



ABSTRACT

This thesis investigates the effective development of EFL reading and writing skills designed for students from 10th class at Unidad Educativa Salesiana María Auxiliadora (UESMA) in Cuenca, Ecuador, through the implementation of web-based activities as a tool to support the process. The application of surveys and questionnaires, as well as the analysis of students' written work provide data to recognize the problem and its implications in the development of the above mentioned skills.

The present research work is developed as follows: Chapter 1 deals with the definition of the problem, the justification and the objectives. Chapter 2 is concerned with the study and review of scientific theories of relevance to the research. In Chapter 3 the data collection of students' EFL learning difficulties and the analysis of students' learning styles serve as a base for the design of the web-based activities. Chapter 4 shows the benefits obtained through their application and use with students from 10th grade in order to support the hypothesis that argues for having a virtual learning environment (VLE) as a resource of teaching material. Finally, Chapter 5 communicates the conclusions drawn from the essential points developed throughout the research process. Additionally, some recommendations for future use in other institutions are given.

KEY WORDS: Web-Based Activities, Technology in Education, EFL (English as a Foreign Language), Reading and Writing Skills, Moodle, ICT, VLE.



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“Web-Based Reading and Writing Activities: Supporting the Learning of English as a Foreign Language (EFL) for Students of 10th Year of Basic Education at Unidad Educativa Salesiana María Auxiliadora (UESMA)”

Tesis previa a la obtención del Grado de Magíster en Lengua Inglesa y Lingüística Aplicada.

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Al presentar esta tesis como uno de los requisitos previos para la obtención del título de Maestría en Lengua Inglesa y Lingüística Aplicada, por la Universidad de Cuenca, autorizo al Centro de Información Juan Bautista Vásquez para que haga de esta tesis un documento disponible para su lectura, según las normas de la universidad.

Karina Elizabeth Alvarez Toromoreno

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DEDICATION

This thesis is dedicated to my loving, supportive and patient husband Pedro and my beloved children Jose and Valeria who have always stood by me and dealt with all my absences with a smile. Their faithful support is treasured in my heart. Thank you.

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INTRODUCTION

The undeniable presence of technology in people's lives in different fields such as medicine, education, work, industry, etc. and the popularity of internet in recent years have transformed ways of communication. Thanks to technology, people are permanently connected and countries are interlinked. However, technology in itself can be considered as a potential tool in education; the effectiveness of using this innovative way of communication in language acquisition through web-based environments can transform the traditional way to teach and make technology an essential tool to serve education.

The interest for applying Information and Communication Technologies (ICT) in education was born in this new decade where technology and all Internet devices have become part of the life of every student. The pivotal role of teachers in the presence of technology in students' lives demands an urgent change in common teaching practice to satisfy students' new interests and offer them new environments where they can learn better using technology. UNESCO reports "Information and communication technology (ICT) has become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education..." (8)

Teaching a foreign language has always been at the leading edge with respect to the teaching of other subjects, in both its methodology and the resources used. This idea suggests that teachers are constantly looking for the most suitable teaching approaches or methods that best suit their teaching contexts. Fortunately, there are strategies that teachers can use for providing students with a variety of possibilities to construct their knowledge. Kumaravadivelu points out the five macrostrategies for the second or foreign language teacher fundamental to pre-and in-service teacher education and self-improvement: "1) create learning opportunities in class; 2) utilize learning opportunities created by the learner; 3) facilitate negotiated interaction between



participants; 4) activate the intuitive heuristics of the learner; and 5) contextualize linguistic input.” (41)

In order to cultivate students’ reading and writing competence it is important to engage students in innovative learning processes that motivate them to learn. The present web-based project sets up well-designed activities using the virtual learning environment with the purpose of maximising students’ language-learning experience, as well as providing cognitive challenges to improve the acquisition of English as a Foreign Language. Warschauer explains “The value of online communication in second language learning has been attributed to how it combines the interactivity of speech with the permanence of writing...” (3)

The findings of the present research work will provide a useful framework of reference for teachers who are interested in initiating web-based courses.



ACRONYMS

ICT	Information and Communication Technologies	EFL	English as a Foreign Language
UESMA	Unidad Educativa Salesiana "Maria Auxiliadora"	ESL	English as a Second Language
EXE	Exe learning	Ss	Students
L1	First Language (Spanish)	CMS	Course Management System
L2	Second Language (English)	VLE	Virtual Learning Environment
CEF	Common European Framework	LMS	Learning Management System
CEFR	Common European Framework of Reference for Languages	ALTE	The Association of Language Testers in Europe



CHAPTER 1

THE PROBLEM

1.1 Teaching English within the Classroom Context at UESMA

According to the regulations stipulated by the Ministry of Education in Ecuador, the tenth graders are required to receive 6 English classes every week. Students at UESMA usually have a limited time, which is six 45-minute class hours for learning. During that period, they often feel the pressure to speak or write the foreign language and to correctly follow patterns available in the course book. Due to the limitation of time, most of the English teachers at UESMA cannot offer full reading and writing practice in class. Besides, they do not have additional time to train their students to write.

Reading is mostly a classroom activity. Reading comprehension skills have been considered as passive within the classroom context. Reading activities mostly involve skimming for overall understanding of short stories, scanning, inferring and reconstructing a text. Students often find difficulty in the process of word recognition where they lose interest in reading articles, short texts or stories; and language comprehension due to the complex grammar structures they find in the texts.

Writing well requires effort and a large amount of practice in composing, organizing, developing, and analyzing ideas. Students from 10th grade when writing paragraphs or short compositions within the classroom context generally produce texts that contain varying degrees of grammatical errors. Actually, most of them face many difficulties because their ability to write well is not a naturally acquired skill; it is usually learned by a set of activities provided by the teacher.



1.2 Justification

Nowadays, technology is considered as a great source of excellent teaching material in order to enhance students' achievement and teachers' learning; many teachers make use of free web sites that offer downloads of different kinds of activities that support the process inside the classroom. (Tinio, 3) In fact, due to the proliferation of personal and professional web sites, teachers have started designing, publishing and sharing their own material to improve and support the teaching and learning process.

Even though computing is taught as a subject in every educational institution, it should become a tool to support the teaching of every subject and used by all teachers in innovative ways to enhance the teaching process.

In order to rectify the difficulty of limited English teaching of EFL reading and writing in the school curriculum the present project set up the web-based reading and writing activities using the virtual learning environment (VLE/Moodle) for 10th grade students to practice in different settings in and out of school. The present methodological proposal aims to support the learning of EFL using the VLE of the institution, a software system designed to support the teaching and learning process, to provide interactive and visually attractive material to get students hooked on learning and to integrate Information and Communication Technologies (ICT) in education at UESMA. Lovato explains that "The term *Information and Communication Technologies* (ICT) refers to the combination of computer technology and telecommunication technology, which is particularly strong in the *World Wide Web* (WWW). (41)

Additionally, the use of the VLE enables access to a wide range of tools such as: forums, e-mail, video conferences, chats, online evaluation, tests and active links with the Internet. Moreover, this VLE offers the possibility to access a diversity of resources



including museums, libraries, databases and archives. It also includes innovative and more interactive models of teaching where students become active participants.

Nearly all the courses at UESMA are taught in traditional classrooms. However, changing the classroom environment into technology-integrated settings may result in more creative and motivating learning experiences.

This research is meant to contribute to the teaching and learning process of EFL at UESMA in order to obtain superior results in reading and writing skills by the time students finish their high school years. A positive consequence obtained from this research is the employment of the virtual learning environment of the institution for educational purposes, in general.

1.2.1 GENERAL OBJECTIVE

To improve EFL reading and writing skills through the development of web- based activities for students of 10th year of Basic Education.

1.2.2 SPECIFIC OBJECTIVES

- a.** To diagnose the problem with the teaching of EFL reading and writing skills by analyzing the difficulties students face when developing reading and writing activities within the classroom context at UESMA.
- b.** To propose a certain number of web-based reading and writing activities to be developed in the virtual learning environment based on the diagnosis in **a)** above.
- c.** To adapt the activities in **b)** to the virtual learning environment taking into account students' learning styles, interests and needs.



- d. To validate the success of the proposal through the analysis of the students' level of involvement and performance towards using web-based activities as a tool for the improvement of their reading and writing skills.

1.3 RESEARCH QUESTIONS

- 1) What difficulties do my 10th grade students have in reading skills?
- 2) What difficulties do my 10th grade students have in writing skills?
- 3) Will web-based activities focused on the difficulties in **1)** above help my students to improve their reading skills?
- 4) Will web-based activities focused on the difficulties in **2)** above help my students to improve their writing skills?

1.4 HYPOTHESIS

The development of web-based activities makes the virtual learning environment of the institution an effective tool to improve the development of EFL reading and writing skills.

1.4.1 Independent Variable

- The development of web-based reading and writing activities based on diagnosed difficulties.

1.4.2 Dependent Variable

- Improvement in students' reading and writing skills.



CHAPTER 2

THEORETICAL FRAMEWORK

The philosophical underpinning of knowledge of learning theories which constitutes the main referent in educational practice validates the technical and scientific analysis of the teaching process and provides the base to carry out educational projects in the course of time. In order to produce high levels of understanding in students and prepare them to perform successfully in daily and professional life, it is essential to construct more effective ways of managing teaching and learning processes associated with various academic disciplines. In this sense it is crucial to understand how people learn and why they learn in that way, to adjust our teaching taking care of each student's needs.

The theoretical background of this study, as discussed below, has been derived from a search of theoretical models considered relevant to sustain the proposal of using web-based reading and writing activities in order to support the learning of English as a foreign language for 10th grade students. This research process defines the educational setting and the virtual environment, and provides an overview of the main facts about technology in education.

2.1 Learning Theories of Relevance to the Research

This review of learning theories attempts to provide an overview of important aspects of human learning particularly relevant to the development of this research. Additionally, it presents a deep understanding of how students learn and provides some important ways to determine their strengths and weaknesses.



2.1.1 Constructivism

As a philosophy of learning, constructivism can be traced to the eighteenth century, which holds that learning occurs as learners are actively involved in a process of meaning and knowledge constructions as opposed to passively receiving information.

This theory is used to explain how people know what they know, and how they make sense of everything. By this view, learning is thus an active process that produces a change in the learner, a process where the individual is involved from infancy to adulthood.

According to Piaget, our relation with the world is mediated by the mental constructions we can obtain from it, which are organized in a way of structures that vary qualitatively in the evolutionary process of the individual. Additionally, he suggested that some of the fundamental categories from reality are not in reality, itself; they are in our own minds, this reality is being interpreted according to the schemas previously constructed in the human mind. The new knowledge is not a copy of reality; it is a construction of the human being through his experimentation with the external world. (Glaserfeld 2)

The following guiding principles of constructivism provided by Simon (19) are considered imperative for the development of the present web-based and any other learning project.

-
1. Knowledge is actively constructed by the individual.
 2. Learning is both an individual and a social process.
 3. Learning is a self-regulated process.
 4. Learning is an organizational process that enables people to make sense
-



of their world.

5. Cognition serves the organization of the experiential world, not the ontological reality. Truth as viability not validity.
 6. Reality represents an interpretation.
 7. Learning is a socially situated activity that is enhanced in meaningful contexts.
 8. Language plays an essential role in learning. Thinking takes place in communication.
 9. Motivation is a key component in learning.
-

Constructivism plays an important role for teaching; as a matter of fact; it cannot be viewed as simple transmission of knowledge. A constructivist teacher and a constructivist classroom are distinguished from a traditional teacher and classroom by a number of identifiable qualities: the learners are actively involved, the environment is democratic; the activities are interactive and student-centered; and the teacher facilitates a process of learning in which students are encouraged to be responsible and autonomous. But what conditions are classroom teachers creating to help students construct their own knowledge? Brooks and Brooks (1) offer 12 descriptors which provide a guide to help teachers understand what the role of constructivist teachers is.

1. Constructivist teachers encourage and accept student autonomy and initiative.
 2. Constructivist teachers use raw data and primary sources, along with manipulative, interactive, and physical materials.
 3. When framing tasks, constructivist teachers use cognitive terminology such
-



as “classify,” “analyze,” “predict,” and “create.”

4. Constructivist teachers allow student responses to drive lessons, shift instructional strategies, and alter content.
 5. Constructivist teachers inquire about students’ understandings of concepts before sharing their own understandings of those concepts.
 6. Constructivist teachers encourage students to engage in dialogue, both with the teacher and with one another.
 7. Constructivist teachers encourage student inquiry by asking thoughtful, open-ended questions and encouraging students to ask questions of each other.
 8. Constructivist teachers seek elaboration of students’ initial responses.
 9. Constructivist teachers engage students in experiences that might engender contradictions to their initial hypotheses and then encourage discussion.
 10. Constructivist teacher allow wait time after posing questions.
 11. Constructivist teacher provide time for students to construct relationships and create metaphors.
 12. Constructivist teachers nurture students’ natural curiosity through frequent use of the learning cycle model.
-

Constructivist teaching fosters critical thinking, and creates motivated and independent learners. Williams and Burden explain that according to Piaget the essential aspect of learning is “...the central process of cognitive adaptation.” (22), it becomes an important aspect to language teachers considering that students are actively engaged in constructing meaning; they are able to make sense of the input received and give meaning to the tasks planned for them. The authors emphasize how efficient the teachers’ ability has to be to encourage students to get involved in the process instead of considering them as passive receptors of the language.



2.1.2 Cognitive Development

The subjects of the research are 10th Graders, so it is necessary to focus on the cognitive development of this age group.

As stated by Piaget, cognitive development proceeds in sequence through different stages of reasoning.

Sensory Motor Stage (birth to about age 2),

- 1) The Preoperational Stage (2-7 years),
- 2) Stage of Concrete Operations (7-12 years),
- 3) Stage of Formal Operations (12 years and onwards).

Students who are in 10th grade belong to the Formal Operations stage, which is the fourth period of cognitive development of Piaget's theory. It starts at around 12 years old and continues into adulthood.

This period is characterized by the fact that the students move from concrete experiences to abstract reasoning, their thinking is systematic, and data are collected-by inference, deduction, and reflection.

The development of thinking at this age is influenced by important developmental advances that establish adolescents' sense of identity. During the years between 12 and 14 they arrive at adulthood by becoming competent, independent, self-aware, and involved in the world beyond their families.

Furthermore, biological and cognitive changes transform teens' bodies and minds. Social relationships and roles change dramatically. They enter high school, join programs, and become involved with peers and adults outside their families. According to Williams and Burden, Erikson sees adolescence as "a period within which the search for identity provides the key challenge." (32)

With the aim of improving the development of students' reading and writing skills, every activity must be prepared matching the requirements which correspond to the students cognitive level so that they can be capable of performing tasks in a superior



way. Williams and Burden cite Bruner "...the development of conceptual understanding and of cognitive skills and strategies is a central aim of education..." (24)

Teachers must facilitate the development of students' thinking capacity, and provide activities where they can be involved in experiments and have opportunities to apply the tools of inquiry to discover and validate knowledge. On this issue, Erikson considers that the role for teachers at this age is "...to foster this sense of personal identity by encouraging learners to make decisions for themselves..." (Williams and Burden, 32)

2.1.3 Social-Constructivism

The theory of social-constructivism emphasizes the social construction of reality through human interaction by sharing knowledge, understandings, and expectations.

Social constructivism has its roots in Vygotsky's theories of teaching and learning. It has provided a new perspective to children's growth and development. According to Williams and Burden, "Vygotsky emphasizes the importance of language in interacting with people; not just speech, but signs and symbols as well. It is by means of language that culture is transmitted, thinking develops and learning occurs." (40) For Vygotsky both teachers and students act as mediators who promote students' learning, and this can be accomplished with his concept of the Zone of Proximal Development (ZPD). This concept describes the type of environment that enables the students to develop cognitively. The presence of another person, not necessarily more mature or competent adults or peers, but those people who are able to help the students develop and enrich their learning process by encouraging them to use the necessary tools in order to move into the next stage of development.



Williams and Burden explain that “Social interactionism emphasizes the dynamic nature of the interplay between teachers, learners and tasks, and provides a view of learning as arising from interactions with others” (43).

The learning environment must be authentic, that is, provide students with people who use the language in a natural way. Furthermore, the activities used in this environment must be authentic providing students with more opportunities to develop cognitive skills necessary to be effective learners.

2.1.4 Learning Styles

The term **Learning Styles** refers to the view that people learn in different ways. People have a preferred learning style which is the way they learn best.

Learning is affected by learning styles and in the case of students who are able to employ multiply learning styles learning outcome is higher. Since learning styles play a crucial role in the learning process, all activities should address and accommodate them taking into account every individual preference.

There are many learning styles theories, but in order to narrow the scope of learning theories, the author of the present research work has decided to give a general overview of the most common Learning Styles.

The most common learning style types are known as **VAK**. **VAK** stands for **V**isual (people learn mainly through seeing), **A**uditory (they learn mainly through hearing), and **K**inesthetic (they learn through touching/doing). These are referred to as perceptually-based learning styles. (Lightbown and Spada, 59)

According to the VAK model most students may have a combination of two or all three leaning styles and these cannot necessarily stay the same, they can change and develop.

Gardner’s theory of Multiple Intelligences (MI) states that people learn through a combination of different intelligences. These include visual-spatial, bodily-kinesthetic,



musical, inter and intrapersonal, linguistic, logical-mathematical, naturalistic, and spiritual. This theory suggests that each individual possesses different forms of intelligence in varying degrees; some may be stronger than others and they serve individuals to learn better. (Dillon, 117)

Myers and Briggs in their Myers-Briggs Type Inventory (MBTI) identify sixteen learning styles, which are a combinations of the following four preferences: extraversion versus introversion (extrovert and introvert students), sensing versus intuition (sensing and intuitive students), thinking versus feeling (thinking and feeling students), and judging versus perceptive (decisive and perceptive students). (Harris et, al.16-18)

Gagné's theory of learning styles is based on the learners' intellectual skills and eclectic behaviorism. This theory explains that learning takes place through attention, encoding, and retrieval of information. Harris et, al. clarify that Gagné examines five major categories of learning: verbal, such as learning an English word; intellectual skills; such as learning a math formula; cognitive strategy or logical reasoning; attitude; and motor skills. (18)

Other ways to define learning styles take into account how people perceive and process information in this field. For David Kolb students can be accommodators, divergers, assimilators, and convergers. For the purpose of the present research work, Kolb's learning styles are used to define 10th grade students' learning preferences. Kolb's experiential learning cycle is described in the following section.

2.1.5 Experiential Learning

Experiential learning attempts to allow students to learn by doing with the purpose of achieving many practical and effective skills such as: creative thinking, problem solving, confidence in performing tasks, outstanding use of knowledge in any situations and the ability to work cooperatively.



Experiential education is an instructional approach based on the idea that ideal learning occurs through experience. The main goal is to provide students with skills and knowledge connected with the real world.

Kolb et al. (1999) define experiential learning as "...the process whereby knowledge is created through the transformation of experience. Knowledge results from the combinations of grasping and transforming experience" (2).

As explained by Dede, Kolb bases his own theory of learning upon the origins of experiential learning theory in the works of John Dewey, who considered that learning should be based on experience; Kurt Lewin, who emphasizes the active participation of the individual in his learning process; and Jean Piaget, who defined intelligence as a result of the individual and his contact with the environment. (20)

According to Kolb's theory, learning is built on six propositions: 1) Learning is best conceived as a process where the main objective is to engage students in a procedure that best enhance their learning. 2) All learning is relearning, learning is effective when it draws out the students' beliefs and ideas. 3) Learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world. 4) Learning is a holistic process of adaptation to the world. 5) Learning results from synergetic transactions between the person and the environment. 6) Learning is the process of creating knowledge. (Kolb et al., 2)

As a result, experiential learning combines active learning with concrete experiences, abstract concepts, and reflection in an effort to engage all learning styles. Kolb's theory describes learning as the combination of experiences, knowledge, perception and behavior. Furthermore, he identifies four different abilities students need in order to learn effectively. They are:

- ❖ Concrete Experience
- ❖ Reflective Observation



- ❖ Abstract Conceptualization
- ❖ Active Experimentation

Concrete experience and abstract conceptualization explain how an individual perceive knowledge, while reflective observation and active experimentation explain how an individual processes knowledge.

Figure 1 represents Kolb's cyclical model of learning, consisting of four stages.

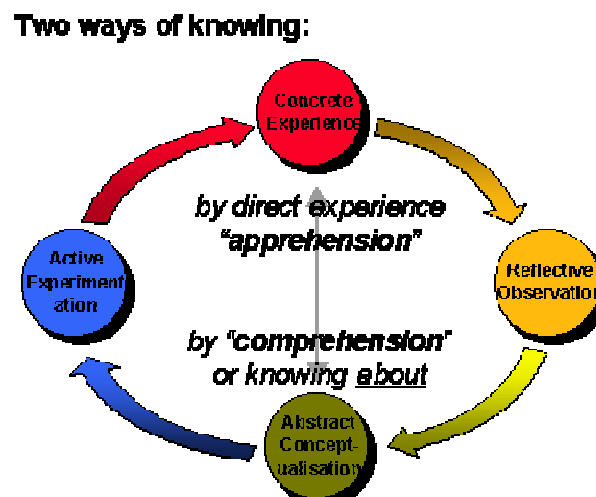


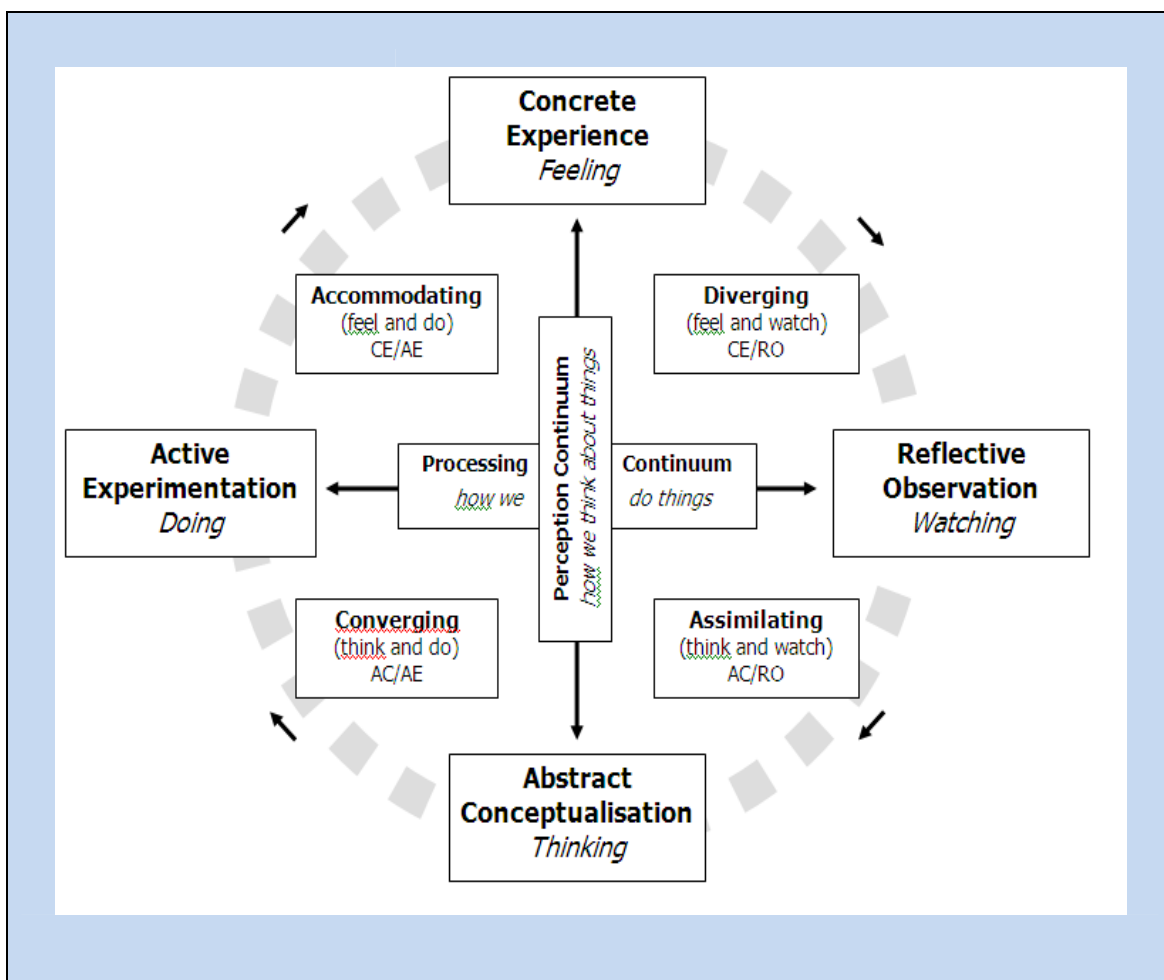
Fig.1.The Experiential Learning Cycle.

The first learning style, Concrete Experience, put emphasis on personal experience and feelings in a learning situation. Using the Reflective Observation style students rely heavily on personal thoughts and feelings manifesting patience, objectivity judgment and the ability to understand ideas and problems. The Abstract Conceptualization style describes students' independent ability to logically analyze



ideas; this is also called thinking strategy. The last style, Active Experimentation, engages students in an active learning mode. (Zacharis 2).

Figure 2 shows a diagram of Kolb's learning styles.



Source: Alan Chapman based on Kolb's Learning Styles¹

Fig. 2. Kolb's Learning Styles.

¹ <http://www.businessballs.com/freepdfmaterials/kolblearningstylesdiagram.pdf>. 20 January 2011



According to the above diagram, different factors influence a person's favored style, in other words, a student can decide whether to **do** or **watch**, and at the same time to **think** or **feel**. The result of the decisions gives the preferred learning style. Students choose a way of grasping the experience, which identifies their approach to it, and then, they select a way to convert the experience into something significant and functional, which defines their emotional response to the experience. Their learning style is a product of these two choice decisions.

Terrell explains that "...the process of constructing knowledge in different learning situations involves a creative combination among the four learning modes that is responsive to contextual demands." (2)

As a result of the combination of the four learning modes we have the following learning styles:

- **The Accommodating Learning Style (CE and AE i.e. Feeling and Doing).** - Students perceive knowledge through the concrete experience path and process it through active experimentation. Students like doing things and solving problems in an intuitive, trial-and-error manner.

