**People's Democratic Republic of Algeria**

**Ministry of Higher Education and Scientific Research**

**Constantine 1 University**

**N° ordre:11/D3C/2021**
**N°serie: 02/Ang/2021**

**Faculty of Letters and Languages**

**Department of English**

# The Impact of Computer-mediated Task-based Approach on Vocabulary Acquisition

## The Case of Third Year Secondary School Students,

## Sirin Lekhmissi Secondary School- Souk Ahras-

**Thesis submitted to the department of letters and English language in candidacy for the degree of doctorate LMD in didactics**

**Submitted by: Ms. Aicha REFFAS** **Supervised by: Pr. Saliha CHELLI**

## Board of Examiners

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**2021**

## Dedication

***All praise and thanks to Allah, whose blessings make possible all good deeds. May His blessings be upon the prophet (Peace be Upon Him)***

**This work is dedicated**

To my dear parents and my brothers Wahid, Nabil and especially Saeed whose encouragement has guided me throughout this journey. To my sister in law Ahlem;

To my beloved friends and sisters Chadia and Nadjat who never stopped believing in me and whose support has motivated me to finish this work;

to my colleagues Hakima, Samira, Wided and Asma;

to my precious and special students Walid and Farid;

Special thanks goes to Elias, the great source of positive energy.

It is especially dedicated to the soul of my teacher and motivator Pr. Samir LARABA.

## Acknowledgments

This thesis would have never been completed without the continuous and endless guidance of my supervisor Pr. Saliha CHELLI. She has put great effort and endeavor in revising the thesis and introducing many amendments to it. I would love to thank her for her precious advice and encouragement from the beginning.

Special thanks go to the board of examiners Pr. Farida ABDERRAHIM, Pr. Nacif LABED, Pr. Riad BELWAHEM, Pr. Hacène HAMADA and Dr. Hanane SAIHI for devoting time to read and evaluate this thesis.

I am deeply grateful to my colleagues from Sirine Lekhmissi Secondary School: Hakima, Wided and Samira for their precious help and for putting at my disposal all the necessary computer devices needed.

Finally, I am so grateful to all my students because they were really a great source of help and they exercised too much patience throughout the experiment.

## Abstract

Many Algerian stundents face difficulties in the process of learning English as a foreign language. Among them, vocabulary learning/retention is the most persistent despite teachers' effort to help them overcome their lexical issues. This mixed methods research attempted to test the following hypothesis which stated that " third year scientific students' vocabulary learning would be improved if they were taught using computer-mediated task-based approach". This study; therefore, investigated the impact of computer-mediated task-based approach on vocabulary learning of third year secondary school scientific stream students from Sirine Lekhmissi Secondary School, Souk Ahras.The sample included 30 participants divided into two groups: a treatment group (n=15) and a control group (n=15). Before the treatment, two pre-questionnaires were administered to ten (n=10) teachers from Souk-Ahras secondary schools in addition to thirty students from the same population in order to confirm that this study was worth undertaking. Then, a teacher-made test of vocabulary was given as a pre-test to the sample followed by vocabulary instruction through which the control group was exposed to vocabulary using the board, pictures, postures and dictionaries. The same vocabulary was introduced to the experimental group using the task-based approach and teacher-made computer quizzes and the Hot Potatoe Software. At the end of this quasi-experiment, the post-test results revealed that the computer-mediated task-based approach was more effective than the traditional way of teaching vocabulary as the unpaired t-test value (5.47) was greater than the critical value (1.70) for twenty eight degrees of freedom. That approach can be more successful if the necessary conditions were provided including the availability of computers in addition to teachers and students' training in computer use.

# List of Abbreviations

**AECT:** Association for educational Communications and Technology.

**CALL**: Computer Assisted Language Learning

**CAVL**: Computer Assisted Vocabulary Learning

**CLT**: Communicative Language Teaching.

**CMC:** Computer Mediated Communication.

**EFL:** English as a Foreign Language.

**ESL**: English as a Second Language.

**FTF**: Face to Face.

**ICT**: Information and Communication Technology

**L2**: Second Language.

**LLS**: Language Learning Strategies.

**MALL**: Mobile Assisted Language Learning.

**NA:** Needs Analysis.

**PPP**: Presentation, Practice, Production.

**PLATO:** Programmed Logic for Automated Teaching Operations.

**QDA**: Qualitative Data Analysis.

**TBI**: Task-Based Instruction

**TBLT**: Task-Based Language Teaching

**VLE**: Vocabulary Learning Environment.

**VLS**: Vocabulary Learning Strategies.

**WWW**: World Wide Web.

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# General Introduction

## 1. Background of the Study

Researchers' attention in the field of foreign language teaching has gradually shifted from grammar-focused to vocabulary-focused instruction. With the emergence of the communicative approach, vocabulary received more attention. Having a good lexical stock is not only necessary for academic success, but it is essential for carrying out a successful conversation in a foreign language. To make the process of vocabulary learning effective and pleasant, researchers in the field came up with a variety of options to make it possible.

Among the attempts that were made to improve students' lexical performance was the task-based approach. It was widely embraced in many educational contexts because it encouraged vocabulary learning with the integration of tasks using authentic language materials. To improve vocabulary learning/teaching, computer technology was considered as an option. It was viewed as a remedy to vocabulary learning related issues. With the traditional ways of presenting new vocabulary items, students spend a great deal of time trying to memorize endless lists of words which was most of the time ineffective. Using computer- based applications and softwares helps giving both students and teachers a pleasant vocabulary learning/teaching experience.

The integration of computer technology has many advantages which include increasing students' motivation towards vocabulary learning and also growing their sense of responsibility as they will be less dependent on their teachers. Moreover, using computer technology for vocabulary instruction maybe more effective as students can remember a word when it is presented using creative manner better than when it is taught with traditional ways.

Later on, there was a growing interest among scholars in the field to find a new approach to vocabulary teaching by mixing up computer assisted vocabulary instruction with

the task-based approach to language teaching. This combination can maximize students' chances of successfully learning vocabulary in contexts rich with authentic language.

## 2. Statement of the Problem

The writing skill poses a challenge to many students due to many factors like spelling issues, syntax, and poor vocabulary knowledge. The latter appears to be a persistent problem, especially for EFL students. Having taught in secondary education, we noticed that teachers give too much credit to grammar and devote a great deal of time to it. This has made students believe that grammar plays an essential role in their process of language learning unlike vocabulary. Therefore, when it comes to official tests or exams, students fail to provide the correct answers. This is mainly the result of their inability to understand the content of the sentences. Most of the tasks require matching pairs of sentences with each other which is almost impossible without understanding the content.

Some teachers, especially those who have been teaching for a long time, do not have the appropriate knowledge of computers and they rarely use them to teach new vocabulary to their students. Furthermore, many teachers follow the PPP model (Presentation- Practice-Production), which do not seem to be effective, especially with students who were born in the digital era. In other words, the 21st century students need creative ways to get their attention or to make them motivated to learn English vocabulary. Lacking computer skills is not only the problem of teachers. Despite living in high-tech societies where technology in its different forms is commonly used, most students do not know too much about how to use technology to support their vocabulary learning.

## 3. Aim of the Study

After having identified the problem of vocabulary learning/ teaching encountered by most teachers at secondary education in Souk-Ahras, this study was conducted to shed light on certain issues related to vocabulary and the different factors standing behind stuednts' failure in developing their vocabulary knowledge.

First, this study aims at showing the effect of computer-assisted language learning on improving the process of vocabulary teaching and also highlights the varied computer based strategies students can use to learn new vocabulary without being too much dependent on the teacher. Second, this study was carried out to know how the merging up of computer assisted language learning and task-based instruction can alter the way teachers train their students to develop their vocabulary learning.

## 4. Research Questions

The present study was an attempt to answer the following questions:

1. What makes the process of vocabulary learning difficult?
2. How can the use of computers contribute to the development of vocabulary learning among third year secondary school scientific streams students?
3. What effects would the integration of computer assisted instruction into task-based approach have on students'vocabulary learning?

## 5. Hypothesis

This study is designed to test the following hypothesis:

- Third year secondary school scientific stream students' vocabulary learning would be improved if they were taught using computer-mediated task-based approach.

## 6. Research Methodology

### 6.1. Research Design

This research can be considered as qualitative and quatitative including two semi-structured questionnaire in addition to an experiment. This quasi-experimental research required the use of a pre-test and a post-test given to both the control and experimental groups before and after the treatment which consisted of the manipulation of the independent variable (the implementation of computer-mediated task-based approach to vocabulary learning/teaching) . The aim of that experiment was to examine its impact on students' lexical performance.

### 6.2. Population and Sample

The population from which our sample was taken contains about 120 students.The sample selected for this research included 30 third year students divided into two groups; a control (n=15 pupils) and an experimental group (n=15 pupils) from a total population of 120 pupils. That sample was chosen from the scientific stream because of the nature of their programme of English. Unlike their literary stream counterparts, students of the scientific streams deal with minimal lessons with topics they can enjoy. In addition to that, the reason why that number of participants in each group was chosen was because those who repeated the year and who must have dealt with the syllabus before were exluded in addition to the lack computer tools .

### 6.3.Data Gathering Tools

The study aimed at showing the effect of computer-assisted language learning on improving the process of vocabulary teaching and also highlights the varied computer based strategies students can use autonomously to learn new vocabulary without being too much dependent on the teacher. For these reasons, we opted for the following data gathering tools:

- Two pre-experiment questionnaires addressed to both secondary school teachers from the different institutions (Sahraoui Zoughlami High School, 18 Avril, Djaber Ibn Hayan) in the city of Souk Ahras as well as students from Sirin Lekhmissi Secondary School.
- A pre-test was given to both the control and the experimental group.
- An experiment was conducted where the control group received no treatment and the targeted vocabulary was taught in traditional manners, whereas, the experimental group received the treatment through technology mediated task-based approach to vocabulary instruction.
- A post-test was intended to determine the degree to which the treatment was effective as far as increasing students' vocabulary knowledge in concerned.

## 7. Structure of the Thesis

The dissertation is divided into three theoretical chapters and three practical chapters. The theoretical chapters are devoted to the literature review and provide the theoretical framework regarding the development of instructional technology, task-based language teaching and the relationship of these two with vocabulary instruction. The three practical chapters discuss the results obtained through qualitative and qualitative data collection tools, followed by the pedagogical and suggestions.

The first chapter of the theoretical part sheds some light on some historical facts considering instructional technology and its role in improving the field of second language teaching. This chapter also aims at highlighting the different types of computer based applications and how they contribute to the improvement of the different language aspects such as reading and writing. The second chapter is dedicated to the study of the task-based approach to language teaching opposed to the traditional PPP (Presentation, Practice, Production) paradigm of teaching. Moreover, it explores the different ways the task-based approach is believed to influence language teaching in general and vocabulary in particular. The third chapter studies of the results of merging up the field of computer assisted language

learning with vocabulary instruction. It presents the different computer based vocabulary learning and teaching strategies and explores their effects on students' achievements in both cognitive and psychological sides. It finally attempts to present some literature regarding the influence of computer-mediated task-based instruction on vocabulary teaching.

The practical chapters are designed to describe the content of the experiment and how it was implemented using the computer-mediated task-based approach to vocabulary instruction. It displays the results obtained through the teachers' and students' questionnaires and the correlation of the two research tools. It also presents the main steps this research has followed when doing the experiment. Furthermore, the results of the pre and the post-tests are analyzed in this chapter and were used to draw the conclusion to this research.

# Chapter One

## Computer-assisted Language Learning

# Chapter One

# Computer-assisted Language Learning

## Introduction

Computer technology has become a substantial educational tool and has brought in promising results to the field of education in general and to foreign language teaching in particular. It has encouraged learning by increasing opportunities and motivation among students. The integration of computer technology into foreign/second language instruction has come to be known as Computer Assisted Language Learning (CALL). It has gained a wide popularity among educators and was adopted as a teaching approach in a wide variety of foreign language teaching contexts. Research evidence shows that the integration of such technologies into the language classes helps offer a variety of learning opportunities and increases students' motivation. It has also been accredited for the variety of applications it puts at the service of practitioners like word processing, error checking, online resources, CMC ( Computer Mediated Communication) and others.

Yet, it should be noted that for a flawless application of computer technology, there are some factors that should be put into consideration like the availability of enough time, the good teacher/ student training as well as the handiness of appropriate hardware and software.

## 1.1. Instructional Technology

Education has always been taken as the corner stone necessary for the development of any nation. Therefore, specialists in the field have put on too much endeavor to come up with the most effective tools to improve its quality and technology appeared in the scene. Subsequently, the integration of technology in education has come to be known as "instructional technology".

Technology is defined as the feasible implementation of knowledge, especially that related to a specific area (Merriam-Webster, 2018). Hence, by combining technology with instruction, instructional technology would refer to the practical application of knowledge of instruction. According to Gentry (1991), instructional technology is the 'systemic' and 'systematic' of strategies and techniques based on behavioral, cognitive or constructivist assumptions to provide answers to instruction-related questions. The Association for Educational Communications and Technology (AECT) adapted Seels and Richey's definition which views instructional technology as "the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning" (Seels and Richey, 1994, p.1). There were many attempts to define the concept of instruction technology along the history, but they have all agreed on the fact that it refers to the integration of technology into education with the aim of improving it.

