MD can help teachers establish links between the different spaces where students’ experiences take place (school, home, and industry, among others). Additionally, MD gives teachers several opportunities to explore the most suitable methodological and pedagogical alternatives for students and institutions.

Likewise, developing materials implies a complex but fascinating and rewarding task that provides significant benefits for both teachers and students. Furthermore, teachers can enhance their daily teaching practice by obtaining more theoretical and practical skills. Besides, students can increase their motivation by showing more interest toward the topics and activities when they realize that the content learned meet their needs and interests. Tosta and Small highlighted this joyous factor in the classroom (as cited in Núñez et al. 2009) since learning can be a pleasant experience that allows students to achieve high levels of enthusiasm and engagement.

**Considerations when developing materials.** Teachers should have in mind a series of factors to accomplish their work as materials developers. According to Richards (2005), proposing, designing, and implementing materials imply a number of factors associated to teachers’ training, experience, language proficiency, cultural and academic background, and

teaching style. Furthermore, the learners' interests, wishes, and needs; the context (institutional infrastructure and resources, school culture and number of students in the classroom); the theoretical aspects related to language and language use; and finally, the language learning approach considered in the proposals for materials design.

Closely associated with the factors above mentioned, teachers should consider some pertinent guidelines in the materials development process. Howard and Major (2004) pointed out that language education materials should be authentic, contextualized, and attractive; they should promote interaction, the development of learning strategies, and opportunities for using the language; besides, they should lead to the progressive development of language skills. Similarly, Núñez and Téllez (2009) asserted that materials should be "effective, appropriate and flexible" (p. 173). These are essential factors that determine their success for all the parties involved: students, teachers, and institutions.

Reflecting upon the quality and variety in the design of materials can make a significant difference. Tomlinson (2000) claimed that teachers are able to accomplish several benefits of working on MD if materials are rich, flexible, and versatile; if they set realistic goals, promote peer correction, self-evaluation, and constructive feedback. Language teachers have many possibilities for developing creative, innovative, and contextualized materials that may fulfill students' needs.

### **Reading Comprehension**

Reading is a complex activity by which an individual deciphers and understands the message conveyed by a writer; a process in which according to Rivers and Williams, the aim is to obtain meaning from a text (as cited in Jiménez, 2000). It is a receptive skill of critical importance in academic life, as students obtain most of the information of their disciplines from

texts that come from books or electronic sources. The way students process this information is a crucial procedure in their general academic performance.

**The process of understanding a text.** Reading implies comprehension, which is the process of capturing and building up meaning from a text (written or oral). It is the result of the interaction that takes place among the text itself, the reader, and the context (Duke & Carlisle, 2011). According to Kintsch and Perfetti, the reader's mind works on the meaning of words and the syntax of the text; it builds coherence (identifying degrees of relevance among different fragments of the text), and generates a "situation model of the text" (as cited in Duke & Carlisle, 2011, p. 200). These steps are influenced by the context in which the communicative act takes place. The interaction of the factors mentioned above makes the reading process a highly elaborate enterprise.

In addition, the act of reading and understanding a text consists of functions that work simultaneously. It implies both decoding content and relating it to previous knowledge from the reader (Jiménez, 2000). Similarly, Snow (2002) stated that reading comprehension is "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 11). According to the author, reading comprehension involves the reader as the process agent, who uses all cognitive and experiential capacities for this task, including "the purposes, processes, and consequences associated with the act of reading" (p. 11); and the text as the printed or electronic object to understand. These aspects interact with the sociocultural context, which influences the attitudes and abilities of the readers, as well as the activities they develop regarding the text.

Consequently, reading comprehension is a complex task that demands considerable effort from the reader who follows a series of important processes. According to Lin, comprehension

implies obtaining and analyzing information to generate a cohesive and solid product that will demonstrate its understanding (as cited in Hill, 2011). Besides, Hill (2011) conceived reading comprehension as a process that implies interaction and strategies that can lead to reading fluency, which according to Hirsch (2003), is the general correlation between comprehension speed and comprehension quality. Assimilating the content of a text goes far beyond understanding mere words; it requires a series of analytical and critical skills, intended to obtain a meaningful outcome about the ideas expressed by an author. In this sense, Swan (1975) complemented these ideas by defining reading comprehension as the capacity of capturing the highest amount of information from a text with the least misunderstanding, as well as the capacity of re-stating the ideas expressed by an author.

Some circumstances associated to the text and a number of reader's habits may hinder an individual's reading comprehension process and performance. Swan (1975) stated that comprehension deficiencies can be classified in two categories:

1. Inadequate habits (a) Paying too much attention to individual elements and details, losing the general idea of the text. (b) Not enough attention given to detail; especially when reading quickly. (c) When there is previous knowledge, or any strong feelings about the topic. The interpretation of the text may be selective and biased.	2. text complexity (a) long sentences, syntactically complex. (b) writer's style: loquacious and repetitive (c) indirect reference to important ideas (especially difficult when reading in a foreign language) (d) vocabulary that is not familiar for the reader
---	--

*Adapted from Swan (1975, p. 1)*

**Strategies for enhancing reading comprehension.** Considering the chart above, it is crucial to think about the importance of learning strategies that can help our students overcome their reading comprehension weaknesses. These strategies may provide systematic, meaningful, and long-lasting tools that allow students to advance in their learning process and obtain

increasingly better results. Therefore, steady progress increases their motivation. Oxford defined language learning strategies as “specific actions, behaviors, steps or techniques that learners use (often deliberately) to improve their progress in the development of their competence in the target language” (as cited in Pavicic, 2008, p. 52). In this sense, Oxford (2003) also highlighted that choosing the adequate strategies, according to the students’ learning style and type of task, can make the learning process more efficient, conscious, and self-regulated. Furthermore, Chamot, Barnhardt, Beard, and Robbins (1999) regarded this concept as “procedures and techniques that learners can use to facilitate a learning task” (p. 2). When learning a language, it is important to have in mind the strategies that suit individual’s academic, cognitive, and linguistic needs. In addition, when implementing the use of learning strategies, teachers should also consider affective factors that may affect our students’ motivation and provide students with strategies to empower their reading comprehension development, especially for those ones who have weaknesses, as they receive tools to build up meaning from texts successfully (Noles & Dole, 2004).

At this point, reading comprehension strategies are paramount to support students in coping with possible complexities interfering with comprehension, and foremost, to become independent readers and learners, which in Cohen’s words (1998), will help “to shift the responsibility for learning off the shoulders of the teachers and on those of the learners” (p. 21). Reading comprehension strategies, defined by Graesser (2007) as actions that can be behavioral or cognitive, are “enacted under particular contextual conditions, with the goal of improving some aspect of comprehension” (p. 6). In this regard, McNamara (2009) asserted that such strategies bring mechanisms to cope efficiently with comprehension problems and, over time,

they will be part of students' habits. Through an adequate use of strategies, students may reduce the obstacles they find when reading a text.

In what concerns with strategies training models, Liu (2010) affirmed that a reading strategy is "a deliberate action that readers take voluntarily to develop and understanding what they read" (p. 154), and mentioned the one proposed by Chamot and O'Malley: the Cognitive Academic Language Learning Approach (CALLA). This approach, according to Lin (2010), embodies "academic language development, content area instruction and explicit instruction in learning strategies for both content and language acquisition" (p. 103). This model encompasses six stages (preparation, presentation, practice, evaluation, expansion, and assessment) that can provide useful guidelines to support our learners in their reading comprehension development.

In sum, the appropriate selection of learning strategies for students, as well as the adequate criteria for elaborating the materials through which teachers implement reading strategies in their classes, will be crucial in the development of students' reading comprehension.

### **Virtual Learning Environments**

The latest technological advances in online education have provided innovative tools to design appealing and dynamic materials, which catch students' attention and interests, and offer wider opportunities for teachers to propose their own class items as they "become the sole developers of their course materials to a certain degree" (Basal, 2013, p. 9). Online educational materials development can occur in specific settings such as "Virtual Learning Environments" (VLEs henceforth),

**Defining VLEs.** In the last years, several Colombian institutions have migrated their learning materials and contents to virtual platforms such as Moodle, a Virtual Learning Environment (VLE henceforth). The institution where this research study took place, adopted this

platform as a mechanism to manage course contents and activities. Sneha and Nagaraja (2013) defined VLEs as systems created "for transferring learning materials to students by means of the web. These systems constitute student tracking, communication tools, assessment and collaboration." (p. 1705). Additionally, Dudeney and Hockly (2007) affirmed that a VLE is "a web-based platform on which course content can be stored" (p. 137). These authors claimed that through this platform, students can access not only content itself (i.e. documents, videos, audio tracks), but also to the possibility to work on a range of activities that include games, quizzes, questionnaires, discussion forums, and chat, among others. A VLE allows teachers to keep track of their students' access and performance, and eases the creation of assessment activities.

**Pedagogical implications and attributes of VLEs.** It is important to understand that learning platforms are far beyond being mere digital uploaded content. To this respect, Chin (2003) stated that VLEs provide learners with tools to facilitate and enrich their learning experience. This author also pointed out that VLEs follow the same teaching methods, approaches, and principles of a face-to-face class. It is not just uploading files or web links, but proposing activities where learners have opportunities to practice the contents studied, to interact with peers, and reflect upon their process through self-assessment.

Moreover, teachers may consider some additional features of VLEs as the ones discussed by Dillenbourg, Schneider and Synteta (2002). According to the authors, VLEs are social and co-participative spaces. The use of platforms fosters interaction and students' active role, even the shiest ones', due to the wide variety of participation modalities of the system. An outstanding feature of VLEs is versatility: they can be part of a face-to-face class as a complement; they incorporate different pedagogical approaches along with technology by presenting its contents in different ways, ranging from simple, plain texts to high-end graphic and video resources.



Language teachers can boost their creativity to design appealing fun activities to explore students' linguistic, cognitive, affective, and social abilities.

Language classes, either in physical or virtual spaces, can contribute to students' general academic performance at university level. The implementation of suitable reading strategies evinced in the materials designed enhances students' reading comprehension level significantly.

Having described and explained the main constructs to build the theoretical support of this research study, with the purpose of helping the readers understand the objective of this work, the next chapter portrays the Methodological Design and the Pedagogical Intervention.

## Chapter III

### Methodological Design

#### Research Design

In this section, I explain the research components of this study. First, it mentions the research approach and type of study that frames this project. Second, it presents the participants of the study. Finally, it describes each one of the data gathering instruments used in the research process.

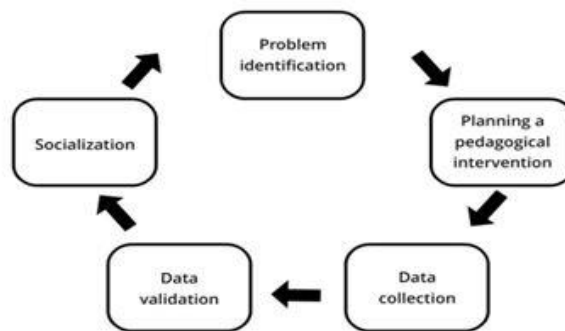
**Approach.** Keeping in mind the features of this research study, I adopted the qualitative approach, which intends to explain problems, behaviors, and practices, not analyzed from a quantitative perspective (Bell, 2005). It was necessary to observe and study the attitudes and perceptions of a group of individuals with diverse and heterogeneous characteristics.

In this regard, Rossman and Rallis claimed that, this methodology is mainly applicable in natural surroundings where “the teacher often goes to the site of the participant to conduct the research” (as cited in Creswell, 2003, p. 207). The researcher is able to “develop a level of detail about the individual or place, and to be highly involved in actual experiences of the participants” (p. 207). In this sense, the scholars focused on the teachers’ permanent contact with the research participants, being significantly sensitive to students’ growth, perceptions, and progress. The English classroom and the computer labs were the natural *milieu* in the current study, being in close contact with the students’ processes, opinions, and feelings.

In regards to the stages of qualitative research, Creswell (2002) highlighted the description of a specific problem in detail, and by obtaining data "based on words from a small number of individuals so that the participants’ views are obtained" (p. 16). This type of research intends to capture moments more than statistics. Gathered information related to students’

perceptions, activities, and students' progress provided significant insights for the development of this study.

**Type of study.** Consequently, the type of study I adopted was action research, defined by Bell (2005) as an “applied research, carried out by practitioners who have themselves identified a need for change or improvement” (p. 8). Likewise, Mettetal (2001) regarded this type of study as one in which the teacher analyzes an issue or question related to the classroom to discover mechanisms and strategies to optimize the learning processes of students. This author underlined a series of stages to follow when conducting action research: (1) identify a question or problem; (2) review the literature; (3) plan an intervention; (4) collect data; (5) check if data collected make sense; (6) make decisions for taking action; and (7) socialize findings. The figure below shows the cycle followed for this study, according to the stages previously mentioned.



*Figure 1. Action research cycle, based on Mettetal (2001)*

Having these ideas in mind, my study described, interpreted, and analyzed different obstacles that students faced in terms of reading comprehension. This process yielded action taking to overcome troubles occurred. This course of action adhered to Allwright and Bailey's (1991) assertion: “that is what classroom research is all about: gaining a better understanding of what good teachers (and learners) do instinctively as a matter of course, so that ultimately all can benefit” (p. xvi). This type of research aims at discerning and solving obstacles.

**Participants.** I developed this study in a private university in Bogotá, Colombia. The participants involved in this process were a group of undergraduate students and their English teacher, which at the same time, assumed the role of researcher and materials developer. These roles are described below.

**Students.** The population selected to conduct this research study consisted of eight students, whose ages ranged between 20 and 23, seven male and one female ascribed to the Mechatronics Engineering undergraduate program in a private university in Bogotá, Colombia. Their English language command ranked the CEFR A2 and B1. The students' selection was the outcome of observing their weaknesses in their reading comprehension, as well as their lack of adequate strategies to cope with the different challenges faced when reading texts.

Bearing in mind the nature of this study, I adopted the convenience sampling technique focused on the selection of a group of individuals from a community with good accessibility and in line to the researcher's judgment. With this technique, I intended to gain a more profound understanding among the participants, created on a natural basis, similar to the case of this study, the classroom (Lawrence, 2007; Creswell, 2003).

**Teacher as a researcher and as materials developer.** In this role, teachers focus on an issue or question that takes place in the classroom (Mettetal, 2001). Likewise, Hopkins (1985) regarded the teacher-researcher in the classroom as someone who has "extended their role to include systematic reflection upon their-craft with the aim of improving it" (p. 1). I used research to improve my teaching practice and to find mechanisms and strategies for enhancing students' learning process through the identification of their main learning weaknesses, and the design of a strategy that could help them overcome these difficulties. To this respect, Hole and McEntee established that in the role as teacher-researchers, they "must find out what works best in a

particular situation" (as cited in Mettetal, 2001, p. 1). Each place and community will respond to specific proposals according to the context and the kind of situations occurred.

On basis of the needs analysis, and as a materials developer, I proposed, designed and implemented activities aimed at achieving a positive impact on students' progress, and engaging them in the learning process. To this respect, Núñez and Téllez (2009) asserted that materials designed by teachers, foster students' self-assurance as they learn "at their own pace, in their own styles, and in an enjoyable, non-threatening atmosphere that will keep their motivation up" (p. 184). The students' perception of the material may cause a crucial impact on their success at optimizing their learning process.

**Data gathering instruments.** The instruments that teacher-researchers use to collect data are of critical importance for the success of a research study, as well as the quality of the information provided, which influences its results. The following are the instruments that I used in the current research study.

**Artifacts.** Recording the products of the teaching practice allows researchers to obtain and systematize information of procedures and activities performed in the classroom, and identify the aspects to improve. In this sense, Lankshear and Knobel (2006) stated that through the use of artifacts, teachers can keep track of the evolution of participants regarding the specific problem that frames the study. In the case of this research study, I designed reading worksheets as artifacts. All the work the students developed was recorded in the platform. I share Strohmetz and Rosnow's view (2004) of the outcome provided by the participants as a valuable resource to validate the researcher's analysis.

**Tests.** This is a data-collection method that seeks to obtain information related to what an individual knows from a question or series of questions or tasks (Rudner & Schafer, 2002). It is

part of formal assessment which, according to Durocher (2010), comprises “conventional methods of testing that the majority of people are familiar with” (p. 42). This type of assessment aims to determine the learners’ progress by providing data about abilities, behaviors, and accomplishments. It is possible to find different types of tests (standardized tests, classroom questions, performance tests, among others), and their levels of reliability, pertinence and suitability are varied. Some of their advantages reside in their ease for providing the same set of questions/tasks to all participants, as well as for comparing common standards in a group, and for analyzing data (Christensen, Johnson & Turner, 2007). This instrument contributed to establish the degree of progress students showed in three different stages of the pedagogical intervention.

***Focus group.*** This instrument provides first-hand data about participants’ ideas and opinions. According to Cohen, Manion and Morrison (2000), focus group interviews rely on the group members’ interaction by offering "a large amount of data in a short period of time" (p. 288). This is one of the most relevant advantages of this instrument in relation to my study. Additionally, it can complement the information obtained in the self-assessment of artifacts.

### **Instructional Design**

This research study addresses the development and implementation of virtual worksheets for enhancing students’ reading comprehension. Because of that, I decided to design a pedagogical intervention through contextualized and appealing worksheets, focused on reading strategies to help students overcome their weaknesses throughout reading comprehension performance. Their limitations, regarding the use of adequate strategies to cope with those difficulties have seriously affected their understanding of a text (Harmon, 2002).