Accommodators are polar opposites from Assimilators (See below). Their strength lies in working out plans and experiments and engaging themselves in new experiences.

- **The Diverging Learning Style (CE and RO i.e. Feeling and Watching).**- Students perceive knowledge through the concrete experience method and process it through reflective observation. Students are good at identifying



problems and gathering information, they are imaginative and aware of meanings and values, and tend to be feeling-oriented.

Divergers are opposite from Convergents (See below). They show great ability to create and imagine. They excel in the ability to generate many ideas.

- **The Assimilating Learning Style (AC and RO i.e. Thinking and Watching).** - Students perceive knowledge through abstract conceptualization and process it through reflective observation. They are good at reasoning and synthesizing many ideas and observations. For this reason, they enjoy thinking of abstract ideas and concepts, creating alternative solutions and working on projects and experiments.
- **The Converging Learning Style (AC and AE i.e. Thinking and Doing).** – Students perceive information through abstract conceptualization and process it through active experimentation. They enjoy taking decisions, solving problems and applying ideas in practice.

2.1.6 Learning Strategies

Learning strategies determine the approach for achieving the learning objectives and are included in every instructional activity, learning activities, information, testing, etc. Learning strategies meet students' needs and interests and enhance their learning process.

According to Christensen, Friend (1) identifies 7 steps in order to meet diverse learning needs in what he calls **INCLUDE** strategy. They are: (a) Identify classroom environmental, curricular, and instructional demands, (b) Note students' strengths and needs, (c) Check for potential areas of students' success, (d) Look for potential problem



areas, (e) Use information gathered to brainstorm instructional adaptations, (f) Decide which adaptations to implement and (g) Evaluate students' progress.

Learning strategies will compensate for the weaknesses of a learning style and maximize the strengths of a learning style powerfully. Teachers may teach their students some strategies that will help them find those which are effective for studying; as a result, they will be able to study successfully. Furthermore, Mulcahy and Caverly point out the importance of students' awareness about the way they learn. "The successful student is a discriminating decision-maker, an expert who has cultivated a repertoire and fine-tuned study-reading strategies..." (177).

O'Malley and Chamot define learning strategies as being "operations or steps used by a learner that will facilitate the acquisition, storage, retrieval or use of information" (23). They provide a three-part strategy classification consisting of: metacognitive (knowing about learning), cognitive (specific to distinct learning activities) and socio affective (interactional strategies in language learning). These are detailed in figure 3.



METACOGNITIVE STRATEGIES	COGNITIVE STRATEGIES	SOCIOAFFECTIVE STRATEGIES
Advance Organizers	Repetition	Cooperation
Directed Attention	Resourcing	Question for Clarification
Selective Attention	Translation	
Functional Planning	Grouping	
Self-Monitoring	Note Taking	
Delayed Production	Deduction	
Self-Evaluation	Recombination	
	Imagery	
	Auditory Representation	
	Keyword	
	Contextualization	
	Elaboration	
	Transfer	
	Inferencing	

Source: O'Malley et al., Learning Strategies, 1985. Table 5.2.

Fig. 3. Learning Strategies.



2.1.7 Theories of Motivation

Motivation as one of the principles of constructivism is a key component in learning. It is considered as an essential part in the learning process. Mitchell & Miles explain that "...motivation is a complex construct, defined by three main components: 'desire to achieve a goal, effort extended in this direction, and satisfaction with the task'". (26) According to their point of view, teachers must consider strategies which keep students hooked on learning providing them with interactive activities and real learning environments.

Ellis explains that "Motivation can be causative (i.e. have an effect on learning) and it can be resultative (i.e. be influenced by learning). It can be intrinsic (i.e. derive from the personal interests and inner needs of the learner) and it can be extrinsic (i.e. derive from external sources...)." (37) Carreira affirms that intrinsic motivation engages students in an activity for its own sake. (227)

Our role as educators obliges us to consider that our students' level of motivation changes according to their age. Ellis states that motivation is a variable aspect which can change over time by the influence of external factors. (36)

A recent study carried out by Carreira found a significant decline in motivation for learning English which decreases with age. He explains that for Lepper and Hodell there are "four major sources of intrinsic motivation related to tasks: *challenge*, *curiosity*, *control* and *fantasy*." (227)

For Carreira, students need authentic tasks which have meaning; they should be given opportunities to use the language in real situations and to know how people use the foreign language in different contexts. Using English in meaningful contexts will enhance their intrinsic motivation. (228, 229)

Figure 4 provides a summary of the main characteristics of each source of intrinsic motivation.



Challenge

- Students work towards personal meaningful goals.
- Feedback is imperative.

Curiosity

- The environment must stimulate students' interest to learn.
- Tasks attract the students' attention.
- Links present knowledge to what they could do in more sophisticated activities.
- Tasks stimulate cognitive curiosity by making students wonder about something.

Control

- Students understand the cause and effect between an action they will take and the result.
 - Students choose how to go about learning.
 - Students can decide when and how they will perform the activities.
-

**Fantasy**

- Students use the information learned in real-life settings.
- Students can use mental images of things or situations that are not actually present.
- They can imagine themselves in situations that are motivating.

Source: Adapted from "The Factors That Promote Intrinsic Motivation."²

Fig. 4. Sources of Intrinsic Motivation.

Students can also be motivated through competition because of the satisfaction they feel when comparing their performance to others. They can also learn better from cooperation and recognition.

Additionally, positive attitudes and motivation promote success in learning. Brown explains that "Any learning situation can be meaningful if (a) learners have a meaningful learning set – that is, a disposition to relate the new learning task to what they already know, and (b) the learning task itself is potentially meaningful to the learners – that is, relatable to the learner's structure of knowledge." (85)

2.2 Language Learning Theories of Relevance to the Research

Awareness of how languages are learned is a part of the essential background of any language teacher. In order to understand how students acquire the second language it is helpful to explore the theoretical foundations of second language learning (SLL). As explained by Mitchell and Myles, teachers require understanding SLL for two

² http://education.calumet.purdue.edu/vockell/edPsybook/Edpsy5/edpsy5_intrinsic.htm, 15 March 2011



essential reasons: “Because improved knowledge in this particular domain is interesting in itself...” It can contribute to a better understanding of the nature of language, human learning and intercultural communication, and the human mind itself. Also, “Because the knowledge will be useful...we become better at explaining the learning process, and better able to account for both success and failure in SLL...” (6)

Moreover, the understanding of second language acquisition may improve the teachers’ ability to serve the culturally and linguistically diverse students in their classrooms.

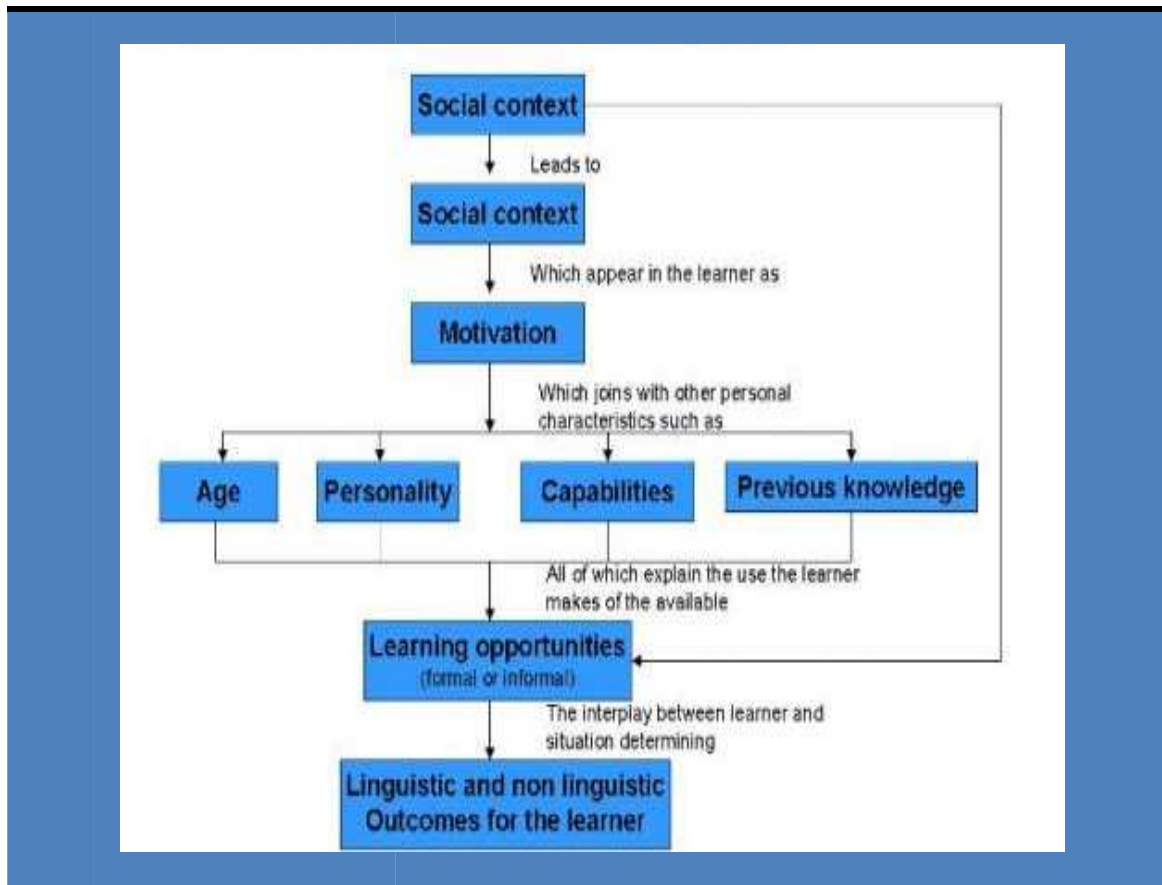
2.2.1 Spolsky’s Model of Second Language Learning

Spolsky’s model covers a number of varying factors that influence students’ second language acquisition. As explained by Mitchell & Myles, Spolsky finds an important relation between contextual factors, individual learner differences, learning opportunities and learning outcomes. (7)

According to his model the social context of the learner provides him/her formal or informal learning opportunities and leads him/her to build up certain attitudes. These attitudes appear in the learner as motivation to learn the second language. Motivation along with personal characteristics such as age, personality, capabilities and previous knowledge explain how the learner will use that learning opportunities in a given situation.

This theory gives importance to the social context of the learner but clarifies that there are personal factors which can influence the successful acquisition of the second language. Factors such as age and capabilities must be considered and analyzed in a deep way in order to help the learner in his/her process of language acquisition.

Figure 5 shows Spolsky’s general model of second language learning.



Source: Mitchell & Myles. Second Language Learning Theories 8.

Fig. 5. General Model of Second Language Learning.

Many factors can influence the success of students' language learning, as stated by Mitchell & Myles, Gardner and MacIntyre identify cognitive and emotional factors. Cognitive factors include: Intelligence, language aptitude and language learning strategies. Emotional or affective factors include: language attitudes, motivation and language anxiety, and willingness to communicate. (25) These two perspectives have concentrated on universal characteristics and on individual characteristics.



The most important factor in teaching and learning in any setting is the learner. Second Language Learners of any age differ from one another in significant ways: some learn best through listening or reading activities, they may require visual reinforcement or verbal explanations; others learn more easily alone or within a small group, they may respond better to interactive activities, etc.

It is also important to view the second language learner as a social being. The social context of the learner is considered as dynamic, reflexive and constantly changing. Throughout the process of interaction the second language learners have the possibility to manipulate the input they need in order to better understand new information. Additionally, they are likely to have more chances to receive additional input and produce new output out of it. Mitchell & Miles state “The learning process itself may also be viewed as essentially social, and inextricably entangled in second language use and second language interaction.” (27)

2.2.2 Krashen’s Theory of Second Language Acquisition

A concept endorsed by most language acquisition theorists is Stephen Krashen’s theory of second language acquisition. As explained by Ellis, Krashen’s theory consists of five main hypotheses: the Acquisition-Learning Hypothesis, the Monitor Hypothesis, the Natural Order Hypothesis, the Input Hypothesis, and the Affective Filter Hypothesis. The Input Hypothesis is considered as the most important one according to which “learners acquire morphological features in a natural order as a result of comprehending input addressed to them” (27)

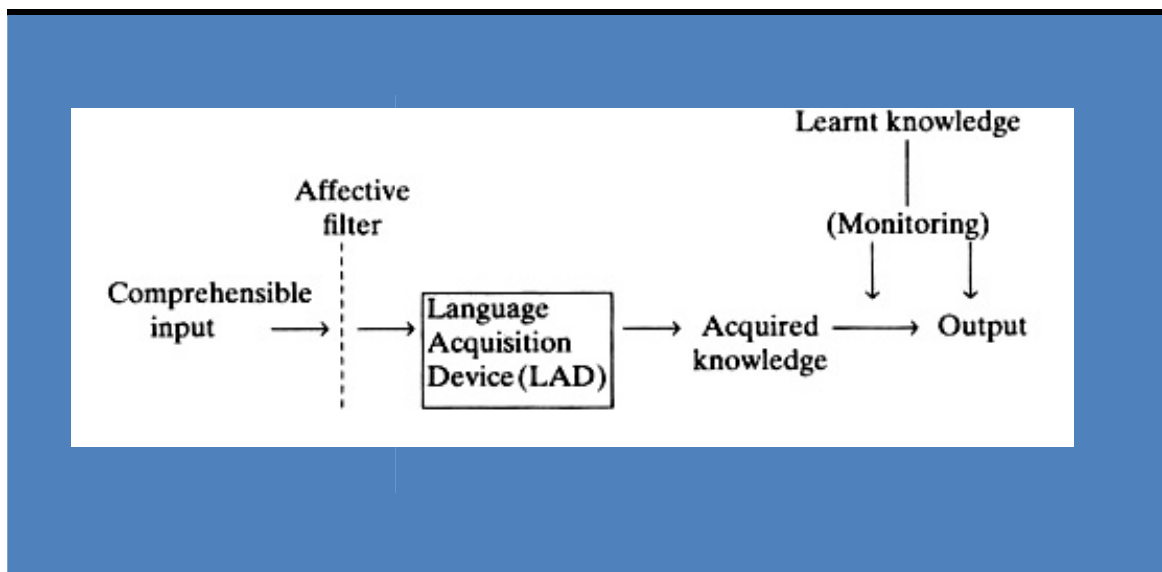
The input hypothesis attempts to explain how second language acquisition takes place. Krashen’s theory argues it is essential not to focus on explicit grammatical structures or learning activities but rather to occupy classroom time with acquisition tasks or activities. Learners must not be forced to produce early. Their production



cannot be taught directly. After a certain amount of comprehensible input is received, they can start producing their own structures. Comprehensible input is responsible for progress in language acquisition. Output is possible as a result of acquired competence.

Figure 6 shows Krashen's combined model of language acquisition and production.

Model of Language Acquisition and Production



Source: Krashen's Comprehension Hypothesis Model of L2 learning³

Fig. 6. Model of Language Acquisition and Production.

The affective filter defines the relationship between affective variables and the process of second language acquisition. Brown affirms "The 'affective filter' is a metaphorical barrier that prevents learner from acquiring language even when

³ <http://homepage.ntlworld.com/vivian.c/SLA/Krashen.htm> 11 June 2011.



appropriate input is available. 'Affect' refers to feelings, motives, needs, attitudes, and emotional states." (37). Motivation at this stage plays an important role since students with positive attitudes to acquiring a second language will obtain more input in a low anxiety situation provided by an effective language teacher.

Besides, teacher talk is an important source of comprehensible target language input; it includes organizing class activities, facilitating acquisition process and the explanations of language input. In order to make students understand what the teacher says, it is necessary that the teacher uses simple vocabulary and less complex syntactic structures to be understood and provide comprehensible input for students.

Additionally, Moussa explains the importance of social interaction in second language learning "Throughout the process of interaction the second language learners have the possibility to create the input they need in order to better understand new information... they are likely to have more chances to receive additional input and produce new output out of it." (2)

Social interaction serves as a tool for students to create strategies with the purpose of helping each others in solving problems in order to effectively acquire the new knowledge. Mitchell and Myles indicate that "Learning is considered as a socially mediated process as it is not only mediated through the developing use and control of psychological tools (e.g. language, resources, technologies), but also relies on interaction and shared processes." (130) As a result, students engage in systems of cooperation and co-constructing experiences with others.

2.2.3 Language Learning Styles and Strategies

Language learning styles and strategies are the main factors that help determine how and how well students learn EFL. English is a language studied at UESMA in a setting where that language is not the main way of everyday communication and where



there is not enough input to be easily acquired. According to Oxford, “teachers can actively help students “stretch” their learning styles by trying some strategies that are outside of their primary style preferences.” (362)

Language learning styles are defined by Oxford as “general approaches- for example, global, or analytic, auditory or visual –that students use in acquiring a new language or in learning any other subject.” (2) Oxford cites Cornett “language learning styles are the overall patterns that give general direction to learning behavior.” (2) She finds four dimensions of learning style associated with second language learning: sensory preferences (visual, auditory, kinesthetic, and tactile), personality types (extraverted vs. introverted; intuitive vs. sensing; thinking vs. feeling; and closure vs. open), desired degree of generality (global or holistic and analytic), and biological differences (biorhythms, sustenance, and location). (Oxford 1-8)

Oxford defines language learning strategies as “specific actions, behaviors, steps, or techniques – such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task –used by students to enhance their own learning” (359). Moreover, Ellis states, “Learner strategies are conscious or potentially conscious; they represent the learner’s deliberate attempts to learn.” (37)

According to Oxford there are six groups of Language learning strategies taking into account the taxonomies offered by O'Malley and Chamot, they are: cognitive, metacognitive, memory-related, compensatory, affective, and social. Cognitive strategies help learners to manipulate the language material in direct ways. Metacognitive strategies are employed for managing the learning process overall, Memory-related strategies help learners to join concepts, Compensatory strategies help learners make up for missing knowledge, Affective strategies and Social strategies help students to look for opportunities to use the language to communicate (363).



However, in any act of language learning it is the teachers' ability that facilitates the effective use of the language inside and outside the classroom through a specific teaching and learning process that fits the particular students' learning strategies and styles. Oxford explains that "If there is harmony between (a) the student (in terms of style and strategy preferences) and (b) the combinations of instructional methodology and materials, then the students is likely to perform well, feel confident, and experience low anxiety." (3) As maintained by the author, "skilled teachers help their students develop an awareness of learning strategies and enable them to use a wider range of appropriate strategies." She also explains that learning strategies are considered as "...specific behaviors or thoughts learners use to enhance their language learning. These factors influence the student's ability in a particular instructional framework." (362).

2.3 Communicative Competence

When students learn a foreign language they do not only acquire the knowledge of rules of grammar, but also the ability to use the language to communicate. To know a language means more than how to understand, speak, read, and write sentences, but how sentences are used to communicate.

Brown explains that Hymes defines communicative competence as knowledge of the rules for understanding and producing both the referential and social meaning of language. (246) The Common European Framework (CEF) defines the communicative language competences as "those which empower a person to act using specifically linguistic means." (9)

For the awareness of communicative objectives, students should bring to bear their general capacities to communicate with a more particularly language-related communicative competence. Towards achieving the aims of the project for 10th graders



it is important to reflect on the CEF components of the communicative competences for level A2 (Waystage).

-
- **Linguistic competence;**
 - **Sociolinguistic competence;**
 - **Pragmatic competence.**
-



2.3.1 Linguistic Competence is defined as the knowledge of, and the ability to use, the formal resources forming meaningful messages.

GENERAL LINGUISTIC RANGE	
A2	<p>Has a repertoire of basic language which enables him/her to deal with everyday situations with predictable content, though he/she will generally have to compromise the message and search for words.</p> <p>Can produce brief everyday expressions in order to satisfy simple needs of a concrete type: personal details, daily routines, wants and needs, requests for information.</p> <p>Can use basic sentence patterns and communicate with memorized phrases, groups of a few words and formulae about themselves and other people, what they do, places, possessions, etc.</p> <p>Has a limited repertoire of short memorized phrases covering predictable survival situations; frequent breakdowns and misunderstandings occur in non-routine situations.</p>



VOCABULARY RANGE	
	Has sufficient vocabulary to conduct routine, everyday transactions involving familiar situations and topics.
A2	Has sufficient vocabulary for the expression of basic communicative needs. Has a sufficient vocabulary for coping with simple survival needs.
	Can control a narrow repertoire dealing with concrete everyday needs.

PHONOLOGICAL CONTROL	
A2	Pronunciation is generally clear enough to be understood despite a noticeable foreign accent, but conversational partners will need to ask for repetitions from time to time.

GRAMMATICAL ACCURACY	
A2	Uses some simple structures correctly, but still systematically makes basic mistakes – for example tends to mix up tenses and forget to mark agreement; nevertheless, it is usually clear what he/she is trying to say.



2.3.2 Sociolinguistic Competence is concerned with the knowledge and skills required to deal with the social dimension of language use.

SOCIOLINGUISTIC APPROPRIATENESS	
A2	<p>Can perform and respond to basic language functions, such as information exchange and requests and express opinions and attitudes in a simple way.</p> <p>Can socialize simply but effectively using the simple common expressions and following basic routines.</p> <p>Can handle very short social exchanges, using everyday polite forms of greeting and address. Can make and respond invitations, suggestions, apologies, etc.</p>

2.3.3 Pragmatic Competences are concerned with the students' knowledge of the principles according to which messages are organized, structured and arranged (discourse competence). Used to perform communicative functions (functional competence) and sequenced according to interactional and transactional schemata (design competence).



ASPECTS OF DISCOURSE COMPETENCE	
FLEXIBILITY	
Can adapt well rehearsed memorized simple phrases to particular circumstances through limited lexical substitution. Can expand learned phrases through simple recombinations of their elements.	
TURNTAKING	
A2	Can use simple techniques to start, maintain, or end a short conversation. Can initiate, maintain and close simple, face-to-face conversation. Can ask for attention.
THEMATIC DEVELOPMENT	
Can tell a story or describe something in a simple list of points.	
COHERENCE AND COHESION	
Can use the most frequently occurring connectors to link simple sentences in order to tell a story or describe something as a simple list of points. Can link groups of words with simple connectors like 'and', 'but' and 'because'.	
FACTORS OF FUNCTIONAL COMPETENCE	
SPOKEN FLUENCY	
A2	Can make him/herself understood in short contributions, even though pauses, false starts and reformulation are very evident. Can construct phrases on familiar topics with sufficient ease to handle short exchanges, despite very noticeable hesitations and false starts.



PROPOSITIONAL PRECISION

Can communicate what he/she wants to say in a simple and direct exchange of limited information on familiar and routine matters, but in other situations he/she generally has to compromise the message.

Source: Common European Framework of Reference for Languages: Learning, teaching, assessment. Cambridge University Press.

2.4 Technology in Education

Information and Communication Technology (ICT) which includes radio, television, and the newer digital technologies such as computers and the Internet has been considered as a potentially powerful enabling tool for educational change. ICT nowadays is being used as an educational tool to improve and enrich the teaching of every subject. This new approach provides interactive, active and creative teachers facilities to integrate a wide range of technical tools to improve their teaching practice. According to UNESCO “many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy.” (3)

According to UNESCO “ICT development in schools was described in terms of a continuum of approaches, commencing with the emerging approach, through to the applying and infusing approaches, to reach finally the transforming approach.” (43) These four approaches constitute a structure for the professional development of teachers. For UNESCO students should be capable of communicating with other people using a computer as a source for online interaction. (78) See Figure 7.



Students should be familiar with using computers to communicate

Source: UNESCO Information and Communication Technology. A Curriculum for Schools and Programme of Teacher Development.

Fig. 7. Students should be Familiar with Using Computers to Communicate

Students should understand the diversity of electronic communication means such as e-mail, chatting, use of the Internet and the World Wide Web; they should be able to critically discriminate the information found.



Figure 8 indicates the approaches to ICT development and their main characteristics consistent with the UNESCO.

Emerging	<ul style="list-style-type: none">• Beginning stages of ICT development.• Administrators and teachers start exploring the possibilities and consequences of adding ICT into the curriculum.
Applying	<ul style="list-style-type: none">• Administrators and teachers use ICT for tasks.• Teachers dominate the learning environment.• Instruction is supplemented with ICT.
Infusing	<ul style="list-style-type: none">• Teachers explore new ways to change their personal productivity and professional practice.• Content is provided from multiple sources, including community and global resources through the World Wide Web.• ICT projects stimulate students' learning.• Students have more choices with regard to learning styles and pathways.• Students take more responsibility for their own learning and assessment.
Transforming	<ul style="list-style-type: none">• ICT becomes an integral though invisible part of daily productivity and professional practice.• The focus of the curriculum is more learner-centered and integrates subject areas in real-world applications.• Learners' access to technology is broad and unrestricted.• The school has become a centre of learning for the community.

Fig. 8. Approaches to ICT Development.

Including technology in the educational field refers not only to the use of the sources and technical applications offered on the Web but also to a special methodology



that helps to improve the learning process. In other words, the application of the new technologies should provide ways for a variety of minds to gain access to knowledge.

Furthermore, a study made by the National Association of Advisers for Computer in Education (naace) states that there are five features that make the use of ICT an effective tool in the teaching and learning process either within the classroom context or the virtual environment. Figure 9 shows the five features observed by Michael Wills in primary and secondary education.

AUTONOMY	Students control their Learning	They are able to: <ul style="list-style-type: none">• Make decisions.• Develop their own strategies and learn from their mistakes.• Use teacher intervention effectively.• Value feedback from friends.• Recognise the value of knowledge gained outside the classroom context.
CAPABILITY	Students develop skills to use technologies effectively	<ul style="list-style-type: none">• Transfer and apply their skills to support the learning of other subjects.• Experiment problem solving through extrapolating from previous experience.• Develop the ability to make critical judgements about using ICT.
CREATIVITY	Students find opportunities to be	<ul style="list-style-type: none">• Release their creative ability through a range of ICT tools.• Use ICT to find new ways of

Karina Alvarez Toromoreno /2011



creative using ICT

communication.