The scope of instructional technology is one that has undergone a lot of changes. Its history dates back to at least the first decade of the 20$^{th}$ century. Records show that the early used instructional tools were the chalkboard, the teacher and the textbook. In 1905, a new medium appeared into the scene, it came to be known as "school museums". These museums, as Saettler noted, stored exhibits, stereographs, 3D photograph slides, films, study prints, chart and others (1968). Since the generality of media housed in the museums were visual,

there was an increasing interest in visual instruction which led to what was referred to as "visual instruction" movement (Reiser, 2001, p.55).

Between the years 1920 and 1930, the focus in the field of instructional technology shifted to audiovisual instruction as a consequence of the advances made in areas like that of radio broadcasting, sound recording and sound motion picture (Reiser, 2001, p.56). With the outbreak of the World War II in 1940s, the use of audiovisual media in schools has declined, while its popularity increased in the fields of military and industry training. During that period, more than 400 films and 600 filmstrips were produced by the United States Army Air Force (Reiser, 2001, p.56). These films marked the beginning of a new era of technology based training and which was recognized by the renewing interest in audiovisual instruction at the level of schools.

In the 1950s, televisions were used as instructional medium and up to 242 television channels were devoted for educational purposes which led to the increase of quality television programs for learning. In the 1970; however, the use of media in instruction was no more referred to as audiovisual instruction but other terms like "instructional technology" and "educational technology" were used (Reiser, 2001, p.59). It was after that period that instructional television lost their fame and computers started to gain researchers' attention as a new technology to be applied for educational purposes. Computers, with the abundant resources and applications it brought dominated the field of foreign language teaching and paved the way to extra changes to be made at the level of the practice.

### 1.2. Computer-assisted Language Learning

As technology in general was being embraced by the field of education for its advantages, computers have been adapted as a significant and a musty educational tool considering its various features. In his article "A History of Instructional Media and

Technology", Reiser (2001) stated that computers have come to replace any form of audiovisual techniques and became a popular tool ever since. The application of computers in the different fields has led to positive and satisfying results. As far as education is concerned, Underwood (1984, p.33) stated that the merging up of technology with instruction and more particularly foreign language teaching would bring up fresh variations.

Therefore, the term used to refer to the branch of study which deals with the integration of computer technology in the field of language teaching is "CALL"; Computer Assisted Language Learning. The well-accepted broad definition was proposed by Levy (1997, p.1) which states that CALL is; " the search for and study of applications of computer in language teaching and learning". This definition refers to the fact that CALL is a multidisciplinary field that receives contributions from areas such as; psychology, applied linguistics, instructional technology, artificial technology and others. Yet, the acronym CALL was not a permanent one; change of focus and the development of new technologies called for some adjustments at the level of labeling. The adaptation of mobiles as instructional tools added the term MALL to the list (Mobile Assisted Language Learning). Since that the use of technology is not only limited to computer, web-enhanced learning through computers was also suggested (Thomas, Reinders and Warschauer, 2013, p.20).

### 1.3. Historical Development of Computer-assisted Language Learning

Despite its newness, the field of Computer-assisted Language Learning was not an isolated one. It is a multifaceted field and as it was affected by a lot of theories. In order to identify the history of CALL, researchers like Warshchauer and Healy (1998) used the division suggested for language learning theories; behaviorist, communicative and integrative. Therefore, the history of CALL, according to Warschauer and Healy, can be divided into three main phases which are respectively; behaviorist CALL, communicative

CALL and integrative CALL. Each of these phases is distinguished by a specific type of technologies and approaches to pedagogy.

### 1.3.1. Behaviourist Computer-assisted Language Learning

Behaviourist Computer-assisted Language Learning coincides with skinner's work on the behaviorstic theory which is based on the premise that language is better learned through repetition drills. Programmes developed during that time focused on repetitive drills and practice to help students learn at their own pace having computers as a mechanical tutor that keeps constantly repeating drills and never get tired (Rahimpour, 2011). The behaviourstic CALL is also based on the tenet that getting exposed to the same aspect several times ensures better results. Unlike teachers, computers do not get bored of repeating the same material over and over which makes them the best choice for drills.

The behaviourist CALL was first implemented during the mainframe computers time which were, according Warschauer and Healy (1998), large cabinets that were used to store the central unit and main memory of early computers. The best tutorial system at that time was called PLATO (Programmed Logic for Automated Teaching Operations); a system that was designed in 1960 at Illinois University and that ran a special hardware made up of a central computer and terminals, vocabulary drills, grammar explanations and translation tests (Beatty,2003). In the late 1970s and early 1980s, behaviourstic CALL was undermined by two important factors; the refusal of the theoretical and pedagogical underpinnings behind its theory and the impact the introduction of microcomputers brought with it which has opened the way to the next phase of CALL (Warschauer and Healy, 1998).

### 1.3.2. Communicative Computer-assisted Language Learning

The behaviourist approach to computer assisted learning gained support at the early years of its appearance but it was later neglected for not being satisfactory. CALL Critics of

programmed instruction claimed that drills did not give students the opportunities to use the language they learned; they were unable to communicate once they get outside the womb of their classrooms. The communicative approach, on the other hand, focuses mainly on communicative competence as a goal of instruction unlike the behaviorist approach which focused on the learning of grammar competence (Richards). Substantially, unlike the behaviourist version, communicative CALL emphasizes the use of the material or from in communicative situations rather than focusing on the form itself. (Warschauer and Healy, 1998)

This phase of CALL took place between the 1970s and 1980s. According to this approach, computer-mediated activities should better focus on the use of items rather than teaching the items themselves and on the implicit presentation of grammar rather than the explicit one (Rahimpour, 2011). Underwood (1984) was one of the strong proponents of this approach in addition to Stevens (1989) who believed that CALL courseware and activities should focus on students' intrinsic motivation and enhance students- computer and student-student interaction.

As a result of this new shift of focus, some new CALL programmes were developed. The first of these programmes offered skill practice but not in a drill pattern. They involved options for pace reading, text reconstruction and language games (Healey and Johnson, 1995). In These programmes, Taylor and Perez (1989) noted, the process looked like a stretching of the computer as a tutor model when computer was "the knower of the right answer" with the potential of students' choice, control and interaction being involved in looking for the right answer.

The second model used the computer as a stimulus which, as the name entails, involves activities which help students stimulate, discuss, write and think critically instead of having them find the right answer (ibid). Computer as a tool was the third model of communicative

CALL three models (Kemble and Briely, 1991). Programs of this model such as word processors, spelling and grammar checkers and concordances were designed with the aim of helping the students to both use and understand any language aspects.

### 1.3.3. Integrative Computer-assisted Language Learning

Socio-cognitive views of language influenced researchers and encouraged them to use a more social and student centered methods that emphasize language as used in real life contexts. They leaned towards the integrative view of CALL which suggests the merging of the four language skills and technology (Warschauer, 1996). Starting from 1990s, integrative CALL aimed at addressing the shortcomings reported by the communicative CALL and attempted to integrate the instruction of the fours skills into tasks making use of multimedia technology such as (texts, graphics, sounds and animation) as well as computer-mediated communication (CMC) (Warschauer, 1996). The beginning of this stage of CALL was marked by the wide spread of powerful desktop computers and the Internet, multimedia and hypermedia.

## 1.4. Components of Computer-assisted Language Learning

An effective computer assisted instruction orders for the involvement of the necessary elements. Son (2002) stated that there are three major components for successful CALL classroom which are respectively; computers, students and teachers. According to him, these are complementary to each other and therefore a considerable attention must be paid as to how to make a good use of each of them.

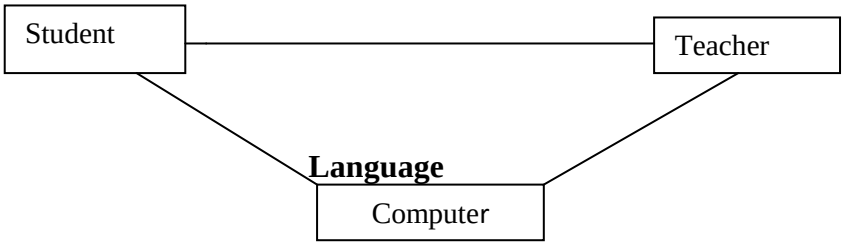


**Figure1.1:** A Model of the Three Main Components in CALL Classroom (Son, 2002)

### 1.4.1. The Computer

The contribution of computers in language classes is undisputed. It is an important element for teaching almost every aspect of the foreign language. In his book: The Computer in the School: Tutor, Tool, Tutee, Taylor (1980a) said the following; “For the foreseeable future, computing will play an increasingly important role in human learning. However, no one yet knows exactly how great that role will eventually be, or precisely what form it will finally take”. He has also proposed a framework for the ways in which computers should be used in a classroom and noted that the three main roles that can be played by the computer; a tutor, a tool or a tutee. Technology offers teachers a toolbox full of softwares or better known as coursewares (Jonassen, 1988; Lathrop & Goodson, 1983) and they have to make their choice as to the appropriate tools for their classroom settings (Son, 2002).

### 1.4.2. The Teacher

Answers come quite convergent as to whether computers can replace teachers in EFL classrooms. Researches in this respect tried to figure out the extent to which classes can get rid of teachers and fully rely on computer technology. Most of these studies revealed that the teacher presence in a computer aided instruction is still an important factor for its success., Arnett (2013), for instance, in an article entitled “will computers replace teachers?” referred to the ongoing debate between those who claim the full power of computers and those who reject to give up on their tenet that teachers are irreplaceable. Teachers’ role in foreign language classes is a vital one. Despite the undeniable help provided by computers, students still need the teacher for support at both the intellectual and psychological levels.

In a nutshell, technology, in most cases, works as a panacea for certain problems that face teachers, students as well as administrators. However, there are some cases in which technology cannot interfere like when a student is struggling with some psychological

problems which call for the interference of a human element. Clements and Nastasi (1993) stated that notwithstanding that computers and other sorts of technology are good for attaining knowledge and solving problems; yet, the teacher's role is paramount for deciding on the way in which these technologies are to function.

### 1.4.3. The Student

Educators' priorities in the field of foreign language learning have shifted with the integration of technology. Computer-assisted instruction has provided opportunities for a student- centered approach to education; an approach whereby the student is at the centre of the operation. Chapelle and Jamieson (1988) stated that as the number of softwares created for pedagogical purposes is constantly increasing. However, deciding on its usefulness should take into account the genre of students to whom this technology is targeted. They allege that age, background, ability, style and affect are important things that teachers should know about their students when trying to evaluate CALL effectiveness.

Therefore, the positions that students have occupied in traditional classes underwent some changes that have been made by O' Murchú (2005) who listed three new examples of students' roles as dictated by the integration of technology in classrooms which are namely; self-student, team member/collaborator and knowledge manager/leader. The use of computer in language classrooms offered students some freedom and control over their learning as they can contribute to the development of their language classes.

## 1.5. Computer-assisted Language Learning Features

The bulk of research investigating the role of technology in improving language learning has generated more detailed studies examining the variety of features that make the application of computers in learning settings so influential. These features have helped the shift from teacher-centered or book centered instruction to student- centered or classroom

based instruction. Frequently used features of CALL are hypertexts, hypermedia and multimedia.

### 1.5.1. Hypertexts

Hypertexts are defined as links within texts signaled by key concepts given in an underlined blue type (Christopher & David, 2005). Their usefulness has been a subject to many foreign language research studies that were aiming at probing the impact they exercise on students' comprehension of texts, their retention of vocabulary and other language items. Hypertexts were introduced by Slatin as " … an assemblage of texts, images, and sounds - nodes - connected by electronic links so as to form a system whose existence is contingent upon the computer" (1991, p.56). Hence, when a reader, for example, points at the highlighted item using a mouse, or touches a sensitive screen, he gets an immediate access to the next page. The referent of the "hotlink" or the hypertext can also be a small box floating above the original page or text (Beatty, 2010). The abundance of hypertext materials made the reading process easier especially in the existence of ambiguous concepts.

The contribution of hypertext technology to reading received a considerable attention on the part of researchers and their studies have valued the role it plays in helping the refinement of students' reading. Abdi (2013), for instance, studied the role of hypertext material in reading comprehension and found that using such techniques helps improve students' reading skills. In addition to reading, other studies related the use of hyperlinks to vocabulary learning. Researchers such as Yun (2010), Bose and Sammons (2009) and others have reported the positive effect exercised by hypertext on vocabulary learning. Hypertext strategies are good boosters of vocabulary learning and retention. Making hypertext glosses available to students while reading a text makes vocabulary learning an easier process.

### 1.5.2. Hypermedia

Hypermedia is another computer based technology which has become a rich sphere of investigation for those willing to inspect its usefulness in language learning and teaching. It is generally defined as the blending of hypertext and multimedia linking texts or items to different media forms such as images, sounds or videos (Beatty, 2003). Hypermedia applications can be used to link a word or a picture to a sound file to show its pronunciation.