This chapter explains the pedagogical intervention implemented considering important foundations on the Theory of Language and Language Learning, the main and specific

instructional objectives, and the innovations of this intervention in regards to the quality of the institution. This chapter also describes the features of the methodological approach and the description of its phases and its implementation.

**Pedagogical intervention.** I developed and implemented a series of worksheets that encompassed learning strategies to analyze and assess their impact on the development of reading comprehension in a group of undergraduate students. Oxford (2003) established that the selection and use of effective learning strategies meeting students' learning style and needs can enrich the learning process and students' performance.

Keeping in mind the purpose of the pedagogical intervention, I adopted the Strategies-Based Instruction approach to propose activities to help students enhance their reading comprehension. In this sense, I took into consideration the principles proposed by Brown (2000) who remarked that it is critical to teach "learners how to learn" (p. 130), either face-to-face or virtually, to constitute an effective learning space that promotes autonomy (2000). The author also pointed out that teachers should discover what can or cannot work for students' goals to implement and promote the strategies that may be effective for them. Choosing the most suitable and effective learning strategies can make the difference in the classroom.

Each worksheet contained a reading passage and pre-reading, while-reading and post-reading activities. Activities included matching, word search puzzles, true/false statements, multiple choice, open questions, and word, sentence and text completion. The reading strategies included were: *grouping/categorizing, using imagery, scanning a text to capture specific information and placing new words into context* (Oxford, 2003, p. 12, 13); *using background knowledge, making predictions and making inferences* (Chamot & O'Malley, 1994, p.54).

To design these worksheets, I considered a set of important Second Language Acquisition (Hereafter, SLA) principles proposed by Tomlinson (2003). These, along with a set of MD tenets, which describe the main characteristics that materials should have (Núñez, Téllez, Castellanos & Ramos, 2009), guided the design and implementation of the worksheets. These worksheets contained an array of activities intended to impact reading comprehension; these were uploaded in a virtual learning platform. To design them, I selected the principles described below.

First, the content of the materials proposed should be visually attractive and “should achieve impact” (Tomlinson, 2003, p. 21). As the worksheets designed on a virtual platform, elements such as color and graphic support items were critical to catch students’ attention. Secondly, materials should “help learners feel at ease” (Tomlinson, 2003, p. 21). The way students feel towards the challenges that materials present can have significant influence on their performance. It is essential for students to feel comfortable while performing each task, even the most challenging ones. When working in a Virtual Learning Environment (VLE) such as Moodle, students need to rely on user-friendly instructions, within a clear layout (visually attractive but precise items). This helps students use the target language from the very beginning of the activities, having them visualize and internalize the target language (Tomlinson, 2011), as well as the procedures to follow. On the other hand, assertive and friendly feedback can influence students’ emotional component (Núñez et al. 2009). A third aspect to have in mind is the fact that materials “should be perceived by learners as relevant and useful” (Tomlinson, 2003, p. 21). The topics of the materials proposed should be connected with students’ interests, needs, and experiences. According to Tomlinson (2011), the inclusion of these characteristics in materials may generate a positive impact on students’ motivation and interest towards the target language and communicative skills involved. Finally, Tomlinson claimed that materials should keep an



adequate balance between students' previous knowledge and the new and challenging elements they can find as part of their construction process. Content recycling and simplicity on instructions are crucial when adapting the activities to students' needs (Graves, 1997). In the particular case of reading comprehension development, even a highly complex task should keep some components based on our students' context and previous knowledge. It is also important to highlight the MD tenets derived from Tomlinson's (2011) SLA principles, in which the exposure to a wide, meaningful, and contextualized language input were fundamental for success in further stages of the worksheets. On the other hand, Núñez et al. (2009) established that designing materials involves an emotional, creative and, at the same time, a highly methodical and rational process which should encompass a theoretical and methodological framework. This process also requires permanent assessment and performing adjustments to suit students' needs.

**Instructional objectives.** The main objective of this pedagogical intervention was to design and implement Moodle-based worksheets intended to put into practice the use of learning strategies for reading comprehension. In addition, there were three specific objectives. a) To make students aware of the use of reading strategies that can contribute to enhance their reading comprehension. b) To provide students with activities that may engage them in the development of reading comprehension. c) To generate a friendly space on a Virtual Learning Environment such as Moodle to motivate students to read texts through interesting and appealing activities.

**Intervention as innovation.** The pedagogical intervention I proposed should represent the implementation of novel ideas and procedures (Markee, 2001) that for Hannan and Silver can produce changes "addressed to improve, solve or ease a given problem" (as cited in Nuñez & Téllez, 2012, p. 43). The worksheets aimed to provide students with new resources to help them improve their reading comprehension through activities that foster the use of reading strategies.

On the other hand, according to Markee (2001), an innovative proposal should be compatible with our students' previous practice, be widely comprehensible in terms of complexity, and be easily testable and observable. Therefore, the proposal included topics related to the participants' interests and general knowledge of the world, integrating challenging but friendly activities that encouraged students to adopt better learning strategies.

My pedagogical intervention sought to innovate in two key aspects: first, the design and implementation of teacher-designed materials to meet students' and institution's needs, interests, and context. Secondly, materials raised the students' and the teacher's awareness regarding the use of learning strategies intended to improve the academic processes. On the other hand, the worksheets proposed brought a positive impact in the institution, as teacher-designed materials became a novelty that generated changes in the academic environment. As stated by Karavas-Doukas (1998), innovation in teaching processes should be "planned to bring about improvement in classroom practice with the ultimate aim of enhancing student achievement" (p. 28). The purpose of innovating was to design appealing, challenging materials inherent to students to meet their interests, and encourage learning autonomy throughout the reading process.

**Theory of language and language learning.** The language view supporting the foreign languages department in the institution where the study took place was the functional view of language proposed by Richards and Rodgers (2001), who defined language as "a vehicle for the expression of functional meaning" (p. 21). This theoretical view of language centers on semantic and communicative aspects more than the structural-grammatical features. It also combines the exchange and negotiation of meaning in diverse communicative situations (Savignon, 1991).

Considering reading as the language skill worked in this research study, the theoretical view that guided the development of the worksheets was the functional one proposed by Krashen

(1989). The author affirmed that language acquisition comes mainly by input, within a process that takes place with the help of the extra linguistic context, the knowledge of the world, and the prior linguistic competence. This input hypothesis corroborates the way visual aids can help the teaching-learning process, as they can provide the background factors previously mentioned, contributing to the comprehensibility of this input. Besides, the author claimed that the main objective of the language class should be “to put students in a position to understand the language of the ‘outside’ world, to make them ‘intermediates” (p. 11). In terms of the worksheets implemented in this study, the quantity and quality of the input students received was crucial.

This input turned to be an important driving force in language learning processes, which can be framed according to the theoretical perspective presented by Tudor (2001), who proposed several visions of language learning to explain the way students learn and assimilate a new language in the classroom. The visions shared by the author of this study and the institution are the ones related to experiential learning and analytical learning. The first one addresses the importance of the level of exposure to the target language and the use for communicating in context; the second vision refers to the cognitive processes students have to accomplish when learning new language items. Accordingly, the students participating in this study belonged to a higher education context that expected them to use the target language in real academic spaces.

**Methodological approach underlying the pedagogical intervention.** The methodological approach underpinning this pedagogical intervention was the Strategies-based instruction (Henceforth, SBI). This approach is centered on the ‘know-how’ of the way to cope with the learning process. It largely focuses on making students aware of the strategies that can best help them overcome different learning weaknesses. According to Hatch and Brown (as cited in Pavicic, 2008), teaching strategies refer to everything teachers do or should do to help their

learners learn. The use of a strategy depends on factors such as time availability, the content worked and the extent to which it is applicable and relevant for the learner (Pavicic, 2008). Additionally, MacIntyre and Noels shared this view when they claimed that SBI can work very well, and the learner will obtain significant benefit from it if they get a good understanding of the strategy, perceive its effectiveness, and are able to apply it easily (as cited in Brown, 2000). The proper selection of the strategies applied in the pedagogical intervention was paramount, as it determined the potential success or failure of the worksheets I implemented.

Likewise, according to O'Malley and Chamot (1996), strategies involving the activation of mental processes can promote learning more effectively. In the same line of thought, Weinstein and Mayer asserted that when using learning strategies, students are able to select, attain, classify, and integrate the new knowledge items (as cited in Pavicic, 2008). The use of these strategies in the implementation of the worksheets helps students enhance their reading comprehension on a steady basis.

This approach is functional "as part of a standard communicative methodology" (Brown, 2000, p. 131), in which teachers can identify students' preferences and styles by using different resources such as checklists, interviews, and surveys. Moreover, teachers can provide advice about strategies in and out the classroom. As teachers can identify what works and what does not, they can propose strategies that work effectively. However, it is not possible to expect success from the very beginning in their application, since students may still have some preconceptions of what is required to do when learning a language (Bialystok, as cited in Brown, 2000).

Furthermore, one of the most outstanding authors in the field of language learning strategies is Rebecca Oxford (1990), who defined them as "specific actions, behaviours, steps, or techniques that students (often intentionally) use to improve their progress in developing L2

skills.” (p. 18). In this sense, the same author (2003) referred to different types of strategies, grouped in direct strategies (memory-related, cognitive, and compensatory) and indirect strategies (metacognitive, social, and affective), which consciously adopted, can significantly help students to improve their learning process, as it can be more active and self-regulated (Oxford, 2003). In the case of this study, the strategies that best suited the nature and characteristics of the English institutional program, the students, and the pedagogical intervention were the memory-related (grouping, associating, using imagery, using key words, etc.) and the cognitive ones (skimming, scanning, among others). Students experienced a highly beneficial classroom time when adopting systematic learning behaviors that optimized their performance and their learning process awareness.

**Connection of the pedagogical intervention with the research question.** The worksheets proposed for this pedagogical intervention encompassed activities that offered several opportunities for students to develop effective reading strategies to enhance their reading comprehension development. These activities provided clues regarding the link between the research question and this pedagogical intervention. By means of direct instruction related to the use of reading strategies, this intervention aimed to observe, on the one hand, if students used any strategies when reading a text. On the other hand, how the use of a VLE such as Moodle helped them develop their reading comprehension; and how explicit instruction on reading strategies affected the reading comprehension of a group of undergraduate students.

The pedagogical intervention was closely connected with the research question as the virtual worksheets showed the application of reading strategies, allowing students to feel aware of their benefits and the substantial impact throughout the reading comprehension process.

**Instructional stages.** For the design of the pedagogical intervention (virtual worksheets), it was valuable to consider some structural points to develop materials as the ones proposed by Núñez, Pineda and Téllez (2004). The authors highlighted the importance of conducting a needs analysis, establishing clear objectives, selecting a series of activities and their sequence for their development, and carrying out an adequate assessment of the materials.

In the case of current study, the first stage was the diagnostic one (See Appendix A), in which I identified the complexities students had in terms of reading comprehension. In this stage, I also recognized different characteristics of the target population, which allowed me to identify their interests and reading preferences. This first stage also implied obtaining the consent from the institution and the participants for conducting the study; as well as sensitizing the students about the importance of the pedagogical intervention activities in their learning process.

The second stage was the implementation. After having determined the objectives of the study, I designed and developed six reading worksheets to upload on the institutional platform (Moodle) of the university. Their development included a piloting process, aimed to make the necessary adjustments. The worksheets comprised a variety of activities mainly focused on reading strategies tasks intended to enhance reading comprehension.

**Topic selection and development.** I designed six virtual worksheets based on reading passages selected on basis of the students' preferences. These were the topics included in the worksheets: information technologies, travel, social networks, and business in the information era. They emerged from the information collected from the students' needs and preferences survey. In this regard, Núñez et al. (2009) stated that an appropriate needs analysis is useful for identifying the students' main matters of interest for developing materials. The worksheets were structured as it follows: 1) A warming-up activity and pre-reading activities to help students

make predictions about the topics of the passages and get familiar with the words and expressions that are part of them. 2) While-reading activities to encourage students to take an active role as readers and to help them check their comprehension considering different reading strategies. 3) Post-reading activities to help students assess their understanding of the texts and their engagement with the use of reading strategies. 4) Finally, the implementation of a brief survey in which learners expressed their perceptions and opinions of their experience with the worksheet, and a reflection on the use of reading strategies.

***Informed consent.*** It was necessary to inform participants and the institution about the study, its purpose, methodology and procedures. I wrote a letter (See Appendix B) to the University's Foreign Languages Common Area director for requesting permission to conduct the study with a group of undergraduate students. I also wrote an informed consent form for the participants (See Appendix B), in which I explained the aim of the study, its benefits and implications. The students willing to participate signed the document.


***Sensitization.*** I developed a series of sensitization activities in which students had the opportunity to share their experiences, their reading comprehension weaknesses and their causes. Then, I explained the purpose of the study to the group by describing some actions that could help them overcome such challenges through the adequate use of reading strategies.

***Implementation of the materials.*** For developing this stage, I designed six virtual worksheets focused on reading comprehension. I chose the topics according to the participants' preferences, context and language level. The worksheets included a wide array of activities (matching, true/false statements, multiple choice questions, completion tasks, word search games, etc.), intended to help students enhance their reading comprehension through the use of diverse reading strategies that were reflected on the above mentioned activities. At the end of each

worksheet, there was a self-assessment form (See Appendix C), where I collected students' perceptions regarding the materials and their performance. It is important to mention that I had the opportunity to pilot the worksheets with another group of the same course level. It was an important step in this process, as it helped me identify weaknesses in the worksheets designed, and to make the necessary improvements.

### Worksheet sample

## SOCIAL NETWORKING AND ITS RISKS




**Main objective:**  
To comprehend some of the risks we face when using web-based social networks.

**Specific objectives:**

- To recognize the weaknesses the internet has in terms of system security and social interaction.
- To capture, understand and interpret specific information contained in the text.
- To become familiar with some vocabulary related to Internet use.

**Introduction**

1. Crossword puzzle!

 *Strategy: Exploring previous knowledge on vocabulary* (This activity will allow you to combine your intuition, memory, and previous knowledge to prepare for receiving new information)



Try to find 13 words related to internet and social networks in this word search puzzle.

Example: i \_ \_ \_ \_ \_ t    Answer: internet

- 1 a \_ \_ s
- 2 c \_ \_ \_ \_ \_ s
- 3 f \_ \_ \_ \_ \_ k
- 4 i \_ \_ \_ x
- 5 i \_ \_ \_ \_ \_ m
- 6 m \_ \_ \_ \_ s
- 7 p \_ \_ \_ \_ \_ d
- 8 p \_ \_ \_ \_ s
- 9 p \_ \_ t
- 10 t \_ g
- 11 t \_ \_ \_ \_ r
- 12 u \_ \_ \_ \_ e
- 13 y \_ \_ \_ \_ e

### Social Networking

C	P	M	D	R	O	W	S	S	A	P
O	D	I	A	L	E	J	M	F	L	S
M	Z	U	N	R	N	T	A	Q	P	W
P	S	T	S	T	G	C	T	P	N	T
U	P	E	E	E	E	A	A	I	P	N
T	Z	H	L	B	R	R	T	D	W	L
E	D	X	O	I	U	N	N	S	B	T
R	M	O	T	T	B	T	A	E	N	M
S	K	B	T	S	O	Q	U	M	T	I
W	B	N	B	A	O	S	M	O	E	D
K	L	I	P	B	G	P	W	W	Y	J

1	2	3	4	5	6	7	8	9	10	11
12	13									

#### Introduction

#### 2. Survey: Internet and social networks in your life!



**Strategy:** Exploring students' experiences regarding the use of social networks  
(This activity will allow you to have a look at your previous experiences regarding activities on social networks)

Answer the following questions by choosing the option that relates the most with your life.

1. How often do you check your social networks (Facebook, Instagram, Twitter, etc.) per day?

Selecione una o más de una:

- a. a. Once a day
- b. b. between 2 and 4 times a day
- c. c. more than 5 times a day

2. How many friends do you have in Facebook?

Selecione una o más de una:

- a. a. less than 100
- b. b. between 100 and 300
- c. c. more than 300

3. Do you like posting comments on the photos your friends share?

Selecione una o más de una:


- a. a. No, I'm not interested in them
- b. b. Sometimes
- c. c. I love it... I do it all the time!!

4. Have you ever forgotten you password to access any of your social networks?

Selecione una o más de una:


- a. a. No, I've never forgotten that.
- b. b. a couple of times
- c. c. I forget it all the time!