- Explore the possibilities of multimedia tools.

QUALITY	Students use ICT to improve the quality of their work	<ul style="list-style-type: none">• Use ICT to improve the presentation of their work to a high standard.• Justify the use of ICT in terms of the quality of the outcomes.• Develop personal commitment to good quality.• Work and aspire to the highest standards.• Are engaged in high quality thinking.
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SCOPE	Students use ICT to add intrinsic value to a process	<ul style="list-style-type: none">• Employ ICT to access information or resources impossible with other media.• Their learning is enhanced by reaching beyond the classroom, expanding their knowledge and understanding the world.• Use ICT to explore and question, hypothesise and predict.• Find different manners to do things.
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Source: **naace** Key characteristics of good quality teaching and learning with ICT: a discussion document.⁴

Fig. 9. Features that make ICT an Effective Tool in Education.

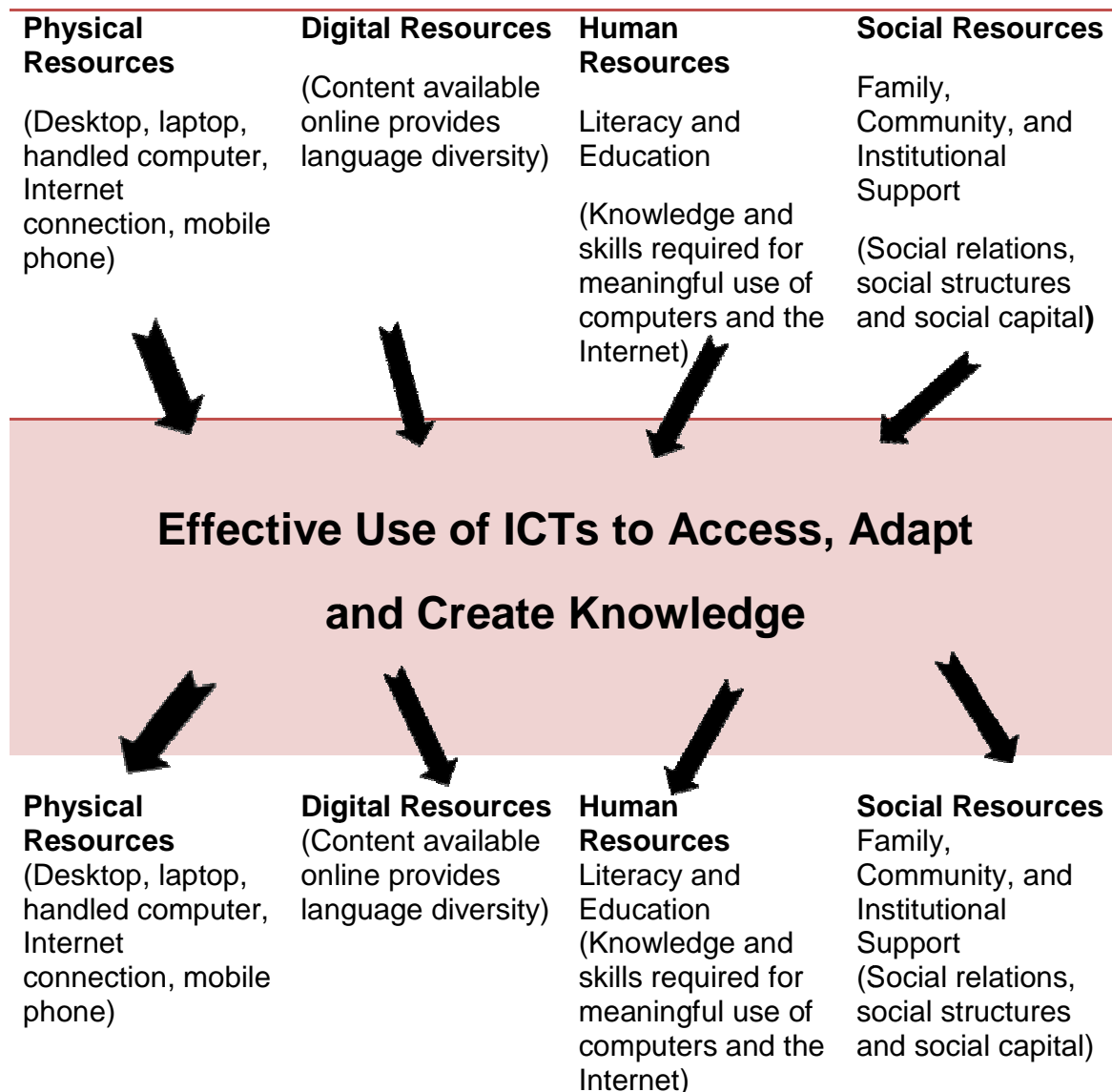
As a result, through the arrival of new technology, the richness of the informative process provides superior motivation for learning and an excellent relationship between the participants in the educational process (teachers, students and parents).

Furthermore, Warschauer indicates that ICT involves a complex range of physical resources, digital resources, human resources, and social resources. (144) The effective use of ICT resources in teaching and learning is a key element of educational improvement. In addition, constructive emotional experiences are strongly related to effective learning. Even though technology may help to support the educational process, it is still necessary to consider that each student possesses individual styles and strategies for learning, important factors that teachers must take into account before planning their lessons, so that lessons meet students' needs.

⁴ Adapted from <http://revolution.caret.cam.ac.uk/pdfs/bectaadvice.pdf> February 2011



Figure 10 illustrates resources for the effective use of ICT.



Source: Mark Warschauer. Effective Use of ICTs.⁵

Fig. 10. ICT Resources.

⁵ <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/967/888>. March 2010



In light of the above, Wagner indicates that this new generation of students have to be motivated differently to learn in order to achieve excellence at a higher level. He considers that education is the key factor to change students' future by reframing the educational curricula to perform that change, including activities to help students become critical thinkers and problem-solvers. He manifests that towards succeeding in the 21st century students need skills for a successful career, skills for continue learning, and skills for becoming active citizens.⁶

The skills students need are the following:

1. Critical Thinking and Problem-solving.
2. Collaboration Across Networks and Leading by influence
3. Agility and Adaptability
4. Initiative and Entrepreneurialism
5. Effective Oral and Written Communication
6. Accessing and Analyzing Information
7. Curiosity and Imagination

Virtual learning used as a support for every subject at UESMA may offer students a step-by-step development of the mentioned skills.

2.5 The Virtual Learning Environment

The constructivist virtual learning environment (VLE) designed to support the development of web-based reading and writing activities is believed to promote effective

⁶<http://www.tonywagner.com/> 2 December 2010



learning and is formed by a set of teaching and learning tools planned to enhance students' learning experience by including ICT in their learning process. According to Zacharis, "Online instruction provides a unique opportunity for learning materials, tasks and activities to fit individual learning styles and preferences, by allowing students to take control over the learning process, engage in social interaction and dialogue, develop multiple modes of representation and become more self aware." (2)

The VLE becomes important because it determines how easily learners can focus on learning materials without having to make an effort to figure out how to access them. Even though web-based activities provide flexibility for students, their level of performance can be affected if appropriate cognitive, metacognitive, compensatory, affective and social language learning strategies are not developed within the classroom context. In that case virtual education conceived as a support, may not meet their needs and the web-based activities will be associated with much higher rates of attrition than traditional classroom activities. Olson and Land state that for Paris, strategic learners require to show three kinds of knowledge: "... declarative knowledge of what the cognitive strategies are, procedural knowledge of how to use cognitive strategies, and conditional knowledge of when and why to use cognitive strategies..." (276)

Web-based activities in the virtual environment encourage students' interaction using the foreign language. In fact, in an effective learning environment students feel less intimidated about using the language to communicate their ideas, they can express themselves more freely, their thinking ability will increase, and they will feel less stressed while communicating via the Internet. Consequently, they enjoy learning the foreign language. These opportunities include the reduction of pressure to produce and the chance to work independently according to their preferred learning styles.



Additionally, Egbert provides a general model of four conditions that can be viewed as essential aspects in order to create an optimal virtual learning environment that affords opportunities for effective students' learning. (1)

- | | |
|--|--|
| 1. The learning environment must provide opportunities for learners to interact and negotiate meaning with an authentic audience. | <ul style="list-style-type: none">❖ Social interaction is necessary for learning.❖ Real audience provides students the development of communicative competence. |
|--|--|

- | | |
|--|---|
| 2. Learners must be involved in authentic tasks which promote exposure to and production of varied and creative language. | <ul style="list-style-type: none">❖ Authentic tasks provide students with reasons to share ideas and information that allows problem solving. |
|--|---|

- | | |
|---|---|
| 3. Learners must have opportunities to formulate ideas and thoughts and intentional cognition is promoted. | <ul style="list-style-type: none">❖ Students need sufficient time and feedback in order to reflect on and communicate ideas properly. |
|---|---|

- | | |
|---|--|
| 4. The learning environment must be an atmosphere with ideal stress/anxiety level in a learner-centered classroom. | <ul style="list-style-type: none">❖ Students must experience an optimal level of anxiety.❖ Students have control over their learning process. |
|---|--|



2.5.1 Virtual Learning and Moodle

Stonebreaker and Hazeltine define Virtual Learning as "... the delivery of learning through electronic mediation which bridges the gap caused when the instructor and student are separated in either time or place" (209) Communication among group members in virtual learning can be asynchronous (delay between sending a message and receiving the response) or synchronous (live).

In particular, the Course Management System (CMS) Moodle, also known as a learning Management System (LMS), or a Virtual Learning Environment (VLE) is a package designed to help teachers to easily create online quality courses.

The socio-constructivist (collaboration, activities, critical reflection, etc.) feature of Moodle makes it ideal for collaborative work, in which teachers can update themselves with the current issues in teaching as well as sharing educational materials and innovative ideas in classroom practices. Due to its modular design, it can be shaped as needed. Basically, Moodle involves creating a course, designing a forum and a questionnaire, elaborating quizzes, grading and evaluating results, chatting, and using and creating wiki. It also offers the opportunity to link several resources available on the Internet.

The main elements of the VLE include: student tracking, online support for both teachers and students, electronic communication, and Internet links to educational resources, Brandl states that "*Moodle* is a teacher's dream in terms of course management features that it offers." (17) Teachers can obtain a report when students have completed their tasks and also the time they have spent working online or visiting the web sites provided to do the tasks.

Students can have a clear awareness of their performance during the course and receive feedback after every task where their mistakes are explained by the teacher.



As Brandl explains “*Moodle* has great potential to create a successful e-learning experience by providing a plethora of excellent tools that can be used to enhance conventional classroom instruction, in hybrid courses, or any distance learning arrangements.” (22)

Therefore, the teacher can create an atmosphere centred on the students who aid in constructing their own knowledge on the basis of their abilities and own backgrounds, in line with the constructivist theories discussed in 2.1.

In brief, the use of a virtual platform will activate each student’s learning process; there is little pressure to perform activities and there is more emphasis on comprehension rather than on production. Besides, the environment will turn into a relaxing experience where students will keep in contact with the foreign language. Furthermore, they will all participate actively. According to Erdogan, Bayram and Deniz, “... a shy and inhibited learner in the traditional educational system may become a more active and social student ...” This transformation is possible because, as stated by the authors “... a more individualized teaching takes place in the virtual environment where learner involvement is a fundamental element.” (32).

According to Ballesteros et al., the use of virtual platforms affords the opportunity to access a wide range of varied services such as: standardized services and information available in a society, new data exchange through forums, collaborative processes to solve problems, collaboration to create new knowledge, independent learning and a teaching process adapted to the normal rhythm of the student (3).

2.5.2 Traditional vs. Virtual Learning

The classroom is an environment with particular needs, an environment on which there is little prior work to draw. Students may benefit from ICT that helps them reflect on their own emotional experiences during learning. (Stonebraker and Hazeltine 210)



Figure 11 provides a list of differences between traditional and virtual learning environments.

	Traditional learning	Virtual learning
Focus of course	Group	Individual
Focus of content	Teacher-centred	Student-centred
Form	Synchronous	Asynchronous
Time	Scheduled	Anytime
Place	Classroom	Anywhere
Flexibility	Standardized	Customized
Content	Stable, durable	Dynamic, transitory
Number of students	Space delimited	Without limits
Instructor preparation	Some (transparencies)	Extensive pre-preparation
Distribution of materials	Hard copy	Electronic download
Interaction	Spontaneous	Structured
Range of interactivity	Full interactivity	Limited interactivity

Fig. 11. Differences between Traditional and Virtual learning Environments.

Virtual learning cannot replace traditional learning. However, it is in some ways superior. One of the major advantages of virtual learning is that it supports students' progress at their own pace. It allows students to take more responsibility for their own learning, and teachers to monitor their progress.



Figure 12 illustrates the resources and activities of virtual learning.

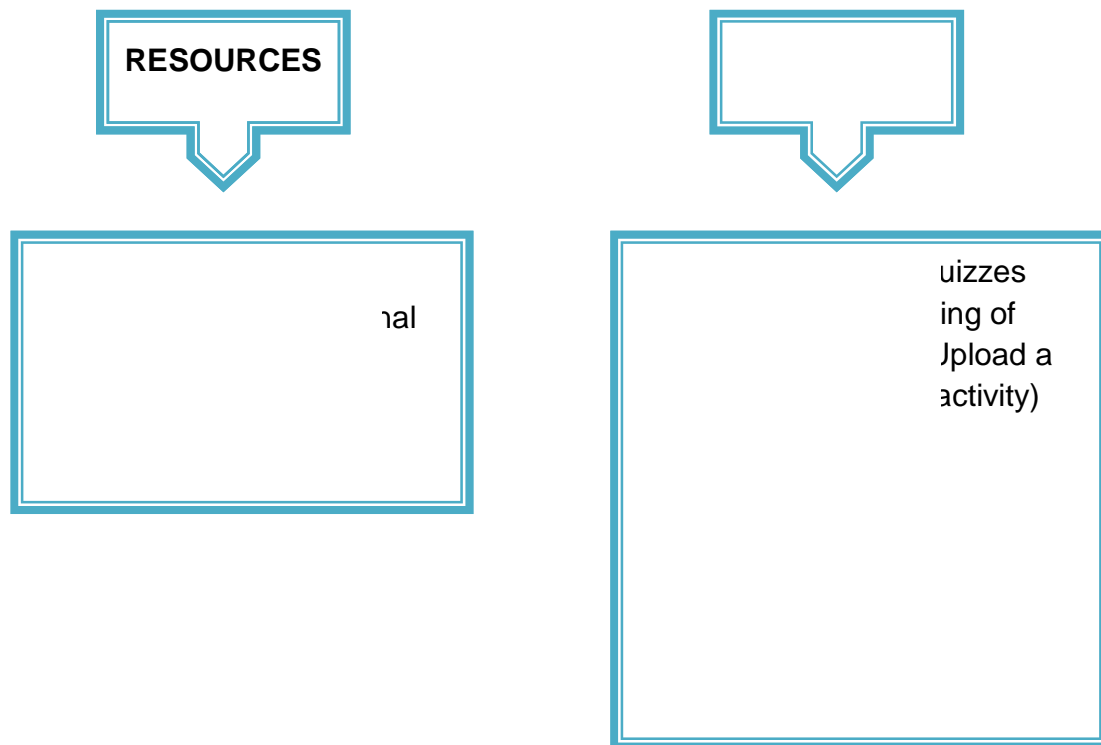


Fig. 12. Resources and Activities of Virtual Learning.



2.6 Conclusions of Chapter 2

In brief, this chapter has presented and briefly analyzed learning theories, language learning theories, virtual learning and ICT in education. The following conclusions can be drawn from the study summarized in the previous sections.

First, regardless of learning theories students must be considered as active constructors of their own knowledge taking into account important characteristics related to their cognitive development, variables which can affect the effectiveness of the teaching-learning process where effective teachers should become motivators by creating a pleasant environment taking into account students' individual differences.

Second, language learning theories make important contributions related to the input, social context, motivation, personal characteristics, and students' interaction, factors that may influence in a positive or negative manner to students' language acquisition.

The final, perhaps most important observations are related to the importance of using ICT and VLE as a main source to support students' language learning considering their individual learning styles and strategies offering them an emotional and constructive learning experience.



CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents (3.1) an error analysis of 10th grade students' written work, (3.2) analysis of students' difficulties in the development of reading and writing skills, (3.3) analysis of students' learning styles, and (3.4) the design of the web-based project based on those analyses.

3.1 Error Analysis of Students' Written Work

3.1.1 Subjects

In Ecuador, a high school includes grades 8th, 9th and 10th of Basic Education and 1st, 2nd and 3rd of Bachillerato, consisting of students from 11 to 18 years old. The subjects in the study were 30 students from 10th grade in the academic year 2010-2011 from UESMA high school in Cuenca; they were 14 and 15 years olds.

3.1.2 Procedure

The analysis method used in the first stage of this research thesis was aimed to highlight students' difficulties when developing reading and writing skills. The objective of this stage was to identify the types of errors in paragraph and essay writing in English made by 10th grade students. The 30 students were assigned to write an essay as a final step proposed in their course book. A standard format consisting of 11 symbols was used to analyze their writing. Figure 13 illustrates the error correction symbols used and their meanings.



SYMBOL	MEANING
s	Incorrect spelling
w.o.	Wrong word order
T	Wrong tense
C	Concord. Subject and verb agreement
WF	Wrong form
S/P	Singular or plural form wrong
^	Missing words
[]	Unnecessary words in the sentence
?m	Meaning is not clear
NA	Words used inappropriately
P	Wrong or Missing Punctuation

Source: Teaching Writing Skills by D Byrne (Person Education Ltd)

Fig. 13. Error Correction Symbols.

After correction, grading, and feedback to students, copies of the 30 students' essays were retained to use in this study. The English staff at UESMA collaborated with analysis and the errors were recorded.

3.1.3 Results

The following analysis reveals the most common errors found in the students' essays. (For individual analysis see Annex 5)



Figure 14 shows the percentage of errors calculated according to the number of students who make the same type of mistake.

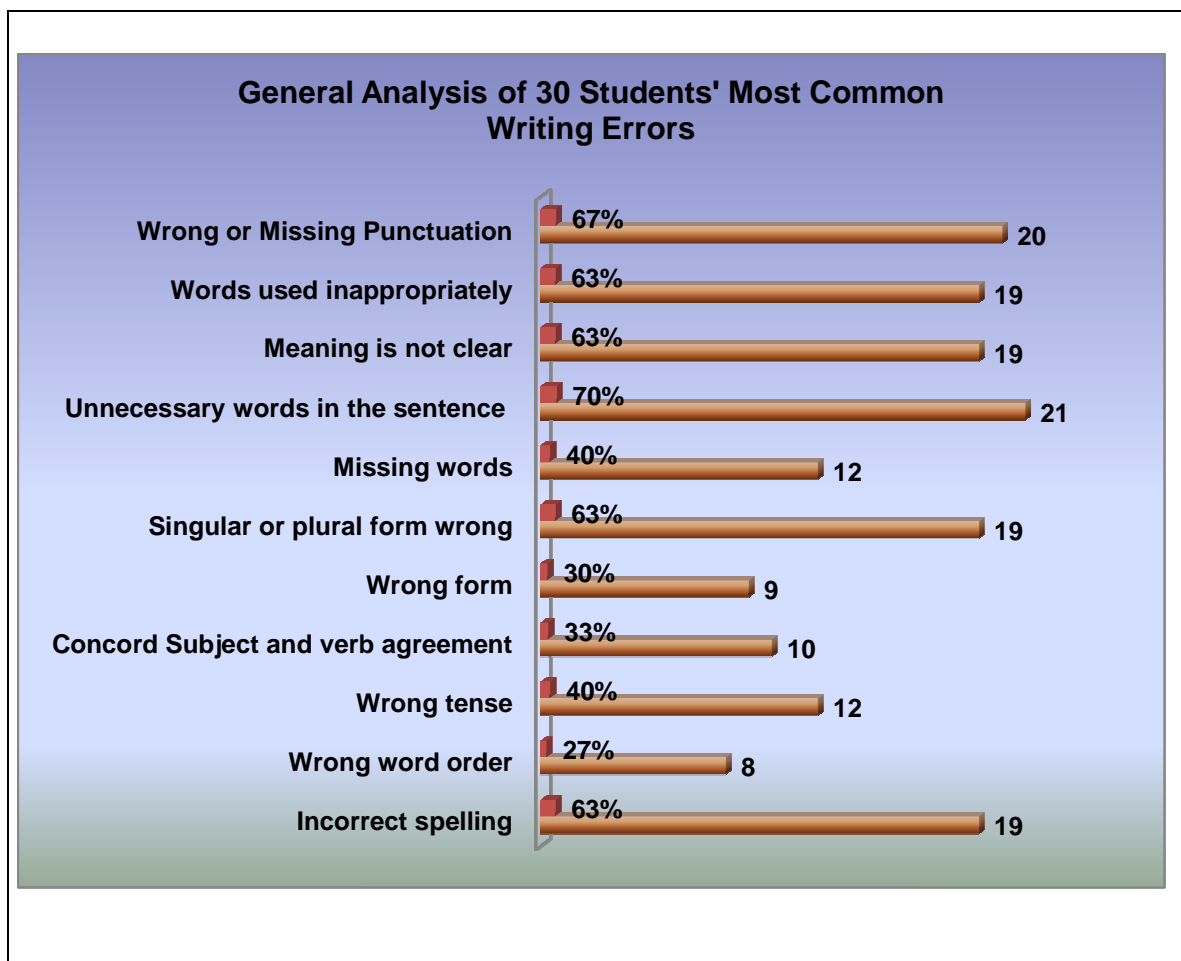


Fig. 14. Most Common Students' Errors

According to the individual analysis I can summarize my students' errors as follows:

The predominance of unnecessary words in sentences (70%) and wrong or missing punctuation (67%) errors in students' work used for this analysis is surprisingly



high. However, it must be considered with care. Their most common form of error was absence of a full stop at the end of sentences or paragraphs.



Analysis of mistakes in students' paragraphs revealed significant weaknesses in grammatical ability even though they were able to demonstrate competence in textbook exercises within the classroom context; verb forms presented a major difficulty for students (40%).

There is a clear interference of L1 (Spanish) when they use the article 'the' unnecessarily and the possessive adjective 'your' (as interference from 'tu or su' when referring to the personal pronouns he/she/it). Additionally, lack of subject, verb and pronoun, in most of the sentences (40%) and the unnecessary pluralisation of adjectives is present in 63% of them.

Nevertheless, the results are instructive, as they quantify the extent of the problems faced by students who demonstrate little awareness of writing down their ideas efficiently, but are constantly annoyed by their incapacity to do so.

In brief, the results of this study suggest ways to enhance and improve the current method used by teachers in writing classes. Techniques which allow students to write more efficiently and motivate them to do so are implicit in the web-based activities proposed in the virtual platform.

3.2 Students' Survey

Questionnaires were used as the initial survey instrument for the 30 10th grade students. In section one the questionnaire for Reading Skills consisted of 14 items and in section two the questionnaire for Writing Skills consisted of 13 items. The questionnaires were written in English and a four-point scale was used (1), Always, (2), Often, (3), Sometimes, (4), Never. (See Annex 6)

The purpose of this study was to help students identify the difficulties they face within the classroom context when developing Reading and Writing Skills.



3.2.1 Section One Analysis

Question: When reading a text in class, how often do you have difficulty with each of the following:

Figure 15 clearly reveals that the largest number of students (90%) considers it less challenging to understand the main idea of the text. Sometimes (67%) and never (23%) support the statement.

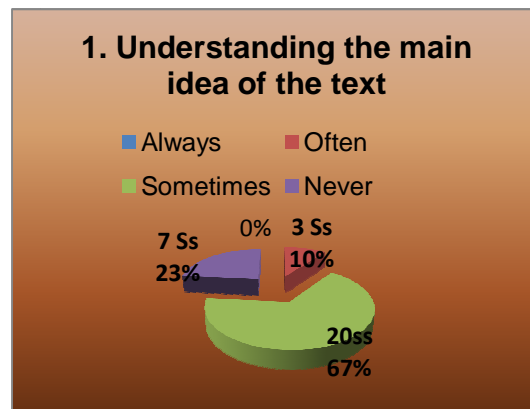


Fig. 15. Students' Survey.

Figure 16 shows that the largest number of students (63%) has difficulty feeling relaxed during a reading comprehension text. This percentage considers the most outstanding parameters, always (17%) and often (46%).

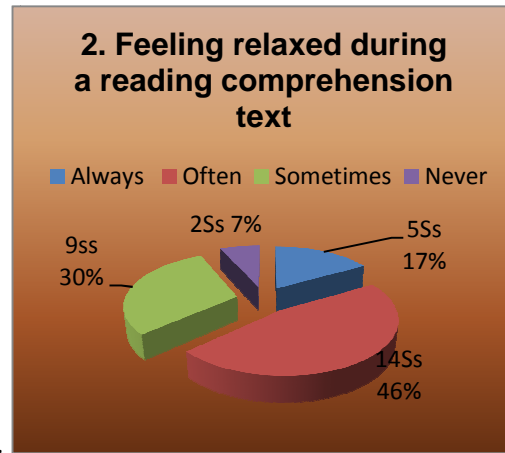


Fig. 16. Students' Survey.

Figure 17 shows that the largest number of students (60%) has difficulty understanding what to do with the text. Always (17%) and often (43%) support the statement.

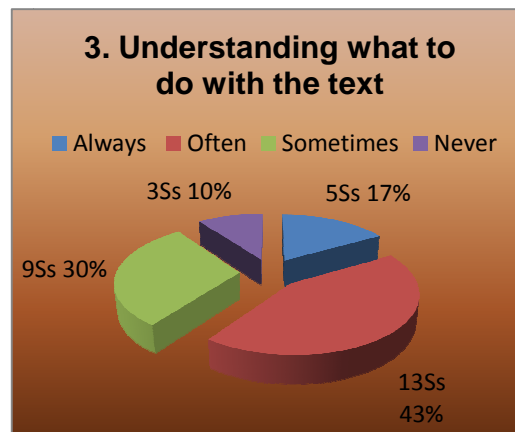


Fig. 17. Students' Survey.