Hypermedia Glossing or annotation has always been an important technology that helps students and more particularly those learning a foreign language to go through reading and comprehending texts in a smooth manner. It is; therefore, the act of adding marginal notes to a text, a book or a picture (Abuseileek, 2008). A significant number of researches have linked the use of hypermedia annotation to effective vocabulary learning (Chun and Plass, 1996; Abuseileek, 2008; Mohsen and Balakumar, 2011). According to Chun and Plass (1996), words are better remembered if presented in contexts provided with hypermedia glosses. Mohsen and Balakumar (2011) also studied the effect of hypermedia glosses on learning of second language literature vocabulary and the results of their study revealed that multimedia annotation contributed positively to vocabulary learning. When compared with printed glosses, multimedia annotations can lead to better results as for as vocabulary learning is concerned. Finally, Abuseileek (2008) added that when dealing with annotated texts, students can also have fun while interacting with the different media as they look up for the difficult concepts. This is because they present the combination of the different forms of material; visual, audio, video and texts which help learning and retaining vocabulary better than a traditional gloss.

### 15.3. Multimedia

Multimedia is another computer based technology whose use is believed to have powerful effect on foreign language learning. It is generally defined as the merging of

multiple media contents such as texts, audio, images, videos. Notwithstanding, Collins, Hammond and Wellington (2002) put that giving a suitable definition to the term "multimedia" is a difficult matter. In some contexts, multimedia refers to the use of tape and slide presentation; while in educational settings, multimedia can be referred to as integrated media that is made up of different media forms such as texts, graphics and audios.

In a nutshell, Reddi (2003) defined multimedia "… as an integration of multiple media elements (audio, video, graphics, text, animation, etc.) into one synergetic and symbiotic whole that results in more benefits for the end user than any one of the media elements can provide individually". His definition, therefore, suggests that the combination of the variant media forms would open ways to achieving better results; it makes the process of language learning an easier and a more effective one.

Teaching has always been a multimedia enterprise; instructors were always the ones speaking aloud, drawing pictures and demonstrating for the good of their students. Yet, with the advancements of the new technologies and more particularly that of computers mediated instruction, teachers and educators have became gifted by the multitude of options offered by computer applications. Among the advantages accredited to the application of technology such as multimedia in language teaching is motivation. Literature reports that students get mesmerized by the novelty of multimedia technology (Astleitner and Wiesner, 2004; Yarbrough, 2001). It is a multi-sensory tool that stimulates the senses of audience and that will help students remember the material presented through such multimedia technology in different forms.

### 1.6. Advantages of Computer-assisted Language Learning

The integration of computer in education with all its forms has proven its usefulness in increasing its quality. It has the ability of improving both teaching and learning by offering a

content that encourages interactivity and engagement. Computer technology has influenced the practice of educationalists and brought in a great immense of innovations that have changed the way foreign languages are taught (Beatty, 2003).

Several scholars like Cohen (1986), Fletcher and Atkinson (1972) tried to test whether the integration of computers in foreign language teaching can influence the way language skills or aspects are taught. Cohen (1986), for example, carried out a research in which he compared the writing performance of students who were taught writing using computers as a medium of instruction with those who did not. Results revealed that students receiving computer-assisted writing instruction outperformed those who were taught in normal settings. In the same vein, a research by Flethcer and Atkisnon (1972) showed that the results of students with computer-assisted instruction are better than those of others with traditional sittings. Other studies focused on the role of computers in the instruction of specific aspects of language such as grammar and vocabulary (Mehrgan, 2012; Pirasteh, 2014) some have investigated its utility in teaching grammar while others studies focused on its role in promoting students' vocabulary knowledge.

A study about the impact of computer- assisted instruction on grammatical abilities was conducted by Mehrgan (2012). The research focused on the utility of multimedia programs in enhancing students' use of grammar. The results showed that the experimental group, which was taught with CALL, outperformed the control group that was taught in an ordinary context without the integration of computer technology. A similar study was conducted by Pirasteh (2014) in Iranian context where participants were taught the grammar points illustrated with some examples with CALL being used with one group only. The findings revealed that using the computer technology for grammar instruction helps the experimental group show a better performance unlike the control group. Yunus, Salehi and Amini (2016) attempted to study the effect of computer mediated instruction on Iranian students' vocabulary learning. The

researchers examined the extent to which the PowerPoint presentation can be effective in enhancing Iranian students' vocabulary achievement. The results; therefore, indicated that the use of this computer-based application have a positive impact on students' vocabulary development.

### 1.6.1. Motivation

Motivation plays a significant role in the process of language learning. Without it, students cannot make any progress in their quest of mastering a foreign language. It is that inner or outer drive which triggers our desire to do or to learn something. In the field of language learning, motivation has always been accredited for its big role in the process of second language learning. According to Linnenbrink and Pintrich (2002), motivation is of crucial importance in the field of education and it has long been a major concern for teachers who are always in pursuit of ways to raise their students' interest for learning. A multitude of methods and techniques were used with the aim of increasing students' motivation towards second language learning. Music, pictures, games, plays, and even drama were all used as triggers for students' motivation. Yet, bearing in mind the massive impact exercised by technology not only in education but almost to every aspect of one's life, teachers and educationalist in general begun to think of designing technology-infused activities that would suit this new generation of "digital-natives" as they are familiar with the digital technology Prensky (2001).

In order to increase students' motivation towards learning, several methods were proposed. For example, Eloff and Ebersohm (2004), two educational psychologists, posit that one way to promote students' motivation is to assign them to computer based programs that would also lessen the impedance of those with specific learning needs. Moreover, Donaldson and Haggstrom pointed to the relation between CALL application and motivation by stating the following, "Motivation is an important element in language learning which can be

fostered in software, courseware and language web pages through appropriate feedback"(2006, p. 37). Students positively respond and better react with their teacher and fellows if they are taught in technology- mediated environment, and that is why teachers are advised drop out those outdated materials and think of ways of enriching their classrooms with some technological tools.

### 1.6.2. Autonomy

There have been lots of suggestions to promote students' autonomy in different levels of foreign language education and among the approaches suggested for the development of students' autonomy was technology. However, research investigating the role of technology in students' autonomy did not show very strong evidence about its efficacy. According to Benson (2001), researchers claiming for the utility of technology in promoting students' autonomy have to go beyond theory and to prove its effectiveness in practice. That is to say, despite the widespread use of computer in EFL classes, scholars could not definitely prove the relationship between CALL and students' autonomy.

Moreover, Erben, Ban and Castaneda (2009, p. 81) put that "technology-enhanced classrooms have been found to promote discovery learning, learner autonomy, and learner-centeredness". Technology gives students access to information and this makes them less dependent on their teachers and so they learn how to control their learning. Godwin-Jones (2011) also posits that by providing access to a great amount of materials for self-learning, computer technology helps, to a great extent, in promoting students' autonomy. In order to examine the potential correlation between technology and students' autonomy, a number of studies were carried out. For instance, Frarivar and Rahimi (2015) studied the effect of technology on Iranian EFL students' autonomy. The findings of their research revealed that using CALL applications had a positive impact on developing stuednts' autonomous learning.

### 1.6.3. Collaboration

In addition to motivation and autonomy, collaboration is considered another good side of CALL. It improves students' social skills as it makes them work on different tasks with a group of students. Technology or computer assisted learning was found as a good tool for encouraging collaborative learning. Golebiowski (1994) stated that one of the benefits of computer assisted instruction is promoting interaction within a group of students as they help each other with information and discussion of meaning.

There were a considerable number of studies that were conducted with the aim of investigating the effectiveness of collaboration in computer based instruction. For example, some have probed the usefulness of wikis, one of the unprecedented instructional technologies, in collaborative writing. Kessler (2009), Elola and Oskoz (2010) proclaimed that wikis as a social technology plays a significant role in promoting collaborative learning (Mehrak, 2015). Computer-mediated communication, an important application of CALL, also has a significant role to play in enhancing collaborative learning. Starting with traditional e-mail exchanges to online discussion forums, synchronous text chats and the recent web 2.0, CMC has made collaborative learning an easier and a funnier process.

## 1.7. Technology in Second Language Learning

Teaching/ learning technologies went through drastic changes over the past 30 years and have increased in popularity ever since. Studies of the usefulness of technological tools as implemented for pedagogical purposes have reported them as beneficial and performance boosters. Hoopingarner (2009), for instance, stated that technology is considered as a mean for improving teaching and learning by increasing input and offering students extra opportunities for language practice.

Samuels noted that, “much more recent developments in social media and information technology are taking foreign language education in new directions” (2013, p.19). The use of technology in second language learning and teaching dates back to the 1960s when it took the form of textbooks, chalkboard (Reiser, 2001). Students were, to a very large extent, dependent on their instructors. It was the teacher who supplies his class with necessary information, the one who models and corrects and so on. However, when technology started to appear on the scene, significant changes took place. Chapelle (2003 ); stated: “ over the past 30 years, drastic changes have occurred in the technologies that intersect with second language teaching, second language assessment, language analysis and many aspects of language use.” Modifications resulting from the integration of technology into additional languages teaching have almost reached every side of it starting with teaching to assessment and use.

The integration of technology, as stated by Chapelle (2003), has revolutionised almost every aspect of the profession. It has changed the ways foreign languages are introduced in the classroom, and has also shifted the roles played by both the teachers and the students. In its early days, technology was not so welcomed by practitioners; they have always been skeptical as to the use of technology in language classes (Hoomingarner, 2009). Clark (1994), in his influential paper, ‘Media Will Never Influence Learning’, proclaimed “no learning benefits” of instructional technology (p.21). Again, he encapsulated the case against technology stating that technologies are “ mere vehicles that deliver instruction but don’t influence student achievement anymore that the truck that delivers our groceries causes changes in our nutrition” ( 1985, p.445). According to Clark, there is no way for technology to be helpful for learning in their process of learning a foreign language.

After that, there has been a sea change in attitudes towards technology. It has become clear that the integration of these tools in language classrooms brings in fruitful results.

Sivin-Kachala and Bialo (2000) noted that when learning takes place in technology rich environments, students profit from significant payoffs. That is because technology offers many opportunities for learning and opens tremendous sources to information. technology also presents the techniques of mixing the learning factor together with the fun factor.

## 1.8. Computer-assisted Language Learning and the Four Language Skills

Increasing students' control over a foreign language has been, for a long time, a concern for educators in the field of second and foreign language teaching. They need to experience language as used in different contexts and also to practice it in its spoken, written, heard and readable forms (Green, 2005). Being proficient in any additional language is assessed in terms of our mastery of its four essential skills; reading, writing, speaking and listening.

The emergence of Information and Communication Technology (ICT) has revolutionized the way language skills are learned. According to Samuel and Pulizala (2014), technology helps students improve their reading skills by offering comprehensive and evident reading material together with voice modifications. In addition to that, they note that technology enhances listening skills of students by offering them abundant resources like audio-visual materials that encourage a more natural method of learning the language. Moreover, they put that the integration of ICTs can be helpful in improving speaking skills by using role plays, group discussions and other ways. Thanks to multimedia softwares, videos, and electronic books supported with hypertext annotations, the integration of ICTs in language classrooms doubles students' chances of learning foreign language skills in natural ways.

### 1.8.1. Computer-assisted Language Learning and the Reading Skill

Reading as a language skill plays a pivotal role in the process of foreign language learning as it is a key source of language input in addition to listening. Levine et al. (2000, p. 1) said, ‘‘The ability to read academic texts is considered one of the most important skills that university students of English as a Second Language (ESL) and English as a Foreign Language (EFL) need to acquire’’. It is considered as the foundation of instruction in all the facets of language: grammar learning, vocabulary development, reading, revising and using computer assisted language learning programs (Mikulecky, 2008). Jarvis and Pastuzka (2008) also pointed out that reading ability plays a crucial role in student’s academic achievement. One of the so many payoffs a foreign language students could benefit from reading in a foreign language is an increase in its vocabulary.

However, despite their awareness of the immense potential of reading, students are most of the time less motivated to read. In fact, a number of recent studies in the field of educational technologies claimed the positive role played by ICTs in solving that kind of problems. Computers, for instance, can improve students’ reading ability by raising their interest in the material they are about to read and provide them with the proper feedback on their work (Green, 2005). Additionally, educators such Altman (1972) stated that individualized instruction is one of the advantages offered by computer technology. As opposed to differentiated instruction, individualized instruction is a system where the choice of objectives, materials, and all aspects of the classroom is based on the features and needs of students (Altman, 1972). That is to say, using the 21th century technology, teachers are going to focus on the abilities and interests of each individual student.

The reading skill can be facilitated by the integration of computer technology for these latter offers tremendous options for both teachers and students that would help them make the reading process more funny and enjoyable. Nuttal (2005) postulated that, “the aims of reading

program are to enable students to enjoy (or at least feel comfortable with) reading in the foreign language, and to read without help unfamiliar texts, at appropriate speed, silently and with adequate understanding". Reading with the aid of computer based applications does not only solve the various reading issues students encounter it also makes it faster and funnier which is almost possible when reading takes place in traditional contexts. Marzban (2011) also compared the performance of the experimental group which was taught reading by means of computers with that of the control group. According to him, there was a significant difference between the results reported by the two groups stating that computers are effective tools for teaching the reading skill.