1 Associating internet expressions with examples (Matching)


 **Strategy:** Using visual samples to identify words (Through this activity, you will be able to relate some words or expressions with their images)

Match the words with the pictures:


**B**



**A**



**C**



**Example: 1 keystroke (E)**

2 IP address


3 buttons

4 hacker


5 network

6 upload


**D**



**E**



**F**



2 Elegir...

3 Elegir...


4 Elegir...

5 Elegir...

6 Elegir...

**Pre-reading activity**

2 Matching words/expressions with possible definitions


 **Strategy:** Using verbal clues to define a concept (Through this activity you will be able to relate some words or expressions with the idea that best defines each one)

Match the words (left column) with their respective definition (right column):

<b>Example: 1 label (B)</b>	A. the ultimate consumer of a finished product. The person who will eventually use a product.	
2 track	B. a group of characters, such as a number or a word, given to a particular statement in a program to allow its unique identification	2 Elegir...
3 end-user	C. to remove something that has been written down or stored in a computer	3 Elegir...
4 log file	D. a file that records either events that occur in an operating system or other software runs, or messages between different users of a communication software	4 Elegir...
5 sysadmin	E. the job of making sure that the law is obeyed, and the individuals or entities that violate the rules will be punished.	5 Elegir...
6 delete	F. to record or study the behavior or development of someone or something over time.	6 Elegir...
7 law enforcement	G. a person who is responsible for the upkeep, configuration, and reliable operation of computer systems; especially multi-user computers, such as servers.	7 Elegir...

**Pre-reading activity 3**

3 Completing sentences with words from the box

 **Strategy:** Using verbal clues and context to identify and learn new vocabulary. (Through this activity you will be able to make connections between some words that can be new for you and a piece of text, to infer their meaning)

Complete the following sentences using the words you observe in the box.

account websites deactivate secure profile inactive


**Example:** Doing electronic bank transactions on public places is not a secure option.

- |  |           |
|--|-----------|
| 1 I created an _____ in Twitter, but it has been _____ for several months, I never check it!                                     | Elegir... |
| 2 I have checked Sandra's _____ in Facebook a couple of times, and she has posted some great photos of her trip to Tayrona Park. | Elegir... |
| 3 During the week, I've posted information about nice _____ to learn English!  | Elegir... |
| 4 I'm tired of receiving strange and risky requests on Facebook. I think I will _____ my account soon!                           | Elegir... |

**While-reading activities**

Read the following text, and develop the activities below.

**The Dangers of Social Networking**




<p>The Internet is definitely not secure, no more secure than walking on a street in the middle of the day in a large city. In such a scenario you can be filmed without your knowledge by cell phone cameras, regular everyday digital cameras and even TV cameras. Similarly, on the Internet every keystroke is recorded, every photo you upload is archived. Did you know you cannot 'delete' a photo from Facebook? Oh sure, you can remove it from your profile and the button is labelled 'delete', but Facebook keeps a copy, it is in your Facebook end-user agreement. Have you read it? Have you read any of the end-user agreements on these social media websites? You should. Did you know you cannot delete your Facebook account? You can deactivate it but it will always be there and hackers love inactive accounts. The password never changes.</p> <p>On many occasions law enforcement has been able to track people and their activities based purely on internet activities alone. Most of the time it is for a</p>	<p>good reason, but have you ever asked yourself how they got access to this information when they are obviously not a part of the social media circle in question?</p> <p>Don't forget that every website on the Internet has a 'sysadmin' and he can see and watch everything on their network. So, be sure of it, everything you put up on the internet stays on the internet for at least a very long time and it can be viewed by a wide variety of people for many different reasons. Every time you visit a website your IP address is recorded in a log file somewhere and associated with that website.</p> <p>Social Media was not created for evil purposes but, like anything, it can be misused by a wide variety of morally unacceptable individuals or entities. Are corporations and governments monitoring you on the net? In a general sense, yes they are. But there are those out there watching you a lot more closely than that. Be aware!</p>
---	--

Source: <http://creeviking.hubpages.com/hub/The-Dangers-of-Social-Networking-Why-you-need-to-be-careful>

**While-reading activity 1**

**Finding answers in the text**


 **Strategy:** Scanning the text to find specific information. (When you scan a text, you look only for a specific piece of information, without reading the whole text.)

- Example:** 1. When is it possible to change a password in FB? never
2. What is able to observe every movement we make in our social networks? \_\_\_\_\_
3. Where is your web visits information recorded? \_\_\_\_\_
4. Who/what may supervise your internet activities besides the government? \_\_\_\_\_

2  3  4

**While-reading activity 2**

**Vocabulary: Spelling words from definitions.**

 **Strategy:** Using verbal clues and context to identify and learn new vocabulary (Through this activity, you can access the definition of a piece of vocabulary from the text, so you can make inferences)

Read the description of some words you can find in the text. What is the word for each one? The first letter is already there. There is one space for each other letter in the word.

**Example:** A virtual description that gives important details about a person, an organization, a group of people, or a place. **profile**

- 1 When you move information from a small computer to a computer network so that other people can see it or use it. **u** \_\_\_\_\_
- 2 To use something for the wrong purpose, or in the wrong way, often with harmful results.  
**m** \_\_\_\_\_
- 3 A set of computers that are connected to each other so that they can share information; a group of people, organizations etc that are connected or that work together. **n** \_\_\_\_\_

1  2  3

**While-reading activity 3**

Completing a text!



**Strategy:** *Placing new words into a context* (Through this activity, you can make connections between some words that can be new for you and a piece of text, to infer their meaning)

Read this paragraph, which is incomplete, for completing the gaps, selecting the best option.

**Be careful when social networking!!**

The fact that social networking implies being part of a massive users database (most of which are unknown to you), implies certain (1) \_\_\_\_\_ of different nature, for instance, cyber-crime, cyber-bullying, identity-theft, inappropriate use of private (2) \_\_\_\_\_, viruses, among others.

It is important to surf the (3) \_\_\_\_\_ and use our social networks having in mind some safety guidelines, as follows:

- Be careful with the (4) \_\_\_\_\_ you use to access your accounts, it should contain at least eight characters; better if mixing letters and numbers.

- Keep your profile private. For viewing it, allow only your friends, after informed request. Try to restrict the (5) \_\_\_\_\_ of strangers to your profile.

- Do not say or (6) \_\_\_\_\_ anything that may embarrass you or someone else later.

- Do not post your location while you're away. Burglars are permanently monitoring networking sites for their crimes.

Adapted from <https://www.getsafeonline.org/social-networking/social-networking-sites/>

2 Elegir... ▼  
3 Elegir... ▼  
4 Elegir... ▼

1 (Example)	A safety	B risks	C addresses
2	A information	B dates	C purpose
3	A place	B upload	C net
4	A password	B profile	C website
5	A entry	B access	C posts
6	A tell	B publish	C view

5 Elegir... ▼  
6 Elegir... ▼

**Post-reading activity 1**

**True/False statements**



**Strategy:** *clarifying and confirming ideas to answer questions correctly.* (Through this activity, you will be able to determine if some ideas are right or wrong according to the text.)

Read the following text and mark the following statements as True (T) or False (F).

**Example:** It is possible to delete a photo from Facebook. **F**

1. You can delete your Facebook profile.
2. The government and different authorities can follow your social networking activity.
3. A network can be constantly supervised by the person who manages it.
4. Behind the creation of social networks there are non-ethical purposes.

**Post-reading activity 2**

**Multiple-choice test**



*Strategy: clarifying and confirming ideas to answer questions correctly. (Through this activity, you will be able to decide which idea is correct from a series of options.)*

After you read, choose the correct answer (A, B, C or D) for each one of the questions.

**Example:**

1. The text is mainly about:
- a. The security risks we face when using the Internet and especially social networks.
  - b. Some tips to use the internet on a more secure way.
  - c. How social networks have influenced our concept of security.
  - d. How to prevent other individuals and entities' supervision of our internet activities.



**Answer:**

2. Every photo you upload is
- a. deleted
  - b. updated
  - c. censored
  - d. archived
3. Every social network on the internet has
- a. a hacker
  - b. a 'sysadmin'
  - c. virus
  - d. full security
4. In all occasions you access any internet page, your IP address is
- a. deleted
  - b. uploaded
  - c. recorded
  - d. changed
5. Who are monitoring you on the internet?
- a. Corporations
  - b. Governments
  - c. none of them
  - d. both a and b
6. Which of the following ideas was **NOT** mentioned by the author?
- a. We need to accept that every activity we do on the internet will be recorded.
  - b. We may obtain a lot of money if we create many accounts in social networks.
  - c. Governments have the power to follow your web activities
  - d. Before creating a social network account, it is a good idea to read all its regulations.

**Something to keep in mind!!**

Try to remember at least four reading strategies you worked in this worksheet.

---



---



---



---



## Chapter IV

### Data Analysis

#### Data Analysis Procedure

This chapter deals with the process of data analysis and the methodology adopted to describe the impact of the development and implementation of Moodle-based worksheets built on reading strategies in undergraduate students' reading comprehension. Data analysis is a paramount step for understanding and interpreting the information to answer the research question. In this sense, Berg (2004) contended that data analysis entails a comprehensive exploration of data to explain findings in the previous phase of the study.

This chapter illustrates the development of the different categories emerged from the analysis of data obtained through the instruments proposed in the research design, along with the constructs that provided the conceptual basis of this research study.

The research approach in this study was qualitative as it aimed at describing and interpreting experiences and perceptions (Corbin & Strauss, 1998). Having this in mind, I adopted the grounded approach. This methodology enabled the researcher to derive theory from data, based on insights and comprehension to guide future action (Corbin & Strauss, 1990). Likewise, Charmaz (2006) asserted that, "data forms the foundation of our theory and our analysis of these generates the concepts we construct" (p. 2). According to this approach, data provide the input to identify the most relevant elements to answer my research question.

To obtain and process comprehensive data, the type of triangulation I chose was the methodological triangulation, which according to Freeman (1998), implies the use of assorted sources of information, and facilitates the validation of the concepts emerged, providing "a more detailed and balanced picture of the situation" (Altrichter et al. 2008, p. 147). Data collection

instruments I used in this study were the artifacts (worksheets), tests, and focus group. These instruments were useful for acquiring enough evidence to identify patterns, analyze them, and establish categories.

I analyzed the artifacts (worksheets), the tests, and the focus group interview (See Appendix D) for systematizing the information obtained. Once I organized the information, I reduced data by using the color coding technique, which according to Hubbard and Power (1999) can be helpful to arrange data into segments that deliver meaningful and comprehensible information, from which I identified and checked patterns, which according to Saldaña (2016) are "repetitive, regular, or consistent occurrences of action/data that appear more than twice" (p. 5). After analyzing and reducing data, categories were generated. The categories emerged from the information obtained having in mind the three constructs I adopted and evinced in the three instruments used.

### Research categories

The following chart embraces the categories emerged from the processes previously explained:

**Table 2**  
*Categories and Subcategories for the research question*

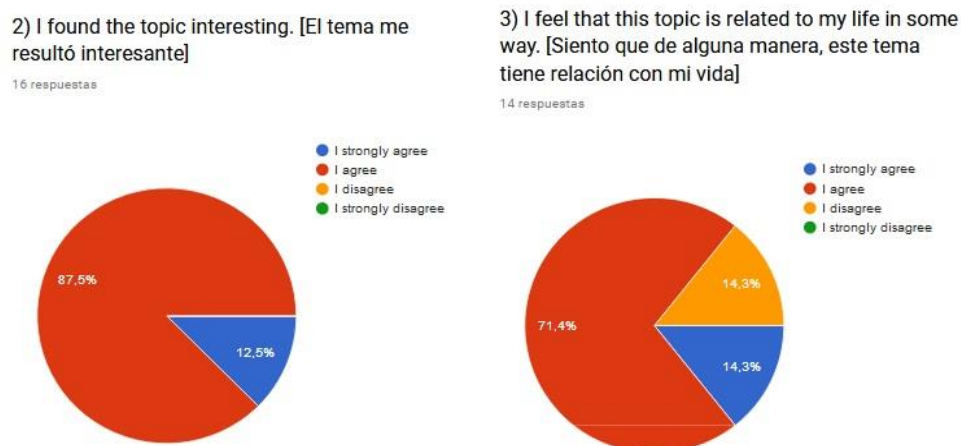
Main question	Categories	Subcategories
How do the development and implementation of Moodle-based activities based on reading strategies impact university students' reading comprehension?	1. Boosting knowledge through attractive, clear, and contextualized materials	-Achieving impact through contextualized and meaningful materials
		-Attracting learners' attention through clarity and visual appeal
	2. Reading strategies enhancing reading comprehension and vocabulary learning	- Achieving progress in reading comprehension
		-Using strategies to help students improve reading comprehension
		- Realizing the importance of the role of reading in vocabulary learning
	3. Using Moodle to support learning	- Moodle's simplicity to facilitate learning

**Boosting our knowledge through attractive, clear, and contextualized materials.** This category is built on the field of Materials Development (MD), which as stated by Tomlinson focuses on "the design, implementation and evaluation of language teaching materials" (2011, p. 66). It addresses the study participants' insights that emerged from the pedagogical intervention materials and their impact. The subcategories that describe the relevance of MD in this study focus on the importance of considering students' context and interests, visual aspects as well as their academic and life development (Arnone, 2003; Núñez et al. 2009; Tomlinson, 2003).

***Achieving impact through contextualized and meaningful materials.*** This subcategory shows how the virtual worksheets raised motivation in students, as they found that they were connected to their needs, interests, and context. According to Núñez, Pineda and Téllez (2009), it is fundamental to create materials that "tap our learners' feelings and background" (p. 131).

When the implementation process took place, participants showed permanent interest in these topics and had the opportunity to express themselves about them. The artifacts' self-assessment and the focus group interview showed that their perception was positive. The connection established between materials and students' context shares Brindley's view, when he affirmed that "contextualized materials are those that address students' interests, expectations, and needs" (as cited in Núñez et al. 2009, p. 23). In the following excerpts, it is possible to observe these perceptions:





**Graph No. 1. Artifact - Self-assessment, Worksheet No. 2**

**Tom:** pues a mí me parece que son temas de actualidad, por decirlo de alguna manera, que de alguna manera a todos nos toca o nos interesa...

**Lenny:** me gustó mucho porque el tema es como muy afín a lo que me gusta, y pues que también abre como las posibilidades para ver lecturas o cosas en inglés que sean con respecto a ese tema.

[sic] (*Focus group transcription*)

**Tom:** I think they are current topics that in some way are related to us, or we are interested about...

**Lenny:** I really liked it because the topic is highly related to the things I like, and because it opens possibilities for looking at readings or things in English connected to that topic.

(*Translated by the author*)

As noticed, the graph above showed that most students had a positive perception about the topic and its connection to their lives, as they had the chance to express their preferences, which according to Arnone (2003), is fundamental to propose pertinent class materials (as cited in Núñez et al. 2009). Likewise, the focus group segment revealed that these participants found topics with relevance to their lives. This is an influential factor in their motivation to learn and for optimizing learners' processes. There is a series of principles as the one proposed by Tomlinson (as cited in Mishan & Timmis, 2015), in which language input should be meaningful and involve affective and cognitive aspects. In this sense, he contended that materials' pertinence and usefulness can determine their effectiveness.

On the other hand, it is fundamental to assess and test students by using materials that are consistent with the principles mentioned above (Bachman & Palmer, 1996). In this sense, the

students' needs, topics of interest, and context underpinned the tests conducted on the group of students. The following excerpt shows the opinion of a participant about the connection between the worksheets and the tests in terms of contextualization and activities:

**Sheldon:** Pues yo diría que la estructura en general se asemeja bastante. Siempre la manera de abordar las preguntas en los textos es totalmente la misma, entonces no me pareció muy diferente los textos de las actividades a los de un test.

**Tom:** Uno realmente encontraba mucha relación con todo. Me parece que los test estaban muy bien formulados, porque al momento en que los desarrollé no me sentí realmente perdido.

[sic] (*Focus group transcription*)


**Sheldon:** I would say that the general structure is very similar. The way to address the questions in the texts is always similar; therefore, I did not find any major differences between the texts of the activities and the ones of a test.

**Tom:** One really found a close relationship with everything. I think that the tests were very well formulated, because when developing them I did not feel really lost.

(*Translated by the author*)

As seen above, participants found similarities between the worksheets and tests structures. One of them highlighted the fact that this facilitated their work when solving the tests. According to the Language Policy Division of the Council of Europe (2011), low-stake tests (Evaluations intended to assess students' achievement and detect possible difficulties in their learning process) should have straight relation with the context where the testing process takes place. Likewise, Brown (2004) contended that, when testing students, they must feel confident with contextualized and meaningful test components and with the reasonable level of complexity as well. The image below, a test sample contrasted with a worksheet sample, shows that the text topic responded to the group preferences, for instance, issues related to traveling, as well as their structure was very connected, as participants affirmed previously. It may influence their tests accomplishment:

**Questions 11-15**  
 Look at the sentences below about a trip to East Africa.  
 Read the text below to decide if each sentence is correct or incorrect.  
 If it is correct, choose **A**.  
 If it is **not** correct, choose **B**.



**Example:** 0 It is possible to choose between a mountain or the beach.  
 Answer: **A**

11 You can see animals from the air on this trip.  a  b

12 You can spend a fortnight at the beach.  a  b

13 It is possible to see large numbers of birds on Lake Manyara at sunset.  a  b

14 Some animals are frightened when visitors use cameras.  a  b

15 You are sure to see all the animals you want.  a  b

**The Trip of a Lifetime**

Take a trip to East Africa. You begin this trip by visiting the wonderful wildlife parks. As well as travel by coach, there is also an opportunity to take a short trip in a hot-air balloon over the parks to get a better view of the wildlife.

After visiting the wildlife parks you have the choice of either spending the rest of your holiday (7 nights) climbing Mount Kilimanjaro – the highest mountain in Africa – or, for the not so adventurous, sunbathing on the beautiful white sand beside the Indian Ocean. (It is also possible to stay an extra week at the coast.)