Figure 18 shows that the largest number of students (70%) considers it less challenging to read and put paragraphs in the correct order. Sometimes (37%) and never (33%) support the statement.

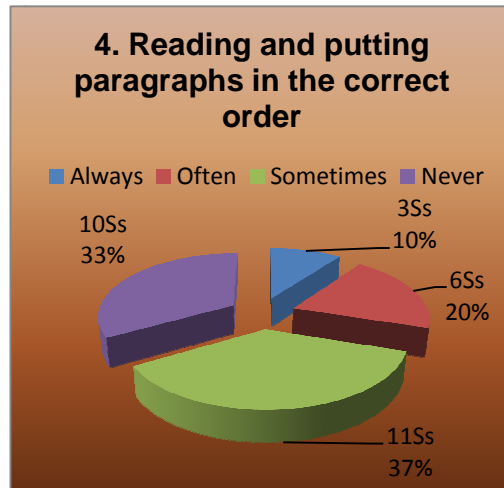


Fig. 18. Students' Survey.

Figure 19 shows that the largest number of students (53%) has difficulty reading the text slowly in order to understand details. Always (10%) and often (43%) support the statement.

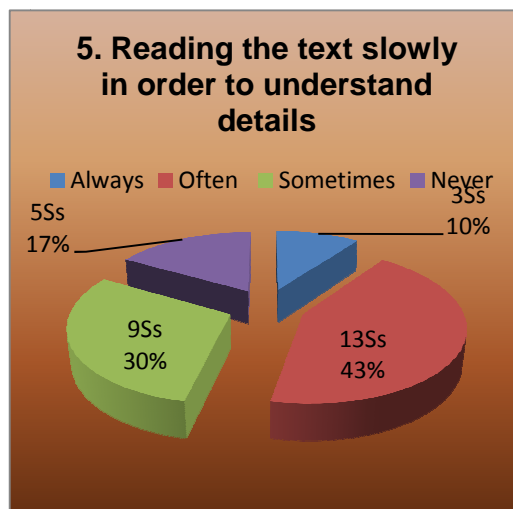


Fig. 19. Students' Survey.



Figure 20 indicates that the largest number of students (73%) consider it less challenging to locate specific information in order to answer questions. Sometimes (63%) and never (10%) support the statement.

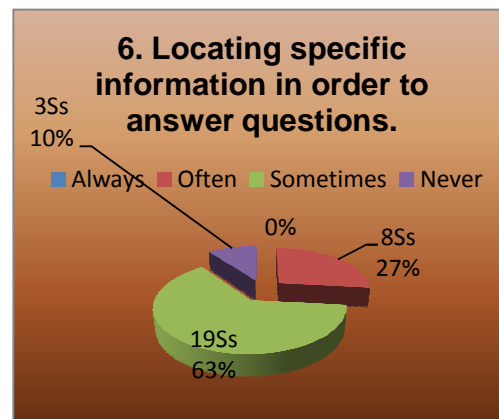


Fig. 20. Students' Survey.

Figure 21 proves that the largest number of students (67%) has difficulty guessing unknown words in a text. Always (23%) and often (44%) support the statement.

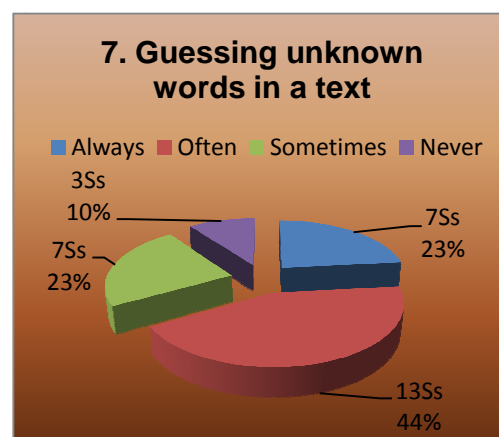


Fig. 21. Students' Survey.



Figure 22 illustrates that the largest number of students (67%) has difficulty reading fast. Always (20%) and often (47%) support the statement.

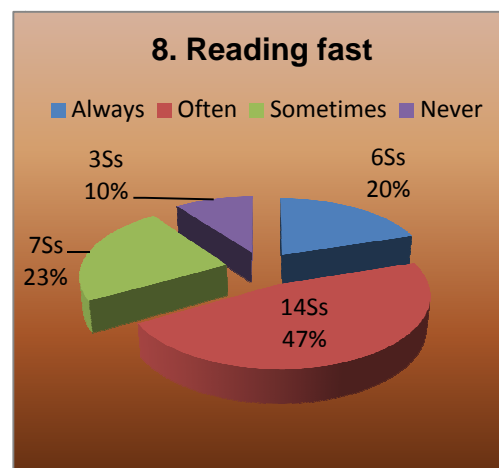


Fig. 22. Students' Survey.



Figure 23 indicates that the largest number of students (64%) has difficulty reading the text in order to give an opinion about the content. Always (20%) and often (44%) support the statement.

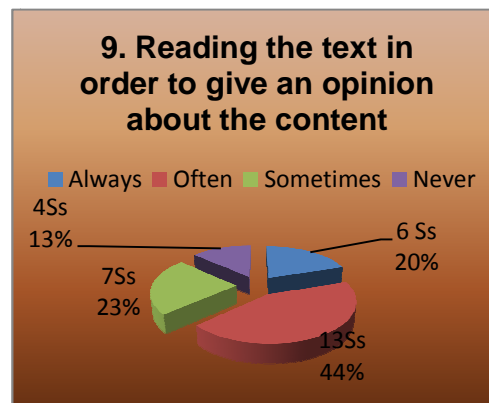


Fig. 23 Students' Survey.

Figure 24 shows that the largest number of students (60%) has difficulty reading and summarizing a text. Always (20%) and often (40%) support the statement.

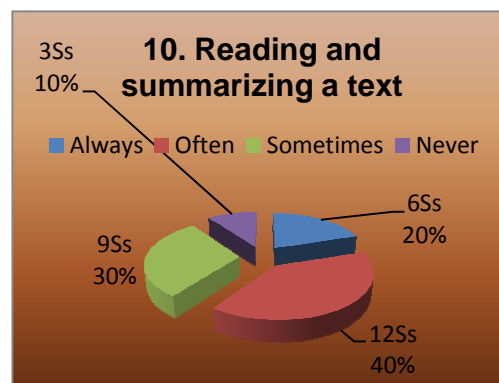


Fig. 24. Students' Survey.



Figure 25 demonstrate that the largest number of students (63%) has difficulty concentrating on the text. Always (17%) and often (46%) support the statement.

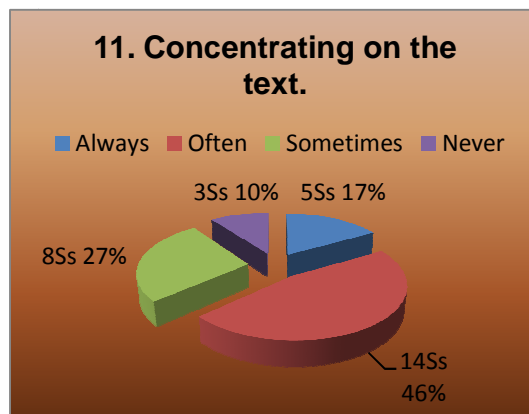


Fig. 25. Students' Survey.

Figure 26 indicates that the largest number of students (53%) has difficulty feeling motivated to read the text. Always (10%) and often (43%) support the statement.

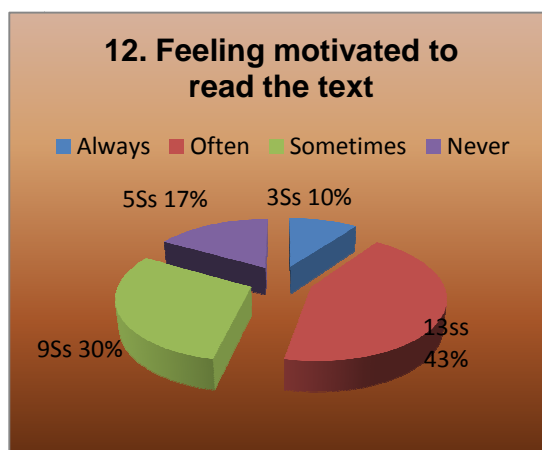


Fig. 26. Students' Survey.



Figure 27 shows that the largest number of students (66%) has difficulty recognizing specific parts of speech along the text. Always (20%) and often (46%) support the statement.

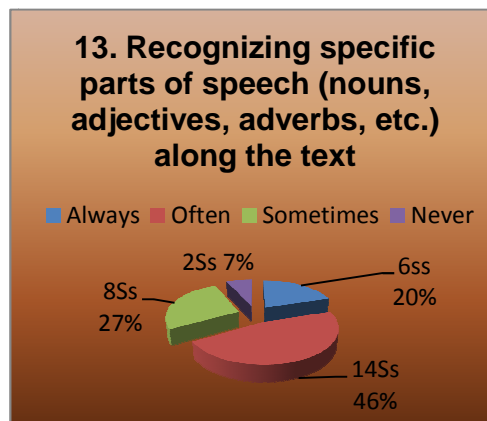


Fig. 27. Students' Survey.

Figure 28 shows that the largest number of students (63%) has difficulty reading the text, identifying grammar mistakes and correcting them. Always (17%) and often (46%) support the statement.

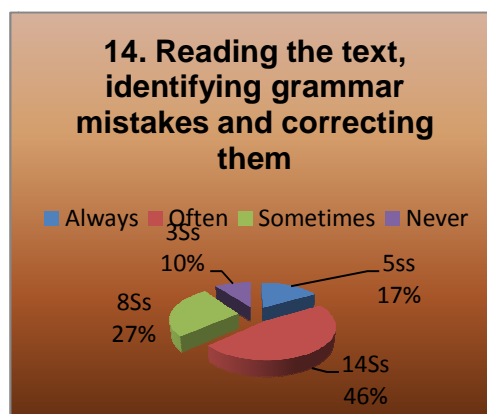


Fig. 28. Students' Survey.



3.2.2 Section Two Analysis

Question: When writing a text in class, how often do you have difficulty with each of the following:

Figure 29 shows that the largest number of students (67%) has difficulty thinking about what to write. Always (20%) and often (47%) support the statement.

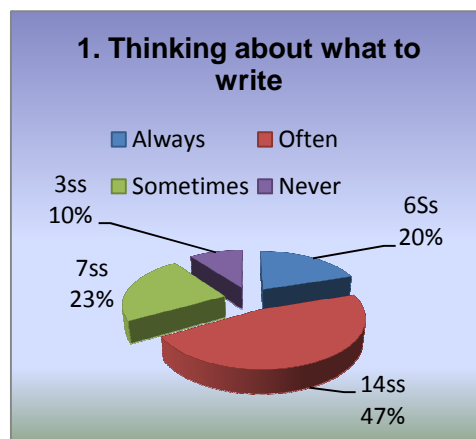


Fig. 29. Students' Survey.

Figure 30 explains that the largest number of students (73%) has difficulty using correct punctuation and spelling. Always (27%) and often (46%) support the statement.

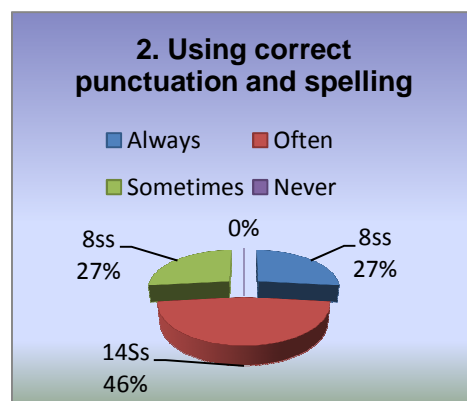


Fig. 30. Students' Survey.



Figure 31 shows that the largest number of students (67%) has difficulty structuring sentences. Always (17%) and often (50%) support the statement.

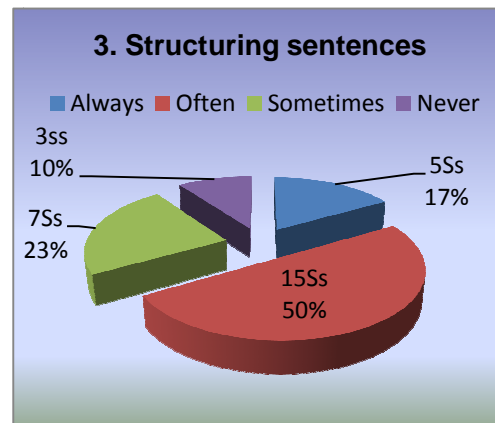


Fig. 31. Students' Survey.

Figure 32 shows that the largest number of students (65%) considers less challenging to use appropriate vocabulary. Sometimes (52%) and never (13%) support the statement.

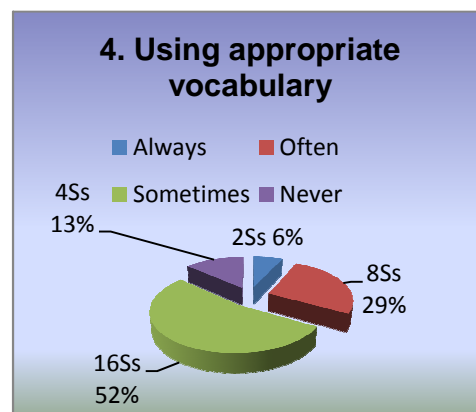


Fig. 32. Students' Survey.



Figure 33 shows that the largest number of students (57%) has difficulty organizing their ideas into paragraphs. Always (10%) and often (47%) support the statement.

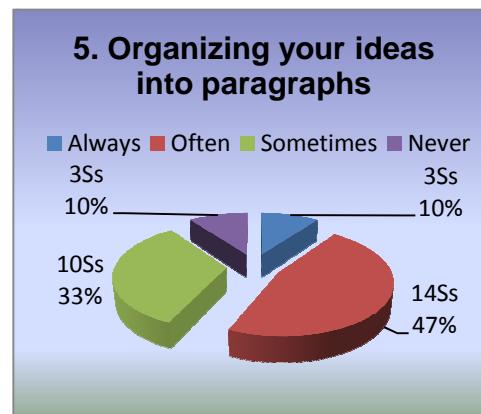


Fig. 33. Students' Survey.

Figure 34 shows that the largest number of students (60%) considers less challenging to link their ideas in writing. Sometimes (50%) and never (10%) support the statement.

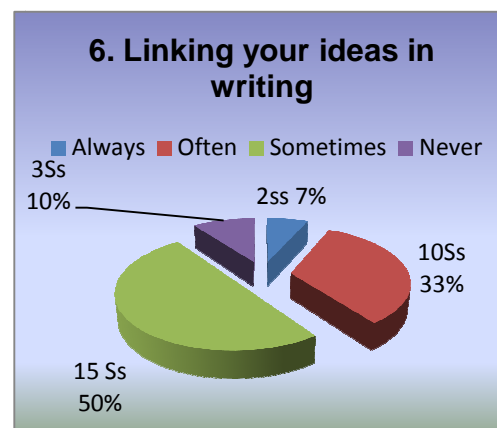


Fig. 34. Students' Survey.



Figure 35 shows that the largest number of students (54%) considers less challenging to express their ideas appropriately. Sometimes (37%) and never (17%) support the statement.



Fig. 35. Students' Survey.

Figure 36 shows that the largest number of students (74%) considers less challenging to follow instructions. Sometimes (47%) and never (27%) support the statement.

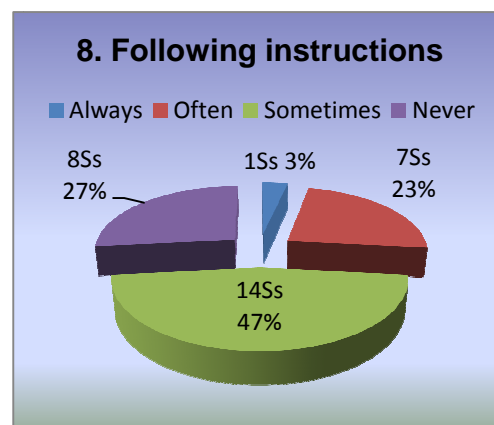


Fig. 36. Students' Survey.



Figure 37 shows that the largest number of students (64%) has difficulty reviewing their writings. Always (17%) and often (47%) support the statement.

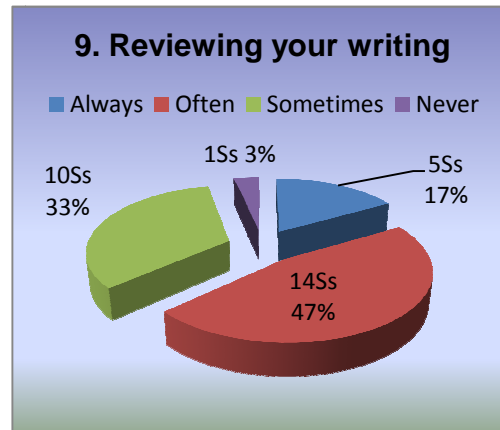


Fig. 37. Students' Survey.

Figure 38 shows that half of the group (50%) finishes the task within the time available and half of the group (50%) needs extra time to finish their written task.

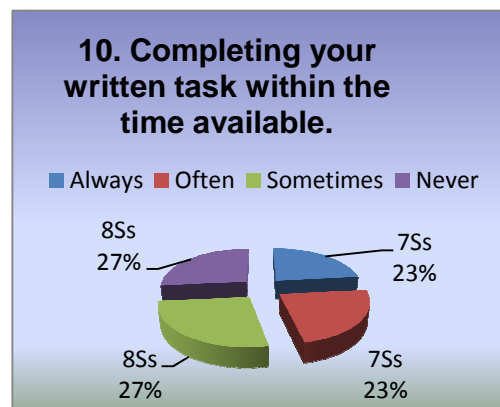


Fig. 38. Students' Survey.



Figure 39 shows that the largest number of students (64%) has difficulty concentrating on the written task. Always (17%) and often (47%) support the statement.

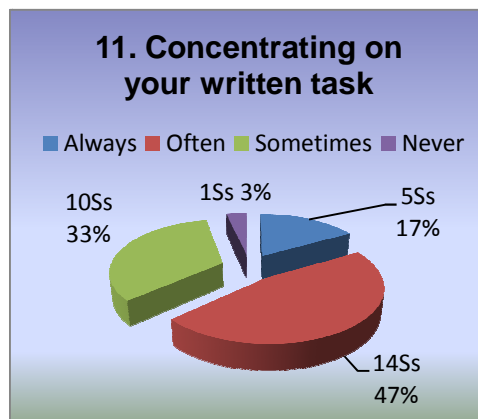


Fig. 39. Students' Survey.

Figure 40 shows that the largest number of students (63%) has difficulty feeling motivated to write. Always (30%) and often (33%) support the statement.

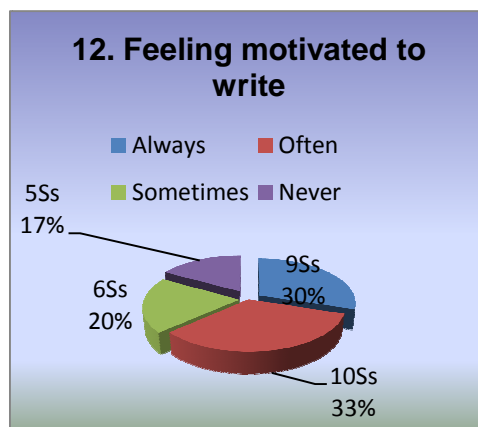


Fig. 40. Students' Survey.



Figure 41 shows that the largest number of students (73%) has difficulty rewriting sentences or a story with their own words. Always (27%) and Often (46%) support the statement.

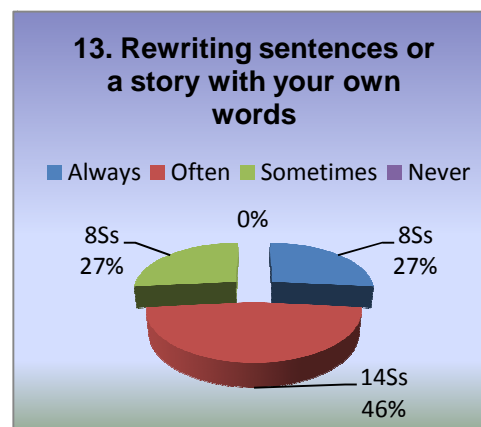


Fig. 41. Students' Survey.

3.2.3 Results

A preliminary analysis of the 27 items indicates that these results sustain the present proposal designed in order to support the students' development of Reading and Writing skills taking advantage of the virtual environment.

In short, the implication of these findings for Reading and Writing teachers at UESMA is that they must be aware of the fact that students' anxiety created by a tense classroom environment might be one of the most potent factors undermining students' classroom performance. However, explicit language learning strategies and frequent engagement of students in interactive activities are necessary to develop personal Reading and Writing Skills. In other words, what really matters in class is multi-faceted



and includes many factors: teaching methodology and students' own perceptions of being active in class.

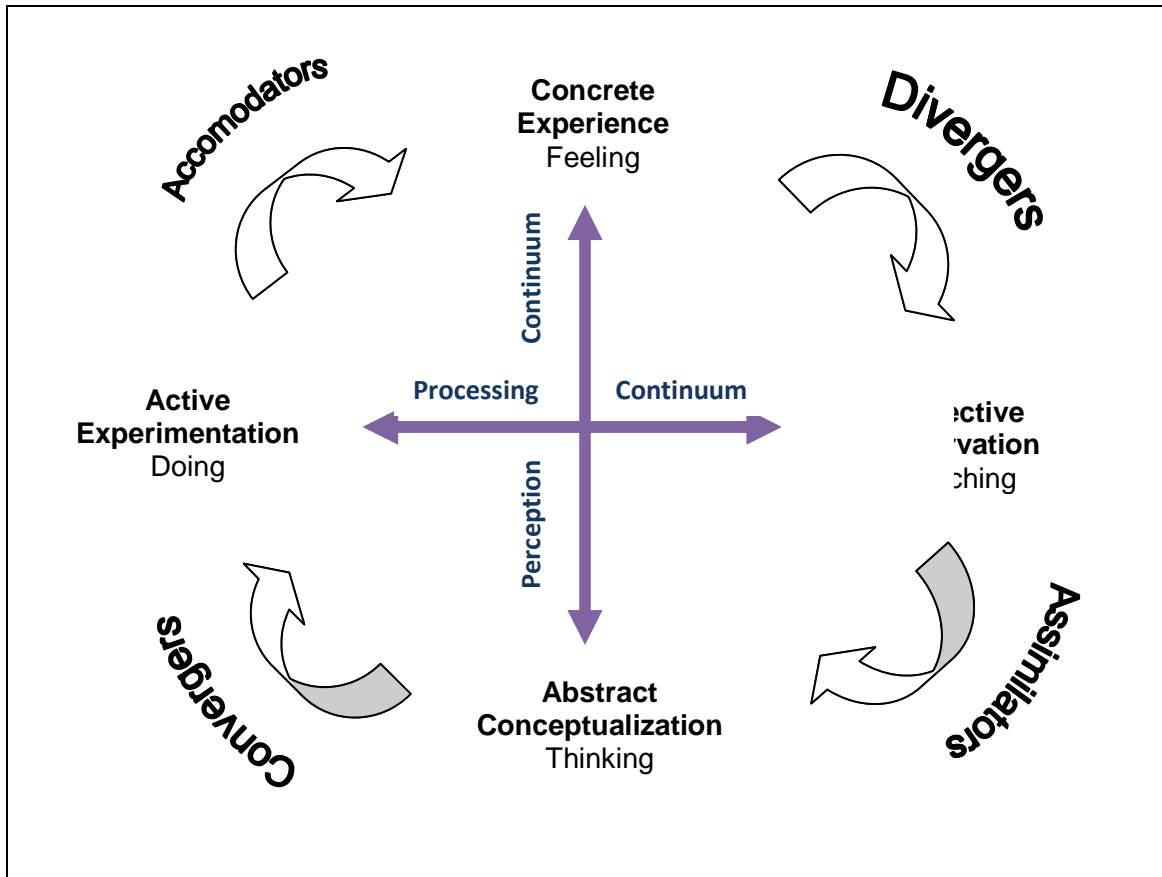
3.3 Investigating 10th Graders Learning Styles According to the Kolb's Learning Style Model

In order to provide students with effective web-based reading and writing activities it is necessary to consider their learning styles, so the aim of this study is to investigate 10th grade students' learning styles.

There are several ways to identify students' learning styles. For the convenience of this study the Kolb Learning Style Inventory translated into Spanish by the author of the present proposal was used as a data collection tool. The Inventory consists of 12 items, in every item there are four statements. The first one is Concrete Experience (CE), the second one is Reflective Observation (RO), the third one is Abstract Conceptualization (AC) and the fourth one is Active Experimentation (AE). (See Annex 2)

Kolb's learning theory is two-dimensional. These dimensions provide two basic mechanisms which constitute the students' learning process. The first one refers to the way students perceive knowledge (grasping experience); the second one explains how students process knowledge (transforming experience).

In figure 42 the horizontal axis represents the processing of knowledge, and the perception of knowledge is indicated in the vertical axis. Thus, students perceive knowledge through **Concrete Experience or Abstract Conceptualization** and process it through **Reflective Observation or Active Experimentation**.



Source: Adapted from "Learning Types According to Kolb's Theory of Learning." The Teacher's Educational Leadership Roles According to Kolb's Theory of Learning, 2011.⁷

Fig. 42. The Learning Process.

Figure 43 explains the components of the four learning styles defined by Kolb which can be obtained according to students' individual preferences when perceiving and processing knowledge.

⁷ [http://www.idosi.org/hssi/hssi4\(2\)09/7.pdf](http://www.idosi.org/hssi/hssi4(2)09/7.pdf). 25 May. 2011



Perception of Knowledge		Processing of Knowledge		Learning Style
Concrete Experience	+	Active Experimentation	=	Accommodating CE / AE
Concrete Experience	+	Reflective Observation	=	Diverging CE / RO
Abstract Conceptualization	+	Reflective Observation	=	Assimilating AC / RO
Abstract Conceptualization	+	Active Experimentation	=	Converging AC / AE

Fig.43. Components of the four Learning Styles.