In an attempt to evaluate the extent to which computer technologies can contribute in improving students' reading skills, researchers such as Bateineh (2014), Auzar (2013) and many others conducted studies in which they probed the influence of multimedia and hypermedia technologies on students' reading achievements. The findings revealed that there was a progress in students' reading achievements after they had been exposed to these technologies. Hypermedia annotations or glosses, compared with the usual glosses make the process of checking the meaning of unknown words easier and not time wasting. The same for multimedia; when a given text is backed with some pictures or an audio script related to the topic, reading will be very effective.

### 1.8.2. Computer-assisted Language Learning and the Writing Skill

In addition to reading, writing is a highly significant language skill. Harmer states, "…. we no longer have to ask ourselves whether writing is a good thing or no. We take it as a fundamental right." (2004, p.3), However, despite the recognition of the fact that writing is an important skill for both communicative and academic reasons, and despite all the

endeavors made to help, English students seem to struggle a lot with this very skill and most of the time fail to achieve favorable results.

The use of computer technology has its very special touch as far as the writing skill is concerned. The National Commission on Writing (2003) noted that, "just as [computers] have transformed schools, offices, and homes, [they] have introduced entirely new ways of generating, organizing, and editing text" (in Whithaus , 2005, p.1). Word processing softwares are one example of computer based applications that allow the creation, storage and editing of texts. Their use as a pedagogical tool has been discussed by many educators such as Hardsity and Windraet (1989), Kemble and Brierly (1991). Brown (1993, p.69) , for instance, stated that "Word processing in writing instruction may provide lasting educational benefits to users because it encourages a fluid conceptualization of text and frees the writer from mechanical concerns". It also makes the processes of drafting, redrafting and editing a text easier ones.

In addition to that, word processors like Microsoft Word are said to be very effective when it comes to spell checking. Healy and Warschauer (1998) mentioned that word processors reduce students' anxiety of making spelling mistakes and aids them to write with fewer spelling errors. Elsewhere, Morphy and Graham (2012) stated that with word processors is much easier to supply feedback on electronic text by including notes and making modifications which makes it visible for the author and easier to comment on by a reader or a teacher.

However, researches did not all yield to positive views to support the case for word processors. For example, Herrick (1997) stated that word processors could not alter students' writing skills for they work on limiting their writing abilities and makes them more dependent on technology. That is to say that the full reliance on word processor applications gets

students neglect the rules of spelling writing will ultimately affect the quality of their productions.

### 1.8.3. Computer-assisted Language Learning and the Listening Skill

Listening is of a paramount importance in our everyday life; it occupies a big chunk of the time we spend on communicating. It has a major role to play in speaking and in getting a good pronunciation especially when learning a foreign language. Morley(1991, p.82) stated that, “Listening is the most common communicative activity in daily life: we can expect to listen twice as much as we speak, four times more than we read, and five times more than we write." That is why, students and teachers alike are advised to improve their listening comprehension by getting accustomed to native speakers when talking on TV or even listening to English songs. However, with the arrival of computers and the alternations that have been imposed by the integration of the multitude of technological tools, the teaching listening comprehension took on a new direction.

Multimedia technology, therefore, has become commonplace; it is now used in almost every aspect of language learning and teaching. It gained fame amongst educators and students for the plethora of ways it served the practice. A study carried out by Pangaribuan, Sinaga and Sipayung (2017) examined the effect of multimedia application on listening comprehension. The findings of the research revealed that the use of this application is more effective than the old way. Multimedia instruction helps foster language learning and promises good results the thing that is missed when teaching/learning takes place with no interference of technological aids.

Moreover, Meskill (1996) stated that students can communicate with each other by means of textual, aural and visual media brought in by multimedia technology. He also noted that by considering the way computers contribute in promoting the listening skills, focus

should be placed on “multimodal” processing; combined media, because it works on enriching students’ linguistic input.

### 1.8.4. Computer-assisted Language Learning and Speaking Skills

We decide on one’s mastery of a foreign language according to his ability to speak fluently and accurately in that language. Good speaking skills are preconditions for communication to take place. However, it should be noted that knowing a language and speaking it are two different things. That is to say, knowing the grammar of a language, like English, does not necessarily entail our ability to communicate with it; we can still make a comprehensible conversation regardless of our ignorance of grammar rules.

Renandya and Richards (2002) put that “a large percentage of the world's language learners study English in order to develop proficiency in speaking”(p.201). Notwithstanding this fact, using a foreign language for communication is still a great challenge for EFL students. It could their fear of being laughed at in case they make mistakes or mispronounce words and most important of all is the lack of motive to speak it. In most of foreign language classes, students are found to be reluctant to speak in English or any other foreign language. Cultural differences, as stated by Li and Lui (2011), are another reason why students are unwilling to communicate. They state that some cultures can play a crucial role in encouraging or hindering people to speak.

In addition to that, classroom settings can be the reason standing behind students’ poor oral skills because sometimes they fail to provide students with opportunities for real time communication. Also, there are teachers who dominate the whole classroom speech; they keep talking and talking giving students few or no chances to speak or to practise the language points they are learning.

Technology has been acting like the magic wand which changed the attitudes towards speaking skills and contributed in solving students’ communication issues. It, therefore, has

offered abundant options like for instance audio-tapes, video tapes, chat rooms, software. Video tapes played an important role in promoting students' speech proficiency. Renandya and Richards (2002) state that this audio-visual aid includes a diversity of visual components along with aural materials next to spoken language. In other words, video tapes are a rich source of input because it gives students opportunities to hear and to see the language.

Another valuable pedagogical tool is language laboratories. According to Rai (2014), language laboratory is a good way to make students improve their oral skills. Learning is such settings, Rai believes, will engage students in a multitude of activities; asking and answering question, imitation and repetition, dialogues. Nomass (2013) claims that the integration of internet voice chats is another way of increasing students' communicative competence. He further alleges that this technique can very helpful especially if the other part of the conversation is a native speaker. Voice chats are good sources of authentic language that can successfully help students develop their language skills.

### 1.9. Computer-assisted Language Learning and Grammar Teaching

Grammar poses many challenges to EFL students. The "s" of the present simple, adverbial clauses, irregular verbs, prepositions and many other rules make learning English a difficult task Most students believe that no matter what they do, they will not be able to master the numerous grammar rules dictated by the language and ;therefore, they will not score well in their tests. Having a sketch in the history of language teaching, we see that the issue of grammar instruction was a foci for educators. Questions were raised about whether grammar should be taught deductively or inductively or about whether it should be intensively focused on.

The use of computer technology as a pedagogical tool has become a commonplace and applying it for teaching language areas such as grammar and vocabulary attracted the attention of practitioners in the field. Bloch (2009) has reported that early applications of

computer software for grammar instruction were an attempt to "mimic" conventional methods and had students to answer correctly on artificial sentences. No matter how small is the help provided by the integration of technology into a grammar course, it still can make a difference in the results. Nutta (1998) claimed that computer based programs are very helpful to students because it offers them a substantial input with the implementation of multimedia features and allows them to check and recheck grammar explanations. Nelson, Ward and Kaplow also pointed that; "The unique property of the computer as a medium is its ability to interact with the students"( 1976, p.32). The ability of giving the proper feedback is one of the advantageous features accredited to CALL particularly when it has to do with grammar teaching/learning. In case of mistakes, computers will show students where they have failed so that they come back to their tasks, study them and figure out ways of finding the correct answers.

Researchers like Dodigovic (2005), Fredericksen et al., (1995), Garrett (1995); Levy & Stockwell (2006) and Nutta (2004) agreed on the use of computers as an effective tool for grammar instruction. Other studies, on the other hand, investigated the effectiveness of computer based grammar instruction as compared to textbook or paper based instruction. Kilickaya (2015), for instance, probed the use of the previously mentioned two methods in teaching adverbial clauses to 50 students of English. His study revealed that both methods if used together can lead to high scores. Similarly, Abuseilleek and Rababah (2007) with the same earlier focus showed that students who received computer based instruction outperformed those instructed with traditional methods. In similar fashion, another study carried out by Pirasteh (2014) in which he checked the impact of computer based grammar instruction on students' performance. Again, the study revealed that the treatment group (the one taught with computer technology) scored better than the control group.

In a nutshell, researchers in the field of CALL have been giving encouraging data to support the earlier integration of computer technology in EFL courses. Nutta (1998, p.51), from her side mentioned that computer based grammar instruction helps establish a communicative classes. She alleges that, "By using the computer for the presentation, explanation, and application of grammatical structures, more classroom time could be dedicated to real communication that focuses on expressing meaning and using appropriate grammatical structures to express that meaning". Technology use can provide a better explanation and illustration of grammar rules with the use of hyperlinks, pictures and videos.

## 1.10. Teachers and Students Training for Effective Computer- assisted Langauge Learning Implementation

In the course of using computer-mediated task-based instruction, teachers and students training in the use of computer and other ICTs should be taken into account to pave the way for a successful integration of CALL in foreign language learning contexts.

### 1.10.1. Teachers' Training

The inappropriate use of computer technologies in language classrooms by both teachers and studentscan lead to its failure. Hence, as the remarkable advantages of CALL stand behind its increasing popularity among language practitioners, there was an intense need for integrating teacher/student training in CALL curricula. Hubbard and Levy (2006) noted that, "both language teachers in training and practicing teachers will find themselves at a disadvantage if they are not adequately proficient in computer-assisted language learning (CALL). Teacher's education; therefore, seems of a vital importance for the prosperous implications of CALL programs. Researchers like; Stockwell (2009), Robb (2006), Kessler

and Plakans(2008), and many others have tackled the issue of teacher education in CALL and tried to exhibit its significance. Robb (2006, p. 340); for example, mentioned that teacher training in CALL helps them gain autonomy in three main areas; a solid knowledge base, 'the confidence to attempt to use new technology" and "an awareness of available resources". The integration of computer applications makes teachers' practices more valid as it provides them with extra teaching ideas and it also increases their reliance as far as the use of technology is concerned.

Teachers; therefore, should receive the appropriate training as to the use of computers in pedagogical settings. This does not mean using computers to type some worksheets or to play some videos; rather, it is about being able to "… choose, use and in some case refuse technology for their students." (Hubbard and Levy, 2006 ). Stockwell (2009) claims that in the absence of the equipments or programs designed for the aim of teacher training in CALL, getting accustomed to CALL softwares and tools seems a difficult task. Instructors need to know what they are dealing with and how to handle it. The lack of the right knowledge of technology manipulation increases teachers' failure in fulfilling their students' expectations of learning in computer aided classrooms.

### 1.10.2. Students' Training

Training students about the use of a given tool or strategy is a prerequisite for its success. In the case of technology or computer- mediated instructional tools, teaching students about the use of a given software before having to use it in the class will ease the tensions and lead to better results. Despite students' stingy knowledge and unfamiliarity with both fields of language learning and CALL, they are always expected to act with a certain amount of responsibility towards their learning (Hubbard, 2004). Teachers tend to believe that students are already loaded with certain kinds knowledge that they have to bring in to the classroom to

support their learning with. Perhaps as Barette (2001) puts it that regarding the fact that students are born in a computer age, teachers tend to believe that they will perform good in any learning that is based on computers.

Students are analogous to empty vessels that wait to be filled, and hence teachers should not expect too much from them as the knowledge they are supposed to own at the beginning of any learning process is never enough to tackle the diverse learning issues they are about to get exposed to. For this matter, training students in areas such as CALL is of a great importance for the learning to take place in better circumstance. According to Hubbard and Romeo (2010), the reason behind training students for effective CALL use is the need to improve students' computer capacities in preparation for second language learning.

A set of five principles were suggested by Hubbard (2004) for an effective students' training. The first of the list entails that teachers, before getting students to use CALL tools, are ought to try them beforehand. Furthermore, he believes that students must learn the basic tips for an effective language teaching. In addition to that, Hubbard (2004) puts that students in training should make use of what they learn in their training. He further notes that collaboration serves well especially if students are going to share what they have learned and put their experience with CALL softwares at their mates' disposal. That is to say that for an effective CALL integration, both teachers and students must first get familiar with the tools or the technologies which are becoming part and parcel of any school day. Another important factor for a fruitful CALL use is collaboration when an individual student shares what he has learned with a group students to strengthen their knowledge.

## 1.11. Factors and Barriers Influencing the Implementation of Computer-assisted Language Learning

For a successful implementation of computer assisted language learning, both researchers and teachers must put into consideration a set of factors. Elements such as time

devoted for computer- based tasks or activities as well as the appropriate training of teachers and students must be studied carefully. Moreover, there are a set of obstacles that may stand in the way of the effective integration of computers into the language class. That is why, it is necessary to know the factors that can contribute in the correct use of technology and to learn how to deal with any possible problem that may encounter teachers and students.

### 1.11.1. Factors Influencing the Implementation of Computer-assisted Language Learning

The interest in computer-mediated instruction, commonly known as CALL kept on growing at a great speed. Recognizing the bulk of advantages it offers for the field of language learning/teacher made researchers in general and teachers in particular more willing to integrate it into their classrooms. Many of them went on investigating a set of factors that could possibly lead to the success of failure of CALL implementation.