**Day One:** Fly from London Heathrow to Nairobi, Kenya.

**Day Two:** Drive to the National Park at Lake Manyara. This park is famous for the large variety of birds, which you can see there early in the morning.


**Day Three:** Leave Manyara for the Serengeti National Park, where you may see elephants, lions and giraffes.

**Days Four to Nine:** Spend these days travelling by coach around the park. All visitors have a window seat on the coach with a clear view for photographs of the park and animals. Although the animals are not worried by tourists taking photos, we ask visitors to speak quietly so as not to disturb them too much.

Accommodation in tents is normal in the parks. All have private washing facilities. The tents have plenty of space, are very comfortable and have a solid floor. The guides are highly experienced, but there is always the possibility that you may be very unlucky and not see certain animals.

Taken from: Cambridge Exams Extra - PET with answers (2006). Cambridge: Cambridge University Press, p. 40-41.

**Top airports in the world**



**S**ome airports are a nightmare-long queues when you check in and go through security and an even longer wait if your flight is delayed. But there are some airports where you can actually enjoy yourself. All good airports have excellent facilities for business people and children, free Wi-Fi, restaurants, cafes and shops. But the best airports have much more...

**S**ingapore airport is Paradise from flower lovers, as it has an indoor orchid garden! It also has a rooftop swimming pool and a free sight-seeing tour for people who have at least five hours to wait for their connecting flight.

If you like computer games, you'll never be bored at Hong Kong International Airport - there are dozens of free PlayStation all over the terminals! It is also good for people with no sense of direction. There are 'Airport Ambassadors' in red coats, who help you get from one place to another.

**S**econd airport is the place to relax. You can go to the hairdresser and have beauty treatments or a massage. Sports fans can also play golf at their 72-hole golf course!

**M**unich Airport helps to keep passengers entertained with a 60-seat cinema and non-stop films. There is also free coffee and tea near all the seating areas, and lots of free magazines and newspapers.

If you worry about your health and like to be near medical services at all times, Osaka airport in Japan is the perfect place to visit, as it has a dentist and doctor's surgery. And for people with animals there's even a pet hotel!

If you have a long wait between flights at Zurich airport in Switzerland, you can rent the rooms with their own bathroom and kitchen and wake-up call service. So you can have a shower and then sleep peacefully until you have to board your flight.

Taken from: Chandler C., Latham-Kiwitj C. (2008) American English File - Student Book 2. New York, NY: Oxford University Press, p. 42

**While-reading activity**  
 2. Understanding pronoun references.  
 (Strategy: Attributing contextual references)  
 Find in the text to which ideas these words refer to.  
 Example: It (line 12) Singapore airport

a) It (line 11) Singapore Airport  a  b

b) their (line 14) flight  a  b

c) It (line 36) Osaka Airport  a  b

d) their (line 41) rooms  a  b

**Post-reading activity**  
 2. Match notices to sentences.  
 (Strategy: reading between the lines to make inferences)  
 Which notice (A-E) says this (1-4)? One of the notices (A-E) will not be used.

**Post-reading activity**  
 1. Identify the place  
 (Strategy: capturing details from the text)  
 Identify the airport where you can do each one of the activities below.  
 In which airport?  
 Example: You have plenty of material to read. Munich airport

1) You can have a shower, while waiting for your flight. Zurich Airport  a  b

2) You can have a free tour around the city. Singapore Airport  a  b

3) You can receive orientation in case you feel lost. Hong Kong Airport  a  b

4) You can leave your pet for some hours. Osaka Airport  a  b

1. You do not have to pay for assessments to make you up. **A**

2. On April 13th, you will be able to use all swimming pools. **B**

3. People from all ages can attend this entertainment activity. **C**

4. You do not have to pay for participating in this activity. **D**

**MINI-GOLF TOURNAMENT**  
 August 10<sup>th</sup> - 12<sup>th</sup>  
 Free registration  
 (attach receipt)

**RENT GAY ROOMS**  
 24 hours open  
 \$5 per hour  
 Free internet call service

**ONLY TODAY!**  
 Movies 10:15 - Free popcorn  
 Movies 12:15 - Free facial misting  
 Call 31487487 to book appointment

**Airport cinema - movie showtimes today**

b  a

e  d

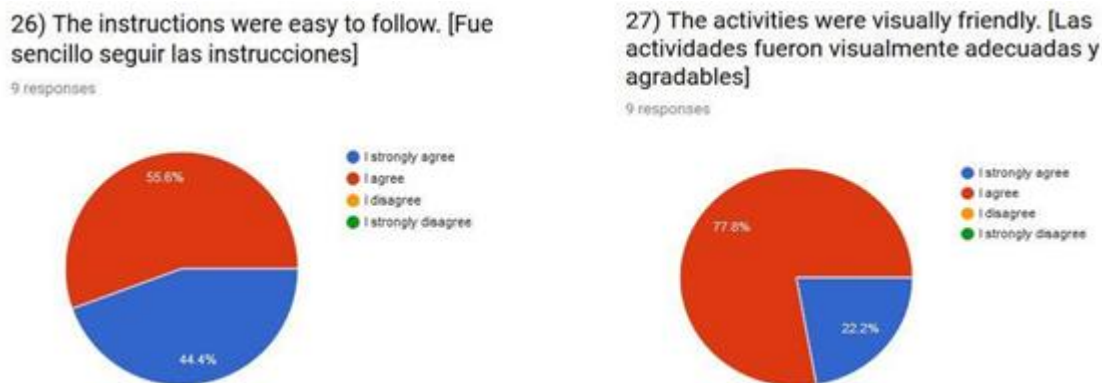
d  a

Sample 1. Entry test (left) – Worksheet No. 2 (right)

Through all these pieces of evidence, I managed to confirm how materials that are tailored with learners' context and wishes can foster students' learning process (Holguin & Aguirre, 2014). Having described the relevance of students' context and interests when developing the worksheets, I proceed to present the following subcategory that highlights visual aspects to keep in mind when designing teaching materials.

*Attracting learners' attention through clarity and visual appeal.* This subcategory focuses on the perceptions that the instruments displayed in relation to one of Tomlinson's (2011) MD tenets adopted for this study, when he referred to the way materials impact "through novelty, variety, attractive presentation, and appealing content" (as cited in Núñez, et al. 2009, p. 43). The

importance of visual impact, simplicity and precision is fundamental when developing teaching materials. In this regard, students' voice was heard in both self-assessment and the focus group:



Graph No. 2. Artifact - Self-assessment, Worksheet No. 2

**Jim:** Bueno, pues me parece que como jugar con los colores, para resaltar como las estrategias y las instrucciones, es como más fácil para nosotros, y también pues tenían muchas imágenes.

**Lenny:** Estaba súper bien organizado, y la estrategia de los colores facilitaba mucho la ubicación, como la comprensión de la estrategia [...] la organización de las tablas, las imágenes, los textos y todo eso, me parece que estaba visualmente atractivo.

**Carl:** Pues en general las actividades con más imágenes, son como más fáciles de hacer.

[sic] (*Focus group transcription*)

**Jim:** Well, I think that playing with colors for highlighting the strategies and the instructions makes things easier for us, and also they had several images.

**Lenny:** It was very well organized and the colors' strategy helped us locate things easier, as well as understanding the strategy [...] it was visually attractive with the organization of the charts, the images, the texts, and all that.

**Carl:** "Generally speaking, activities that included imagery are easier to work with.


(*Translated by the author*)

According to the graph above, activities were visually suitable and pleasant for students; and in the focus group interview, some students talked about the attractiveness and benefits of the visual factor, as well as the organization that helped the procedures to be clear and straightforward. Likewise, participants expressed their opinions about the role of imagery when performing a reading task as it facilitated comprehension. The visual impact of exercises and the use of colors for highlighting strategies and instructions helped for their recognition and location. This fact helped students "feel at ease" (Tomlinson, 2011, p. 9) having them learn in a more relaxing way.

On the other hand, it is critical to preserve those visual principles in the tests. Brown (2004) affirmed that a valid language test should be designed within the format expected by learners, including tasks that are familiar for them, which positively influence their performance, as it can be seen in the test sample below:

While-reading activity 3

Completing a text!



**Strategy:** *Placing new words into a context* (Through this activity, you can make connections between some words that can be new for you and a piece of text, to infer their meaning)

Read this paragraph, which is incomplete, for completing the gaps, selecting the best option.

**Be careful when social networking!!**

The fact that social networking implies being part of a massive users database (most of which are unknown to you), implies certain (1) \_\_\_\_\_ of different nature, for instance, cyber-crime, cyber-bullying, identity-theft, inappropriate use of private (2) \_\_\_\_\_, viruses, among others.

It is important to surf the (3) \_\_\_\_\_ and use our social networks having in mind some safety guidelines, as follows:

- Be careful with the (4) \_\_\_\_\_ you use to access your accounts, it should contain at least eight characters; better if mixing letters and numbers.
- Keep your profile private. For viewing it, allow only your friends, after informed request. Try to restrict the (5) \_\_\_\_\_ of strangers to your profile.
- Do not say or (6) \_\_\_\_\_ anything that may embarrass you or someone else later.
- Do not post your location while you're away. Burglars are permanently monitoring networking sites for their crimes.

Adapted from <https://www.gettaonline.org/social-networking/social-networking-sites/>

1 (Example)	A safety	B risks	C addresses
2	A information	B dates	C purpose
3	A place	B upload	C net
4	A password	B profile	C website
5	A entry	B access	C posts
6	A tell	B publish	C view

Post-reading activity 1

True/False statements


**Strategy:** *clarifying and confirming ideas to answer questions correctly.* (Through this activity, you will be able to determine if some ideas are right or wrong according to the text.)

Read the following text and mark the following statements as True (T) or False (F).  
**Example:** It is possible to delete a photo from Facebook. *F*


- You can delete your Facebook profile.  F  T
- The government and different authorities can follow your social networking activity.  T  F
- A network can be constantly supervised by the person who manages it.  T  F
- Behind the creation of social networks there are non-ethical purposes.  F  T

Sample 2. Worksheet No. 3 (left) – Midterm test (right)

**Tech support scams on the rise**



1. Gap fill



Complete the text by using the words you find in the right column.

Fraudsters are using a new (Example: 0) method to trick people into parting with their money. They are (1) \_\_\_\_\_ to be technical support teams of people's ISP (Internet Service Provider). The new scam is very (2) \_\_\_\_\_ and can trick even experienced Internet users. The fraudsters are targeting the IP (Internet Protocol) of computers – this is a (3) \_\_\_\_\_ computer's online ID number. Once they have the IP, the (4) \_\_\_\_\_ gets a pop-up window with a message that says the ISP has "detected (5) \_\_\_\_\_" on the computer. The victim is then (6) \_\_\_\_\_ to call a phone number for help. The Internet security company Malwarebytes said: "The scammers are trying to get people to call them. People are (7) \_\_\_\_\_ paying to be scammed."

Malwarebytes said most of the (8) \_\_\_\_\_ so far have been detected in the USA and UK, but they will (9) \_\_\_\_\_ worldwide. Jerome Segura, a malware (10) \_\_\_\_\_ at Malwarebytes, told the BBC: "It caught me by surprise and I almost thought that it was real. It was a page from my ISP telling me my computer was (11) \_\_\_\_\_. It was only when I looked in closer (12) \_\_\_\_\_ that I saw it was a scam." The fraudsters are infecting online adverts. Once an infected ad appears on your (13) \_\_\_\_\_, the virus works out your IP number. You do not even need to click on the ad for the (14) \_\_\_\_\_ to do this. Malwarebytes' advice is to call the tech support number you received when you signed up for the Internet, and to not (15) \_\_\_\_\_ numbers in pop-up windows.

particular	1 pretending	<input checked="" type="checkbox"/>
method	2 realistic	<input checked="" type="checkbox"/>
malware	3 particular	<input checked="" type="checkbox"/>
literally	4 advised	<input checked="" type="checkbox"/>
realistic	5 malware	<input checked="" type="checkbox"/>
advised	6 advised	<input checked="" type="checkbox"/>
pretending	7 literally	<input checked="" type="checkbox"/>
victim	8 scams	<input checked="" type="checkbox"/>
	9 spread	<input checked="" type="checkbox"/>
	10 expert	<input checked="" type="checkbox"/>
detail	11 infected	<input checked="" type="checkbox"/>
scams	12 detail	<input checked="" type="checkbox"/>
screen	13 screen	<input checked="" type="checkbox"/>
infected	14 virus	<input checked="" type="checkbox"/>
trust	15 trust	<input checked="" type="checkbox"/>
spread		
virus		
expert		

2 True/False statements

Read the following text and mark the following statements as True (T) or False (F).

- Fraudsters are using an old method to trick people out of their money.  F  T
- The scam cannot trick experienced Internet user.  F  T
- Victims are asked to call a phone number in a pop-up window.  T  F
- Most of the scams found have been in the USA and UK.  T  F
- The fraudsters use online ads to try and get your IP number.  F  T

Consequently, the tests should reflect the different aspects of the worksheets and provide enough clarity and organization, keeping in mind Harmer's assertion related to "a variety of pleasing, challenging and motivating tasks" (as cited in Núñez et al. 2009, p. 43) that may lead to a successful development of both worksheets and tests.

Besides providing an adequate context, visual attractiveness, and organization, worksheets activities should contribute to enhance language skills (as in this study, reading comprehension) and vocabulary development, issues that will be discussed in the following category.

### **Reading strategies enhancing reading comprehension and vocabulary learning.**

During the implementation of the worksheets, the use of reading strategies, defined as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (RAND Reading Study Group, 2002, p. 11), played a crucial role in promoting reading comprehension. The subcategories explained in the next excerpt specify the items linked to reading strategies and vocabulary that influenced this reading comprehension enhancement.

*Achieving progress in reading comprehension.* This subcategory provides insights about the way students perceived their evolution in regards to reading comprehension, having in mind that reading is the most relevant skill in an academic setting (Grabe, 2008), one that implies a intricate cognitive process (Pardo, 2004). The following lines show how the activities developed in the worksheets helped them to improve this aspect. In the focus group, participants reflected about their improvement, and showed their awareness concerning their progress:

**Sheldon:** Al principio me sentía bastante perdido a la hora de leer los textos. Me puse un poco triste al ver el resultado del primer taller [...] Y a medida que fueron pasando los talleres me di cuenta que iba mejorando.

**Tom:** Yo he visto un mejoramiento en la comprensión lectora desde que empezaron estos ejercicios [...] me he dado cuenta que la dificultad de cada taller ha aumentado un poco, pero entonces ya con el tiempo, uno se da cuenta que puede solucionar talleres cada vez más complejos. Entonces sí, sí ha aumentado la comprensión lectora, y cada ejercicio que se realiza le enseña a uno cosas que le sirven para el siguiente que viene.

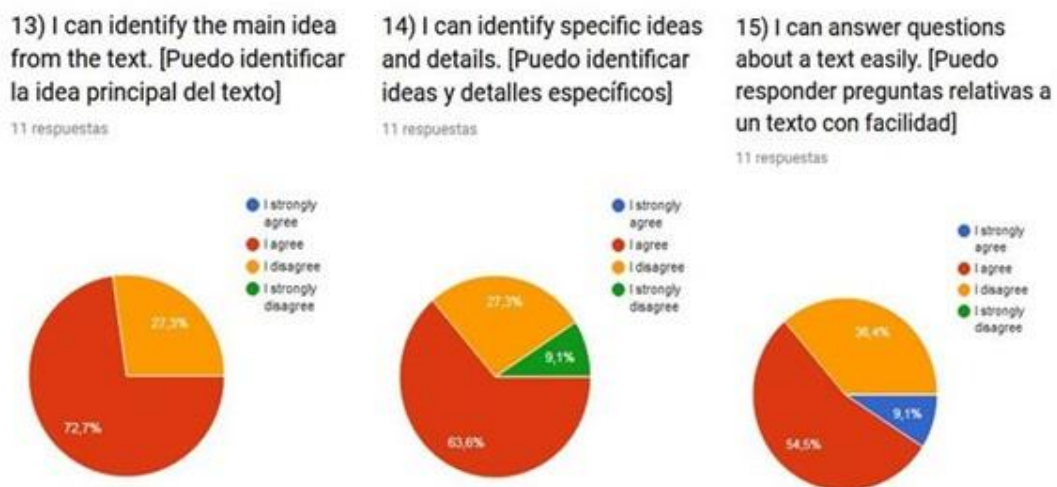
[SIC] (Focus group transcription)

**Sheldon:** At the beginning of the process, I was feeling lost when reading the texts. I felt a bit sad when I saw the result of the first worksheet [...] As the worksheets were going on, I realized that I was improving.