3.3.1 Data Collection

The study was carried out with the participation of 30 students from 10th grade. The data were collected in the first trimester of 2010-2011 academic years. The application of the inventory was done by the 10th grade English teachers.

3.3.2 Analysis of the Data

The 30 forms were filled and the data were analyzed.

After determining students' individual CE, RO, AC and AE scores of the total 12 item the consolidated scores were obtained as CE-AC and RO-AE. The highest score of CE-AC will indicate how a student perceives knowledge, and the highest score of AE-RO will show how she processes that knowledge. (For individual analysis see Annex 3 and 4)



Figure 44 presents a general analysis of students' preferred learning styles found in 10th grade.

Learning Style	Number of students	Percentage
Accomodators (CE AE)	0	0%
Divergers (CE RO)	5	17%
Assimilators (RO AC)	10	33%
Convergers (AC AE)	15	50%
TOTAL	30	100%

Fig. 44. 10th Grade Students' Learning Styles.

3.3.3 Results

As clarified in figure 44 the majority of students (50%) are more successful in solving problems, making decisions, analyzing their ideas logically, and making plans. They prefer dealing with technical tasks and problems rather than with issues that involve interpersonal and social interactions. They learn better by thinking and doing rather than watching and feeling.

Additionally, a significant percentage of students (33%) perceives knowledge through abstract conceptualization and processes it through reflective observation. They learn better by thinking and watching rather than feeling and doing.



A lower percentage of students (17%) is receptive and open minded. This group enjoys brainstorming and small group work. These students learn better by watching and feeling rather than thinking and doing.

The absence of an accommodating learning style in 10th grade indicates that students lack abilities to adapt themselves to new situations which require responsibility. They don't like being active and experiencing new situations. Besides, learning by feeling and doing is something they don't enjoy.

3.3.4 Conclusions

Different students tend to exhibit different learning styles based on their learning habits developed over the learning cycle. These styles manifest their preferences for specific kinds of learning activities used by teachers within the classroom context.

By understanding the way students learn, the web-based activities will help them put emphasis on other actions they need in order to enlarge their learning styles around the learning cycle.

Since online learning does not engage students in face-to-face interactions it is essential to identify students' individual learning styles to adapt the web-based activities towards enhancing their learning process. Some activities will offer them concrete experience, e.g. real word situations; others will offer them active experimentation, e.g. problem solving through experiments; also abstract conceptualization, e.g. text analysis; as well as reflective observation, e.g. activities to observe and analyze.



3.4 The Project: Web-Based Reading and Writing Activities: Supporting the Learning of English as a Foreign Language (EFL) for Students of 10th Year of Basic Education at Unidad Educativa Salesiana María Auxiliadora (UESMA)

The present research work took place at UESMA, a Catholic institution for girls whose mission is to provide girls and adolescents from Cuenca with an integral formation with high levels of excellence in line with the current scientific and technical innovations towards forming active agents of social change and development.

The general objectives of teaching English defined by the institution in the Curriculum Annual Plan for secondary levels are the following:

1. To use the English language as a means of participation in different situations of real-life contexts.
2. To understand the main features of the linguistic sources for comprehension of written material.
3. To identify elements and structures of the spoken and written language.
4. To use the different parts of phonology in order to obtain a better communication.
5. To develop students' linguistic competences taking into account the syntactic, semantic, phonological and morphological systems.
6. To develop students' critical thinking in order to use the foreign language as an effective tool for personal and professional development.

Source: "Unidad Educativa Salesiana María Auxiliadora - Plan Anual Por Competencias 2010-2011." Departamento de Inglés.



Additionally, the current curriculum guidelines of teaching English at UESMA aim to develop English language skills to successfully perform the Common European Framework (CEF) examinations according to their age.

- ❖ WAYSTAGE or KET (A2) for 9th and 10th graders,
- ❖ THRESHOLD or PET (B1) for 4th and 5th graders,
- ❖ VANTAGE or FCE (B2) for 6th graders.

With this intention the present web-based project draws on the study of the Common European Framework of Reference for Languages (CEFR) as the basis for the elaboration of the web-based reading and writing activities taking into account what language proficiency is expected to obtain in A2 level for students of 10th grade. Figure 45 clarifies 10th grade students' general abilities which must be developed according to level A2.



CEFR LEVELS	LISTENING/SPEAKING	READING	WRITING
A2 (KET)	CAN express simple opinions or requirements in a familiar context.	CAN understand straightforward information within a known area, such as on products and signs and simple textbooks or reports on familiar matters.	CAN use complete forms and write short simple letters or postcards related to personal information.
	GRAMMAR	GRAMMAR	
	<ul style="list-style-type: none"> • Adjectives – comparative, – use of than and definite article. • Adjectives – superlative – use of definite article • Adverbial phrases of time, place and frequency – including word order • Adverbs of frequency • Articles – with countable and uncountable nouns • Countables and Uncountables: much many • Future Time (will and going to) • Gerunds • Going to • Imperatives • Modals – can/could • Modals – have to • Modals – should 	<ul style="list-style-type: none"> • Past continuous • Past simple • Phrasal verbs – common • Possessives – use of ‘s, s’ • Prepositional phrases (place, time and movement) • Prepositions of time: on/in/at • Present continuous • Present continuous for future • Present perfect • Questions • Verb + ing/infinitive: like/ want-would like • Wh-questions in past • Zero and 1st conditional 	

Source: “CEFR and ‘Can Do’.” University of Cambridge ESOL Examinations⁸
 Fig.45. Students’ General Abilities.

⁸ <http://www.cambridgeesol.org/exams/exams-info/cefr.html>. 14 April 2011



3.4.1 General Characteristics of the Web-based Project

The web-based learning environment was implemented for 30 students from 10th grade. For the purpose of this study the process was monitored during the first and second trimesters of 2010-2011 academic years.

To fulfil the central aim of the project—to improve EFL reading and writing skills through the development of web-based activities for students of tenth grade of Basic Education—the second specific objective established was the development and adaptation of the web-based activities in the virtual learning environment (VLE) applicable in the academic year 2010-2011.

This project involved the development and delivery of online materials for students aimed at supporting the improvement of reading and writing skills. Materials were taken from the Internet and created by the author of the present research work. The main idea was that students explore new and more flexible ways of working in a creative learning environment, involving online and on-screen activities in real-time with the assistance of the teacher.

Factors believed to enhance intrinsic motivation (challenge, control, curiosity, and fantasy) were integrated into the instructional design of the web-based reading and writing activities.

VLE provided students with a working space where they could become more actively involved in the management of their own learning and more metacognitively aware of their personal resources.

Figure 46 shows cognitive and metacognitive reading and writing strategies students applied in the virtual environment.



**Cognitive and
Metacognitive
Reading and Writing
Strategies**

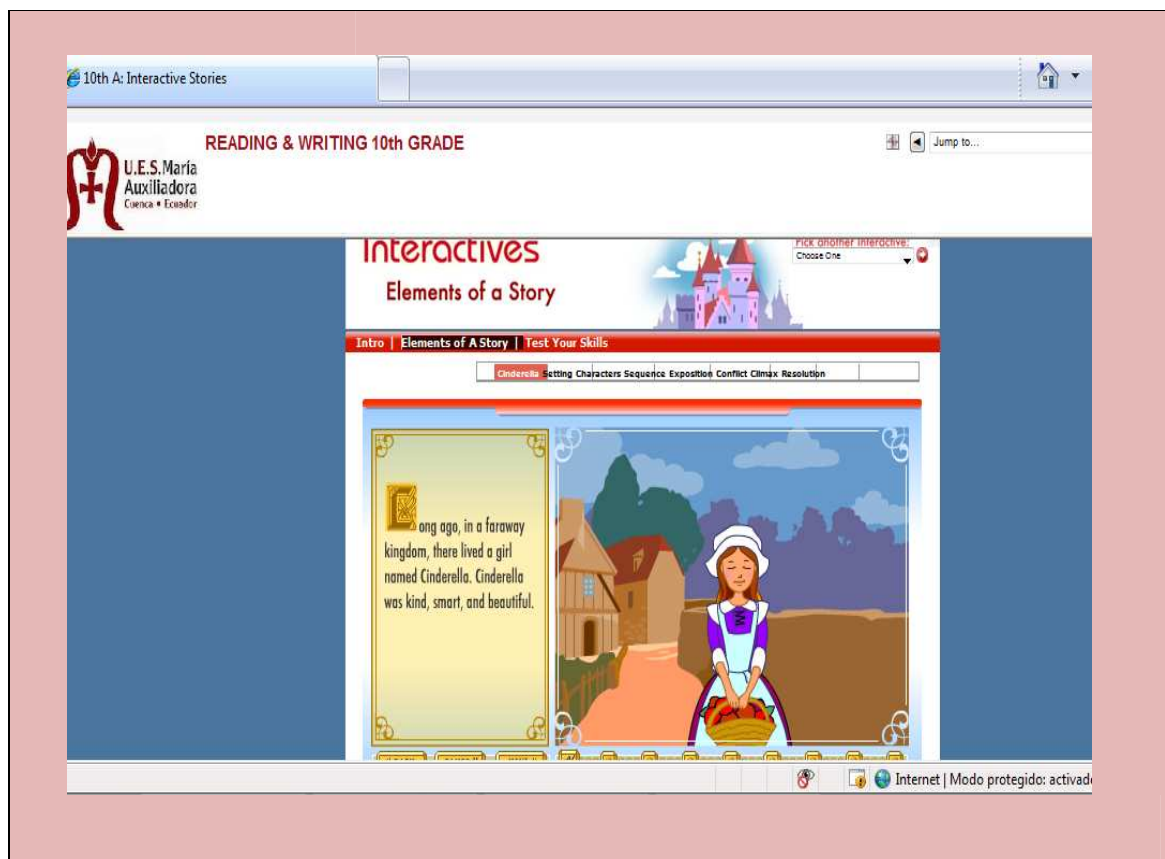
- ✓ Planning and Goal Setting: Defining personal priorities.
 - ✓ Making connections: Connecting new with known knowledge.
 - ✓ Making predictions: Thinking about what's going to happen based on what they know.
 - ✓ Asking questions: Before, during and after reading in order to better understand the text.
 - ✓ Visualizing: Picturing what is happening as they read the text.
 - ✓ Monitoring and Clarifying: Identifying understandable expressions and finding meanings.
 - ✓ Summarizing and Synthesizing: Restating ideas in own words.
 - ✓ Determining what's important: Identifying main ideas and important messages in the text.
 - ✓ Analyzing author's craft: Identifying the author's use of language to get his/her ideas across.
 - ✓ Reflecting and Relating: Giving opinions.
 - ✓ Forming interpretations.
-



Adapted from Olson and Land “A Cognitive Strategies Approach to Reading and Writing Instruction for English Language Learners in Secondary School”⁹

Fig.46. Cognitive and Metacognitive Reading and Writing Strategies.

Metacognitive visual strategies were employed mostly in the web-based VLE to serve two main reasons: to help in understanding by serving as a stepping stone between text and mental representation, and to assess text comprehension. Figure 47 shows a visual strategy used in the virtual environment.



Source: “Reading & Writing 10th Grade.” ELearning UESMA.¹⁰

⁹ [http://www.nwp.org/cs/public/download/nwp_file/8538/Booth Olson, Carol, et al.pdf?x-r=pcfile_d](http://www.nwp.org/cs/public/download/nwp_file/8538/Booth%20Olson,%20Carol,%20et%20al.pdf?x-r=pcfile_d) 17 March 2011



Fig.47. Visual Strategy.

In this new learning environment the teacher acts as a facilitator of students' individual learning processes, providing constant feedback to assist them to reflect on their own learning progress.

3.4.2 The Process inside VLE

VLE includes two types of users, students' individual access and teacher's individual access. Both teacher and students need a username and a password to log in to the web-based course. The overall course is structured by weeks, but depending on the students' progress some topics are covered in more than one week. Topics and contents correspond to the course book used for class instruction.

The present web-based project is available on the website:

<http://elearning.uesmacuenca.edu.ec/>

Figure 48 shows the main screen of the virtual learning environment.

It is indispensable to specify that this was the first time the VLE had been used by teachers and students at UESMA.

¹⁰ <http://elearning.uesmacuenca.edu.ec/course/view.php?id=3>. 10 March. 2011

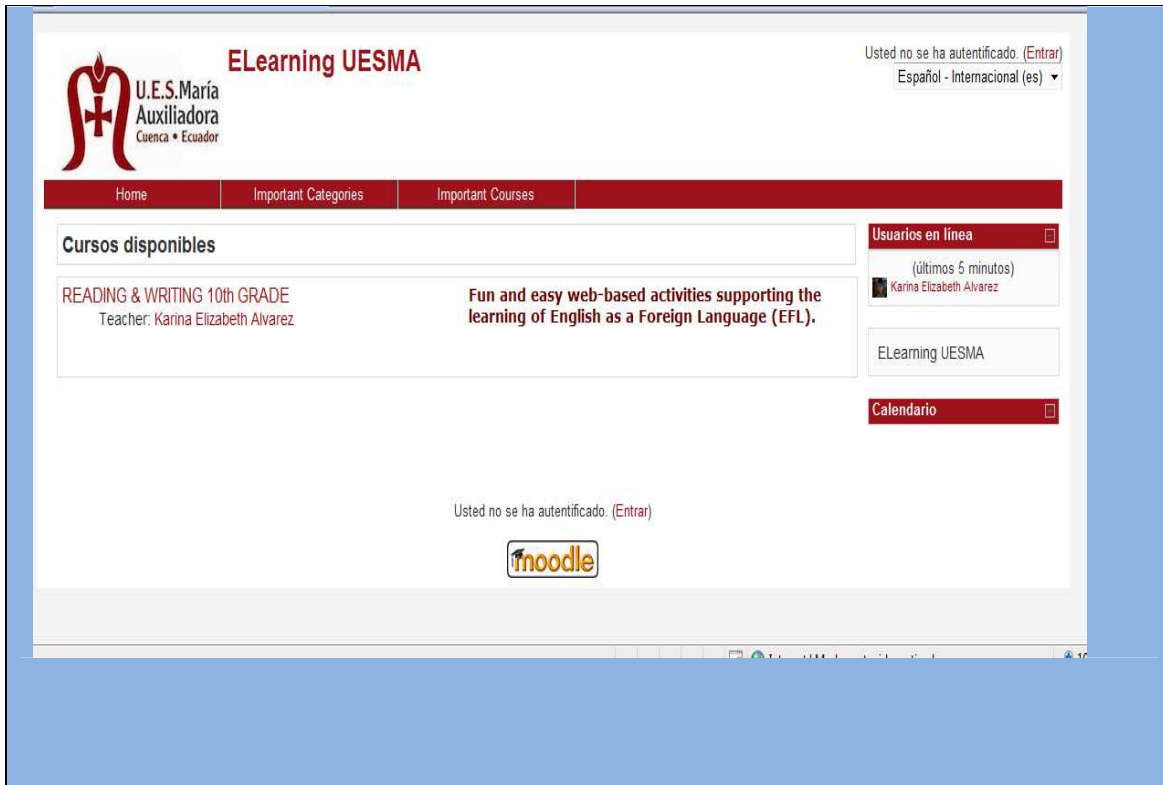


Fig. 48. Main Screen of the Virtual Learning Environment.



Figure 49 indicates the general weekly diagram designed in the VLE.

The screenshot shows a Moodle course interface for 'READING & WRITING 10th GRADE'. The page is titled 'Life is all about taking risks' and features a red flower with a butterfly. The course is set for '20 September - 26 September' and 'WEEK 1'. A task titled 'Task 1 Introduce yourself' is shown, which includes a video player with the text: 'Learn English- Introduce Yourself (with English... I'm learning Spanish right now, because I think it's a beautiful language, and also because I want to visit Spain one day. I'm improving day after day, but I need to practice with someone who is a native.' Below the video is a 'How to introduce yourself' link. The next task is 'Task 2 Present Simple', dated '27 September - 3 October', featuring a video player with the text: 'Tell Me Why - Joe Jonas (Jonas Brothers) - With... Tell me why (why why) Does it make me mad?'. The video player has a 'PRESENT SIMPLE' label below it. The interface includes a left sidebar with navigation options like 'People', 'Activities', and 'Search Forums', and a right sidebar with 'Online Users', 'Latest News', and 'Upcoming Events'.

Fig.49. Weekly Diagram.



Figure 50 demonstrates the last three weeks designed in the VLE.

The screenshot shows a Moodle course interface for 'READING & WRITING 10th GRADE'. It displays three sequential weeks of content:

- WEEK 17:** Titled 'Basketball', featuring a stylized illustration of a basketball court with the text 'play game' and 'Basketball' written in a hand-drawn style. Below the illustration are navigation icons and links to 'MES Games' and 'Basketball Game'.
- WEEK 18:** Dated '21 March - 27 March', featuring a still from the Disney movie 'Alice in Wonderland' showing the Cheshire Cat sitting at a table with a teapot and pastries. Below the image are navigation icons and links to 'Task 17 Reading and Comprehension Activity' and 'The Missing Cat'.
- WEEK 19:** Titled 'Life in the Future', featuring a video player showing a futuristic interior with the text 'Living Tomorrow: house of the future'. Below the video player are navigation icons, a 'Whatever Will Be, Will Be!' link, and options to 'Add a resource...' and 'Add an activity...'.

At the bottom of the page, it says 'Moodle Docs for this page'.



Fig. 50. The Last Three Weeks in the VLE.

As a first step students register for the course assigned by the author of the present project (**READING & WRITING 10th GRADE**), update their profile and upload a photo. Figure 51 shows an example of a 10th grade student's profile.

For a better understanding of the web-based project three images taken from the virtual environment are shown below to recreate the activities developed by students¹¹.



Fig. 51. Student's Profile.

¹¹ For the purposes of the present research work the 10th grade students' parents permitted their participation in the process by signing a consent form. (See Annex 1)



Figure 52 shows a second example of 10th grade students' profile.

The screenshot shows a Moodle user profile for Stephanie Leon Crespo. The page title is "READING & WRITING 10th CLASS 'A'". The user's name is "STEPHANIE LEON CRESPO". The profile includes a photo of three people, a bio stating "I'm a very nice person. I like support a all my friends in all moment.", and personal details: Country: Ecuador, City/town: Cuenca, Email address: snleoncre@uesmacuenca.edu.ec, Courses: READING & WRITING 10th CLASS "A", First access: Wednesday, 22 September 2010, 02:43 PM (210 days 5 hours), Last access: Sunday, 20 March 2011, 06:42 PM (31 days 1 hour), Roles: Student, and Interests: I like listen to music, watch TV, surf the net and more things. Navigation buttons include "Unenrol me from 10th A", "Login as", and "Send message". A Moodle Docs icon and a login status for Karina Elizabeth Alvarez are also visible.

Fig. 52. Student's Profile.

Figure 53 shows a third example of 10th grade students' profile.

The screenshot shows a Moodle user profile for Cynthia Soto Villegas. The page title is "ELearning UESMA > 10th A > Participants > CYNTHIA SOTO VILLEGAS". The user's name is "CYNTHIA SOTO VILLEGAS". The profile includes a photo of a woman, a bio stating "mMm... I'm fUnnY... I lIOvE mY fRiEndS... AnD I lIkE tHe Musc...", and personal details: Country: Ecuador, City/town: Cuenca, Email address: cesotovil@uesmacuenca.edu.ec, Courses: READING & WRITING 10th CLASS "A", First access: Wednesday, 22 September 2010, 02:33 PM (210 days 5 hours), Last access: Thursday, 24 March 2011, 06:30 PM (27 days 1 hour), Roles: Student, and navigation buttons: "Unenrol me from 10th A", "Login as", and "Send message".

Fig. 53. Student's Profile.



3.4.3 Different Resources Used to Design the Web-based Reading and Writing Project

The web-based activities in the VLE supports face-to-face classroom instructions by providing students with access to all lecture material, interactive textbook modules, discussion forums, online reading articles, language learning websites and a wealth of other resources. Using the VLE students did self-check quizzes and exercises focussing on specific language points. Some were designed as true or false, multiple choice or fill-in-the-blanks.

Figure 54 clarifies the variety of resources used in the virtual environment during the teaching and learning process.

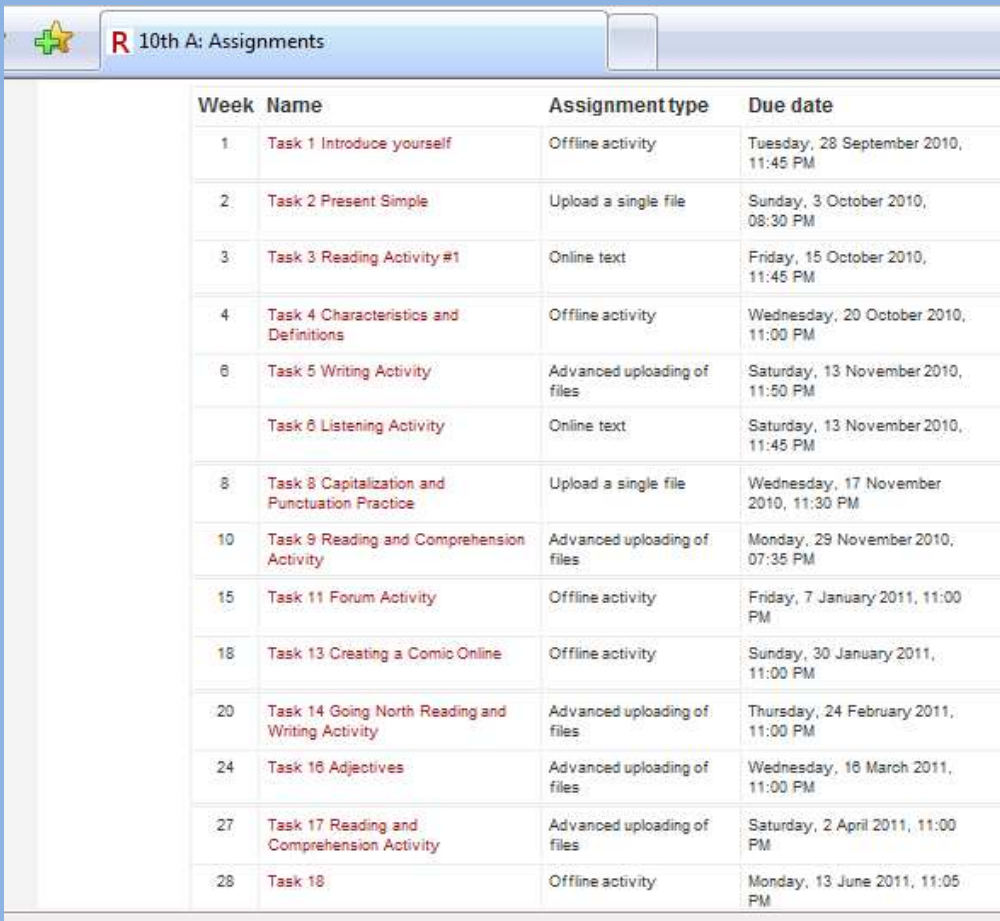


Fig. 54. Resources.



3.4.3.1 Assignments

Some assignments students did individually and others permitted their interaction with other students and/or the teacher. Through the assignments students received feedback and grades. Figure 55 shows an example of the assignments during the process.



Week	Name	Assignment type	Due date
1	Task 1 Introduce yourself	Offline activity	Tuesday, 28 September 2010, 11:45 PM
2	Task 2 Present Simple	Upload a single file	Sunday, 3 October 2010, 08:30 PM
3	Task 3 Reading Activity#1	Online text	Friday, 15 October 2010, 11:45 PM
4	Task 4 Characteristics and Definitions	Offline activity	Wednesday, 20 October 2010, 11:00 PM
6	Task 5 Writing Activity	Advanced uploading of files	Saturday, 13 November 2010, 11:50 PM
	Task 6 Listening Activity	Online text	Saturday, 13 November 2010, 11:45 PM
8	Task 8 Capitalization and Punctuation Practice	Upload a single file	Wednesday, 17 November 2010, 11:30 PM
10	Task 9 Reading and Comprehension Activity	Advanced uploading of files	Monday, 29 November 2010, 07:35 PM
15	Task 11 Forum Activity	Offline activity	Friday, 7 January 2011, 11:00 PM
18	Task 13 Creating a Comic Online	Offline activity	Sunday, 30 January 2011, 11:00 PM
20	Task 14 Going North Reading and Writing Activity	Advanced uploading of files	Thursday, 24 February 2011, 11:00 PM
24	Task 16 Adjectives	Advanced uploading of files	Wednesday, 16 March 2011, 11:00 PM
27	Task 17 Reading and Comprehension Activity	Advanced uploading of files	Saturday, 2 April 2011, 11:00 PM
28	Task 18	Offline activity	Monday, 13 June 2011, 11:05 PM

Fig. 55. Assignments.



3.4.3.2 Forum

In the forum the students and the teacher post comments and exchange ideas. This activity in the VLE contributes significantly to improving students' communicative competence. Figure 56 indicates some forums used in the process.



10th A: Forums

Novedades Novedades y anuncios 0 Yes

Learning forums




Week	Forum	Description	Discussions	Subscribed
1	About me	Now it is time to introduce yourself. Feel free to write everything about yourself and your family.	24	<input type="checkbox"/>
	My first experience	Once you have finished task 1, write about your first experience working online.	13	<input type="checkbox"/>
3	What kinds of films do you like?	Most films usually include funny parts: people in love, action and danger or frightening scenes. Others catch people's attention because of the advanced technology which makes people think about the future and aliens. What kinds of films do you like?	13	<input type="checkbox"/>
6	Task 7 About my favorite film	Did you search for information about your favorite film? What did you find?	12	<input type="checkbox"/>
15	The New Year's Eve	 How do you and your family celebrate the New Year's Eve? What do you wear? What do you eat?	26	<input type="checkbox"/>
20	Cooperative Learning	 Use the forum to contact one of your classmates and decide how to do the activity. Every time you need you can contact your classmate using the same forum until you finish the activity.	14	<input type="checkbox"/>
	Important Facts about Copenhagen	 Surf the net looking for extra information about Copenhagen and write one important fact which calls your attention.	13	<input type="checkbox"/>

Fig. 56. Forum Activity



3.4.3.3 Glossary

The glossary was used as a collaborative activity by students and the teacher to create a list of new words and definitions. Figure 57 shows an example of a vocabulary list.