Elements like teacher training, the availability of computer technologies, the good knowledge and familiarity with ICTs were reported to be among the factors that contribute in both success and failure of CALL ( Atkins and Vasu, 2000; Lam, 2000; Shin and Son, 2007; Yildirim, 2000) . Research concerning this respect revealed that there were many attempts that have been made to give an appropriate typology of the set of factors interfering in CALL implementation. Some researchers, for example, have distinguished two main types of factors which are internal and external factors (Al-ruz, J. and Khasawneh, S., 2011). Insufficient time, absence of computer equipments and administrative support are among the external factors that influence the integration of CALL. The internal factors; however, can include teachers attitudes towards CALL as well as their skills in the use of such technologies. Another distinction; however, has exhibited five set of factors which are namely; personal, technical, pedagogical, socio-cultural and institutional factors. As it has been noted earlier,

bearing in mind this set of factors can help scholars fix any problems beforehand and set a good plan that guarantees better results.

### 1.11.2. Barriers Influencing the Implementation of Computer-assisted Language Learning

According to research, there are four major blocks that inhibit the successful implication of the CALL which can be financial blocks or those related to the availability of hardware and software, technical knowledge and access to technology. Lee (2000) and Dashestani (2012) carried out a study to investigate the set of barriers that hinder the CALL implementation. The study reported that curriculum limitations, the non-availability of the appropriate equipments and the lack of knowledge concerning CALL use as well as training played a major role as hindrances.

Another study by Mahmoudikia, Hoomanfard and Izadpanah (2014) has also offered a different classification of the barriers. Their list included psychological barriers such as teachers' attitudes and resistance to change in addition to cultural factors. They have also referred to professional development related factors which have to do with technology literacy and skills. In addition to that, age and gender have been included under the rubric of educational factors which are believed to influence the process of computer mediated language learning. These factors, when taken into consideration, can lead to effective integration of computer technologies into language classes.

Elsewhere, Gilakjani, Sabouri and Zabihniaemran (2015) reviewed some of the barriers that interfere with CALL integration which are respectively the availability of computer softwares, time factor, knowledge about ICT use, absence of experience and also teachers' beliefs and attitudes.

In a different study, a distinction between teacher-level and school-level barriers was made. Becta (2004), in a review of literature on barriers to ICT implementation, listed factors

such as time shortage, absence of as teacher related barriers. Whereas, reluctance to new changes has been included within the second group; school related barrier. Apparently, the results led by these and other studies are quite convergent. The problems associated with CALL integration look to be the same everywhere. Hence, drawing on a great number of research. There are some basic ways through which practitioners believe they can deal with those obstacles. Good training, sufficient knowledge about CALL, enough time and availability of softwares are thought to be important for successful CALL integration.

### 1.12. Computer-mediated Communication

The use of computer is not more limited to the concept of student- device interaction where students only deal with the computer before them. However, with the revolution created with the World Wide Web (WWW), options are now more open to technology users. Computer- mediated communication (CMC) is a term which was first coined by Hiltz and Turoff (1978) to refer to the act of two or more people using separate computers to communicate through the internet. Nguyen (2008) noted that this type of communication has been looked at from different angles and it works on easing the process of information making and message transmission as it expedites human to human and human to instrument interaction.

Regarding the various perspectives from which CMC has been treated, diversified definitions has been offered in attempt to get a clear view of the field. December (1996), for example, has pointed out that CMC is considered as " the process by which people create, exchange, and perceive information using networked telecommunications systems (or non-networked computers) that facilitate encoding, transmitting, and decoding messages." Elsewhere, Luppicini (2007), stated that CMC is a computer lead communication between a group of individuals living in a different space and time. Regardless of the different angels

from which researchers has viewed and tried to define the concept of Computer Mediated Communication, they all seem to agree that CMC is the act of communicating with other individuals using computers connected to internet.

Boone (2001), as cited in Nguyen (2008), noted that the various tools CMC-CALL or CMC based computer assisted language learning has presented have frequently changed the sphere of education. Hence, having it applied to the field of language instruction is believed to be so advantageous regarding the significant number of applications and activities it offers to facilitate teachers and researchers job. Hirvela (2006) reported that having a communication through computers helps students get over the issues they frequently come across when communicating in a foreign language. Ken and Warschauer (2002) also stated that "CMC allows language students with network access to communicate with other students or speakers of the target language". Learning with CMC tools such as emails, instant messages and other ways makes students less reluctant as to sharing their learning experiences with their counterparts as it increases their chances of collaborations through computer-mediated communications.

In addition to that, Thorne (2008) stated that the integration of computer-mediated technology has altered the way foreign languages are learned, and it has taken students away from artificial classroom situation to real experiences of communicating with native speakers of the language they are learning. On the other hand, Abrams (2008) argued that when students communicate with each other through computers, they take the advantage of selecting the topic of their discussion and also they get chances of learning and getting accustomed to the different fashions of interaction by means of cooperation with participants.

### 1.12.1. Characteristics of Computer-mediated Communication

Unlike the conventional students computer interaction, computer mediated communication offers many options especially for language students; it opens ways for authentic communication and language use. There are three main characteristics which can explain why CMC is considered as a very distinctive learning tool and to a far extent is a good choice for those willing to have the best learning experience.

The first CMC characteristic is called interactive communication. According to Romiszowski J. and Mason (2004), computer- mediated communication, unlike traditional CAI, offers boundless opportunities for interaction and expression of ideas. Hiltz and Johnson (1990) also pointed that CMC is a good option for those who live in separate places and it does not urge them to communicate at the same time. Zhang and Barber( 2008, p.343) stated that, " the interactive nature of CMC can enhance structural participation in collaborative activities and offer (a) forums of more collaborate use of interactive written discourse among students than FTF conversation". Unlike face to face communications, interacting by means of computer mediated applications helps students to work together in more creative ways to answer the different language related issues.

### 1.12.2. Classification of Computer-mediated Communication Modes

Synchronous and asynchronous are two major modes of computer-mediated communication that do different jobs and applied for varied pedagogical reasons. According to Abrams (2003), the synchronous mode of CMC is when a communication takes place a real time which means the prompt reply on texts or messages. In other words, in synchronous CMC, the message is delivered immediately like in the case of chat rooms; whereas, in the case of asynchronous CMC, participants communicate at different time which does not support the immediate response on messages. However, this is not the only classification we

get for CMC modes. They can also be divided into text-based or audio/video based types of communication. Paulus (2007) stated that in spite of the wide acceptance of audio/video CMC by the world's most population, the text-based mood is still the preferred choice of people in higher education when they make use of "commercial learning and management systems".

## Conclusion

The journey of instructional technology was an impressive one and since the beginning of its application in learning contexts, great advances had been taking place. Using computers as a teaching medium has given a new face to the field of language teaching/learning in particular. The number of the substantial computer-based techniques has enabled teachers and students alike to overcome issues that have stood in the way of successful language learning.

Hypermedia, hypertext, multimedia and CMC, are all applications that helped CALL gain popularity among educationalists. As studies have revealed, the CALL is quite beneficial in the instruction of the four language skills. Students , therefore, are found to be more induced to learning in computer-assisted contexts and they score higher compared to those learning in traditional situations when the teachers and students are the only components. However, despite the positive influence; there are some precautions that must be put into consideration in avoidance of anything that might block the process of integrating computer technology into learning. The availability of softwares, the appropriate training of teachers and students and many others are prerequisites for any computer assisted course.

# Chapter Two

## Technology-mediated Task-based Language Teaching

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# Computer-mediated Task-based Language Teaching

## Introduction

Task-Based Language Teaching (TBLT) is one of the latest approaches to language teaching/learning. It is a sub-category of Communicative Language Teaching (CLT) which is based on the promises good results by engaging students in communicative tasks. It is also considered as an alternative to the PPP model of language teaching (Presentation, Practice, Production) which was attacked for the inability to satisfy students needs for communicative language skills TBLT; however, was thought to help students by creating tasks that are closer to their real life experiences.

The present chapter offers a brief introduction to the task-based approach (TBLT) and its principles. It sheds light on the role played by this approach in improving students' academic achievements and highlights some of its advantages like automaticity, communication, vocabulary and motivation. In addition to that, the chapter in hand aims at exploring the result of integrating the computer technology and other forms of instructional technologies in task-based instruction. It also tries to point at the different ways the merging up of computer assisted language learning (CALL) and task-based approach (TBA) can improve students' academic performance in different language areas like writing, speaking in addition to grammar. Furthermore, the chapter presents an attempt to reveal the set of challenges to the implementation of technology mediated task-based approach.

## 2.1. Task-based Language Teaching

Research in the field of second language teaching came up with a plethora of language teaching approaches all with the aim of giving both teachers and students a good teaching/learning experience. The task-based approach (TBA) of language teaching was one of those attempts.

### 2.1.1. Historical Background and Rationale behind Task-based Language Teaching

The field of foreing language teaching has recognized a multitude of methods and approaches that were designed with the purpose of giving both teachers and students the best language teaching/learning experience. One such influential attempt was the Communicative Approach which has given the language teaching profession a new direction to steer toward and shifted the teachers' focus to meaning rather than form only ( i.e. linguistic items). This move towards the communicative view of language came as a reaction to traditional approaches that viewed language as a set of grammatical rules to be learned through drills leading to automatization. (Richards and Rodgers, 2001)

The field of language teaching was greatly dominated by structural methods that encouraged and focused mainly on the instruction of grammar and devoted too much effort it. This trend of language teaching was later attacked by advocates of the communicative view of language teaching. According to Richards and Rodgers (2001), the communicative view of language came as a reaction to traditional approaches that viewed language as a set of grammatical rules to be learned through drills leading to automatization.

In communicative classrooms, teachers lead their students towards second language proficiency following a three phase technique where language items were presented and practiced and more attention was given to free production. Harmer (2001) simply defines the

"3Ps" (Presentation, Practice, Production) as the alteration of conventional methods such as Audiolingualism. According to Woodward (1993) the PPP draws on Descartes belief that things should be broken into pieces to be analyzed. Language items are better learned when broken into chunks rather being presented as a whole which gives students the opportunity to process the material presented and effectively use it in the production phase.

In his article "Is PPP Dead?", Harmer stated that despite being an influential method, PPP has been criticized for a number of reasons. He mentioned some of the names who have joined the battle against PPP such as Willis (1994) and Woodward (1993). Harmer (2009, p. 66) stated that this model of teaching was rejected for being teacher centered; whereas, Lewis (1993, p. 190) noted that; "...the model (PPP) is discredited and reflects neither the nature of language nor the nature of learning". With the three P's mode on instruction, students would end up being unable to use language to fulfill given communicative tasks when necessary.

One of the substitutions of this model of teaching is the task-based language teaching (TBLT). According to(Lou and Willis, 2004), this approach was used with the aim of having an approach that is meaning focused and mimics the language as used in real life contexts. Ellis (2003) pointed out that task-based instruction can be considered as an adjustment to communicative language teaching (CLT) and also a response to the shortcomings of the Presentation- Practice-Production model of teaching (PPP). Ellis (2003) also noted that, "TBA can only be fully understood if it is contrasted with preceding methods and analyze it within mainstream communicative methodology". That is to say, in order to find out how the task-based approach can be used, it should be compared with its preceding model of teaching (PPP). This would,therefore, offer a clear image of the way task-based instruction works to address the different language issues which were inefficiently dealt with in the presentation-practice-production model. In addition to being a reaction to the presentation- practice-production approach to language learning and teaching, the task-based approach (TBA) is

believed to be the result to the sort of criticisms and resentments expressed by pedagogues such as ( Nunan, 2004;Willis and Willis, 2007) .

Task-based Language Instruction (TBI) draws on the belief that students are to better acquire a language when engaged in a task completion rather than to focus on structure or function solely (Harmer, 2001). Willis, on the other hand, stated that one way to think of the task-based instruction (TBI) is to see it as "a sort of PPP upside down" (Willis, 1994, p.19). That is to say, once the students finish the task they were assigned, teachers intervene by talking about the language used and providing some corrective feedback in case students face some problems when working on the communicative task.

### 2.1.2. Definition of a "Task"

Research on task-based instruction suggested a number of different definitions of a "task". Scholars like (Richards, Plat and Weber, 1985; Prabhu 1987; Richards and Renandya, 2002; Ellis, 2003; Willis and Willis, 2007) tried to define tasks according to their individual point of views or understandings. According to Richards, Platt and Weber (1985, p.289) "tasks" are any act that happens as a consequence to language treatment or decoding. They further note that these actions or "tasks" might lead to language production. They may also call for teachers' interventions in determining what to be an effective task accomplishment. According to them, making use of variant tasks harnesses the chances for communication while teaching. In addition to that, Prabhu (1987, p.24) stated that a task is "an activity which required students to arrive at an outcome from given information through some process of thought, and which allowed teachers to control and regulate that process, was regarded as a 'task'.Following this definition, a task is any sort of activities in which students are engaged in a discussion to reach the outlined results and in which the teachers' intervention by managing and adjusting the operation is welcomed

Ellis (2003, p16), on the other hand, tried to define tasks from a pragmatic point of view. He; therefore, indicates that a "task" is

> a work plan that requires learners to process language pragmatically in order to achieve an outcome that can be evaluated in terms of whether the correct or appropriate propositional content has been conveyed. To this end, it requires them to give primary attention to meaning and to make use of their own linguistic resources.