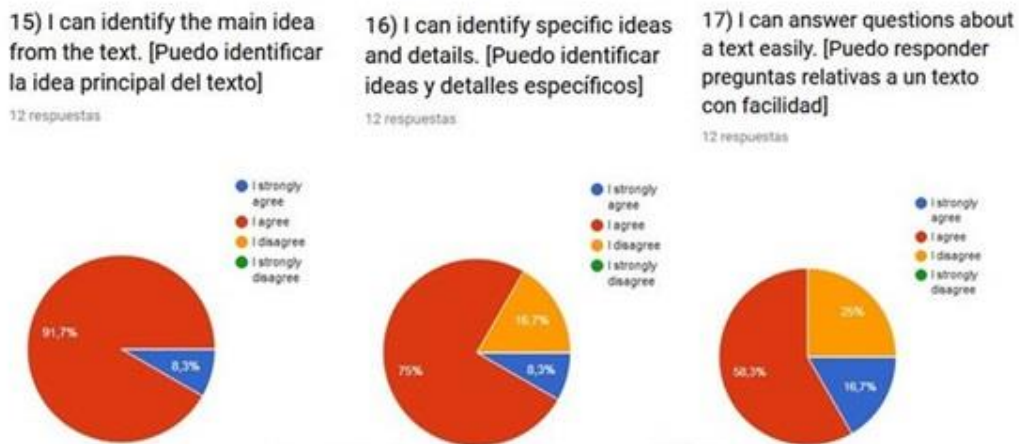
**Tom:** I have seen some improvement in reading comprehension since we started working with these exercises [...] I have realized that the level of difficulty of each worksheet has increased a little, but as time goes by, one finds out that it is possible to solve increasingly complex worksheets. Thus, reading comprehension has increased, and every exercise one develops, teaches things that can be useful for the next worksheet to come.

(Translated by the author)

This extract shows how respondents felt about their evolution as they advanced in the worksheets development process. They observed their difficulties at the beginning of the process; and as they kept on working, they found that they were able to improve their comprehension, throughout increasingly complex and demanding reading tasks. Likewise, the worksheets' self-assessment showed participants' impressions about their reading comprehension, and its evolution throughout the worksheets process:



**Graph No. 3. Artifact - Self-assessment, Worksheet No. 1**

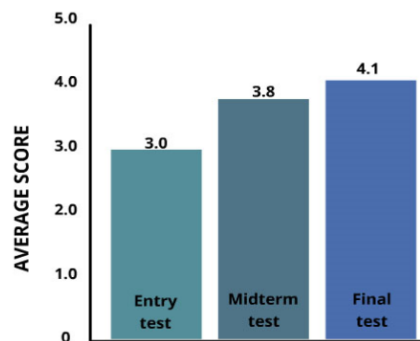


**Graph No. 4. Artifact - Self-assessment, Worksheet No. 6**

The graphs above display how students felt when identifying the main idea from a text, when recognizing specific ideas and details; as well as for answering questions about a passage in

the first worksheet. The first graph shows that in general terms, they were mostly able to perform the tasks mentioned, while some participants had some difficulties. The second graph reveals how the positive perception increased significantly in the sixth worksheet, although some difficulties persisted.

The test results complemented the insights shown above and evidenced students' progress in their reading comprehension, as it is shown below:



**Graph No. 5. Tests results average score**

The previous graph shows the average grade obtained by the participants of this study, indicating general improvement in the students' performance in the three reading tests they took. However, the nature of their evolution was not homogeneous: Most of the participants started the process having several difficulties, but then they had progressive improvement in the midterm and final tests. Some students had initial difficulties and showed little progress between the midterm and final tests. Only one student had a good general performance in all the three tests. This improvement in reading comprehension is closely connected to the use of reading strategies (Brown, 2001), which is connected to the subcategory that will be described below.

***Using strategies to help students improve reading comprehension.*** To develop students' reading comprehension, it is necessary to consider the use of a set of strategies that, according to Barnett (1988), are defined as cognitive procedures that occur when reading a text aims to



understand its content. Reading strategies can be helpful as they allow students' better development of their reading tasks, (Almasi & Fullerton, 2012). This is an important factor in achieving comprehension. The extracts below present the way students perceived their progress in terms of the role of reading strategies in the development of worksheets:

**Cookie:** Cuando se empiezan a hacer más lecturas y se empiezan a hacer más ejercicios y complementando estas estrategias, ya es un poco más fácil y ya la comprensión de lectura mejora mucho más.

**Carl:** Yo siento que al principio no tenía muchas estrategias de lectura [...] a lo largo del proceso iba adoptando algunas de estas estrategias, y yo siento que si he mejorado bastante.

**Sheldon:** Muchas veces es más fácil comprender el texto en su totalidad cuando primero se utilizan las estrategias.

**Tom:** En general, como que es bueno implementar estas estrategias, ya que el principal problema que uno tiene en las pruebas es que uno no lee bien, [...] entonces es como importante desarrollar las estrategias y leer bien, entender bien, más que todo.

[sic] (*Focus group transcription*)

**Cookie:** When we started to read, and exercises based on reading strategies increased, it was a little easier, and reading comprehension improved much more.

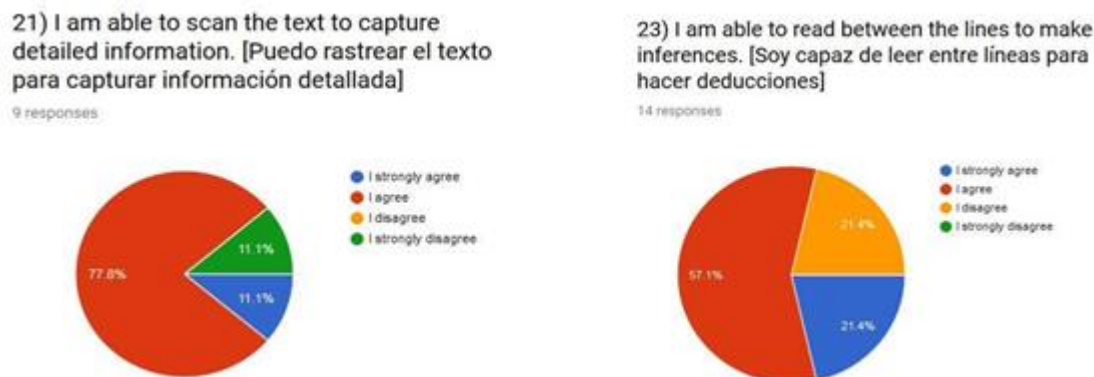
**Carl:** I feel that at the beginning, I did not have many reading strategies [...], throughout the process, I started to adopt some of these strategies, and I feel that I have improved considerably.

**Sheldon:** In several occasions, it is easier to understand the text completely when we use the strategies.

**Tom:** "...in general, it's good to implement these strategies, since the main problem regarding the tests relies on the fact that one does not read well, [...] Therefore, it is important to develop the strategies and to read well, and above all, understand well.

(*Translated by the author*)

The samples above show how participants reflected about the way they read, their familiarity with the use of reading strategies prior the implementation process, and the effect they had, and as they said, their reading comprehension improved considerably by using reading strategies (McNamara, 2009; Pardo, 2004). These strategies provide mechanisms to solve obstacles more efficiently to become better readers. To this respect, the following pieces of evidence displayed participants' perception:



Graph No. 6. Artifact - Self-assessment, Worksheets No. 3 and 4

**Sheldon:** Yo diría [...], que era suponer sobre que puede ser un texto con sólo ver el título. La segunda es relacionar el conocimiento previo con lo que se está a punto de tratar y la última que yo diría es escanear el texto para encontrar información específica.

**Lenny:** Hay una que recuerdo bastante que era suponer de que se iba a tratar el texto con sólo ver el título del párrafo.

**Jim:** La de conocimientos previos me pareció muy importante. También facilita mucho las cosas la de asociar sinónimos con el vocabulario que se tiene en los textos, y así mismo pues la de las imágenes asociadas al tema que se trata en la lectura.

[sic] (*Focus group transcription*)

**Sheldon:** I would say [...], that it was to make assumptions on what a text can be about by giving a look at the title. The second was to relate prior knowledge with the upcoming topic, and the last, I would say it is to scan the text to find specific information.

**Lenny:** There is one, I specially remember, was to make assumptions on what the text was going to be about, just by looking at the paragraph title.

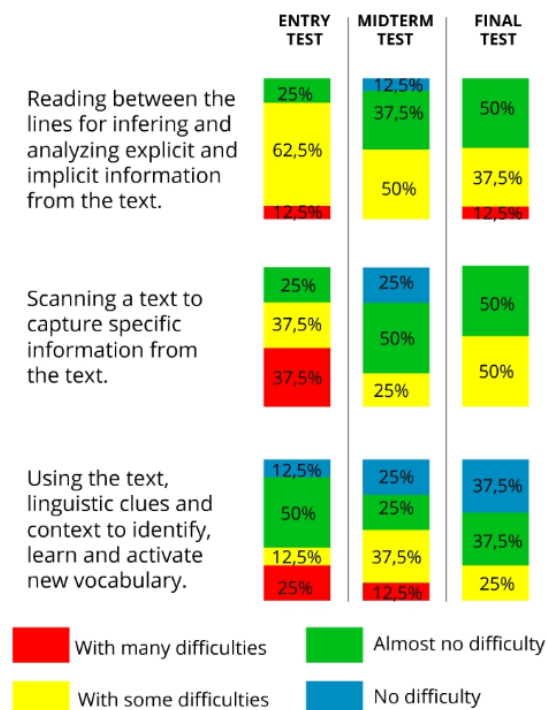
**Jim:** In my opinion, the one related to previous knowledge was very important. Associating synonyms with the text vocabulary also facilitated the task, as well as the images associated to the topic of the passage.

(*Translated by the author*)

As observed, the graphs above showed that most participants declared that they managed to use a series of strategies that aided their comprehension; in this case, their capacity to scan texts for capturing specific information and reading between the lines for making inference. In the focus group excerpt, participants commented about a series of reading strategies that impacted them the most. They referred to the importance of looking at the title for establishing the potential content of a text, exploring background knowledge, scanning texts to recognize specific information, and using linguistic clues to identify new vocabulary as part of the strategies proposed in the worksheets to improve reading comprehension. In this regard, Hurd, Beaven, and Ortega contended that web-based language learning materials must provide

possibilities to experiment with learning strategies and to reflect on the way they can learn (as cited in Lopera, 2014).

On the other hand, the tests also shed light about participants' performance in terms of the use of strategies. In this sense, Brown (2001) affirmed that "for assessing reading, some attention should be given to the highly strategic nature of reading comprehension by accounting for which of the many strategies for reading are being examined" (p. 385). The graphs below, display information related to three main reading strategies used in the implementation process. They synthesize what students applied in the tests tasks: (1) reading between the lines for inferring and analyzing explicit and implicit information from the text, (2) scanning a text to capture specific information from the text and (3) using the text, linguistic clues and context to identify, learn and activate new vocabulary.



**Graph No. 7. Reading strategies use performance in tests**

It is possible to observe in the graphs that in general terms, the number of students who had more difficulties in the use of the strategies mentioned above, decreased progressively from one test to another, with some variations. The percentage of students who showed some difficulties had a mild decrease. On the other hand, the percentage of participants with a very low level of difficulty, revealed a highly satisfactory performance, with little variations. Finally, the students with no difficulties at all, had some variations from the midterm to the final test, decreasing in two strategies, and increasing in one. All this means that the use of a series of reading strategies in the worksheets had a positive impact on their reading comprehension, sharing McNamara's view (2009) on the helpfulness of these strategies at enhancing learners' abilities in reading. In this sense, it is important to motivate students to keep them putting reading strategies into practice.

Regarding the tests design, they should reflect the use of reading strategies intended to measure their progress in reading comprehension, since exercises in the tests should match the ones proposed in the worksheets, as it was mentioned in a previous category analysis. In this regard, participants expressed their opinions:

**Jim:** No me pareció muy diferente los textos de las actividades a los de un test; simplemente tenía que tener en cuenta las estrategias para saber cómo abordar cada una de las preguntas.

**Sheldon:** La mayor relación entre las actividades y los tests fue, sobre todo, el uso de las estrategias que se enseñaron [...] eran una gran ayuda a la hora de resolver el test.

[sic] (*Focus group transcription*)

**Jim:** I did not find any major differences between the activities' texts and the ones from any test; I just had to keep in mind the strategies to know how to cope with each one of the questions.

**Sheldon:** The closest connection between the activities and the tests noticed was especially the use of the strategies taught [...] they were very useful when solving the test.

(*Translated by the author*)

In the preceding excerpts, students showed how they connected the strategies suggested in the worksheets and the tests they solved. According to Zhang (2014), for reading test purposes, students should reinforce both their linguistic skills and the use of diverse strategies, as they may

help them cope with linguistic and test taking challenges, thus, optimizing their performance. It seemed that it had a positive impact in the whole process and in their reading comprehension. The use of reading strategies is central for reading comprehension, in all its aspects, including vocabulary growth, which links to the next subcategory analyzed.

***Realizing the importance of the role of reading in vocabulary learning.*** One of the elements that sparked particular interest for participants was related to the contribution of the virtual reading comprehension worksheets for their vocabulary development. This perception follows Thornbury's ideas (2002) about the opportunities that reading offers for learning new words and expressions in context. Students who participated in the study expressed their views on the way the worksheets impacted their vocabulary learning:

**Sheldon:** Otra cosa que yo valoro mucho en las actividades es que me ayudó a ampliar desde todo punto mi vocabulario por las temáticas que se trabajaron [...] nos ayuda a ampliar el vocabulario y a conocer nuevas terminologías en temas que nos sean de interés.

**Cookie:** En una actividad el tema fue basado más que todo en tecnología, y me gustó mucho porque había vocabulario que no conocía, me pareció interesante [...] el tema es como muy afín a lo que me gusta, y pues que también abre como las posibilidades para ver lecturas o cosas en inglés que sean con respecto a ese tema.

[sic] (*Focus group transcription*)

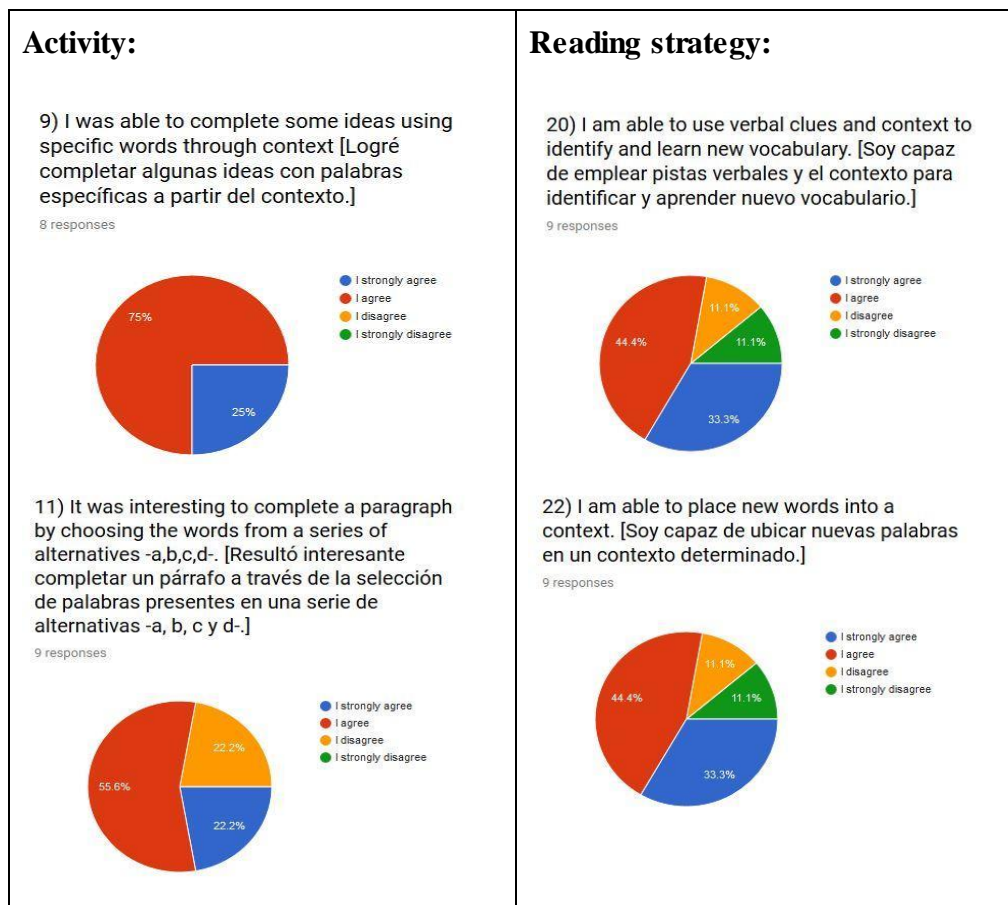
**Sheldon:** Another aspect that I really value in these activities is that they helped me increase my vocabulary related to the different topics we worked. [...] I think it is a really good tool, because it helps us to expand our vocabulary, and to learn new terminology about topics of our interest.

**Cookie:** There was an activity in which the topic was mainly based on technology, and I really liked it, because there was vocabulary that I did not know before, I found this interesting [...] the topic is highly related to my interests, and it may open possibilities to have readings or anything in English that is connected to that topic.

(*Translated by the author*)

In the ideas expressed above, students talked about vocabulary learning as a positive outcome of the worksheets. Reading can turn into a mechanism for learners to improve vocabulary, as "meanings are understood when they are experienced in a variety of contexts" (Manimozhi, 2012, p. 135). In this sense, respondents found an opportunity to learn new words, increasing their English vocabulary, especially regarding specific topics (i.e. technology).

The use of different reading strategies should complement the contextualized nature of the exercises of the worksheets, as discussed in the previous subcategory. Some of these strategies were closely related to vocabulary development for improving reading comprehension. In this regard, participants expressed their insights about these strategies and the impact they had.