The screenshot shows a web browser window with the title "10th A: Task 10 Vocabulary Activity". The page content is from "U.E.S. Maria Auxiliadora" and is titled "READING & WRITING 10th GRADE". The page includes a navigation menu with "Elearning UE SMA", "10th A", "Glossaries", and "Task 10 Vocabulary Activity". There are buttons for "Upload the Glossary", "Import entries", and "Export entries". The main content area has a heading "Let's build a vocabulary list." followed by instructions: "First, find new words in the article [New Year's Eve Celebrations around the World](#). Second, look for the meaning in English using a [dictionary online](#). Third, click on [Agregar entrada](#) and write the word and the meaning of it. Finally, write your name, save it and check what you did." Below the instructions is a search bar with a "Search" button and an "Add a new entry" button. At the bottom, there are navigation options: "Browse by alphabet", "Browse by category", "Browse by date", and "Browse by Author". Below these options is a link "Browse the glossary using this Index" and a list of letters: "A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |".



The screenshot displays a glossary activity interface with the following content:

- atmosphere:** The gaseous mass or envelope surrounding a celestial body, especially the one surrounding the earth, and retained by the celestial body's gravitational field. By Maria Gracia Ortiz. Rating: 20 / 20
- B**
- bright:** Emitting or reflecting light readily or in large amounts; shining. By Maria Gracia Ortiz. Rating: 1 / 20
- bustling:** To move or cause to move energetically and busily. By Madeline Sarmento. Rating: 20 / 20
- C**
- Chime:** Sound like a single bell, as in the mechanism of a clock. By Valeria Valencia. Rating: 20 / 20
- Crescent:** A crescent is generally the shape produced when a circular disk has a segment of another circle removed from its edge. By Karen Tello. Rating: 20 / 20
- D**
- descends:** To move from a higher to a lower place, come or go down. By Andrea Rocano. Rating: 1 / 20
- Dummy:** A figure representing the human form. By Dunia Calle. Rating: 20 / 20
- E**
- embrace:** To clasp or hold close with the arms, usually as an expression of affection. Rating: 20 / 20

Fig. 57. Glossary Activity.



3.4.3.4 Quizzes

The quizzes designed by the author of the present project consisted of multiple choice, true-false, short answer, and fill-in-the-blank questions. Figure 58 illustrates a quiz based on an online reading activity.

The screenshot shows a web browser window displaying an online quiz. The browser's address bar shows the URL: [R 10th A: Online Reading and Comprehension Quiz](#). The page header includes the logo of U.E.S. Maria Auxiliadora Cuenca + Ecuador and the text "READING & WRITING 10th GRADE". A user is logged in as Karina Elizabeth Alvarez (Logout). The page title is "ELearning UESMA - 10th A - Quizzes -> Online Reading and Comprehension Quiz -> Attempt 2". There are buttons for "Update this Quiz", "Info", "Results", "Preview", and "Edit". The main heading is "Preview Online Reading and Comprehension Quiz" with a "Start again" button and "Page: 1 2 (Next)". The quiz consists of six true-false questions:

- 1 ^{tr} The most important sites in Paris are close together.
Marks: -/1
Answer: Verdadero Falso
- 2 ^{tr} Notre-Dame is the most important Cathedral in the world.
Marks: -/1
Answer: Verdadero Falso
- 3 ^{tr} One of the highlights of the Latin Quarter of Paris includes the Sorbonne University.
Marks: -/1
Answer: Verdadero Falso
- 4 ^{tr} The Louvre is one of the most expensive art museums in the world.
Marks: -/1
Answer: Verdadero Falso
- 5 ^{tr} The Louvre is the most visited museum in the world.
Marks: -/1
Answer: Verdadero Falso
- 6 ^{tr} The Eiffel Tower was built in 1898.
Marks: -/1
Answer: Verdadero Falso

Fig. 58. Quiz Activity.



3.4.3.5 Resources

Some resources such as files in different formats created by the author of the present project and links to web-sites were added to the web-based project. Figure 59 shows an example of files, web resources and VLE resources used in week 5.



The screenshot shows a web browser window with the URL `macuenca.edu.ec/file.php/3/...`. The page content includes:

- Skills to develop:**
 - Following instructions.
 - Thinking about what to write.
 - Using correct punctuation and spelling.
 - Using appropriate vocabulary.
 - Guessing unknown words to a text.
- By Karina Alvarez 1**
- WRITING A FILM REVIEW**
- 1 Use the information below to write a film review for "Letters to Juliet".**
- WRITING TIP:** We use present simple when we write reviews for films, books and plays.
- Image gallery:** A collection of small images from the movie "Letters to Juliet".
- Text box:**
 - Title: Letters to Juliet
 - Type of film: Comedy, Romance
 - Place: Verona
 - Main Characters: Amanda Seyfried, Chris Egan, Gael Garcia Bernal, Vanessa Redgrave, Franco Nero
 - Director: Gary Winick
 - Plot: A young American girl / travel to Verona / join a group of volunteers / respond to letters seeking advice about love / romantic journey / many unexpected events bring true love / the experience change her life forever
 - Opinion: Fascinating / Touching / Don't miss it!

Below the browser window, there is a navigation menu with the following items:

- Task 5 Writing Activity
- Letters to Juliet
- Letters to Juliet
- Task 6 Listening Activity

A video player is embedded, showing a scene from the movie "Letters to Juliet" with the title "Letters to Juliet - You got me - Colbie Caillat -16:9 widescreen HD" and a duration of 0:17 / 4:04. A red box labeled "Web Resource" has an arrow pointing to the video player.



The screenshot shows a forum post within a Learning Management System (LMS) interface. At the top, there are four movie posters: Twilight, Bolt, Made of Honor, and a dark, possibly horror-themed film. Below the posters, the text of the post asks: "What do you know about your favorite film? Where does it take place? Who is the director? Who are the main characters?... Provide this information in the forum." The post includes a title "Task 7 About my favorite film" and a "VLE Resource" label with an arrow pointing to it. At the bottom of the post, there are two dropdown menus: "Add a resource..." and "Add an activity...".

Fig. 59. Resources in Week 5.

Additionally, students were made aware of the skills they were developing in every activity. Figure 60 indicates an example of a reading activity created by the author of the present project.



Fig. 60. Reading Activity.

3.4.4 Structure of the Teaching-Learning Process in the Virtual Learning Environment

In general, besides considering learning strategies and styles and language competence of 10th grade students, the presentation and design of the web-based activities in the virtual platform strengthened students' learning weaknesses and provided new opportunities of experiencing different ways of learning.

Since the evaluation and monitoring is an essential part of any educational activity, computer supported collaborative instruction provides an effective means for this purpose. Existing systems in the virtual environment assist the teacher with the assessment process, but it primarily offers effective feedback as formative evaluation.



Similar to most educational activities, the main teacher's role in the VLE is to identify students' difficulties and obstacles during the learning process in order to prepare students for developing and using knowledge and skills in the best possible way. Figure 61 shows a structure of the teaching-learning process used in the VLE designed by the author of the research project.



STRUCTURE OF THE TEACHING-LEARNING PROCESS IN THE VIRTUAL ENVIRONMENT				
Step 1	Selection of the activities (online sources/teacher's sources).			
Step 2	Detailed explanation of the development of the assignment. <table border="1" style="margin-left: 20px; width: 60%;"> <tr> <td style="text-align: center;">Images</td> <td style="text-align: center;">Structured instructions</td> <td style="text-align: center;">Due Date to Perform the Tasks</td> </tr> </table>	Images	Structured instructions	Due Date to Perform the Tasks
Images	Structured instructions	Due Date to Perform the Tasks		
Step 3	Students' individual or group work. Control of the Students' activity in the virtual environment (views, posts, daily and weekly activity).			
Step 4				
EVALUATION				
Formative	Feedback during and after assignments.			
Summative	According to the parameters established at UESMA 20/20.			

Fig. 61. Sequence Structure of the Teaching-Learning Process in the Virtual Environment.



Steps 1 and 2 are considered as relevant in the design of the web-based project since students' intrinsic motivation is gained through the effective use of online resources.

First, in **Step 1** the author of this project incorporated the necessary activities in order to support the development of students' skills. These activities were related to the course book used in class.

Second, in **Step 2** visual resources were used aimed at motivating students by boosting their fantasy and curiosity. Besides, structured instructions helped them to define a system of organized steps and categorize personal priorities in order to obtain better learning results.

Additionally, the due date set for every assignment helped keep students from getting distracted and wandering off and allowed them to control their learning process with responsibility. Figure 62 shows an example of step 2.



The screenshot shows a web browser window with the address bar displaying "10th A: Assignment: Task 13 Creating a Comic O...". The main content area shows a comic strip titled "Saving Power at the Office" by suzievesper. The comic consists of three panels:

- Panel 1: A woman asks, "Did you know that computers use up a lot of power even when you are not using them?"
- Panel 2: The woman explains, "Monitors take up a lot of power - switch it off when you don't need to see what is happening."
- Panel 3: The woman says, "And switch off the power at the wall when the computer is shut down."

Below the comic is the Pixton logo. At the bottom of the interface, it states: "Available from: Tuesday, 18 January 2011, 07:40 PM" and "Due date: Sunday, 30 January 2011, 11:00 PM". A link "View 8 submitted assignments" is visible in the top right corner of the comic viewer. Three callout boxes on the right side of the screenshot point to the comic image, the Pixton logo, and the due date information.

Fig. 62. Step 2 example 1.



Figure 63 shows a second example of Step 2.

The screenshot displays an assignment page titled "READING & WRITING 10th GRADE" from U.E.S. Maria Auxiliadora. The assignment is "Task 14 Going North Reading and Writing Activity". It features a central graphic with the text "Going North" and two images: a classical statue and a colorful town. Below the graphic, instructions are provided: "First, read the ISSUU Document 'Going North - Reading and Writing Activity'. Second, search for the information required. Third, use the forum 'Cooperative Learning' to contact one of your classmates and decide how to". A green arrow points downwards. The page also shows submission details: "Available from: Wednesday, 16 February 2011, 07:35 AM" and "Due date: Thursday, 24 February 2011, 11:00 PM". A "Submission draft" section indicates "No files submitted yet" and includes an "Upload a file (Max size: 2MB)" button. A "Final submission for assignment marking" section includes a "Send for marking" button. Three callout boxes on the right side of the page point to specific elements: "Image" points to the central graphic, "Instructions" points to the text instructions, and "Due Date" points to the due date information.

Fig. 63. Step 2 example 2.



Figure 64 shows a third example of Step 2.

The screenshot displays a digital activity window titled "Reading and Comprehension Activity". The window contains an illustration of books, a CD, a computer monitor, and a mouse. Below the illustration, there are four instructions: "First, click on the link 'A Missing Cat'.", "Second, play the story while you read.", "Third, choose one of the activities offered at the end of the story.", and "Finally, upload the activity under this window using a Word Document." At the bottom left, it shows availability and due dates: "Available from: Sunday, 27 March 2011, 06:00 AM" and "Due date: Saturday, 2 April 2011, 11:00 PM". Three callout boxes on the right side of the window point to the illustration, the instructions, and the due date information, labeled "Image", "Instructions", and "Due Date" respectively.

Fig. 64. Step 2 example 3.

Third, in **Step 3** the author of this project monitored every student's actions by analyzing her views, posts and activities. Figure 65 shows an example of an individual report.



READING & WRITING 10th GRADE : DANIELA CORDOVA, Tuesday, 28 September 2010 (Server's local time)

READING & WRITING 10th GRADE DANIELA CORDOVA Tuesday, 28 September 2010

All activities All actions Display on page Get these logs

Displaying 39 records

Time	IP Address	Full name	Action	Information
Tue 28 September 2010, 05:10 PM	200.25.197.112	DANIELA CORDOVA	forum user report	DANIELA CORDOVA
Tue 28 September 2010, 05:10 PM	200.25.197.112	DANIELA CORDOVA	user view	DANIELA CORDOVA
Tue 28 September 2010, 04:25 PM	200.25.197.112	DANIELA CORDOVA	assignment view all	
Tue 28 September 2010, 04:25 PM	200.25.197.112	DANIELA CORDOVA	assignment view	Task 2 Present Simple
Tue 28 September 2010, 04:10 PM	200.25.197.112	DANIELA CORDOVA	course view	READING & WRITING 10th GRADE
Tue 28 September 2010, 04:06 PM	200.25.197.112	DANIELA CORDOVA	user view	Karina Elizabeth Alvarez
Tue 28 September 2010, 04:06 PM	200.25.197.112	DANIELA CORDOVA	forum user report	Karina Elizabeth Alvarez
Tue 28 September 2010, 04:05 PM	200.25.197.112	DANIELA CORDOVA	user view	Karina Elizabeth Alvarez
Tue 28 September 2010, 04:04 PM	200.25.197.112	DANIELA CORDOVA	forum view forum	
Tue 28 September 2010, 04:01 PM	200.25.197.112	DANIELA CORDOVA	course view	READING & WRITING 10th GRADE
Tue 28 September 2010, 04:01 PM	200.25.197.112	DANIELA CORDOVA	forum view forum	My first experience
Tue 28 September 2010, 04:00 PM	200.25.197.112	DANIELA CORDOVA	forum add discussion	My First Experience
Tue 28 September 2010, 03:55 PM	200.25.197.112	DANIELA CORDOVA	forum view forum	My first experience
Tue 28 September 2010, 03:55 PM	200.25.197.112	DANIELA CORDOVA	course view	READING & WRITING 10th GRADE
Tue 28 September 2010, 03:54 PM	200.25.197.112	DANIELA CORDOVA	forum view forums	
Tue 28 September 2010, 03:54 PM	200.25.197.112	DANIELA CORDOVA	forum view forums	
Tue 28 September 2010, 03:54 PM	200.25.197.112	DANIELA CORDOVA	forum view forum	My first experience
Tue 28 September 2010, 03:54 PM	200.25.197.112	DANIELA CORDOVA	forum view forum	My first experience
Tue 28 September 2010, 03:53 PM	200.25.197.112	DANIELA CORDOVA	course view	READING & WRITING 10th GRADE
Tue 28 September 2010, 03:53 PM	200.25.197.112	DANIELA CORDOVA	user view	Valeria Valencia Ortiz
Tue 28 September 2010, 03:53 PM	200.25.197.112	DANIELA CORDOVA	forum view forum	My first experience
Tue 28 September 2010, 03:50 PM	200.25.197.112	DANIELA CORDOVA	course view	READING & WRITING 10th GRADE
Tue 28 September 2010, 03:49 PM	200.25.197.112	DANIELA CORDOVA	assignment view	Task 1 Introduce yourself
Tue 28 September 2010, 03:48 PM	200.25.197.112	DANIELA CORDOVA	resource view	My Mistakes

Fig. 65. Individual Report.

Finally, in **Step 4** the author of this project provided formative feedback and summative evaluation to help students obtain information referring to their strong and weak areas with the purpose of supporting their personal improvement.



Figure 66 shows an example of a student's summative evaluation with formative feedback.

The screenshot displays a web browser window showing a student's evaluation interface. The browser title is "Feedback:STEPHANIE LEON CRESPO:Task 3 Reading Activity #1 - Windows Internet Explorer (No response)". The URL is "http://elearning.uesmacuenca.edu.ec/mod/assignment/submissions.php?id=77&userid=24&mode=single&offset=17". The page shows a student's submission for "Karina Elizabeth Alvarez" on "Wednesday, 13 October 2010, 02:13 PM". The "Grade" is "18 / 20" and the "Final grade" is "18.00". The submission text is "11.Glass= Transparent solid substance". Below this is a "Comprehension Part" with feedback: "I (incorrect) and B(incorrect). If you read slowly you will understand the main idea of the text and find important details. Try again!". There are buttons for "Save changes", "Cancel", "Save and show next", and "Next". Below the submission is the name "STEPHANIE LEON CRESPO" and the date "Monday, 11 October 2010, 05:09 PM (4 days 6 hours early)". A "VOCABULARY" section lists: "1. Sleepy = Tired", "2.Perhaps =", "3.", "Maybe", and "Grass= Field". The browser status bar shows "Listo" and "100%" zoom.

Fig. 66. Student's Evaluation.



Figure 67 shows a second example of a student's evaluation.

The screenshot displays a student evaluation interface. At the top right, it shows "Final grade: 20.00". The main content area contains a message: "You're doing a good job! You are really good at reading fast and locating specific information in a text." Below the message, there is a "Path:" field, a checkbox for "Send notification emails", and buttons for "Save changes", "Cancel", "Save and show next", and "Next". At the bottom, the student's name "TATIANA GUARACA MEDINA" and the date "Monday, 18 October 2010, 07:08 PM" are visible. Two callout boxes on the right side of the interface point to the "Final grade: 20.00" and the message text, labeled "Summative Evaluation" and "Formative Feedback" respectively.

Fig. 67. Student's Evaluation.



Figure 68 shows a third example of a student's evaluation.

The screenshot shows a web-based evaluation interface. At the top, the evaluator is identified as Karina Elizabeth Alvarez, with a timestamp of Sunday, 5 December 2010, 03:02 PM. The grade is set to 'No grade' and the final grade is 18.00. A rich text editor toolbar is visible, followed by the message: 'Dear Andrea, There is too much information in your answer. Read the article again and try to locate only what is necessary to answer the question.' Below this, a green button labeled 'Try again!' with a smiley face icon is present. The interface includes a 'Path' field showing 'body > p >> font', a 'Send notification emails' checkbox, and buttons for 'Save changes', 'Cancel', 'Save and show next', and 'Next'. A 'Response files' section contains an 'Examinar...' button and an 'Upload this file' button. At the bottom, the student's information is shown: Andrea Morales, Monday, 29 November 2010, 06:28 PM (1 hour 6 mins early). A 'Draft' section shows a file named 'andrea.doc' with a red 'x' icon and a 'No more submissions' button. Two green callout boxes on the right side of the screenshot have arrows pointing to the 'Try again!' button (labeled 'Summative Evaluation') and the 'No more submissions' button (labeled 'Formative Feedback').

Fig. 68 Student's Evaluation.



3.4.5 Applying the Theory to the Web-Based Reading and Writing Activities

The web-based environment is structured in order to provide 10th grade students' with effective reading and writing skills development by supporting their diverse learning styles and strategies, and allowing them to enhance their learning process using the four different learning modes.

The web-based project consisted of 19 weeks. The following description of weeks 1 to 4 used as an example provides a clear idea of how the process was structured. The activities corresponding to the other weeks can be found on the website: <http://elearning.uesmacuenca.edu.ec/>.

Figure 69 demonstrates the skills, strategies and learning modes students' developed during the first week.

WEEK 1

SKILLS Reading and Writing	STRATEGIES Cognitive Metacognitive and Socioaffective	LEARNING PROCESS Perception and Processing
<ul style="list-style-type: none"> • Reading in order to give an opinion • Using correct punctuation and spelling • Structuring sentences 	<ul style="list-style-type: none"> • Note taking • Repetition • Visualizing • Determining what's important • Giving opinions • Organizing ideas • Thinking about what to write 	<ul style="list-style-type: none"> • Concrete Experience Interactive tutorial Forum Practical exercises • Reflective Observation Watching and listening Online reading instructions • Abstract Conceptualization Text analysis "Introduce Yourself" • Active Experimentation Applying new concepts

Fig. 69. Week 1



Figure 70 provides an illustration corresponding to week 1.

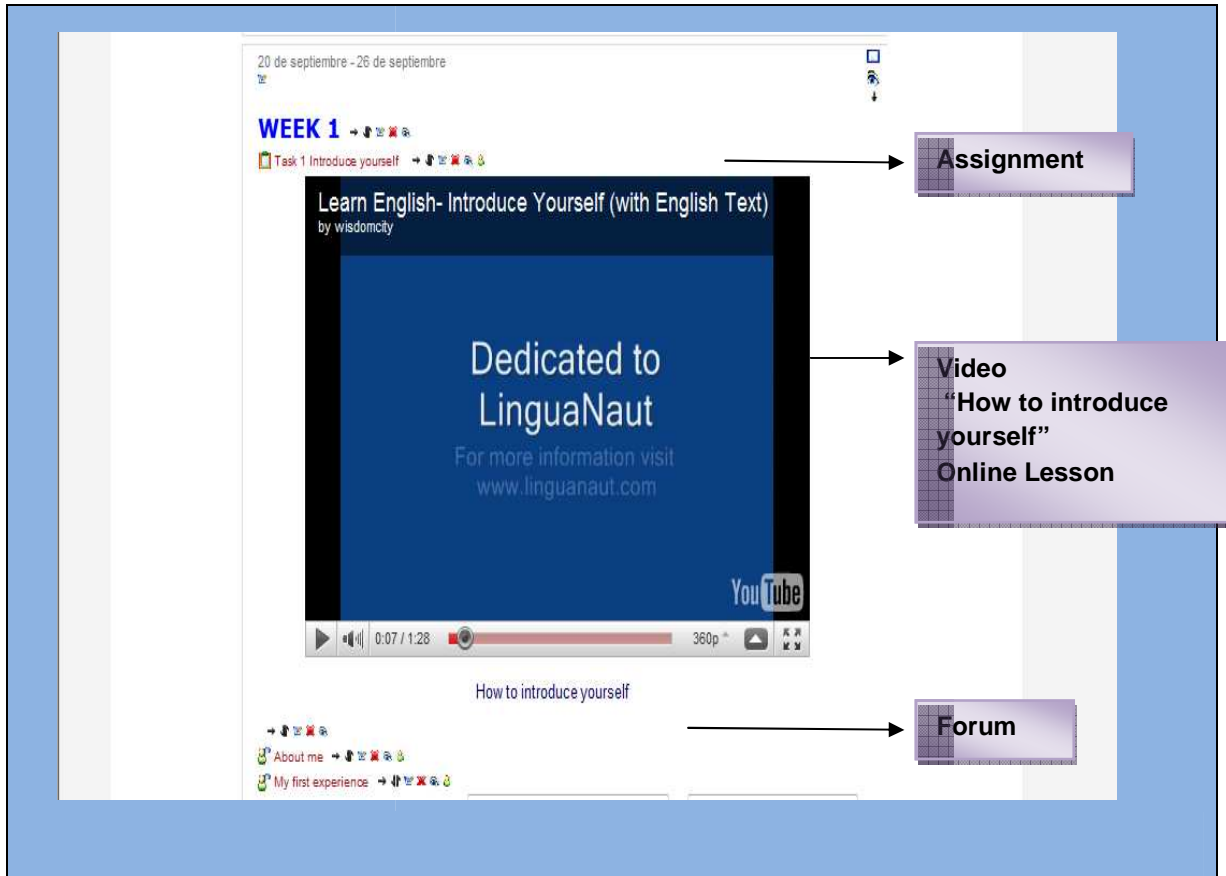


Fig. 70. Illustration of Week 1.



Figure 71 shows the skills, strategies and learning modes students' developed during the second week.

WEEK 2

SKILLS	STRATEGIES	LEARNING PROCESS
<p>Reading and Writing</p> <ul style="list-style-type: none"> • Following instructions to write • Rewriting sentences • Reading fast 	<p>Cognitive Metacognitive and Socioaffective</p> <ul style="list-style-type: none"> • Repetition • Visualizing • Determining what's important • Forming interpretations • Recognizing specific parts of speech • Questions for clarification 	<p>Perception and Processing</p> <ul style="list-style-type: none"> • Concrete Experience Specific examples Practical exercises • Reflective Observation Watching and listening to Video Brainstorming Online reading • Abstract Conceptualization Theory analysis • Active Experimentation Online activities

Fig. 71. Week 2.



Figure 72 provides an illustration corresponding to week 2.

27 de septiembre - 3 de octubre
WEEK 2
Task 2 Present Simple

Tell Me Why - Joe Jonas (Jonas Brothers) - With...
**Tell me why
(why why)
Does it make
me mad?**

YouTube

0:00 / 1:32

PRESENT SIMPLE

PRESENT SIMPLE

I Sing

Affirmative I sing, He/She/It sings , We/You/They sing.
Negative I don't sing, He/She/It doesn't sing , We/You/they don't sing .
Interrogative Do I sing?, Does he/she/it sing ? Do we/you/they sing ?
Short Answers Yes, I do No, I don't

Here you will find extra practice for the present simple use.

Assignment

Video
Tell Me Why - Song
Online Activity

Online Lesson

Fig. 72. Illustration of Week 2.



Figure 73 demonstrates the skills, strategies and learning modes students' developed during the third week.

WEEK 3

SKILLS	STRATEGIES	LEARNING PROCESS
<p>Reading and Writing</p> <ul style="list-style-type: none"> • Guessing unknown words in a text. • Reading the text slowly in order to understand details • Rewriting sentences • Expressing ideas appropriately • Using correct punctuation and spelling 	<p>Cognitive Metacognitive and Socioaffective</p> <ul style="list-style-type: none"> • Visualizing • Determining what's important • Forming interpretations • Understanding what to do with the text. • Forming interpretations • Deduction • Imagery • Cooperation • Selective attention • Making connections • Making predictions • Questions for clarification 	<p>Perception and Processing</p> <ul style="list-style-type: none"> • Concrete Experience Active involvement with other students Forum • Reflective Observation Watching and listening to Video Online reading • Abstract Conceptualization Text analysis "Alice in Wonderland" Questions for understanding • Active Experimentation Discovery of new information Forum

Fig. 73. Week 3.



Figure 74 provides an illustration corresponding to week 3.

The image shows a Moodle course page for 'WEEK 3' from October 4 to 10. The page features a video player with a thumbnail of the Mad Hatter from 'Alice in Wonderland'. Below the video, there are three activity items: 'Task 3 Reading Activity#1', 'Alice in Wonderland', and 'What kinds of films do you like?'. Three arrows point from these items to labels on the right: 'Video Online Lesson' points to the video player, 'Assignment' points to the 'Alice in Wonderland' activity, and 'Forum' points to the 'What kinds of films do you like?' activity.

Fig. 74. Illustration of Week 3.



Figure 75 explains the skills, strategies and learning modes students' developed during the fourth week.