According to Ellis' definition, students must focus mostly on meaning and employ what they have learned about language. Richards and Renandya (2002, p.94), on the other hand, presented their view of "tasks" that looks similar to Ellis. They note that:

> A task is an activity which learners carry out using their available language resources and leading to a real outcome. Examples of tasks are playing a game, solving a problem or sharing and comparing experiences. In carrying out tasks, learners are said to take part in such processes as negotiation of meaning, paraphrase and experimentation, which are thought to lead to successful language development.

That is to say, tasks, according to their definition, are what students do using the linguistic knowledge they have acquired in problem solving, game playing and other tasks. They believe that, once students are engaged in discussing meaning and other activities such as paraphrasing and experimenting, they are going to end up with effective language production.

### 2.1.3. Task Complexity

In the way of designing any lesson following the task-based approach model of teaching, instructors should pay attention to many aspects starting with task complexity. The Cognitive Hypothesis of task-based language teaching is based on the tenet that students' pedagogical tasks should be sequenced in a manner that targets the increases of their cognitive complexity in order to raise the demands for authentic tasks (Robinson, 2003). Task complexity is defined by Robinson (2001, p.29) as "the result of attentional, memory, reasoning, and other information processing demands imposed by the structure of task on the

language student". That is to say, when a task is cognitively challenging, students will make use of any information processing technique in order to deal with the task complexity and accomplish the task.

Deciding on the degree of task complexity is not a straightforward matter as referred to by Nunan (2004); rather, it is a demanding process. Determining the task difficulty according to researchers such as (Brindely, 1987) is based on multiple factors; student factors, task factors, input factors and others. According to Skehan (1998) and Robinson (2001a), the most important factor of the above mentioned factors is 'cognitive complexity'. Nunan (2004, p.87) defined 'cognitive complexity' as: "the topic familiarity and predictability, familiarity of discourse genre, familiarity of task". Taking into consideration the degree of the cognitive task complexity helps in deciding the degree of complexity of any task. That entails knowing whether a given task is familiar to students or it is easily predicted by them.

The way task complexity affects students' performance has been investigated by a number of scholars. Rahimpour (2010), for instance, investigated the impact of task complexity on students' writings of narrative productions. The study findings revealed that task complexity did not influence students' performance. A different study by Jiaxin (2016) searched the role of increasing task complexity on writing and it has been found that students' fluency, accuracy and syntactic complexity have been decreased as task complexity increases.

### 2.1.4. The Place of Grammar Instruction in Task-based Language Teaching

Questions in the field of language teaching were always raised at to the amount of attention that should be given to grammar instruction. A plethora of studies were made in order to investigate how much attention teachers and students should pay to grammatical rule. They also probed the role of grammar in attaining a native like competency and whether or not it should be taught separately from meaning. Long (1998) mentioned that teaching

meaning alone cannot lead to a full mastery of the language. Addressing this issue of grammar centrality, Long (1998) presented three main options in language teaching which are respectively; focus on meaning, focus on form and focus on forms.

While steering to one of the extremes; focus on form or meaning, proved not to be not successful, Long (1998, p.35) proposed another option that is "focus on form" which treats "the L2 as an object, including grammar, but within an otherwise communicative classroom." Nunan, on the other hand, pointed out that the issue of concern in TBLT is whether the fulfillment of any task demands a specific grammatical form or it just takes any structure available for students performing it (2004,). He, therefore, distinguished between two types of tasks; focused and unfocused. Focused tasks are those which call for a predetermined grammatical structure to be accomplished; whereas, unfocused tasks are those that can be completed regardless of the structure being used. (Nunan, 2004)

### 2.1.5. Approaches to Task-based Language Teaching

Research on task-based instruction reveals that there are three main perspectives from which task-based language teaching (TBLT) can be approached, Long's, 1985 Skehan's, 1998 and Ellis',2003. Ellis (2009) classified these three approaches following five major characteristics of task-based language teaching: (1) the provision of opportunities for natural language use; (2) student centeredness; (3) focus on form; (4) the kind of the task and (5) the rejection of traditional approaches to language teaching (e.g. PPP)

| Characteristics | Long (1985) | Skehan (1988) | Ellis (2003) |
|---|---|---|---|
| **Natural language use** | Yes | Yes | Yes |
| **Student-centeredness** | Yes | Yes | Not necessarily |
| **Focus on form** | Yes-through corrective feedback | Yes-mainly though pre-task | Yes- in all phases of a TBLT lesson |
| **Task** | Yes- unfocused and focused | Yes- unfocused | Yes- unfocused and focused |
| **Rejection of traditional approaches to language teaching** | Yes | Yes | No |

**Table 2.1:** A Comparison of Three Approaches to Task-based Language Teaching (Ellis, 2009).

The above table shows, as far as the first characteristic concerned, that the three authors agreed on the fact that task-based instruction should focus on the natural use of language or what Widdowson (2003) referred to as "authenticity". However, when it comes to the 'student-centeredness' characteristic, the authors showed different views. According to Ellis (2012, p. 197), 'student centerdness' is "manifested in the centrality of small group work". Both Long and Skehan insist on group work; whereas, Ellis (2003) finds it insignificant. Moreover, the three approaches indicate three significant views to form. According to Long (1985), focus on form is established by means of corrective feedback. Skehan (1988), on the other hand, believes that attention to form is better made through the pre-task phase unlike Ellis (2003) who states that focus on form takes place at every stage of task-based instruction.

Concerning the 'task' characteristic, the above table shows that both Long (1985) and Skehan (1988) prefer the use of focused and unfocused tasks. As far as the fifth characteristic is concerned, Long (1985) and Skehan (1988) are both against the conventional methods of language instruction while Ellis views them as integral to task-based instruction (TBI). That is to say, while Skehan (1988) and Long (1985) prefer the refreshing concept in teaching via task-based instruction and reject the old teaching manners, Ellis (2003) still believes that the

complete ignorance of traditional methods to language teaching is unnecessary. He; therefore, argues that that these conventional views can be helpful in the development of communicative based classes.

### 2.1.6. Advantages of Task-based Language Teaching

The approach of task-based instruction has been gradually and increasingly drawing researcher's attention since its onset. The number of features accredited to the integration of "tasks" in language classrooms made the quest for task-based instruction grew bigger. Scholars like Freeman, 2000; Nunan, 2004 and others tried to list some advantages to encourage the use of this method by teachers. Freeman (2000); for instance, pointed out that the use of task-based approach gives students the opportunity of practicing language in naturalistic settings. For more detailed information concerning the advantages of TBI, the following points have been gathered from a multitude of studies that insisted on the dynamic implementations of the task-based view of language.

#### 2.1.6.1. Automaticity

Automaticity is a very substantial factor for successful language learning and it has acted as a very rich sphere of research that scholars went on digging looking for possible ways of applying it to a number of language aspects. DeKeyser (2007, p.3) defines automaticity as " the whole process of knowledge change from initial presentation of the rule in a declarative format to the final stage of fully spontaneous, effortless, fast, and errorless use of the rule, often without being aware of it anymore". In other words, automaticity is the act of getting to the point of native like mastery of language where students' production are error free. At this level, students' use of the language will not require too much effort; it will be spontaneous.

According to De. Ridder et al., (2007), task-based instruction/learning has a lot to do with automaticity because the activities it makes use of are built around the aspect of

transferring “ appropriate processes and other positive features of communicative activities”. Task-based language teaching is believed to pave the way to a better learning because it gives students the opportunities of taking what they have learned as far as language aspects are concerned and adopting them to new communicative settings (DeKeyser). They also added that the task-based approach to language teaching, unlike the ordinary communicative lesson, is the best way to enhance automaticity (De. Ridder et al., 2007).Task-based instruction stimulates to a considerable extent the process of automatization unlike communicative lessons with a strong systematic component.

#### 2.1.6.2. Communication

Being able to communicate and interact in a foreign language is the end goal of each student. History reveals an immense body of research on the best ways believed to help students become fluent and accurate speakers of a language. Unfortunately, languages are most of the time taught in the very traditional manner of lecturing while students are passive and have no role to play. Hashim (2006) pointed out that students perform better when they are taught in positive settings rich of chances for practicing real life, naturalistic language. According to Nunan (2004), task-based instruction motivates students to interact, in pairs or groups, and share ideas and experiences with each other. Elsewhere, Ganta (2015) stated that when students are engaged in a task completion along with their peers, they will receive new ideas and vocabulary which would pave their way towards self- esteem. It is the type of activities used in task-based lessons which require the participation of students and subsequently the communication of the group members. Students will be engaged in problem solving tasks which urges them to use the language they learned and they will finally develop the necessary communicative skills.

### 2.1.6.3. Vocabulary

Vocabulary is of a paramount importance in the process of language learning. It is the key component of any language and it is what speakers need in order to be able to successfully perform any skill particularly in speaking and writing (Nation, 2001). Yet, despite its importance, vocabulary seems to be one of the problematic areas of second language learning. Therefore, in attempt to answer certain issues related to vocabulary learning, some scholars like Newton,2001; Sarani and Sahebi, 2012; Khoshsima and Saed, 2016 tried to establish links with the task-based approach to language teaching.

Newton (2001), for example, presented a study in which he tried to establish links between task-based instruction and vocabulary development. He stated that learning lexis through task-based framework helps increase students' vocabulary knowledge and retention. Sarani and Sahebi ,2012; Khoshsima and Saed ,2016 made comparative studies as to which approach is better for vocabulary teaching, traditional approaches or TBLT. They concluded that studnets better learn and remember the new vocabulary when it is presented through the task-based mode of teaching. TBLT increases students' chances for interaction and negotiation of meaning and also positively affects their successful vocabulary retention.

### 2.1.6.4. Motivation

Motivation is one of the key factors believed to have a strong impact on second language learning. Dorney (1998) stated that motivation is of a paramount importance because it is responsible for triggering learning and helps students withstand the difficulties they meet when learning the new language. Hence, different researchers examined the relationship between task-based instruction and motivation. For example, a study by NamazianDost, Bohloulzadeh and Pazakh (2017) explored the effect of task-based teaching on increasing students' motivation with respect to grammatical achievement and approved

the positive correlation between the two. Furthermore, Le and Nguyen (2012) examined the role of task-based instruction in increasing students' motivation to learn vocabulary. They stated that the use of this approach is very helpful and thus teachers should consider it as a good option to enhance their students' lexical performance. When students collaborate with their fellows or members of the same group, they will experience some fun which will make the learning process agreeable. This will subsequently make them motivated to learn in such settings and will help them attain better results.

### 2.1.7. Task Components

There have been different views as what a task should contain. Nunan (1989), for instance, alleged that in order to define what a language learning task is, there is a need to highlight its four main components which are namely; the goals, the input, the activities and the roles played by both the student and the teacher. Candlin (1987), on the other hand, believed that a task should include input, roles, actions, monitoring, outcomes and feedback. Shavelson and Stern(1981); however, claimed that task designers should put the following components into consideration while making tasks;

- Content- the subject matter to be taught
- Materials- the things that students can observe/manipulate
- Activities- the things the students and teacher will be doing during a class
- Goals- the teacher's general aim for the task
- Students- their abilities, needs and interests are important
- Social community- the class as a whole and its sense of "groupness"

However, Wright (1987) pointed out that tasks have two elements within which are the input data and a question which draws students' way to using the data or to learn what to do with it. Thereore, drawing on the perspectives provided by Candlin (1987), Shavelson and: Stern (1981),and Wright (1987), Nunan (1989)stated that a task should include: input, goals and procedures backed with the roles of teachers and students and settings. This is better manifested in the following diagram:

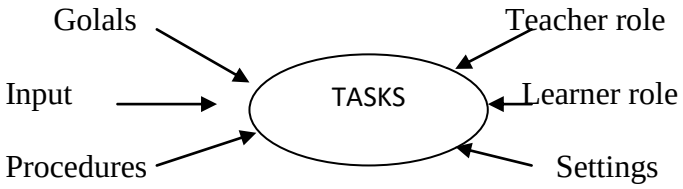


**Figure. 2.2:** Framework for Analyzing Communicative Tasks (Nunan 1989, p.48)

#### 2.1.7.1. Goals

In the field of language teaching, goals have always played a role in deciding on the approach of language teaching to be applied in the classroom and on the type of syllabus to be designed. According to Nunan (2004, p.42), goals are the "vague, general intentions, behind a learning task". He further alleges that goals draw a line between the task and the syllabus. Broadly speaking, goals stem from students' needs which get the teacher to design his classroom tasks with the aim of helping his students with a given language aspect or anything else. In this regard, Richards and Rodgers (2001, p.113) stated the following:

> In developing goals for educational programs, curriculum planner draw on their understanding both of the present and long term needs of learners and of society as well as the planners' beliefs and ideologies about schools, students and teachers. These beliefs and values provide the philosophical underpinnings for educational programs and the justification for the kinds of aims they contain

According to Richards and Rodgers (2001), deciding upon the nature of the end goals of learning plays a significant role in the design of curriculums. That has to be achieved by gathering important information about the teachers, students and schools beliefs and ideologies (Richards and Rodgers, 2001). These details about students' beliefs and desires will help determine the genre of tasks to be used. Nunan (2004), therefore, has given the following examples to illustrate how diverse the tasks can be depending on students' needs:

> " I want to develop their confidence in speaking."
> "I want to develop their personal writing skills."

"I want to encourage them to negotiate information with each other to develop their interactional skills."