Graph No. 8. Artifact - Self-assessment, Worksheets No. 4

The examples in this graph illustrate the way students perceived the activities in which they had to work with vocabulary. Students affirmed that they were mostly able to identify and allocate a series of words that were part of a reading passage by focusing on the context. On the other hand, some opinions below provided by the focus group shed light on the importance of

reading strategies when connecting vocabulary development and reading comprehension

(Mehigan, 2009):

**Tom:** Las estrategias que tenían que ver con contextualizar o enmarcar una palabra en un texto específico, pues me parecían interesantes porque a pesar de que uno no conociera la palabra para nada, pues a través del contexto y la estructura de la palabra como que uno podía tal vez asociarlo a algo.

**Jim:** Los ejercicios donde se notaba que te daban algunas palabras, algunos conceptos, y tú denotabas si eran positivas o negativas, o también las asociadas con sinónimos [...] pues debido a que en unos vocabularios, tanto técnicos como generales, pues es fácil de identificarlos pues se hace una asociación de las mismas.

**Carl:** Las más efectivas [...], las relacionadas a imágenes, relacionar ayudas visuales con palabras. [sic] (*Focus group transcription*)

**Tom:** The strategies that had to do with contextualizing or framing a word in a specific text were, in my opinion, interesting because although one did not know the word at all, it was possible to connect it to something through the context and the structure of the word.

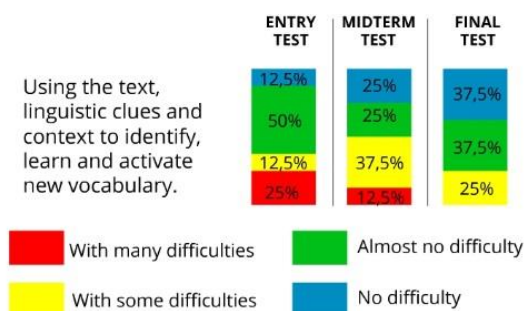
**Jim:** The exercises that provided some words and concepts, and you had to infer if they were positive or negative; or also the ones associated with synonyms [...] as in some technical and general vocabulary settings, they were easy to identify, as it was possible to associate them.

**Carl:** The most effective ones [...], the ones related to imagery, to relate visual aids with words.

(*Translated by the author*)

As observed, the use of reading strategies was a critical step for dealing with vocabulary in the reading worksheets, and the importance of the context as well. It follows Grabe's assumption (2008) that it is possible to learn words having in mind the context, and that vocabulary learning takes place by being in contact with printed or digital text material.

As it is possible to find a powerful relationship between reading comprehension and vocabulary learning; and considering the multifaceted nature of vocabulary knowledge (Thornbury, 2002), words can be usually measured through reading comprehension tests. The scholar referred to the importance of "using context clues to help work out word meaning" (p. 131). In this regard, the tests used in this study included vocabulary work in the form of contextualized reading exercises. To this respect, an extract of the graph No. 7 (displayed in the previous subcategory), shows participants' performance:



**Graph No. 9. Reading strategies use performance in tests (Taken from Graph No. 7)**

The percentage of students with many difficulties regarding vocabulary-related strategies decreased progressively in the three tests. On the other hand, in the midterm test, there was a dramatic increase in the number of students who had some difficulties compared with the first one, and this number decreased for the final test. In the same vein, there were variations in the number of participants that showed almost no difficulties. Finally the percentage of students who did not have any difficulties increased significantly, on a steady basis. All this indicates that vocabulary learning through the reading worksheets had a positive effect in terms of their performance. The vocabulary activities of the tests, which showed good results, were presented in a contextualized setting, and aligned with the worksheets, converging with Thornbury's view (2002) on language teaching and testing, which should be always in context, through tasks in which the text is the axis for vocabulary identification and processing.

Even though there was a positive perception about vocabulary learning and the use of strategies for reading comprehension, students also manifested their reflections about the need to improve their vocabulary level to boost reading comprehension. In the worksheets self-assessment, students had to think about taking possible actions to overcome the obstacles they faced during the implementation:

Debo buscar la manera de aprender más vocabulario. Es lo que me pareció mas difícil en el ejercicio. Talvez hacer más ejercicios de vocabulario por internet o en libros.



“I must search for the way to learn more vocabulary. This is what I found the most difficult in the exercise. Maybe to do more vocabulary exercises on the internet or books.” [sic]

**Siento que necesito trabajar mas sobre vocabulario y prestar mas atención a los tipos de pregunta para no cometer tantos errores**

“I feel I need to work more about vocabulary, and to pay more attention to the question types for not making so many mistakes.” [sic]  
(Worksheet No. 2)

**Siento que debo mejorar en mi vocabulario, y tambien debo leer mas textos en inglés**

**Pienso que deberia leer mas cosas en inglés, para asi aumentar el vocabulario y la comprensión**

**Es necesario estudiar mas vocabulario en inglés, fijarse bien en lo que uno ve en internet, televisión, etc**

“I feel I must improve my vocabulary, and I also must read more texts in English.” [sic]  
“I think I should read more in English, for increasing my vocabulary and comprehension” [sic]  
“It is necessary to study more vocabulary in English, to focus on what one sees on the Internet, TV, etc.” [sic]  
(Worksheet No. 3)

*Sample 3. Self-assessment artifacts- reflection*

The ideas shown above evinced the importance vocabulary had for students regarding its role in reading comprehension. Students claimed they should work more for improving their vocabulary level as, in their opinion it influences, their reading comprehension.

All these reflections and opinions emerged from the work they developed in a Virtual Learning Environment that, in this case, was the institutional Moodle platform of the university and its influence in this intervention, explained in the upcoming category.

**Using Moodle to support learning.** Since recent years, Moodle has become one of the most popular tools in education. It has advantages that can complement classroom work. It offers a set of "tools that can be used in EFL/ESL settings" (Su, as cited in Nozawa, 2011, p. 291), even if it has not been specifically created for language teaching/learning. In this category, there is a description of a series of positive aspects of this VLE that influenced their motivation and performance in the worksheets.

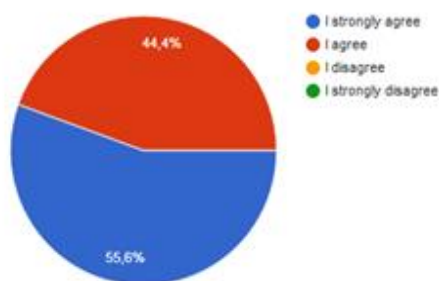
**Moodle’s simplicity to facilitate learning.** The use of Moodle platform has been extended to the different programs of the university where this study took place. This has influenced the

way students perceive the role of online technologies in the classroom, as they are increasingly familiar with these Virtual Learning Environments (Hsu, 2012). The university implemented the platform in 2010. The English Program has uploaded a significant part of the English courses contents and evaluations to this VLE. In this sense, students have become acquainted with these tools and types of exercises, which made things easier when conducting this study.

The instruments used in this study evinced that most students were, in general terms, already familiar with the platform use and did not have any major difficulties when accessing the platform. Likewise, most of them did not need to ask for any assistance from teachers and/or classmates. All navigation elements were the same in all tests and exercises. Therefore, students already knew what to do, which according to Fulcher (2003, p. 390), is a critical requirement for success in computer-based test-taking. In the following excerpts, students showed their perception about the platform use for the worksheets proposed during the implementation phase:

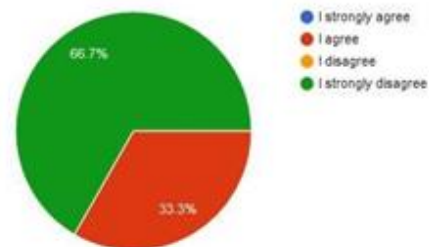
25) I managed to access the platform without any inconveniences. [Logré acceder a la plataforma sin inconvenientes].

9 respuestas



28) I needed to ask for help to a classmate or the teacher. [Me ví en la necesidad de pedir ayuda a un(a) compañero(a) o a la docente]

9 respuestas



**Graph No. 10. Artifact - Self-assessment, Worksheets No. 3**

One of the aspects they highlighted had to do with its usability, connected to its simple interface, straightforward icons, and verbal instructions, which can help learners accomplish their assignments without major difficulties and to navigate accurately (in terms of course structure,

weeks and topics as they were organized) (Krug, 2000; Melton, 2006). Consequently, students felt comfortable at accessing the worksheets:

25) The platform was an adequate mechanism to perform the worksheet's activities. [La plataforma fue un mecanismo adecuado para realizar las actividades del taller].

3 respuestas



*Graph No.11. Artifact - Self-assessment section, Worksheet No. 1*

**Lenny:** Es fácil el acceso a las actividades. Es sólo un click, y comenzar. No tiene ciencia.

**Cookie:** Pues a mí me parece que la plataforma Moodle es muy buena [...] todo está ahí claro, todo lo que uno ve o puede buscar claramente [...] Entonces a mí me parece que para aprender el inglés en la plataforma es perfecto.  
[sic] (*Focus group interview transcription*)

**Lenny:** It is easy the access to the activities. It's just to click and to start, it's quite simple to do.

**Cookie:** "I think that the Moodle platform is really good [...]. Everything looks clear, it is easy to search [...] Therefore, I think that learning English through the platform is perfect.

(*Translated by the author*)


The prior self-assessment question showed that all participants thought that it was good to develop the worksheets through this tool. Likewise, the focus group extracts evinced their perception about the platform access in which they felt they did not have to face complex processes and saw the platform as a valuable mechanism in their English learning process. Hsu's view (2012) highlights Moodle as a facilitator for learning a language and for promoting communicative activities in a manageable and user-friendly environment.

The user-friendly approach of Moodle and the way students felt familiar with it can be also replicated in tests, where it is essential for its interface, buttons, layout, and instructions to be consistent, precise, and simple (Fulcher, 2003). The scholar also stated that inadequate navigation structure in a test leads to avoidable errors that may affect their results and performance. In this sense, the way students navigate in the tests should be the same as in the worksheets.

**3. Hi-tech vocabulary!**  
 (Strategy: Using linguistic clues for identifying new vocabulary)

Unscramble the words and insert them into the sentence.  
 The first letter has been already given.

**Example:** FOREWSTA → The engineers have created a new software to detect bank fraud.



1. CTHUORCENSE → With this new t\_\_\_\_\_s\_\_\_\_\_ system, it is possible to access to all the telephone tools, just by having contact your fingers.

2. CSTIOALPAINP → The new iPhone 5, offers a great variety of a\_\_\_\_\_ for social networks, games and video!

3. RSELWEIS → It is wonderful to know that internet today is w\_\_\_\_\_. you don't need any cables!!

1 touch screen ✓ 2 applications ✓ 3 wireless ✓

**Post-reading activities**

1. Identifying language!  
 (Strategy: using verbal clues and context to identify and activate language)

Read the text below and choose the right word for each space (a, b, e or d).


A U.S. university has found a new (0) (Example) d for the Apple iPhone – as a musical instrument. Academics from the University of Michigan have joined (1) \_\_\_\_\_ to create what they call a 21st century orchestra. There are no traditional instruments, only 20 of Apple's best-(2) \_\_\_\_\_ mobile telephones. The project is a group effort from the university's music, computer science and engineering departments. They call (3) \_\_\_\_\_ the Michigan Mobile Phone Ensemble and describe their work as "new, crazy, electronic ensemble music". Each "musician" will be able to "play" the notes and tunes that they programmed (4) \_\_\_\_\_ their handset. The result will be an original (5) \_\_\_\_\_ of music.

The (6) \_\_\_\_\_ behind the iPhone orchestra is assistant professor Georg Eszl. He is a musician and an engineer. On his course, he motivated students to experiment with the iPhone's (7) \_\_\_\_\_ technologies. They wrote special applications that used wireless radios, motion (8) \_\_\_\_\_ and the touch screen to produce different noises. The result is the hi-tech sound of the experimental new orchestra. Professor Eszl was excited about this innovative form of music. He said: "We can do interesting, weird and unusual things. This kind of technology is in its (9) \_\_\_\_\_, but it's a hot and (10) \_\_\_\_\_ area to use iPhones for artistic expression." He called the iPhone "a very nice platform for exploring (11) \_\_\_\_\_ forms of musical performance".

1 a ✓ 2 b ✓ 3 c ✓ 4 c ✓ 5 b ✓

0. (a) useful (b) useless (c) usefully (d) use  
 1. (a) forces (b) forceful (c) force (d) forcing  
 2. (a) sold (b) selling (c) sales (d) sale  
 3. (a) them (b) they (c) themselves (d) these  
 4. (a) at (b) up (c) into (d) to  
 5. (a) song (b) piece (c) melody (d) stuff

**Samsung: Don't use dangerous Galaxy Note!**



1. Text completion: Identifying language!  
 Read the text below and choose the right word for each space (a, b, c or d).

Samsung: Don't use dangerous Galaxy Note

Line 1 Samsung, the South Korean tech (0) a, has warned owners of the Galaxy  
 Line 2 Note 7 to turn off b phone after more reports of the device (1) \_\_\_\_\_  
 Line 3 fire. The company will also stop shipping the flagship phone to stores. The  
 Line 4 device, launched in August, was set to rival Apple's iPhone. Samsung engineers  
 Line 5 must now (2) \_\_\_\_\_ an investigation into what is causing so many phones  
 Line 6 to catch fire. Samsung had already been hit following a recall of 2.5 million  
 Line 7 phones in September after many burst into flames when b batteries  
 Line 8 exploded. This new episode further damages the company's credibility as many  
 Line 9 of the exploding phones are b that had batteries replaced in September and  
 Line 10 were deemed to be safe.

Line 11 Industry (3) \_\_\_\_\_ are now predicting how much the latest trouble will  
 Line 12 cost the company. South Korean media is reporting that the company could  
 Line 13 discontinue (4) \_\_\_\_\_ the phone. However, South Korea's finance minister  
 Line 14 Yoo Il-ho has warned that the country's exports will be damaged if b does  
 Line 15 this. He said: "Right now we can't tell what the (5) \_\_\_\_\_ will be in the long  
 Line 16 term. It's up to the company and the government cannot interfere, but if  
 Line 17 b abandon the model, b will have a negative impact (6) \_\_\_\_\_ exports."

Put the correct words from the table below in the above article.

0 (Ex)	(a) giant	(b) gigantic	(c) gargantuan	(d) gorilla
1.	(a) catching	(b) catches	(c) catching	(d) catchon
2.	(a) condemn	(b) come	(c) get	(d) start
3.	(a) analysts	(b) analyze	(c) analysis	(d) analytics
4.	(a) produce	(b) producing	(c) productions	(d) producers
5.	(a) intern	(b) impale	(c) impact	(d) implant
6.	(a) by	(b) of	(c) no	(d) on

1 c ✓ 2 d ✓ 3 c ✓ 4 b ✓ 5 c ✓ 6 b ✓

3. Exploring vocabulary!  
 Jnscramble the words and insert them into the sentence.  
 The first letter has been already given.

**Example:** EGNEINSRE → At Siemens, a group of engineers have created a new software to detect bank fraud.

1. ECDVEI → My brother has bought a new d to draw directly in the computer screen.

2. ICSNODNEIUT → BlackBerry has announced that they will d producing mobile phones, now they will focus on mobile

3. ANBDR → Samsung is a smartphones b that has proposed interesting products, competing effectively to Apple.

4. SOCTEMRSU → It will be necessary to refund the money to the e who were affected by the Galaxy 7 massive burn.

1 device ✓ 2 discontinue ✓ 3 brand ✓ 4 customers ✓

Sample No. 4: Worksheet No.3 (left) - Midterm test (right)

This sample selected from the midterm test shows that the style, layout, and structure resembled the worksheets. When students solved the tests, they felt comfortable when navigating on them, as they were already familiar with the type of exercises within the platform. The focus group participants ratified this:

**Jim:** En cuanto al estilo y organización de la plataforma, los talleres y los tests eran similares. [sic] (Focus group interview transcription)

**Jim:** Regarding style and organization of the platform, the worksheets and the tests were similar. (Translated by the author)

This respondent highlighted the fact that both worksheets and tests were very much alike. This contributed to the clarity when solving the test. In this regard, Wise, Pastor and Kong (2009) and Litzler and García-Laborda (2016) contended that the design and format of Moodle tests should be very intuitive because “if students are unfamiliar with a platform, they should still be

able to guess how it works in order to be able to complete a test” (p. 108) (as cited in García-Laborda, 2016). Similarly, the terms and commands shown in the platform were straightforward and concise: they did not yield any ambiguities for the test-takers. The outline of the text was clear. Thus, students were capable to read easily to assure their successful performance. The students received their scores immediately and automatically.

This VLE has received a good general reception from the participants of the study, as its interface is convenient, practical, and simple (Lopera, 2014). In the same vein, students expressed that they had liked the activities, which means that the human factor may keep being one of vital importance. Although Moodle is an adequate mechanism for language teaching, “the key to successful use of technology in language teaching lies not in hardware or software but in humanware” (Warschauer & Meskill, as cited in Nozawa, 2011, p. 309). Fostering students learning processes cannot depend upon Moodle itself, but it greatly depends on the way teachers propose activities and promote dynamic participation in context.

Having described the categories and subcategories that came up from this implementation phase, I will report the conclusions and the pedagogical implications that this study provided to the ELT field.