WEEK 4

SKILLS	STRATEGIES	LEARNING PROCESS
<p>Reading and Writing</p> <ul style="list-style-type: none"> • Using correct punctuation and spelling • Structuring sentences • Using appropriate vocabulary • Linking ideas • Reviewing own writing 	<p>Cognitive Metacognitive and Socioaffective</p> <ul style="list-style-type: none"> • Visualizing • Determining what's important • Forming interpretations • Imagery • Cooperation • Selective attention • Making connections • Note taking • Recombination • Questions for clarification 	<p>Perception and Processing</p> <ul style="list-style-type: none"> • Concrete Experience Online tutorial of grammar concepts Practical exercises Games • Reflective Observation Online reading Reflective questions Personal interpretations • Abstract Conceptualization Online multiple-choice quiz • Active Experimentation Online grammar activities

Fig. 75. Week 4.



Figure 76 provides an illustration corresponding to week 4.

The figure illustrates a Moodle course page for Week 4. The page content includes:

- 11 de octubre - 17 de octubre
- WEEK 4**
- The Grammar Gorillas** (with a cartoon gorilla illustration)
- Text: "This is a nice site where you can identify verbs, nouns, adjectives or prepositions in a sentence. Click on Grammar Gorillas and play the game"
- Grammar Gorillas** (activity link)
- Task 4 Characteristics and Definitions** (assignment link)
- Text: "Slides about different kinds of films"
- Text: "Please check the slides again and focus your attention on: romance, action, adventure, musical, comedy, science-fiction, horror and cartoon types of films. Take notes of their main characteristics. After that click on 'Films quiz' and show what you learned."
- Films Quiz** (quiz link)

Annotations with arrows point to the following elements:

- Image**: Points to the cartoon gorilla illustration.
- Assignment**: Points to the 'Task 4 Characteristics and Definitions' link.
- Online Lesson**: Points to the 'Slides about different kinds of films' text.
- Online Quiz**: Points to the 'Films Quiz' link.

The bottom part of the figure shows a screenshot of the 'Types of films Quiz' page, which includes:

- Logo: Auxiliadora Cuenca - Ecuador
- Navigation: ELearning UESMA > 10th A > SCORMs > Films Quiz
- Buttons: Salir de la actividad, Actualizar SCORM
- Mode: Modo Revisión
- Section: Types of films Quiz
- Activity: Types of films Quiz
- Question Type: True-False Question
- Text: "Read carefully each statement about types of films and decide if they are true or false."
- Questions:
 - Action films are similar to Adventure films.
True False
 - Comedies does not have a happy ending.
- Footer: Moodle Docs para esta página

Fig. 76. Illustration of Week 4.



In brief, the web-based project described above provided 10th grade students with several resources and interactive activities to improve the development of their reading and writing skills taking into account their individual learning differences.



CHAPTER 4

DATA ANALYSIS AND RESULTS

This study measured the 10th grade students' involvement and performance after the first and second trimesters using web-based reading and writing activities.

Findings of the study revealed that students enjoyed the convenience of web-based learning where they were highly engaged. Additionally, these results demonstrate that web-based reading and writing activities in the virtual environment supported their learning process of EFL.

The students were required to complete the 6 months in order to evaluate the process. This study provides an analysis of students' level of agreement towards developing web-based reading and writing activities, process, data analysis, and results. See Section 4.1 below.

4.1 Analysis of Students' Level of Agreement towards Developing Web-Based Reading and Writing Activities.

The web-based reading and writing activities have been developed as a form of online education in order to provide support to the normal development of those skills within the classroom context.

4.1.1 Subjects

The population of the study consisted of the 30 students from 10th grade who participated from the beginning of the process; they were registered and logged in from September 2010.



4.1.2 Process

A survey was considered appropriate to collect the data. For the purpose, a questionnaire on a five-point scale was developed with one open-ended question at the end of the questionnaire. The questionnaire was validated through pilot testing on 10 students and 3 teachers from 10th grade and was administered on students through the English Area Coordinator.

Students were asked to provide a rating from 1 (Strongly Disagree) to 5 (Strongly Agree) for the different statements covered by the survey. (See Annex 8)

4.1.3 Data Analysis

The data collected through the questionnaire were analyzed in terms of percentage and mean scores (See Annex 9). Figure 77 shows the scale values assigned to each response.

Level of Agreement	Strongly Disagree (SD)	Disagree (D)	Undecided (Und)	Agree (A)	Strongly Agree (SA)
Scale value	1	2	3	4	5

Fig. 77. Scale Values.

The following formula was used to calculate the mean score.



$$\text{Mean Score} = \frac{(\text{SDx1} + \text{Dx2} + \text{Undx3} + \text{Ax4} + \text{SAX5})}{\text{N}}$$

N= 30 Students from 10th class

The percentages in the present analysis were calculated by adding the percentage of students agreeing and strongly agreeing, as well as disagreeing and strongly disagreeing.

4.1.4 Analysis in Terms of Percentage and Mean Score

Web-Based Reading and Writing Skills for EFL Students: Process Analysis Questionnaire

It is evident from figure 78 below that the majority of the students (83%) agreed with the statement that through web-based activities they are improving their reading skills. The mean score 4,0 supported the statement. This is an excellent figure to show how the web-based activities have helped them.

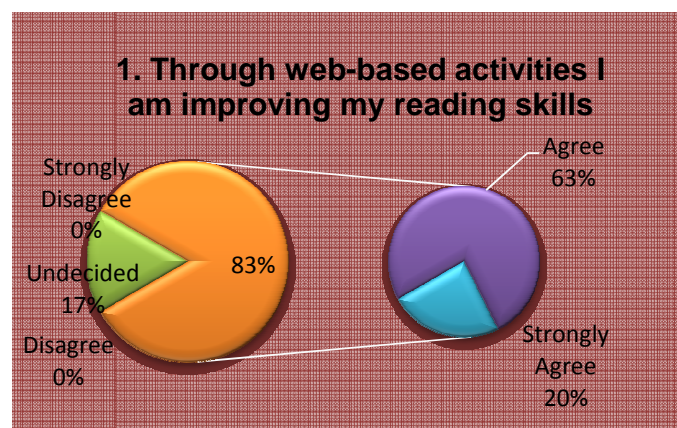


Fig.78. Students' Survey.



Figure 79 shows that a significant majority of the students (87% with 4.1 mean score) agreed that through web-based activities they are improving their writing skills. Considering that writing is a complex skill to develop for 10th grade students the percentage provides important data related to the use of web-based activities which encourage them to write.

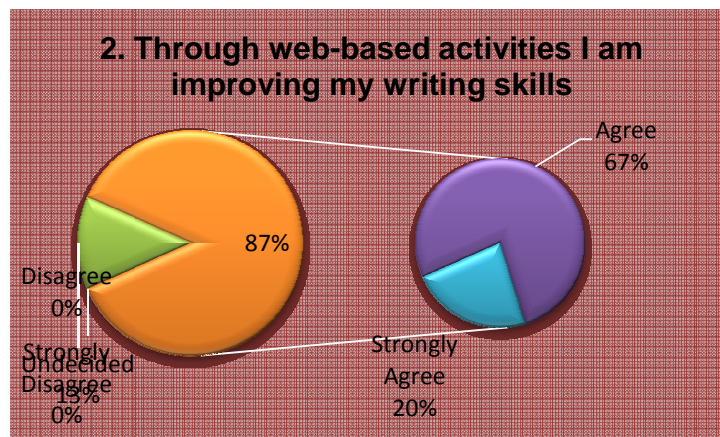


Fig.79. Students' Survey.

In figure 80 a significant majority (87%) of the students expressed their opinion that learning through web-based activities is convenient for them. The mean score 4.3 also supported the statement.

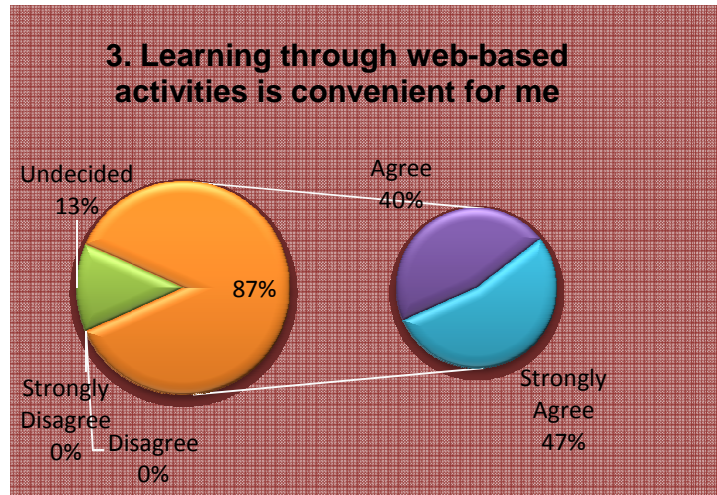


Fig.80. Students' Survey.



Similarly in figure 81 90% of the students agreed with the statement that the web-based course provided them with more opportunities to learn than they could have had in class with a 4.1 mean score.

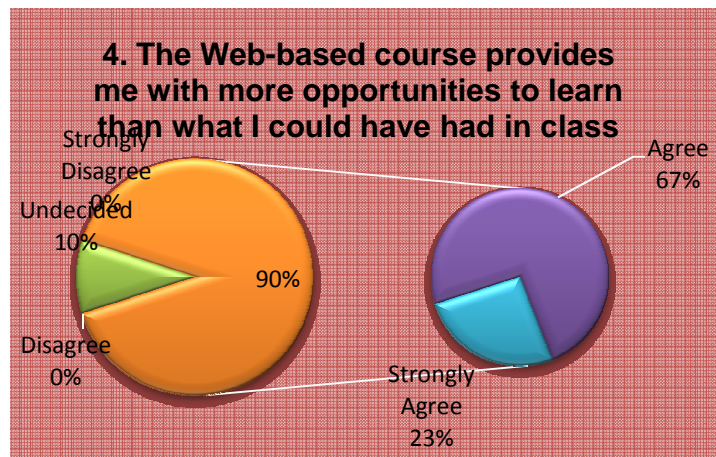


Fig.81. Students' Survey.

Figure 82 reflects that 100% of students enjoyed learning from the web-based activities (mean score 4.5).

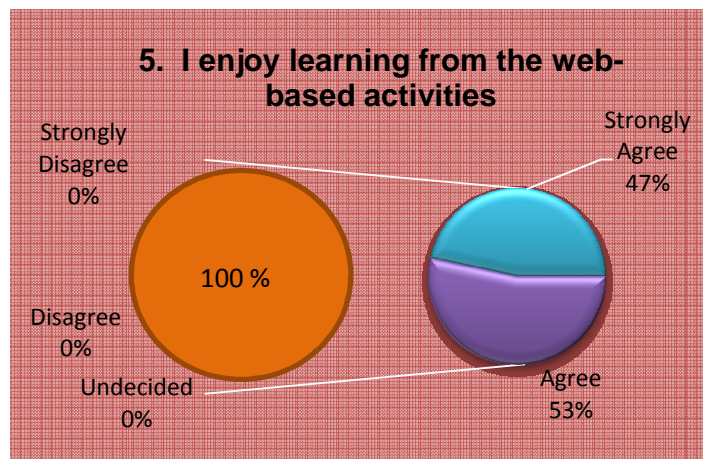


Fig.82. Students' Survey.



In figure 83 83% of students were of the opinion that web-based activities provide interactive learning (mean score 4.2).

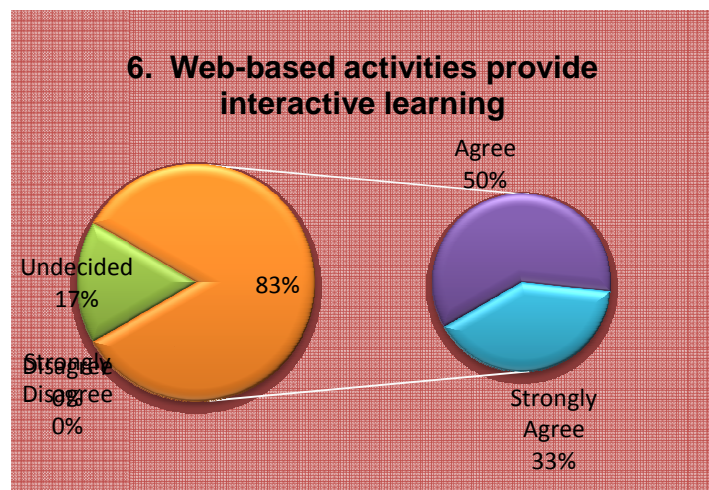


Fig.83. Students' Survey.

Figure 84 clearly demonstrates that a significant majority (80% with 4.1 mean score) of the students were satisfied with the results which they have obtained in the virtual learning environment.

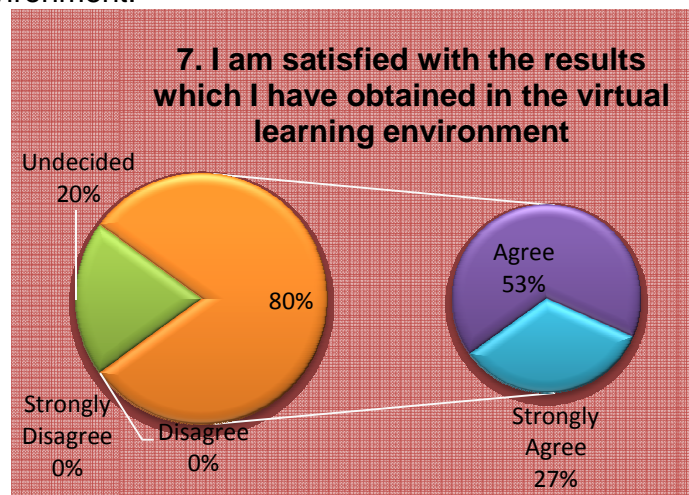


Fig.84. Students' Survey.



Figure 85 shows that 100% of students agreed with the statement that students should be encouraged to work online. The mean score was 4.6, which supported the statement.

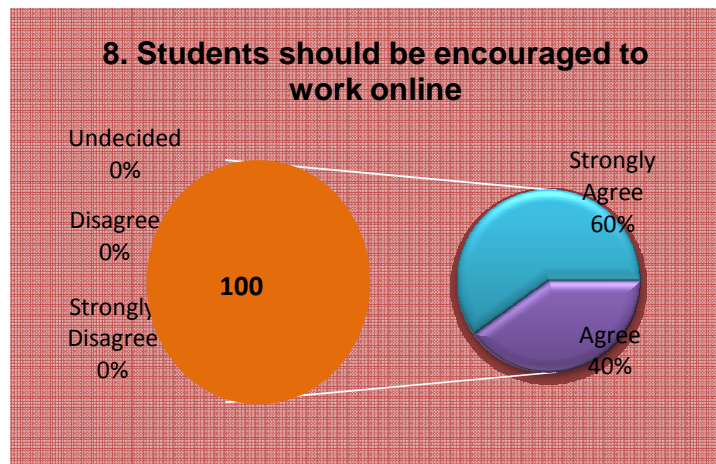


Fig.85. Students' Survey.

In figure 86 83% of the students (with the mean score 4.2) are confident they can do every task online by themselves.

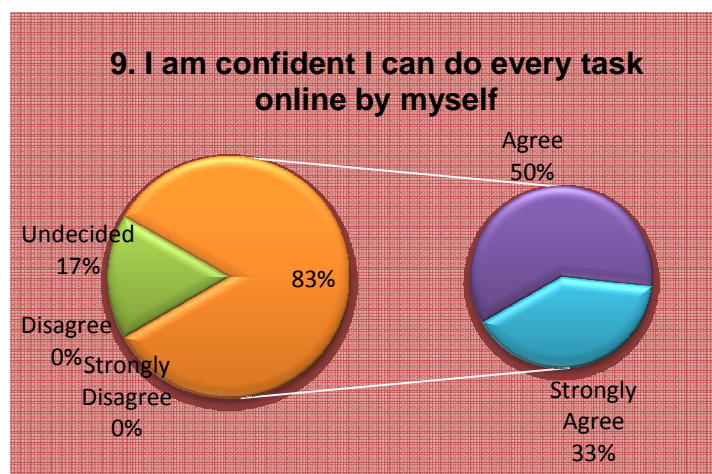


Fig.86. Students' Survey.



Figure 87 indicates that majority of the students (87%) had acquired other computing skills working online. The mean score was 4.2.

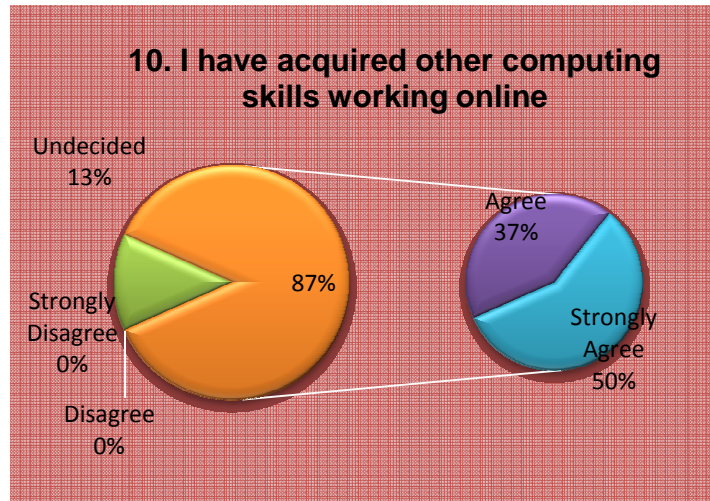


Fig.87. Students' Survey.

It is clear in figure 88 that all the group (100% with the mean score 4.5) agreed with the statement that they do well on the platform because they like the web-based activities.

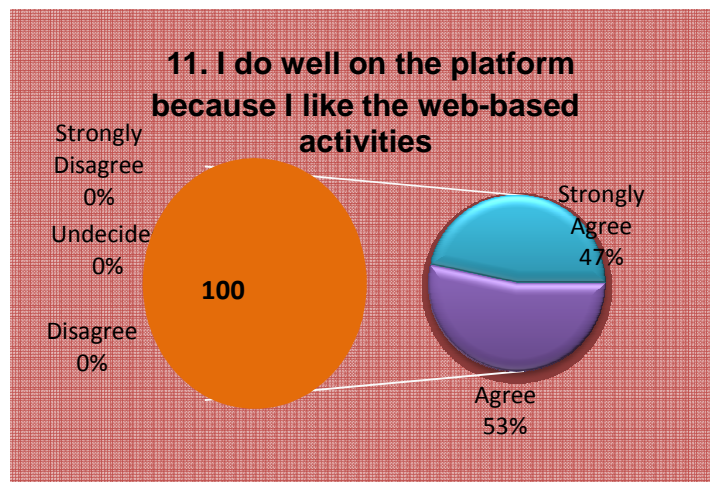


Fig.88. Students' Survey.



According to figure 89 an indication of disagreement was found in the majority of the students 80% (mean score 1.8) with the statement that they become anxious when they have to accomplish an activity in the virtual learning environment.

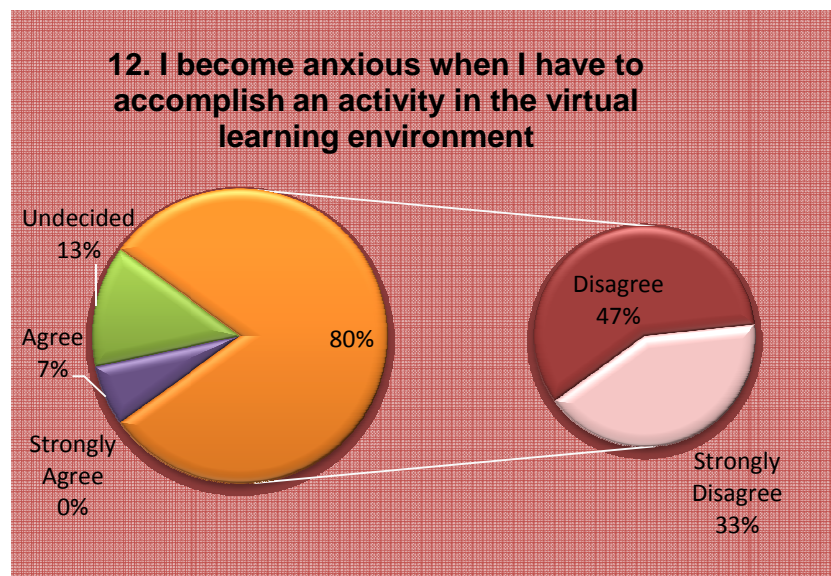


Fig.89. Students' Survey.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The general objective of the present study was: To improve EFL reading and writing skills through the development of web-based activities for students of 10th year of Basic Education. With the completion of the present research project the author draws the following conclusions:

- The design of the web-based learning environment considered students' individual learning styles and adopted efficient mechanisms which contributed to their learning process.
- The web-based project provided evidence that suggests an advantage for giving students an element of control over the online resources with which they engage and therefore supports learning autonomy.
- The virtual learning experience was effective in terms of motivation, skills improvement and willingness to perform the activities.
- The development of web-based activities supported the improvement of reading and writing competences.
- The web-based activities provided students with a more equal opportunity to learn and participate than they could have had in class and interactivity was an important factor in keeping them motivated.
- The VLE offered students the possibility to acquire other computing skills through working online.



- The VLE caused less anxiety and provided a relaxing environment to help students become effective readers and writers.

From the above mentioned, it can be concluded that the project has fulfilled its general objective. In fact, the use of the VLE generated great motivation in students and provided an effective environment for interaction where teachers and students could develop mutual communication and understanding.



5.2 RECOMMENDATIONS

The experience gained from the development of the web-based project has provided valuable insights into how to make use of technology to improve the teaching process, considering students as individual participants and constructors of their own learning processes, making them aware of their weaknesses and strengths.

In order to meet the challenge of integrating the virtual learning environment (VLE) into the current curriculum in the school, and for that matter in the curriculum of any other institution, it is important that teachers consider that:

1. An individual study of students' learning difficulties must be carried out before the implementation of any learning project.
2. Student-centred teaching should consider students' age and learning styles and strategies, as well as their interests and needs.
3. Teaching and learning using VLEs should take place in situations where students work individually or in small groups.
4. Students must be challenged to accomplish multipurpose and demanding activities.
5. The VLE should make use of advanced technology providing students with opportunities to use the language in real contexts.
6. Teachers using VLE should implement efficient strategies in order to develop students' responsibility and autonomy.
7. The activities in the VLE should be designed and selected in order to motivate students' curiosity and keep them engaged in the learning process.



8. Institutions should motivate their teachers to generate innovative learning projects to be integrated into their curricula.
9. Student support and formative feedback should be given continuously in the VLE.

Finally, replications of the present study are recommended to be carried out by other teachers in the school and in other institutions.



WORKS CITED

- Badrul, Khan. "Guide to Web-Based Instruction." 4 February 2011 <<http://bookstoread.com/bestseller/khan/wbt.html>>.
- Ballesteros, C; López, E; Torres, L. M^a. "Las plataformas virtuales: escenarios alternativos para la formación." *Educación con tecnologías de lo excepcional a lo cotidiano*. Edutec, Barcelona (2004) 13 December 2009 <<http://edutec2004.lmi.ub.es/pdf/195.pdf>>.
- Brooks, Jacqueline and Martin G. Brooks. "In Search of Understanding: The Case for Constructivist Classrooms". Revised Edition 1999. 6 April 2011 <http://www.pbs.org/teacherline/courses/inst335/docs/inst335_brooks.pdf>.
- Brown, H.D. *Principles of Language Learning and Teaching* Fourth Edition. New York: Longman. 2000.
- Carreira, Junko Matsuzaki. "Enhancing Intrinsic Motivation of Upper Graders." 2006. 12 December 2010 <<http://pdfcast.org/pdf/enhancing-intrinsic-motivation-of-upper-graders>>.
- Celce-Murcia, Marianne. *Teaching English as a Second or Foreign Language*, USA: Heinle & Heinle. 2001.
- Christensen, Douglas. "Teaching Strategies for Students with Diverse Learning Needs." Nebraska Department of Education. Lincoln, NE.1996. 12 January 2011 <<http://www.nebraskasocialstudies.org/pdf/tsfswdln.pdf>>.
- Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Council for Cultural Co-operation Education Committee Modern Languages Division, Strasbourg. Cambridge University Press. 108-130.



Dede, Sadullah. "The Teacher's Educational Leadership Roles According to Kolb's Theory of Learning." *Humanity & Social Sciences Journal* 4 (2). IDOSI Publications. 2009. 20 May 2011 <[http://www.idosi.org/hssj/hssj4\(2\)09/7.pdf](http://www.idosi.org/hssj/hssj4(2)09/7.pdf)>.

Dillon, Loli M. "Multiple Intelligences Theory and the College English Classroom." 20 July. 2011 <<http://www.mcte.org/journal/mej06/14Dillon.pdf>>.

Egbert, Joy L. and Leonard M. Jessup "Analytic and Systemic Analyses of Computer-Supported Language Learning Environments." Center for English Language Training. Vol.2. No. 2. A-1. Indiana. 1996. 5 May 2011 <<http://www.cc.kyoto-su.ac.jp/information/tesl-ej/ej06/a1.html>>.

Erdogan Yavuz, Servet Bayram and Deniz Levent. "Factors that influence academic achievement and attitudes in Web Based Education." *International Journal of Instruction* Vol.1, No.1 ISSN: 1694-609X (2009) 30 March 2010 <http://www.e-iji.net/dosyalar/iji_2008_1_3.pdf>.

Evans Virginia and Jenny Dooley. *Reading & Writing Targets 2*. USA: Express Publishing: 2007.

Fox, Liana. "Instructor Finds Better Teaching Through Technology." *Special Fall 2003 Advertising supplement Community College Week* 15 October 2009<<http://www.thefreelibrary.com/Instructor+finds+better+teaching+through+technology.-a0110227910> >.

Gardner, H. *Multiple Intelligences: The theory in Practice*. New York: Basic Books. 1993.

Glaserfeld, Ernst Von. "An Interpretation of Piaget's Constructivism." 1982. 22 March 2011 <<http://www.univie.ac.at/constructivism/EvG/papers/077.pdf>>.