"I want to develop their study skills."

Tasks have to be chosen deliberately depending on students' needs and desires and that would make the teaching/learning process successful. If tasks are appropriately and wisely picked up, curriculum design would be easier and less time consuming and so learning will be less tedious.

#### 2.1.7.2. Input

Input is a notion that has been of a great interest to researchers in the field of language learning/teaching. It is defined by Gass and Selinker (2008, p. 304) as "the language to which learners are exposed to" . In order to develop good language habits, students are in need for an environment where the target language is used extensively. According to Nunan (2004), input can come from different sources; it can be external (from the teacher, a textbook, etc) as it can be internal (coming from the student himself).

The importance of comprehensible input has long been stressed by the majority of learning theories. It was first introduced by Krashen (1980) as one of his five hypotheses of language learning. According to him, by improving their knowledge of the second language, students will be able to move from "i", that is their current level, to "i+1", which is the advanced level of language. However, the frequently raised question was about how authentic this input must be. To start with, authentic language input was defined by Taylor (1994) as, "real language, produced by a real speaker or writer for a real audience and designed to convey a real message of some sort". Taylor's (1994) definition suggested that the authentic language input is any language produced for other purposes other than educational ones.

Authentic language input can be found almost everywhere. However, regarding the scarcity of such linguistic material in EFL settings, audiovisual technologies can be used as a rich source of authentic language input. Bahrani and Soltani (2012) stated the application of

various audiovisual mass media programs such as films and cartoons has gone beyond the boundaries of entertainment". Authentic language input is no more limited to listening or watching a native speaker, it is now everywhere on media which gives students great opportunities for learning. In addition, reporting the advantages of using an authentic language input, scholars such as Martinerz, 2002; Nunan ,1999; Gilmore,2007 and many others stated that the integration of authentic language input in second language classrooms helps students learn about the different accents or forms of language spoken in different places. In addition to the fun factor, being exposed to real language material enhances students' speaking and communication skills.

#### 2.1.7.3. Procedures

The third component of tasks according to the framework proposed by Nunan (1989) is 'procedures'. It is defined as a set of sequenced activities in a given action or course (Meriam-Webster, 2018). As far as foreign language learning is concerned, this concept is considered as one of the stages which interfere in the organization of a method. Richards and Rodgers defined it as, " the last level of conceptualization and organization within a method…..This encompasses a moment-to-moment techniques, practices and behaviors that operate in teaching a language according to a particular method" ( 1999, p.26). Whereas, Nunan (2004) introduced 'procedures' as the act of using input as a starting point to the learning task. He further raises the concept of " procedural authenticity" as one influential components of task-based approach .According to him, ' procedural authenticity' is the term used to refer to the set of activities repeating and emphasizing what the students are supposed to do in the classroom).

River and Temperely (1978) stated that a different way of looking at procedures is in terms of their goals; 'skill getting' or 'skill using'. They believe that 'skill using' is what

students need to adopt and apply what they have learned in the classroom for communicative reasons outside.

#### 2.1.7.4. Teachers' Role

Teachers role in foreign language classrooms varies from one approach to another. According to Van Avermaet et al., (2006), the teacher's role in a task-based classroom is as important as the role he plays in more "linguistic" approaches. They add that there are a couple of things a teacher should do in order to ameliorate students' performances when carrying out a task. These two actions should be taken into consideration during the three phases of TBLT.

- Motivating learners to invest intensive mental energy in task completion;
- Internationally supporting task performance in such a way as to trigger processes such as negotiation of meaning and content, the comprehension of rich input, the production of output and focus on form which are believed to be central to (second) language learning.

Richards and Rodgers, on the other hand, pointed out that in a task-based classroom, the teacher can play different roles like being a selector and sequencer of tasks, preparing students for tasks and conscious raising (2001, p.236). Moreover, Willis and Willis (2007, p. 164) indicated that in task-based settings, the teacher carries on his classic role as a source of language input in addition to encouraging the use of the real language. They outlined the possible roles for a teacher to perform in a task-based context. According to them, a teacher can be a leader and an organizer of discussion in addition to being a manager of pair or group work. Moreover, a teacher can also be a facilitator, a motivator, a language knower and seeker and finally a language teacher. (Willis and Willis, 2007). Therefore, it can be noted that the teacher in a task based classroom does not have a single role to play like he used to be in conventional approaches. In task-based instruction, the teacher is multi faced; he is a facilitator, a motivator, a researcher and a contributor in the language learning process.

### 2.1.7.5. Students' Role

The roles played by students in a foreign language class have always been the foci of research. Historical accounts; therefore, show how much changes this aspect has undergone with the coming of each of the methods and approaches of language teaching. The following table is a summary of the roles students played in each of the language teaching methods:

| Approaches | Roles |
|---|---|
| 1.Oral/Situational | -Learner listens to teacher and repeats;<br>No control over content or methods |
| 2.Audiolingual | -Learner has little control; reaction to teacher direction; and passive, reactive role. |
| 3.Communicative | -Learner has an active, negotiative role; should contribute as well as receive. |
| 4.Total Physical Response | -Learner is a listener and performer; little influence over content and none over methodology. |
| 5.The Silent Way | -Learners learn through systematic analysis; must become independent and autonomous. |
| 6.CommunicativeLanguage Learning | -Learners are member of a social group or community; move from dependence to autonomy as learning progresses. |
| 7.The Natural Approach | -Learners play and active role and relatively high degree of control over content language production. |
| 8.Suggestopedia | - Learners are passive, have little control over content or methods. |

**Table 2.2** : Learners' Roles in Different Approaches ( Nunan, 1989, p.80 )

As it is exhibited in the above table, students have played diversified roles throughout the paradigm of language teaching. They were placed in one of the two categories; a passive or an active student. Apparently, since the appearance of

communicative approaches, students' roles shifted to the other side of the extreme. In task-based language learning, students or "participants", as called by Willis and Willis (2007), seem to be taking positive parts in the language classroom and intervening in the different aspects of a task. The following diagram was sued by Willis and Willis to show the possible roles of a student.

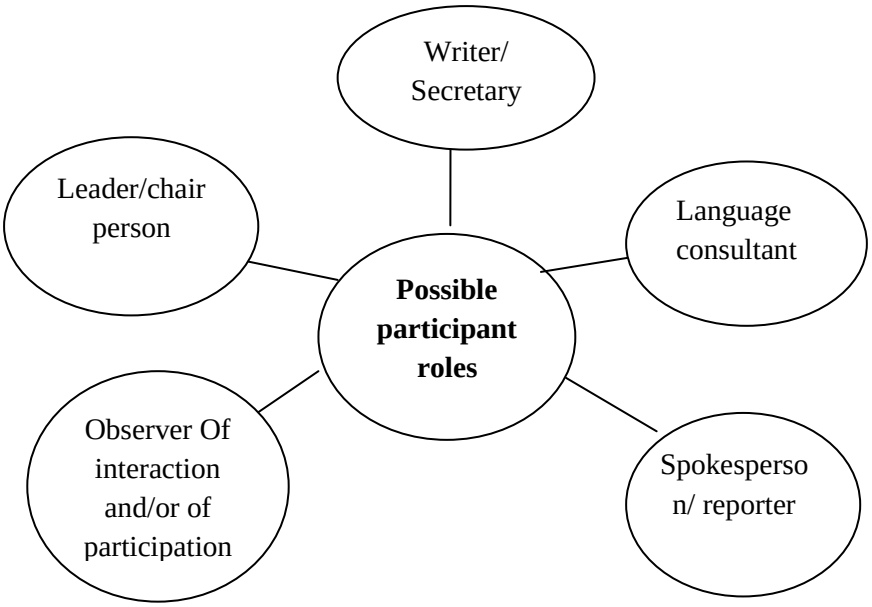


**Figure 2.3:** Roles of Participants/Learners in task-based classrooms. (Willis and Willis, 2007, p.163)

Apparently, the task-based approach gives students more opportunities to participate in the different tasks and stages of the course. While working in a group, a student or the participant enjoys the opportunity of being a writer or a secretary, a language consultant, a leader, an observer of the interaction and a spokesperson or reporter. Willis and Willis ( 2007) put that when every participant of the group is responsible for a particular task, that would lead a well- managed class where every single stage of the course is under control. With the communicative approaches such as TBLT, students take part to contribute in the

process of language learning and, to far extent, determine the results of the tasks they participate in their accomplishment.

### 2.1.7.6. Settings

Students spend most of their daily time at school which means that a great emphasis should be placed on the way classrooms are organized. Classroom settings or setups have been taken as one of the elements of an approach and it received a considerable attention on the part of researchers. If the classroom arrangement is not carried out properly, this would lead to stifling creativity and weakens students' motivations and achievements. That is why it is believed to help students thrive.

According to Nunan (2004), saying whether a task is to be carried out fully or partly is one of the requirements of classroom arrangements in task based approach. Physical arrangement is one such important factor of classroom settings. On this matter, Wright (1987,) used the following frame to show how students are physically placed inside the class:

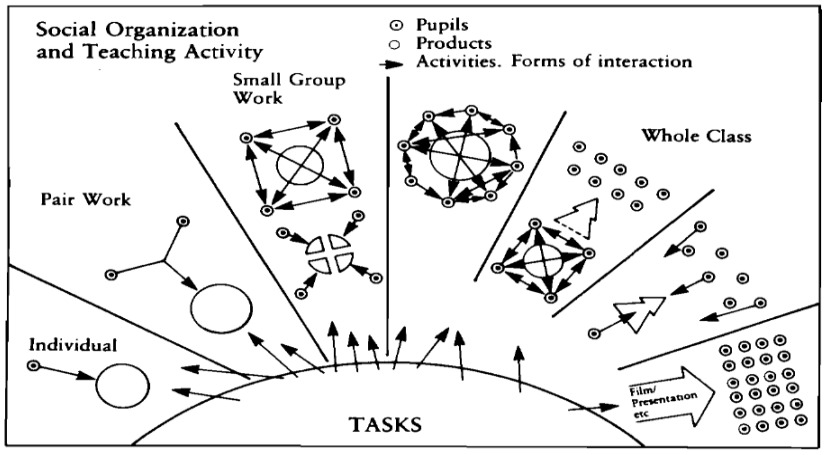


**Figure. 2.4**: Students' Roles in Task-Based Class. (Wright, 1987, p.58)

In addition to that, Nunan (2004) noted that when talking about arrangement of classroom in the task based approach, one must make the difference between a learning

"mode" and a learning "environment". A "mode" is about whether the student is working individually or in a group. "Environment"; however, refers to the settings where the learning process is taking place: a traditional class, a language centre, or a multimedia language centre (Nunan, 2004). A good plan is; therefore, a prerequisite for an effective task based instruction. Task designers and teachers alike should take into consideration the two elements of task-based classroom arrangement; the mode and the environment.

### 2.1.8. Framework for the Task-based Approach

Providing an appropriate and a logical sequence for what is taking place in a classroom is of a great importance for its success. Ellis (2006) pointed out that designing a task-based course requires a thinking of the stages making it. Therefore, there were several endeavors to make a suitable categorization of the basic stages making up a task in TBLT. One of those attempts was a four-step sequence made by Slaberry (2001) which contains the following elements; introduction to the topic, illustration, implementation and integration.

| Task stages | Teacher's roles | Learners' roles |
|---|---|---|
| **Stage 1** | Introduction of topic | Involvement( motivation to participate in the task) |
| **Stage 2** | Illustration | Inquiry (communicative analysis of language in communicative context; mostly initiated by students, not the teacher) |
| **Stage 3** | Implementation | Induction (development of hypotheses about structure and functions of the language) |
| **Stage 4** | Integration | Incorporation (assimilation of knowledge about new L2 features in a way productive to the overall L2 system) |

**Table 2.3**: Slaberry' s Task Stages (Oxford, 2006)

The above table explains both teachers' and students' role in each of the task stages. The teacher starts by introducing any topic to involve students by motivating them to take part in the task. He, then moves to the illustration and implementation to end with the integration

stage. At this point, students incorporate by assimilating knowledge about the new language in a productive fashion. However, this was not the only classification proposed for task stages.

In addition to Slaberry's classification, some other designs have been made by researchers such as Prabhu (1987), Skehan ( 1996 ) and Willis (1996). The most important of these proposed designs and the frequently adopted one by most of the scholars is a three-phase framework designed by Willis (1996). The pre-task phase, the task cycle and the language focus are the three main components of this model. According to Willis, among these stages, the pre-task one is supposed to be the shortest and it is expected to extent to twenty minutes depending on the students' intimacy with the topic of the task.

#### 2.1.8.1. Pre-task Phase

As the name suggests, this first stage of a task-based course aims at introducing students to the topic of task and increasing their familiarity with it. It is believed that introducing the theme to the students using the right activities will increase students' awareness and help them deal with the challenging words and grammar they get exposed to at the beginning. At this point, the instructor goes through the task exploring it with the class and trying to explain the terms and expressions related to it (Willis, 1996). The activities to be used in this particular phase are meant to properly engage students in the task and increase their willingness to do it. Willis (1996) proposed a list of some useful pre-task activities to help both the teacher and the students explore the task. Writing a list of jumbled words related the topic is one such good idea to get the students think about the content of the task. In this way, they will make a good brainstorming of the topic they are exposed to. Moreover, as a point of departure, the instructor can use a set of pictures with some mixed captions put and the students are then asked to put them in the right order.