## Chapter V

### Conclusions and Pedagogical Implications

This chapter explains the most representative findings of this research study that emerged from data analysis intended to answer the research question. On the other hand, it presents the pedagogical implications for the English language teaching community, the institution where this study took place, and for me as a teacher-researcher and materials developer. This chapter will end explaining the limitations of the study and some further questions that may yield further research.

#### Conclusions

Addressing the research question, I concluded that the design and use of contextualized virtual reading worksheets was a useful tool for students to enhance their reading comprehension. They regarded visual appeal and organization as features that can generate a positive impression; as well as they thought that the fact of considering their context, needs and interests was a fundamental aspect in the materials they worked, as it triggered participants' involvement (Tomlinson, 2003; Núñez and Téllez, 2009). The current research study also constituted a pedagogical innovation, as the participants had never had the opportunity to work with reading materials designed having in mind their context and their real needs. It definitely influenced motivation in the participants who declared to have enjoyed the process. Moreover, most of their comments were rather positive. On the other hand, it is remarkable to mention the fact that students developed awareness of the use of reading strategies as a crucial factor for achieving and enhancing reading comprehension. The most relevant ones for them were associated to the exploration of previous knowledge, predicting, scanning the text to capture specific information, and using linguistic and contextual clues to identify new vocabulary. This latter strategy is

connected to another important finding attained from this study, in which the use of contextualized reading worksheets was useful to strengthen and enhance the learners' vocabulary learning (Jenkins et al. 1984; Adlof & Storkel, 2006), which is a highly relevant issue for students to exploit through reading comprehension activities properly.

Regarding the use of VLEs in the context of this study, it was ratified that Moodle offers spaces and opportunities for helping students enhance language skills, in this particular case, reading comprehension (Tsai & Talley, 2014). It can be considered as an adequate tool to complement teachers' daily work in the classroom.

### **Pedagogical Implications**

This study brought to light some pedagogical implications in different aspects. First, it represented a contribution to the institution where I conducted the current study, as the virtual worksheets fulfilled its population needs by enriching their academic accomplishment through useful materials to strengthen their reading comprehension. Secondly, it had some implications in my role as a teacher-researcher and materials developer, since it helped me significantly to raise my awareness about my classroom daily practices and, therefore, to improve them (Burns, 2010). Besides, it fostered my research skills in my context. Finally, this study may benefit the ELT community in terms of the development of reading comprehension materials in virtual settings that can accomplish students' needs and interests.

### **Limitations**

This research study presented good and satisfactory results. Nevertheless, it also had some limitations especially related to time constraints for implementing the worksheets, as well as the absences of some students to some sessions, due to compulsory academic events of their faculty.

**Further Research**

The insights emerged from this study allowed me to ponder several questions to consider in further research. (1) How do the development and implementation of contextualized materials based on test-taking strategies promote reading comprehension in exams? (2) What could be the impact of contextualized reading comprehension worksheets in vocabulary development? (3) How do the development and implementation of contextualized virtual worksheets promote autonomous learning?



### References

- Abdelaal, N., Saleh, A. (2014) Relationship between Prior Knowledge and Reading Comprehension. *Advances in Language and Literary Studies*, 5(6) 125-141. Retrieved from <http://dx.doi.org/10.7575/aiac.all.v.5n.6p.125>
- Adlof, S., Storkel, H. (2006) Learning vocabulary through reading. *Acquiring knowledge in speech, language, and hearing* 8(3). 110-112.
- Alfonso, J. (2014). *Metacognitive strategies as a fundamental tool to enhance reading comprehension in undergraduate students*. Unpublished Master's Thesis. Bogotá: Universidad Externado de Colombia.
- Allwright, D., Bailey, K. (1991). *Focus on the language classroom - An introduction to classroom research for language teachers*. Cambridge: Cambridge University Press.
- Almasi, J., Fullerton, S. (2012). *Teaching strategic processes in reading*. New York, NY: The Guilford Press. (2nd. edition)
- Altrichter, H., Feldman, A., Posch, P. & Somekh, B. (2008). *Teachers investigate their work; An introduction to action research across the professions*. London and New York: Routledge. p. 147. (2nd. edition).
- Arnone, M. (2003). Using instructional design strategies to foster curiosity. ED479842 ERIC Digest. Retrieved from: <https://www.ericdigests.org/2004-3/foster.html>
- Bachman, L., Palmer, A. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.
- Barnett, M. A. (1988). Reading through context: How real and perceived strategy use affects L2 comprehension. *Modern Language Journal*, 72, 150-160.

- Basal, A. (2013). ELT teachers as online material developers. *The Online Journal of Distance Education and E-Learning*, 1(2), 8-12.
- Bautista, M. (2011). Use of students' learning strategies when implementing criminalistics materials based in the Cognitive Language Learning Approach (CALLA). In Núñez, Téllez & Castellanos (Eds.), *Teacher research on English didactics issues* (pp. 149-177). Bogotá: Universidad Externado de Colombia.
- Bedoya, P. (2014) The exercise of learner autonomy in a virtual EFL course in Colombia. *HOW, A Colombian Journal for Teachers of English*, 21(1), 82-102.
- Bell, J. (2005). *Doing your research project - A guide for first time researchers in education, health and social science*. New York, NY: Open University Press.
- Berg, B. (2004). *Qualitative research methods for the social sciences*. Boston, MA: Pearson Education, Inc. (fifth edition).
- Bower, M., Wittmann, M. (2011). A comparison of LAMS and Moodle as learning design technologies - Teacher education students' perspective. In J. Dalziel, C. Alexander, J. Krajka & R. Kiely (Eds.), Special Edition on LAMS and Learning Design. *Teaching English with Technology*, 11(1), 62-80.
- Brandl, K. (2005). Are you ready to "Moodle"? *Language Learning & Technology* 9(2). pp. 16-23. Available at: <http://llt.msu.edu/vol9num2/review1/>
- Brown, H. D. (2000). *Principles of language learning and teaching* (4<sup>th</sup> ed.). New York, NY: Addison Wesley Longman.
- Brown H. D. (2001). *Teaching by principles - An interactive approach to language pedagogy*. (2nd ed.). White Plains, NY: Longman

- Brown, H.D. (2004). *Language assessment: Principles and classroom practices*. New York, NY: Pearson Education.
- Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners*. New York, NY: Routledge.
- Chamot, O'Malley J.M. (1994) *The CALLA handbook*. Reading, Massachusetts: Addison-Wesley Publishing Company.
- Chamot, A., Barnhardt, S., Beard, P. & Robbins, J. (1999). *The learning strategies handbook*. New York, NY: Addison Wesley Longman Inc.
- Charmaz, K. (2006). *Constructing grounded theory - A practical guide through Qualitative Analysis*. Thousand Oaks, CA: Sage Publications.
- Chin, P. (2003). *Virtual learning environments*. LTSN Physical Sciences Centre. Retrieved from: [http://www.heacademy.ac.uk/assets/ps/documents/practice\\_guides/practice\\_guides/ps0081\\_virtual\\_learning\\_environments\\_sept\\_2003.pdf](http://www.heacademy.ac.uk/assets/ps/documents/practice_guides/practice_guides/ps0081_virtual_learning_environments_sept_2003.pdf)
- Christensen, L., Johnson, B., Turner, L. (2007). *Research methods, design, and analysis*. Upper Saddle River, NJ: Pearson.
- Cohen, A. (1998). *Strategies in learning and using a second language*. Essex: Addison Wesley Longman Inc.
- Cohen, L., Manion, L., Morrison, K. (2000) *Research methods in education*. London: Routledge.
- Coiro, J. (2011). Predicting Reading Comprehension on the Internet: Contributions of Offline Reading Skills, Online Reading Skills, and Prior Knowledge. *Journal of Literacy Research*, 43(4) 352 –392.
- Corbin, J., & Strauss, A. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.

- Creswell, J. (2002). *Educational research - planning, conducting and evaluating quantitative and qualitative research*. Boston, MA: Pearson Education Inc.
- Creswell, J. (2003). *Research design – qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: SAGE Publications, Inc.
- Dillenbourg, P., Schneider, D.K. & Synteta, P. (2002). Virtual learning environments. In A. Dimitracopoulou (Ed.), *Proceedings of the 3rd Hellenic Conference "Information & Communication Technologies in Education"* (pp. 3-18). Greece: Kastaniotis Editions.
- Dudeney, G. & Hockly, N. (2007). *How to teach English with technology*. Essex: Pearson Education Limited.
- Duke, N. & Carlisle, J. (2011). The development of comprehension. In M. Kamil, D. Pearson, E. Birr & P. Afflerbach (Eds.), *Handbook of reading research, Volume IV* (pp. 199-228). New York, NY: Routledge.
- Durocher, J.S. (2010). Assessment for the purpose of instructional planning for students with autism spectrum disorders. In A. E. Boutot & B. S. Myles (Eds.), *Autism spectrum disorders: foundations, characteristics, and effective strategies*. Boston, MA: Prentice Hall.
- Freeman, D. (1998). *Doing teacher-research: from inquiry to understanding*. Boston, MA: Heinle Cengage Learning.
- Fulcher, G. (2003). Interface design in computer-based language testing. *Language Testing* 20(4), 384-408.
- Grabe, W. (2008). Vocabulary and reading comprehension. *Reading in a Second Language: Moving from Theory to Practice* (Cambridge Applied Linguistics, pp. 265-286). Cambridge: Cambridge University Press.

- Graesser, A. (2007). An introduction to strategic reading comprehension. In D. McNamara (Ed), *Reading comprehension strategies - Theories, interventions and technologies* (pp. 3-26). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Graves, K. (1997). *Teachers as course developers*. Cambridge: Cambridge University Press.
- Harmon, J. (2002). Teaching independent word learning strategies to struggling readers. *Journal of Adolescent & Adult Literacy*, 45(7), 606-615.
- Hill, C. (2011). What can teachers do to improve reading comprehension?: An examination of second language reading research and implications for English language teaching practices. *The Arbutus Review*, 2(1), 62-74.
- Hirsch, E.D. (2003). Reading comprehension requires knowledge – of words and the world. *American Educator*, 27(1), 10-29.
- Hopkins, D. (1985) *A teacher's guide to classroom research*. New York, NY: Open University Press.
- Howard, J. & Major, J. (2004). Guidelines for designing effective English language teaching materials. *The TESOLANZ Journal*, 12, 50-58.
- Hsu, H. (2012). The Acceptance of Moodle: An Empirical Study Based on UTAUT. *Creative Education* 3, 44-46. Available at: <http://www.SciRP.org/journal/ce>
- Hubbard, R. S., & Power, B. M. (1999). *Living the questions - a guide for teacher-researcher*. York, Main: Stenhouse Publishers.
- Hymes, D. (1971). Competence and performance in linguistic theory. In R. Huxley & E. Ingram (Eds.), *Language acquisition: Models and methods* (3-23). New York, NY: Academic Press.

- Jenkins, J. R., Stein, M. L., & Wysocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal*, 21(4), 767-787.
- Jimenez, P. (2005). *Teaching reading strategies*. Bogotá: Universidad Externado de Colombia.
- Junca, J. (2012). Encouraging students to become strategic readers. In Núñez, Téllez & Castellanos (Eds.), *Teacher research on English didactics issues* (pp. 65-86). Bogotá: Universidad Externado de Colombia.
- Karavas-Doukas, K. (1998). Evaluating the implementation of educational innovations: lessons from the past. In P. Rea-Dickens & K. Germaine (Eds.), *Managing Evaluation and Innovation in Language Teaching: Building bridges* (pp. 25-50). London: Longman.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon Press Inc.
- Krashen, S. (1989). *Language acquisition and language education - Extensions and applications*. Hertfordshire: Prentice Hall.
- Krug, S. (2000). Don't make me think! A common sense approach to web usability. Indianapolis, IN: New Riders.
- Lankshear, C. & Knobel, M. (2006). *A handbook for teacher research: from design to implementation*. New York, NY: Open University Press. Mc Graw Hill Education.
- Lawrence, W. (2007). *Basics of social research – qualitative and quantitative approaches*. Boston, M.A: Pearson Education Inc.
- Liu, J. (2010). Language learning strategies and its training model. *International Education Studies*, 3(3), 100-104.

- Litzler, M., García-Laborda, J. (2016). Students' Opinions about Ubiquitous Delivery of Standardized English Exams. Alcalá de Henares: Monográfico I, September 2016. Universidad de Alcalá. ISSN: 1697-7467
- Liu, F. (2010). Reading abilities and strategies: A short introduction. *International Education Studies*, 3(3), 153-157.
- Lopera, S. (2012). Effects of strategy instruction in an EFL reading comprehension course: A Case Study. *PROFILE- Issues in Teachers' Professional Development*, 14(1), 79-89.
- Lopera, S. (2014). Motivation conditions in a foreign language reading comprehension course offering both a web-based modality and a face-to-face modality. *PROFILE Issues in Teachers' Professional Development*, 16(1), 89-104.
- Lopes, A. (2014). Teaching with Moodle in Higher Education. Proceedings of EDULEARN 14 Conference 7th-9th July 2014, Barcelona, Spain. Retrieved from:  
<http://recipp.ipp.pt/handle/10400.22/622>
- Manimozhi, M. (2012). Vocabulary and reading comprehension. *Sacred Heart journal of Science and Humanities*, Vol. 1 (January-June 2012) 135-145.
- Manual for language test development and examining - For use with the CEFR. Language Policy Division, Council of Europe, April 2011. Retrieved from:  
[http://www.coe.int/t/dg4/linguistic/ManualLanguageTest-Alte2011\\_EN.pdf](http://www.coe.int/t/dg4/linguistic/ManualLanguageTest-Alte2011_EN.pdf)
- Markee, N. (2001) The diffusion of innovation in language teaching. In Hall, R. & Hewings (Eds.), *Innovations in English language teaching* (pp 118-126). London: Routledge.
- McNamara, D. (2009). The importance of teaching reading strategies. *Perspectives on language and literacy* 35(2), 34-38. The International Dyslexia Association.

- Mehigan, G. (2009) Word Knowledge and Vocabulary Development. *The Changing Landscapes of Literacy –Building Best Practice*. St. Patrick’s College: Reading Association of Ireland
- Melton, J. (2006). The LMS Moodle: A Usability Evaluation. Kumamoto: Prefectural University of Kumamoto. pp. 1–24. Retrieved from:  
<http://www.pukumamoto.ac.jp/~jay/pres/2006/melton2006.pdf>
- Mettetal, G. (2001). The what, why and how of classroom action research. *The Journal of Scholarship of Teaching and Learning (JoSoTL)*, 2(1). 6-13. Indiana University.
- Mishan, F. & Timmis, I. (2015). Materials development for TESOL. Edinburgh: Edinburgh University Press.
- Noles, J.D., & Dole, J.A. (2004). Helping adolescent readers through explicit instruction. In T.L. Jetton & J.A. Dole (Eds.). *Adolescent literacy research and practice*. New York, NY: Guilford Press.
- Nozawa, K. (2011). To Moodle or not to Moodle: Can It Be an Ideal e-Learning Environment? *Policy Science* 18.3 (2011): 289–312. Retrieved from:  
[http://www.ps.ritsumei.ac.jp/assoc/policy\\_science/183/183\\_19\\_nozawa.pdf](http://www.ps.ritsumei.ac.jp/assoc/policy_science/183/183_19_nozawa.pdf)
- Núñez Pardo, A., Pineda Báez, C & Téllez Téllez M. (2004). Key aspects for developing your instructional materials. *PROFILE- Issues in Teachers' Professional Development*, 5(1), 128-139.
- Núñez, A., Téllez, M., Castellanos, J. & Ramos, B. (2009). *A practical materials development guide for EFL pre-service, novice and in-service teachers*. Bogotá: Departamento de Publicaciones, Universidad Externado de Colombia.



- Núñez Pardo, A. & Téllez Téllez, M. (2009). ELT Materials: The key to fostering effective teaching and learning settings. *PROFILE- Issues in Teachers' Professional Development*, 11(2), 171-186.
- Núñez, A. & Téllez, M. (2012). *Using debates in the classroom: A pedagogical strategy for the development of the argumentative competence in the teaching of English as a foreign language*. Bogotá: Departamento de Publicaciones, Universidad Externado de Colombia.
- Núñez, A., & Téllez, M. F. (2015). Reflection on teachers' personal and professional growth through a materials development seminar. *HOW, A Colombian Journal for Teachers of English*, 22(2), 57-74.
- O'Malley, M.J. & Chamot, A.U. (1996) *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge Applied Linguistics.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York, NY: Newbury House.
- Oxford R. (2003). Learning styles & strategies: An overview. *Oxford, GALA 2003*.
- Pachón, A. (2013) *Improving the reading strategies awareness to shape undergraduate students' reading comprehension*. Unpublished Master's Thesis. Bogotá: Universidad Externado de Colombia.
- Pardo, L. S. (2004), What Every Teacher Needs to Know About Comprehension. *The Reading Teacher*, 58: 272–280.
- Pavicic, V. (2008). *Vocabulary learning strategies and foreign language acquisition*. Clevedon: Multilingual Matters.