Harris, L.V., Sadowski, M. A. and Birchman, J. A. "A Comparison of Learning Style Models and Assessment Instruments for University Graphics Educators." 13 June 2011 < <http://core.ecu.edu/ITEC/chinr/59thmidyearproceedings/14.pdf>>

Hesham, Alomyan and Wing Au. "Exploration of Instructional Strategies and Individual Difference within the Context of Web-based Learning." 5 January 2011 <<http://ehlt.flinders.edu.au/education/iej/articles/v4n4/Alomyan/paper.pdf>>.

Kolb, Alice and David A. Kolb. "The Kolb Learning Style Inventory—version 3.1 2005 Technical Specifications." Experience Based Learning Systems, Inc. 2005. 19 September 2010 < <http://www.whitewater-rescue.com/support/pagepics/lstechmanual.pdf> >.

Kolb, David A., Richard E. Boyatzis and Charalampos Mainemelis. "Experiential Learning Theory: Previous Research and New Directions." Department of Organizational Behavior. Cleveland, OH. August 31, 1999. 13 March 2011 <<http://www.d.umn.edu/~kgilbert/educ5165-731/Readings/experiential-learning-theory.pdf>>.

Kumaravadivelu B. "Macrostrategies for the Second/Foreign Language Teacher." Department of Linguistics & Language Development. *The Modern Language Journal*, Vol. 76, No. 1. (Spring, 1992), pp. 41-49. 27 March 2011 <<http://www.ten.edu.uy/IMG/pdf/macrostrategies.handout.pdf>>.

Langer, Judith A. "Guidelines for Teaching Middle and High School Students to Read and Write Well Six Features of Effective Instruction." *National Research Center on English Learning & Achievement*. Albany, NY (2000) 25 December 2009 <<http://cela.albany.edu/publication/brochure/guidelines.pdf>>.

Lightbown, P. & N. Spada. *How Languages are Learned*. 3rd ed. Oxford: OUP. 2006.



Mitchell & Myles. *Second Language Learning Theories 2nd* ed. London: Hodder Arnold. 2004.

Moussa, Lora. "An Investigation of Social Interaction in the Second Language Learning Process: An alternate approach to second language pedagogy in Greece". 20 June 2011 <http://arts.brighton.ac.uk/__data/assets/pdf_file/0004/19741/TLM22-Second-Language-Aquisition-MA-TESOL-University-of-Brighton-Laura-Moussa.pdf>.

Mulcahy-Ernet, Patricia and David C. Caverly. "Strategic Study-Reading", 20 February 2011 <http://books.google.com/books?id=gV-fG_1e0H8C&pg=PA124&lpg=PA124&dq=Alexander+%26+Jetton+cognitive+strategies&source=bl&ots=6ysMkl1N3G&sig=a_dzh4toBGz1ATt2a-uKJ45SINA&hl=es&ei=0tewTaDYLpO3tgelzKGGDA&sa=X&oi=book_result&ct=result&resnum=1&ved=0CCAQ6AEwAA#>>.

O'Malley. M.J. and U. A. Chamot. *Learning Strategies in Second Language Acquisition*. Cambridge: CUP. 1985.

Olson, Carol and Robert Land A. "Cognitive Strategies Approach to Reading and Writing Instruction for English Language Learners in Secondary School." *Research in the Teaching of English*, Vol. 41 No. 3. 2007. 8 March 2011 <http://www.nwp.org/cs/public/download/nwp_file/8538/Booth_Olson,_Carol,_et_al.pdf?x-r=pcfile_d>.

Oxford, Rebecca L. *Language Learning Styles and Strategies*. USA: Heinle & Heinle. 2001.



Oxford, Rebecca. "Language Learning Styles and Strategies: An Overview." *Learning Styles & Strategies*. Oxford, GALA 2003. 12 March 2011

< <http://web.ntpu.edu.tw/~language/workshop/read2.pdf> > 12 March. 2011>.

Redfern, Sam and Niall, N. "Collaborative virtual Environments to Support Communication and Community in Internet-Based Distance Education." *Journal of Information Technology Education. National University of Ireland*. Galway, Ireland. Volume 1 No. 3, 2002. 16 December 2009 < <http://informingcience.org/jite/documents/Vol1/v1n3p201-211.pdf> >.

Scott, Simon D. "From Neo-Behaviorism to Social Constructivism." *The Paradigmatic Neo-Evolution of Albert Bandura*. 2001. 6 April 2011
<<http://des.emory.edu/mfp/simon.PDF>>.

Stonebraker, Peter W and James E. Hazeltine. "Virtual Learning effectiveness An Examination of the Process." *The Learning Organization*. Vol.11 No. 3. Emerald Group Publishing Limited. Chicago, Illinois, USA. 2004. 7 January 2011
< <http://www2.uca.es/orgobierno/ordenacion/formacion/docs/jifpev5-doc6.pdf> >.

Terrell, Steven R. "Supporting Different Learning Styles in an Online Learning Environment: Does it Really Matter in the Long Run?." Florida. 2005. 4 March 2011
<<http://www.westga.edu/~distance/ojdla/summer82/terrell82.htm>>.

Tinio, Victoria L. "ICT in Education." 15 January. 2011
< <http://www.apdip.net/publications/espprimers/eprimer-edu.pdf>>.

UNESCO. "Information and Communication Technology in Education." *A Curriculum for Schools and Programme of Teacher Development*. France. 2002. 20 March 2011
<<http://unesdoc.unesco.org/images/0012/001295/129538e.pdf>>.



- Wagner, Tony. "The Global Achievement Gap." Change Leadership Group. Harvard University, Graduate School of Education. 2009. 2 December 2010
<<http://www.slideshare.net/internationalead/the-global-achievement-gap>>
<<http://www.tonywagner.com/>>.
- Warschauer, Mark. "Reconceptualizing the Digital Divide." Volume 7, Number 7-1 July 2002. 4 March 2010
<<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/967/888>>.
- Williams, Marion and Robert L. Burden. *Psychology for Language Teachers: A social Constructivist approach*. New York: Cambridge University Press, 1997.
- Wills, Michael. "Key Characteristics of good Quality Teaching and Learning with ICT: a Discussion Document." **naace** *National Association of Adviser for Computers in Education*. BECTa British Educational Communications and Technology Agency. 2001. 26 February 2011 <<http://revolution.caret.cam.ac.uk/pdfs/bectaadvice.pdf>>.
- Zacharis, Nick Z. "The Impact of Learning Styles on Student Achievement in a Web-Based Versus and Equivalent Face-To-Face Course." *College Student Journal*. *Technological Educational Institute of Piraeus*. Greece. September 1, 2010.



BIBLIOGRAPHY

Consejo Nacional de Innovaciones Educativas "CONIE". *Proyecto Educativo de Innovación Curricular para las Instituciones Educativas de las Hijas de María Auxiliadora*. 1st ed. Ecuador: Quito, 2008.

Erdogan Yavuz, Servet Bayram and Deniz Levent. "Factors that influence academic achievement and attitudes in Web Based Education." *International Journal of Instruction* Vol.1, No.1 ISSN: 1694-609X (2009) 30 March 2010 <http://www.e-iji.net/dosyalar/iji_2008_1_3.pdf>.

Farfán, Andrea and Martha Jaramillo. *The Influence of Technology in the English Teaching-Learning Process in Students of the 5th Course at "María auxiliadora" High School*. (.pdf) format, Cuenca- Ecuador, 2008.

IMS Global Learning Consortium. *Learning impact 2008*. August 2009. 15 September 2009 <<http://www.imsglobal.org/learningimpact2008>>.

Landeta, Ana. *Libro de buenas prácticas de e-learning*. 29 August. 2008 <<http://www.buenaspracticas-elearning.com/>>.

Larsen-Freeman, D. *Techniques and Principles in Language Teaching*. Oxford: OUP. 2000.

Lovato, Guilhermina. "The Limits and Possibilities of ICT in Education." *sísifo /educationalsciencesjournal*. no. 3 (2007) 30 March 2010 <<http://sisifo.fpce.ul.pt/pdfs/sisifo03ENGa3.pdf>>.

Zubiría Samper, Julián de. *Las Vanguardias Pedagógicas en la Sociedad del Conocimiento*. Versión preliminar. Colombia, 1999.



Zubiría Samper, Miguel de. *Pedagogías del siglo XXI: Mentefactos I El arte de pensar para enseñar y de enseñar para pensar*. Sexta reimpresión. Colombia: J.A. Vega Impreso, 1998.



ANNEX 1 Consent Form



Señores Padres de Familia de Décimo Año de Educación Básica

La presente tiene por objeto hacerles partícipes de la invitación realizada a sus hijas para que se integren al proyecto virtual denominado “Web-Based Reading and Writing Activities Supporting the Learning of English as a Foreign Language (EFL)” como parte de un programa piloto del Departamento de Inglés de la institución.

En este proyecto, que durará aproximadamente 6 meses, ellas desarrollarán actividades individuales y grupales vía internet con el fin de apoyar el desarrollo de sus destrezas de Reading & Writing. Las actividades están planificadas para ser trabajadas por semana durante la cual la alumna tendrá libertad de decidir cuándo hacerlo. (Se requiere conexión de banda ancha)

Usted puede acceder a la plataforma educativa a través de la página web de la institución y controlar los enlaces a los cuales su hija tendrá acceso, de la misma manera podrá observar su avance en el desarrollo de las actividades.

Si desea que su representada participe en el proyecto por favor marque el casillero correspondiente. Le agradezco de antemano por su colaboración en pro del beneficio académico de su hija.

Yo, _____ . Deseo que mi hija _____

participe en el proyecto:

SI NO

Firma de autorización: _____

Teléfono de contacto: _____

Responsable
Licenciada Karina Alvarez T.
Departamento de Inglés

Cuenca, septiembre de 2010

**ANNEX 2**

**Unidad Educativa Salesiana “María Auxiliadora”
Learning Styles Assessment Instrument
For 10th Grade Students**



Dear Student: This survey is designed to explore the way you prefer to learn.

Instructions: Look at the 4 statements in each row and decide how they refer to you.

Rank: Using the spaces provided under each sentence, rank them with a “4” for the sentence that best describe how you learn, down to a “1” for the sentence that seems the least like the way you learn.

**4= MOST descriptive of you
1= LEAST descriptive of you**

Example:

1. When I learn...	...I like to deal with my feelings _____ 1 _____	...I like to watch and listen _____ 3 _____	...I like to think about ideas _____ 2 _____	... I like to be doing things. _____ 4 _____
---------------------------	--	---	--	--

- Do not answer as you **WISH** you were or as you think you **SHOULD** be, just answer as you honestly think you are.
- Do not forget to rank all twelve sentences, one at a time.

When I learn...	...I like to deal with my feelings	...I like to watch and listen	...I like to think about ideas	... I like to be doing things
Cuando aprendo...	Me gusta tratar con mis sentimientos _____	Me gusta ver y escuchar _____	Me gusta pensar _____	Me gusta estar haciendo algo _____
2. I learn best when...	...I trust my hunches and feelings	...I listen carefully and watch	...I rely on logical thinking	...I work hard to get things done
Aprendo mejor cuando...	Confío en mis intuiciones y sentimientos _____	Escucho con atención y miro _____	Confío en el pensamiento lógico _____	Trabajo duro para conseguir las cosas _____



3. When I am learning... Cuando estoy aprendiendoI have strong feelings and reactions Tengo Fuertes sentimientos y reacciones	...I am quiet and reserved Soy tranquila y reservada	...I tend to reason things out Tiendo a razonar las cosas primero	...I am responsible about things Soy responsable por las cosas que hago
4. I learn by... Aprendofeeling Sintiendo	...watching Mirando	...thinking Pensando	...doing Haciendo
5. When I learn... Cuando aprendo...	...I am open to new experiences Estoy abierta a nuevas experiencias	...I look at all sides of an issue Miro todos los lados de un problema antes de resolverlo	...I like to analyze things, break them into their parts Me gusta analizar todas las cosas primero	...I like to try things out Me gusta intentar hacer las cosas
6. When I am learning... Cuando estoy aprendiendoI am an intuitive person Soy una persona intuitiva	...I am an observant person Soy una persona observadora	...I am a logical person Soy una persona lógica	...I am an active person Soy una persona activa
7. I learn best from... Aprendo mejor de...	...personal relationships Mis relaciones personales	...observation La Observación	...rational theories Las Teorías racionales	...a chance to try and practice La oportunidad de tratar y la práctica
8. when I learn...	...I feel personally involved	...I take my time before acting	...I like ideas and theories	...I like to see results from my work



Cuando aprendo...	Me siento personalmente involucrada _____	Me tomo mi tiempo antes de actuar _____	Me gustan las ideas y las teorías _____	Me gusta ver resultados de mi trabajo _____
9. I learn best when ... Aprendo mejor cuando...	...I rely on my feelings Confío en mis sentimientos _____	...I rely on my observations Confío en lo que observo _____	...I rely on my ideas Confío en mis ideas _____	...I can try things out for my self Puedo intentar hacer las cosas por mí mismo _____
10. When I am learning... Cuando estoy aprendiendoI am an accepting person Soy una persona receptiva _____	...I am a reserved person Soy una persona reservada _____	...I am a rational person Soy una persona racional, es decir pienso antes de tomar una decisión _____	...I am a responsible person Soy una persona responsable _____
11. When I learn... Cuando aprendo...	...I get involved Me involucro _____	...I like to observe Me gusta observar _____	...I evaluate things Evalúo las cosas _____	...I like to be active Me gusta estar activa _____
12. I learn best when... Aprendo mejor cuando...	...I am receptive and open-minded Soy receptiva y de mente abierta _____	...I am careful Soy cuidadosa _____	...I analyse ideas Analizo las ideas _____	...I am practical Soy práctica _____
Total Score	_____	_____	_____	_____

Which two scores are your highest scores?



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Thanks for Your Cooperation

ANNEX 3

Learning Styles Assessment Instrument For Students of 10th Grade Based on the Kolb's Learning Style Inventory Survey Results

No. Students	Concrete Experience (CE)	Reflective Observation (RO)	Abstract Conceptualisation (AC)	Active Experimentation (AE)	TOTAL
1	23	31	29	37	120
2	29	27	30	34	120
3	28	35	24	33	120
4	29	33	28	30	120
5	24	23	38	35	120
6	25	33	30	32	120
7	23	33	28	36	120
8	29	34	30	27	120
9	23	33	30	34	120
10	21	35	26	38	120
11	20	36	31	33	120
12	23	32	36	29	120
13	21	35	28	36	120
14	29	33	28	30	120
15	28	30	30	34	122
16	23	31	32	34	120
17	25	34	28	33	120
18	20	33	29	38	120
19	28	26	31	35	120



20	24	30	35	31	120
21	24	31	37	28	120
22	28	36	26	32	122
23	20	36	30	34	120
24	24	38	33	25	120
25	20	37	29	34	120
26	29	33	28	30	120
27	20	26	39	35	120
28	21	24	36	39	120
29	21	33	36	30	120
30	25	27	36	32	120



ANNEX 4
Analysis of Students' Preference Learning Style Based on Highest Scores

No. Students	CE+AE Accomodator	CE+RO Diverger	AC+RO Assimilator	AC+AE Converger	Student's Preference based on highest score
1	60	54	60	66	Converger
2	63	56	57	64	Converger
3	61	63	59	57	Divergir
4	59	62	61	58	Divergir
5	59	47	61	73	Converger
6	57	58	63	62	Assimilator
7	59	56	61	64	Converger
8	56	63	64	57	Assimilator
9	57	56	63	64	Converger
10	59	56	61	64	Converger
11	53	56	67	64	Assimilator
12	52	55	68	65	Assimilator
13	57	56	63	64	Converger
14	59	62	61	58	Divergir
15	62	58	60	64	Converger
16	57	54	63	66	Converger
17	58	59	62	61	Assimilator
18	58	53	62	67	Converger
19	63	54	57	66	Converger
20	55	54	65	66	Converger
21	52	55	68	65	Assimilator
22	60	64	62	58	Divergir
23	54	56	66	64	Assimilator
24	49	62	71	58	Assimilator
25	54	57	66	63	Assimilator
26	59	62	61	58	Divergir
27	55	46	65	74	Converger
28	60	45	60	75	Converger
29	51	54	69	66	Assimilator
30	57	52	63	68	Converger

ANNEX 5
Individual Analysis of Students' Mistakes

Number of Students	Incorrect spelling	Wrong word order	Wrong tense	Concord Subject and verb agreement	Wrong form	Singular or plural form wrong	Missing words	Unnecessary words in the sentence	Meaning is not clear	Words used inappropriately	Wrong or missing punctuation	Number of Individual Mistakes
1	1			1		1		1	1	1	1	7
2	1		1						1	1	1	5
3						1	1	1	1	1	1	6
4		1		1		1	1		1	1	1	7
5			1	1	1	1	1	1				6
6	1						1			1	1	4
7	1	1	1		1	1	1	1		1	1	9
8	1		1	1		1	1	1	1	1	1	9
9	1		1		1	1		1	1	1	1	8
10			1			1						2
11	1	1			1	1			1		1	6
12	1		1	1				1	1	1		6
13	1			1		1	1	1			1	6
14	1		1	1	1			1		1	1	7
15	1		1						1	1		4
16		1				1		1	1		1	5
17					1			1	1	1	1	5
18	1		1				1				1	4
19					1	1		1				3
20		1			1			1		1	1	5



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Number of Students	Incorrect spelling	Wrong word order	Wrong tense	Concord Subject and verb agreement	Wrong form	Singular or plural form wrong	Missing words	Unnecessary words in the sentence	Meaning is not clear	Words used inappropriately	Wrong or missing punctuation	Number of Individual Mistakes
21	1				1			1		1	1	5
22	1	1	1				1	1	1	1		7
23	1					1	1		1	1	1	6
24	1	1	1			1	1		1			6
25	1					1		1	1			4
26			1			1		1	1	1		5
27								1		1	1	3
28				1		1		1	1	1		5
29	1	1		1		1		1	1		1	7
30	1			1		1	1	1	1		1	7
Number of Students	19	8	13	10	9	19	12	21	19	19	20	
Percentage	63%	27%	40%	33%	30%	63%	40%	70%	63%	63%	67%	



ANNEX 6
UNIDAD EDUCATIVA SALESIANA “MARIA AUXILIADORA”

Reading and Writing Skills for EFL Students: Questionnaire

Dear Student: You are invited to participate in a survey prepared as part of a research project on supporting EFL students' development of reading and writing skills. The information you are about to provide will remain confidential and will serve for the purposes of the research project. It will take less than 5 minutes to complete the questionnaire.

Instructions: Read each statement carefully and circle the options which best describe your difficulties.

When reading a text, how often do you have difficulty with each of the following:		Always	Often	Sometimes	Never
1	Understanding the main idea of the text.	1	2	3	4
2	Feeling relaxed during a reading comprehension text.	1	2	3	4
3	Understanding what to do with the text.	1	2	3	4
4	Reading and putting paragraphs in the correct order.	1	2	3	4
5	Reading the text slowly in order to understand details.	1	2	3	4
6	Locating specific information in order to answer questions.	1	2	3	4
7	Guessing unknown words in a text.	1	2	3	4
8	Reading fast.	1	2	3	4
9	Reading the text in order to give an opinion about the content.	1	2	3	4
10	Reading and summarizing a text.	1	2	3	4
11	Concentrating on the text.	1	2	3	4
12	Feeling motivated to read the text.	1	2	3	4
13	Recognizing specific parts of speech (nouns, adjectives, adverbs, etc.) throughout the text.	1	2	3	4
14	Reading a text, identifying grammar mistakes and correcting the.	1	2	3	4
15	Other (specify)	1	2	3	4



When writing a text, how often do you have difficulty with each of the following:		Always	Often	Sometimes	Never
1	Thinking about what to write.	1	2	3	4
2	Using correct punctuation and spelling.	1	2	3	4
3	Structuring sentences.	1	2	3	4
4	Using appropriate vocabulary.	1	2	3	4
5	Organizing your ideas into paragraphs.	1	2	3	4
6	Linking your ideas in writing.	1	2	3	4
7	Expressing your ideas appropriately.	1	2	3	4
8	Following instructions	1	2	3	4
9	Reviewing your writing.	1	2	3	4
10	Completing your written task within the time available.	1	2	3	4
11	Concentrating on your written task	1	2	3	4
12	Feeling motivated to write.	1	2	3	4
13	Rewriting sentences or a story in your own words.	1	2	3	4
14	Other (specify) _____	1	2	3	4

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Thank you for your cooperation

**ANNEX 7****Reading Skills for EFL Students: Questionnaire Results**

No.	Statement	Frequency of Difficulty				Number of Students
		Always	Often	Sometimes	Never	
		1	2	3	4	30
1	Understanding the main idea of the text	0	3	20	7	30
2	Feeling relaxed during a reading comprehension text.	5	14	9	2	30
3	Understanding what to do with the text.	5	13	9	3	30
4	Reading and putting paragraphs in the correct order.	3	7	10	10	30
5	Reading the text slowly in order to understand details.	3	13	9	5	30
6	Locating specific information in order to answer questions.	0	8	19	3	30
7	Guessing unknown words in a text.	7	13	7	3	30
8	Reading fast.	6	14	7	3	30
9	Reading the text in order to give an opinion about the content.	6	13	7	4	30
10	Reading and summarizing a text.	6	12	9	3	30
11	Concentrating on the text.	5	14	8	3	30
12	Feeling motivated to read the text.	3	13	9	5	30
13	Recognizing specific parts of speech (nouns, adjectives, adverbs, etc.) along the text.	6	14	8	2	30
14	Reading the text, identifying grammar mistakes and correcting them.	5	14	8	3	30
15	Other (Specify)	0	0	0	0	30



Writing Skills for EFL Students: Questionnaire Results

No.	Statement	Frequency of Difficulty				Number of Students
		Always	Often	Sometimes	Never	
1	Thinking about what to write.	6	14	7	3	30
2	Using correct punctuation and spelling.	8	14	8	0	30
3	Structuring sentences.	5	15	7	3	30
4	Using appropriate vocabulary.	2	8	16	4	30
5	Organizing your ideas into paragraphs.	3	14	10	3	30
6	Linking your ideas in writing.	2	10	15	3	30
7	Expressing your ideas appropriately.	4	10	11	5	30
8	Following instructions	1	7	14	8	30
9	Reviewing your writing.	5	14	10	1	30
10	Completing your written task within the time available.	7	7	8	8	30
11	Concentrating on your written task	5	14	10	1	30
12	Feeling motivated to write.	9	10	6	5	30
13	Rewriting sentences or a story with your own words.	8	14	8	0	30
14	Other (Specify)	0	0	0	0	30

**ANNEX 8**

**UNIDAD EDUCATIVA SALESIANA “MARIA AUXILIADORA”
Web-Based Reading and Writing Skills for EFL Students: Process Analysis
Questionnaire**



Dear Student: Read each statement carefully and circle the options which best describe your experience doing web-based reading and writing activities in the learning platform.

Strongly Disagree (Estoy completamente en desacuerdo)
Disagree (No estoy de acuerdo)
Undecided (Estoy indecisa)
Agree (Estoy de acuerdo)
Strongly Agree (Estoy completamente de acuerdo)

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Through web-based activities I am improving my reading skills.	1	2	3	4	5
2	Through web-based activities I am improving my writing skills	1	2	3	4	5
3	Learning through web-based activities is convenient for me.	1	2	3	4	5
4	The Web-based course provides me with more opportunities to learn than what I could have had in class.	1	2	3	4	5
5	I enjoy learning from the web-based activities.	1	2	3	4	5
6	Web-based activities provide interactive learning.	1	2	3	4	5
7	I am satisfied with the results which I have obtained in the virtual learning environment.	1	2	3	4	5
8	Students should be encouraged to work online.	1	2	3	4	5
9	I am confident I can do every task online by myself.	1	2	3	4	5
10	I have acquired other computing skills working online.	1	2	3	4	5
11	I do well on the platform because I like the web-based activities.	1	2	3	4	5
12	I become anxious when I have to accomplish an activity in the virtual learning environment.	1	2	3	4	5
13	Other (Specify)	1	2	3	4	5

Thank you for your cooperation

April 2011

ANNEX 9

Web-Based Reading and Writing Skills for EFL Students: Questionnaire Results

No	Statement	Level of Agreement					Number of Students	Percentage	Mean Score
		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree			
		1	2	3	4	5	30	100%	5
1	Through web-based activities I am improving my reading skills.	0	0	5	19	6	30		
		0%	0%	17%	63%	20%		83%	4,0
2	Through web-based activities I am improving my writing skills	0	0	4	20	6	30		
		0%	0%	13%	67%	20%		87%	4,1
3	Learning through web-based activities is convenient for me.	0	0	4	12	14	30		
		0%	0%	13%	40%	47%		87%	4,3
4	The Web-based course provides me with more opportunities to learn than what I could have had in class.	0	0	3	20	7	30		
		0%	0%	10%	67%	23%		90%	4,1
5	I enjoy learning from the web-based activities.	0	0	0	16	14	30		
		0%	0%	0%	53%	47%		100%	4,5
6	Web-based activities provide interactive learning.	0	0	5	15	10	30		
		0%	0%	17%	50%	33%		83%	4,2



7	I am satisfied with the results which I have obtained in the virtual learning environment.	0	0	6	16	8	30		
		0%	0%	20%	53%	27%		80%	4,1
8	Students should be encouraged to work online.	0	0	0	12	18	30		
		0%	0%	0%	40%	60%		100%	4,6
9	I am confident I can do every task online by myself.	0	0	5	15	10	30		
		0%	0%	17%	50%	33%		83%	4,2
10	I have acquired other computing skills working online.	0	0	4	11	15	30		
		0%	0%	13%	37%	50%		87%	4,2
11	I do well on the platform because I like the web-based activities.	0	0	0	16	14	30		
		0%	0%	0%	53%	47%		100%	4,5
12	I become anxious when I have to accomplish an activity in the virtual learning environment.	14	10	4	2	0	30		
		47%	33%	13%	7%	0%		80%	1,8
13	Other (Specify)	0	0	0	0	0	30	0%	0,0