- Ramos Holguín, B., & Aguirre Morales J. (2014). Materials development in the Colombian context: Some considerations about its benefits and challenges. *HOW, A Colombian Journal for Teachers of English*, 21(2), 134-150.
- RAND Reading Study Group. (2002). *Reading for understanding: Toward a research and development program in reading comprehension*. Santa Monica, CA: Office of Education Research and Improvement.
- Richards, J. C. & Rodgers T. S. (2001). *Approaches and methods in language teaching*. Second edition. Cambridge: Cambridge University Press.
- Richards, J. (2005) Materials development and research - Making the connection. *TESOL Convention, March 2005*. San Antonio, TX.
- Rudner, L. and W. Schafer (2002) *What Teachers Need to Know About Assessment*. Washington, DC: National Education Association.
- Saldaña, J. (2016). *The Coding Manual for Qualitative Researchers*, Third ed. Thousand Oaks, CA: Sage Publications.
- Saricoban, A. (2002). Reading strategies of successful readers through the three phase approach. *The Reading Matrix*, 2, 1-13.
- Sauvignon, S. (1991). Communicative language teaching: State of the art. *TESOL Quarterly*, 25(2), 261-277.
- Sneha, J.M., & Nagaraja, G.S. (2013) Virtual Learning Environments - A survey. *International Journal of Computer Trends and Technology (IJCTT)*, 4(6),1705-1709.
- Snow, C. (2002). *Reading for understanding: toward a research and development program in reading comprehension*. Santa Monica, CA: RAND.
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory*

- procedures and techniques*. Newbury Park, CA: Sage Publications.
- Strohmetz, D., & Rosnow, R. (2004). Artifacts in research process. In M. Lewis-Beck, A. Bryman, & T. Liao (Eds.), *The SAGE Encyclopedia of social science research methods* (pp. 26-28). Thousand Oaks, CA: SAGE Publications.
- Swan M. (1975). *Inside meaning - Proficiency reading comprehension*. Cambridge: Cambridge University Press.
- Thornbury S. (2002). *How to teach vocabulary*. Essex: Pearson Education Ltd.
- Tomlinson, B. (2003). Developing materials to develop yourself. *MELTA Conference*. Subang, Malaysia, May 2003.
- Tomlinson, B. (2003). *Developing materials for language teaching*. London: Continuum International Publishing Group.
- Tomlinson, B. (2011). *Materials development in language teaching*. Cambridge: Cambridge University Press.
- Tsai, Y., Talley, P. (2014). The effect of a course management system (CMS)-supported strategy instruction on EFL reading comprehension and strategy use. *Computer assisted language learning* 27(5). 422-438.
- Tudor, I. (2001). *The dynamics of the language classroom*. Cambridge: Cambridge University Press.
- Zhang, L. (2014). A structural equation modeling approach to investigating test takers' strategy use and reading test performance. *Asian EFL Journal* 16(1). 153-188.

## Appendices

### Appendix A: Needs analysis



#### Acerca de la comprensión lectora

##### a. Para leer textos académicos en inglés

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

##### b. Para comprender la idea general del texto

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

##### c. Para identificar el propósito central del texto

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

##### d. Para identificar información específica y detallada del texto

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

#### Acerca de los Ambientes Virtuales de Aprendizaje (Uso de la plataforma Moodle)

##### e. Para acceder a la plataforma de la Universidad

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

##### f. Para trabajar en las actividades de la plataforma solo(a)

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

##### g. Para entregar una tarea que ha sido asignada

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí

##### h. Para observar y entender la retroalimentación

- 1 Pienso que necesito mucha ayuda
- 2 Pienso que necesito algo de ayuda
- 3 Pienso que necesito poca ayuda
- 4 Pienso que es importante, pero no necesito ayuda extra
- 5 Pienso que no es importante para mí



**Mi desempeño como lector(a) en inglés**

5. Para esta pregunta, por favor seleccione la opción que mejor se ajuste para usted. ¿Cómo cree usted que ha sido su desempeño en comprensión de lectura (en inglés) a lo largo de su vida académica (colegio y universidad)?

- a. Sobresaliente
- b. Por encima del promedio
- c. Promedio
- d. Por debajo del promedio
- e. Bajo

**Datos biográficos**

Por favor, complete la siguiente información. Recuerde que su identidad permanecerá confidencial, y por tanto, no será divulgada.

1 Nombre:

Tu respuesta \_\_\_\_\_

2 Género:

- Masculino
- Femenino

3 Edad:

Tu respuesta \_\_\_\_\_

4 Semestre que cursa actualmente:

Tu respuesta \_\_\_\_\_

5 Programa académico

- Arquitectura
- Negocios Internacionales
- Ingeniería Mecatrónica
- Ingeniería Civil
- Diseño Gráfico
- Diseño de Espacios y Escenarios

**Muchas gracias por su cooperación!**

**Appendix B: Consent Forms**

Bogotá D.C. Agosto 04 de 2016

**Profesor**  
**JAIRO LÓPEZ FORERO**  
**Jefe Área Común Lengua Extranjera**  
**UNIVERSIDAD PILOTO DE COLOMBIA**  
**Ciudad**

Apreciado Profesor López,

Me dirijo respetuosamente a usted con el fin de hacer de su conocimiento que en este momento me encuentro realizando un proyecto de investigación titulado "The Impact of Moodle-based activities to enhance students' reading comprehension" ("Impacto del uso de actividades implementadas en Moodle para contribuir al mejoramiento de la comprensión lectora"), para optar al grado de Magíster en Educación con Énfasis en Didáctica del Inglés de la Universidad Externado de Colombia. Por tal motivo, acudo a usted para solicitar el permiso para ejecutar la investigación en esta institución.

El objetivo de este estudio es analizar el impacto del uso de estrategias de lectura a través del diseño de actividades virtuales, encaminadas al mejoramiento en la comprensión lectora.

Dentro de las actividades de investigación del proyecto en mención se requerirá efectuar una encuesta para analizar las necesidades de los estudiantes, y posteriormente la realización de una serie de talleres virtuales de comprensión lectora en inglés, con énfasis en el empleo de estrategias de lectura. El objetivo es capturar información acerca de las percepciones de los estudiantes alrededor de dichos talleres y los resultados obtenidos en ellos.

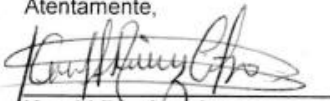
La participación en este estudio tomará diez (10) sesiones. La participación en este proyecto no representará ningún tipo de riesgo para los involucrados. Además, se garantizará el manejo confidencial que se dará a la información suministrada.

Se espera que la ejecución de este proyecto y sus resultados contribuyan significativamente al mejoramiento de las prácticas didácticas relacionadas con comprensión lectora en inglés, y a seguir promoviendo la efectiva implementación de actividades en la plataforma Moodle de la Universidad.

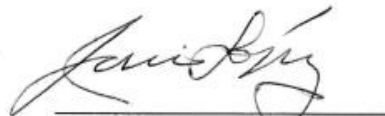
En ese sentido, solicito de manera atenta, su autorización para llevar a cabo este proyecto investigativo en las instalaciones de la Universidad con estudiantes de inglés, nivel 3, jornada diurna.

Para cualquier información, comunicarse al teléfono 300 564 5381 o al correo electrónico [karold-ramirez@unipiloto.edu.co](mailto:karold-ramirez@unipiloto.edu.co).

Atentamente,



**Karold Ramírez Castro**  
Docente – Área Común Lengua Extranjera  
Universidad Piloto de Colombia  
Estudiante de Maestría – U. Externado de Colombia



**Jairo Agustín López Forero**  
Jefe Área Común Lengua Extranjera  
Universidad Piloto de Colombia

**UNIVERSIDAD EXTERNADO DE COLOMBIA****Facultad de Educación****Maestría en Educación – Énfasis en Didáctica del inglés****Carta de consentimiento informado**

Usted ha sido invitado a participar en el estudio de investigación titulado "Working Virtually on Real Words: The impact of the use of Moodle-based activities to enhance students' reading comprehension" ("Impacto del uso de actividades implementadas en Moodle para contribuir al mejoramiento de la comprensión lectora"), a cargo de Karoll Ramírez Castro, estudiante de la Maestría en Educación con énfasis en Didáctica del Inglés de la Universidad Externado de Colombia. El objeto de esta carta es notificar su voluntad de participar en el estudio. Antes de que usted decida participar en el estudio por favor lea este consentimiento informado de manera cuidadosa. Por favor, no dude en hacer todas las preguntas que usted tenga, para asegurarse de que entiende los procedimientos a seguir y sus implicaciones.

El objetivo de este estudio es analizar el impacto del uso de estrategias de lectura a través del diseño de actividades virtuales, encaminadas al mejoramiento en la comprensión lectora.

Durante el curso de la investigación, usted realizará una serie de actividades virtuales relacionadas con estrategias para el desarrollo de la comprensión lectora, y podrá comunicar sus percepciones alrededor de dichas actividades.

La participación en este estudio tomará diez (10) sesiones; y no representará ningún tipo de riesgo para usted.

Este proyecto y su participación en el mismo, contribuirá significativamente al mejoramiento de las prácticas de clase relacionadas con comprensión lectora en inglés.

La investigadora mantendrá absoluta confidencialidad con respecto a cualquier información obtenida en este estudio. La información personal que usted suministre para efectos del proyecto de investigación permanecerá secreta y no será proporcionada a ninguna persona diferente a usted bajo ninguna circunstancia. Una vez se someta la información a análisis, su nombre será reemplazado por un código para fines de protección. Los datos obtenidos serán utilizados únicamente para esta investigación. Los resultados de esta investigación pueden ser publicados en revistas científicas o ser presentados en encuentros académicos, pero la identidad suya no será divulgada.

Su participación en el estudio es completamente voluntaria. Usted puede abandonar el estudio en cualquier momento, sin que esto le genere ningún tipo de penalización.

Si tiene cualquier pregunta acerca de esta investigación, puede contactar a Karoll Ramírez Castro, a través del número telefónico 300 564 5381 y del email [infoenglish3@gmail.com](mailto:infoenglish3@gmail.com). Si tiene alguna consulta o preocupación respecto a sus derechos como participante de este estudio, puede contactar a la dirección del Área Común de Lenguas Extranjeras de la Universidad Piloto de Colombia, al email [jairo-lopez@unipiloto.edu.co](mailto:jairo-lopez@unipiloto.edu.co)

**HE TENIDO LA OPORTUNIDAD DE LEER ESTA DECLARACIÓN DE CONSENTIMIENTO INFORMADO, HACER PREGUNTAS ACERCA DEL PROYECTO DE INVESTIGACIÓN, Y ACEPTO PARTICIPAR EN ESTE PROYECTO.**

---

Nombre del (la) participante

Fecha

---

Firma



**UNIVERSIDAD EXTERNADO DE COLOMBIA****Facultad de Educación****Maestría en Educación – Énfasis en Didáctica del inglés****Carta de consentimiento informado – Participación en actividad de Grupo Focal**

Como parte de su participación en el proyecto de investigación titulado "Working Virtually on Real Words: The impact of the use of Moodle-based activities to enhance students' reading comprehension" ("Impacto del uso de actividades implementadas en Moodle para contribuir al mejoramiento de la comprensión lectora"), a cargo de Karoll Ramírez Castro, estudiante de la Maestría en Educación con énfasis en Didáctica del Inglés de la Universidad Externado de Colombia, usted ha sido invitado a una actividad de discusión denominada "Grupo Focal". El propósito de esta carta es notificar su voluntad de hacer parte de la actividad. Por favor lea este consentimiento informado de manera cuidadosa antes de iniciar la discusión. Por favor, no dude en hacer todas las preguntas que usted tenga, para asegurarse de que entiende los procedimientos a seguir y sus implicaciones.

Esta actividad tendrá una duración aproximada de una (1) hora y quince (15) minutos. La investigadora formulará una serie de preguntas de discusión en la que los participantes expondrán sus puntos de vista libremente. Esta discusión será grabada en formato de audio Mp3.

Sus nombres o cualquier otra identificación personal no aparecerán en el informe final, con el fin de proteger su privacidad. Las grabaciones y transcripciones serán utilizadas únicamente para efectos de la investigación.

Su participación en esta actividad de Grupo Focal no supone ningún tipo de riesgo para usted. En caso de tener alguna pregunta o de solicitar alguna aclaración, se puede realizar sin inconveniente.

Si tiene cualquier pregunta acerca de esta investigación, puede contactar a Karoll Ramírez C., a través del número telefónico 300 564 5381, y del email [infoenglish3@gmail.com](mailto:infoenglish3@gmail.com). Ante cualquier inquietud respecto a sus derechos como participante de este estudio, puede contactar a la dirección del Área Común de Lenguas Extranjeras de la Universidad Piloto de Colombia, al email [jairo-lopez@unipiloto.edu.co](mailto:jairo-lopez@unipiloto.edu.co)

**HE TENIDO LA OPORTUNIDAD DE LEER ESTA DECLARACIÓN DE CONSENTIMIENTO INFORMADO, HACER PREGUNTAS ACERCA DE LA ACTIVIDAD DE GRUPO FOCAL QUE TENDRÁ LUGAR, Y ACEPTO PARTICIPAR EN ESTE PROYECTO.**

---

Nombre del (la) participante

---

Fecha

















---









Firma

## Appendix C: Self-Assessment form

## Self-assessment form – Worksheet No. 1

This is a survey in which you can express your perceptions and opinions about the activities you have developed in the worksheet.

<b>The worksheet</b>	<b>I strongly agree</b> 	<b>I agree</b> 	<b>I disagree</b> 	<b>I strongly disagree</b> 
1. The topic was relevant and useful.				
2. The worksheet was visually attractive.				
3. Instructions were clear, and easy to follow.				
<b>How I felt</b>	<b>I strongly agree</b> 	<b>I agree</b> 	<b>I disagree</b> 	<b>I strongly disagree</b> 
4. I enjoyed performing the worksheet.				
5. I feel that this topic is related to my life in some way.				
6. I feel like talking about this topic with my classmates after the session.				
7. I felt comfortable and confident when performing the activities.				
<b>The activities I developed</b>	<b>I strongly agree</b> 	<b>I agree</b> 	<b>I disagree</b> 	<b>I strongly disagree</b> 
8. The activities proposed helped me to understand the text better.				
9. I had the opportunity to explore new vocabulary related to the reading passage.				
10. The activities were challenging and fun.				
<b>My reading comprehension skills</b>	<b>I strongly agree</b> 	<b>I agree</b> 	<b>I disagree</b> 	<b>I strongly disagree</b> 
11. I can identify the main idea from the text, through the exploration of words, images and definitions.				
12. I can identify specific ideas and details by scanning, and identifying verbal clues and				

making inferences from the context.				
13. I can answer questions easily though inferences and supported decision-making.				
<b>My use of reading strategies</b>	<b>I strongly agree</b> 	<b>I agree</b> 	<b>I disagree</b> 	<b>I strongly disagree</b> 
14. I am able to explore my previous knowledge about a topic				
15. I am able to use visual and/or verbal clues to identify concepts				
16. I am able to scan the text to find specific information				
17. I am able to place new words into a context				
18. I can clarify and confirm ideas for answering questions				
<b>Working with the Moodle platform</b>	<b>I strongly agree</b> 	<b>I agree</b> 	<b>I disagree</b> 	<b>I strongly disagree</b> 
19. I managed to access the platform without any inconveniences.				
20. The platform's interface, where I can see the activities and the instructions was easy to work with.				
21. I needed to ask for help to a classmate or the teacher.				

**Appendix D: Focus Group Interview****Focus group Interview**

**Date: November 10<sup>th</sup>, 2016**

- 1 ¿De qué manera los talleres propuestos contribuyen al desarrollo y mejoramiento de su comprensión lectora en inglés?
- 2 ¿Qué aspectos consideran deberían mejorarse en los talleres?
- 3 ¿Cómo se ve evidenciado el progreso en la comprensión lectora a través de los tests que se aplicaron?
- 4 ¿Qué conexión encontraron entre las actividades realizadas y sus intereses y necesidades?
- 5 ¿Cómo pueden describir la experiencia que tuvieron al desarrollar los talleres?
- 6 En términos de atractivo visual, ¿Cuál es su opinión acerca de las actividades que se desarrollaron?
- 7 ¿Qué tan claras les resultaron las instrucciones para las actividades?
- 8 ¿Sobre qué temas o contenidos presentados quieren seguir indagando por tu cuenta? ¿Por qué?
- 9 ¿Qué tan fácil o difícil les resultó comprender los textos presentados?
- 10 ¿Hasta dónde percibieron mejoramiento en la comprensión lectora a lo largo del desarrollo de los talleres?
- 11 ¿Cuáles su percepción acerca del vocabulario de los textos y su incidencia en la comprensión?
- 12 ¿Qué aspectos positivos pueden señalar respecto al uso de la plataforma para los talleres propuestos?
- 13 ¿Qué aspectos negativos pueden señalar respecto al uso de la plataforma para los talleres propuestos?
- 14 ¿Qué tan amigable resultó la plataforma a la hora de trabajar los talleres?
- 15 En el momento de desarrollar los test ¿Tuvieron algún problema o anomalía en la plataforma?
- 16 ¿De qué manera consideran que las estrategias de lectura trabajadas en los talleres les ayudaron a comprender mejor los textos?
- 17 ¿Cuáles estrategias de lectura recuerdan más?
- 18 ¿Qué diferencias o similitudes percibieron ustedes entre los talleres y los tests respecto al uso de estrategias de lectura?
- 19 ¿Cuáles estrategias de lectura resultaron más efectivas para su proceso de aprendizaje?