In addition to that, teachers can do what Ellis and Shintani referred (2014) to as "Modeling performance of the task", where students are exposed to a listening material or a video containing language as used by experts or native speakers. They also noted that in this stage of a task-based course design, teachers may pre-teach some language items needed to perform the task. However, they argue that this may make students think that they have to focus on the linguistic items they have been introduced to in this pre-teaching point. (Ellis and Shintani, 2014). This phase of a task- based lesson is; therefore, necessary for getting students ready for the task increasing their knowledge about theme. This could be realized by the implementation of the different activities suitable for the stage such as; gap-filling activities, mind mapping, re-ordering and others.

#### 2.1.8.2. Task-cycle Phase

After getting participants exposed to the task and increasing their familiarity with the topic by referring to some related expressions, they are supposed to move to the next step of task-based design which is the "task cycle". Within this phase, Willis (1996) has included three sub-stages which are: task, planning and report. In the first one, students are expected to work in small groups using any available language form in order to finish the assigned task. At this point, Willis (1996) adds that there is no need for a teacher to intervene and provide any lexical or grammatical assistance. She further illustrates that the aim of this stage is to get students work in an entirely student-centered environment which encourages communication.

Before getting to the report stage where students are required to produce an accurate and fluent language, they need to pass by a planning stage where attention is paid to form believing that when doing so, students will be ready for the production of correct and high level of the language. Willis and Willis (2007) state that this phase indirectly aims at encouraging students to produce a fluent and accurate language. That is to say, the

participants in a group will have to share the outcome of their task with a class and subsequently this will urge them to pay more attention to the language they are using.

#### 2.1.8.3. Language Focus Phase

Language focus is the last stage of TBLT framework. It is the phase where students get the opportunity to use whatever language available to them. It is designed to help the students attain higher accuracy levels. Activities within this phase can be carried out during class time or at home which were referred to by Leaver and Willis (2004) as two components of the " language focus" phase. During this stage, students are going to study and negotiate over the language aspects found in the text or the recording included in the task. Then, after the analysis, the teacher encourages students to practice the words and phrases obtained from the language material used for the task (Willis, 1996). Through this stage, both teachers and students will closely observe the results of the previous two phases; whether students have grasped the information presented in the tasks and whether the types of tasks included were appropriate.

## 2.2. Computer Assisted Task-based Language Learning

Literature reveals significant results as to the effectiveness of task-based language teaching. Similarly, the integration of computer technology in the instruction of the different language aspects yielded, in its turn, to promising results. However, there has been an increasing interest on the part of scholars and teachers to merge these two fields together. At the beginning, studies investigating this possible synergy were very scarce and lately they begun to grow up gradually.

A number of books were published in response to this ever growing need of merging up the principles of task-based language teaching and technology applications. One such distinguished contribution was the publication of *"Task-Based language Learning and*

*Teaching with Technology"* by Thomas and Reinders (2010). In this outstanding book, the writers have discussed the possible ways of implementing computer technologies in task-based contexts. Thomas and Reinders (2010) have also shared a number of studies investigating the extent to which this amalgamation can succeed in bringing up the most satisfying results as far as language learning and teaching are concerned.

The application of any technology or theory has its shortcomings that may stand in the way of its successful use. Technology-mediated TBLT, according to research, is found to be effective in some situations and fail to reach the outlined outcomes in others. This of course is a result of the handiness of some factors that will be discussed later in this section.

### 2.2.1. Merging Computer Technology into the Task-based Approach

One of the substantial works on technology was that by Chapelle (2001) "*Computer Applications in Second Language Acquisition".* Throughout his book, Chapelle asserted the enforcement of technology in language contexts. Doing so, he noted the following:

> ….anyone concerned with second language teaching and learning in the 21st century needs to grasp the nature of the unique technology mediated tasks learners can engage in for language acquisition and how such tasks can be used for assessment…to meet the challenge, the study of the feautures of computer-based tasks that promote learning should be a concern for teachers as well as for SLA researchers who wish to contribute to knowledge about instructed SLA
>
> (Chapelle,2001, p.2)

In saying so, Chapelle (2001) did not only praise the role technology plays in the class, but he also highlighted the significance of tasks when used in computer-based settings. Therefore, it has been agreed by a number of researchers like Thomas and Reinders (2010) that when technology and task-based learning are linked together, this would lead to optimum results than when these two fields are being applied separately (Hiradhar, 2015). As explained

by Doughty and Long (2003), technology offers applications with authentic venue that work better in realizing the underlying principles of task-based teaching. When applied separately, the fields of technology and TBLT lead to positive impacts. This advantage is doubled when they are used together to back each other in the field of language learning/teaching.

The integration of technology in instructional contexts was not widely embraced because it brought with it manifest changes at the core of the profession. Thomas and Reinders (2010) assumed that this marginalization of CALL by many scholars was mainly due to the fact that research in TBLT focused solely on face-to-face communication. Historical accounts, then, show that pedagogues held very skeptical views as to the attempts of merging computer applications into task-based learning. On the other hand, Lioret and Ortega (2014) asserted that this scarcity of publication on technology-mediated TBLT is not a matter of eliminating each other, but the endeavors of combining the two in one field were "tenuous". Integrating technology into task-based course would bring up manifest changes to the way this approach was practiced. In other words, the reason behind the poor support of this new approach is due to the scarcity of studies made in the field to prove its effectiveness. That what led some scholars to be suspicious about its efficacy and probably it would take a while before they feel safe about applying this technology assisted approach.

### 2.2.2. Advantages of Integrating Technology into Task-based Instruction

The benefits of using the ICTs and any other forms of technology in language classrooms are numerous and so are the benefits when they are used to support task-based instruction. Doughty and Long (2003), in their seminal paper, noted that the underlying principles of TBLT are better realized when technology is used because it offers the class opportunities for using authentic input. They alos agreed that using a framework like that of TBLT allows a more appropriate choice and application of technology.

Moreover, Ziegler (2016) pointed out that as a result of the use of technology, students' choices became big. He alleges that before having it applied in task-based contexts, participants only had the classroom as a space of interaction. However, technology has expanded the space of interaction and offered students unlimited choices for practicing language thorough web conferences, computer- mediated communication and other ways. He further added that: "the use of TBLT in this online platform encouraged learners' participation, reduced their cognitive burden, and provided the instructor with improved opportunities to individualize instruction". Allowing technology to enter the task-based classroom increases students' interests in learning and paves the way for extra learning sources and opportunities.

The intersection between technology and TBLT has been examined by many scholars (Doughty and Long, 2003; Thomas and Reiders, 2010; Lai and Li, 2011). Despite the pitfalls, this potential synergy was found very helpful on both the psychological level ( lowers students' affective filter and increases their motivation), and the cognitive level ( increases students' linguistic input and enhances their productions). Technology- mediated TBLT plays an important role in enhancing students' receptive and productive skills. It solves the problem of place when the students have nowhere to use and it also increases their motivation towards learning the language and using it.

### 2.2.3. The Impact of Technology-mediated Task-based Teaching on the Four Skills

Applying technology into the teaching of the four language skills and aspects such as grammar and vocabulary was not a modern matter. Similarly, task-based language teaching had gained popularity among practitioners for the role it plays in the structure of language skills such as writing. Researchers such as Abraham (2015) pointed out that learning to write using the task-based approach to teaching will help students improve their writing mainly

grammar and vocabulary. They claim that when engaged in a task completion, participants will be constantly and actively improving their vocabulary and ameliorating their grammatical knowledge. Besides, he believes that getting familiar with the task and having fun when accomplishing it are crucial for overcoming writing related issues.

Willis and Willis (2007) have also shared a number of task-based activities which they believed to be helpful in improving students' writing skill; listing, matching and problem solving activities, to mention a few. In a study investigating the influence of task-based pedagogy on Malaysian students' writing skill, Ahmed and Bidin (2016) concluded that the writing skills of the Malaysian university students ( the sample of the study) was improved in terms of L2 complexity, accuracy and fluency. Therefore, the growing interest in the impact of technology-mediated task based language instruction led some enthusiastic researchers to investigate its usefulness with the productive skills; speaking and writing. The fact that the number of studies conducted with the aim of measuring the efficacy of technology-mediated task-based writing is stingy. Despite that, there are some endeavors which perhaps laid the basis for other researchers to be tackled in this respect.

Elola and Oskoza (2010) carried out a study to probe the degree to which technology and more particularly social tools such as web 2.0 social chats combined with the principles of task-based approach can improve students' skills in writing argumentative and expository essays. The findings revealed that, generally, students spent more time and devoted much effort to revise and edit their writings and that their productions developed in terms of accuracy and fluency. An additional work in this regard was presented by Hiradhar (2015) which looked at the efficiency of technology-mediated writing program in task-based settings. The results of the study revealed that the participants' writings improved in terms of cohesion and coherence while no significant difference has been noticed in terms of the other aspects of language like grammar and vocabulary.

### 2.2.4. Designing Computer-mediated Task-based Instruction

Designing a syllabus where technology is taking part is not an easy task. With the sophisticated computer- based applications, syllabus designers have to be careful as the choice of the right tools to include in the tasks. That is why some steps have to be followed to guarantee a good syllabus design process. The most important step of a syllabus design is needs analysis.

#### 2.2.4.1. Needs Analysis

Needs analysis or needs assessment is a prerequisite of any syllabus design. It is the means by which syllabus designers carry our information about students to make a language syllabus that meets well with students' linguistic and psychological needs. As far as task-based teaching is concerned, Long (2007) regards NA as the "the first stage in the development of a TBLT program" (p.124). According to Gonzales and (2014), carrying out a needs analysis helps determine the type of tasks to be included in the lesson and also the language needed to accomplish those tasks. She adds that when technology is used within the framework of TBLT, needs assessment should not only target linguistic and pragmatic needs of the participants but also " the informational and multimodal digital skills needed to effectively engage with the technology" ( p.23). It should also focus on what students need to know about the different technological options available for them and how they can get the appropriate training to be able to use them effectively.

Bearing in mind the newness of technology-mediated TBLT as a field of research, lacking some convenient studies on how to carry out a needs analysis in such settings would be logical. Still, some information about this respect can be found in Gonzalez' Study (2007) on the implementation of web service in task-based contexts. The research was conducted with college students at the University of Hawaii. In order to gather the necessary

information, the researcher used a survey of existing literature on needs analyses with students in academic settings. Students also were enrolled in the task and the needs analysts made some observations, used questionnaires and interviews in order to get a comprehensive view of the situation. An analysis of documents like the syllabus teachers' corrections of exams and essays writing was also implemented.

There are a multitude of methods that can be used to obtain some data on students' digital skills. Needs analysts, for example, can get some useful information from students by asking them questions about their experiences with technology in additions to their attitudes or opinions about their use. Questionnaires where students are going to self-rate themselves and classroom observation along with screen capture recordings are other possible methods to be used in CALL NA. (Gonzalez, 2014)

The combination of these computer-assisted instruction (CAI) and task-based teaching (TBI) would bring up fruitful results to the domain of foreign language teaching and learning. Gonzales, in one of the valuable contributions in the field of technology-mediated TBLT stated that:

> This fusion between technological innovation and TBLT has a unique learning potential. It can bring learning ideas, contexts, and affordances to language that would not be possible through any other medium. It takes advantage of a new era of learners who are comfortable with innovation and integrates the learning of language and new digital, communicative, and multimedia literacies, all under the philosophy of "learning by doing. Gonzales (2016, p.1)

Anwar and Arifani (2016) carried out a research to develop material with entirely computer-aided task-based activities. In doing so, they followed the suggested three- steps design suggested by Skehan (1996); the pre-task, task-cycle and post-task. In the pre-task phase, the researchers used comic pictures and recording in order to introduce the theme and increase students' familiarity with it. However, in the task-cycle phase, there was some focus on language by doing some activities like matching pictures, role playing and others. In the

post-task stage, then, some follow up tasks were proposed in order to encourage advanced communication. The researchers pointed out that the course included the integration technology or computer applications in the three stages of task design.

In terms if classroom applications, Doughty and Long (2003) proposed a list of methodological principles to be considered when working in a task-based context. These principles can be applied when technology is used within the framework of TBLT. These nine principles are:

1. Use task, not texts ( as the unit of analysis);
2. Promote learning by doing;
3. Elaborate input ( do not simplify, do not solely rely on "authentic" texts);
4. Provide rich (not impoverished) input;
5. Encourage inductive ('chunk') learning;
6. Provide negative feedback;
7. Respect learners' syllabuses/developmental processes;
8. Promote cooperative/collaborative learning;
9. Individualize instructions (according to communicative needs and psycholinguistically).

According to Schrooten (2006), task designers should bear a considerable attention to the content of activities. For instance, when the aim is using multimedia in the task-based context, the content of the multimedia activities ought to be motivating and related to the topic. If tasks were designed with consideration of the above mentioned principles, they will be appropriate to enhance students' academic performance.

### 2.2.5. Technology for Technology-mediated Task-based Approach

A plethora of technology tools and softwares are available to both teachers and students which gives them full access to the information they can rely on. Foreign language teaching is known as a fertile field for containing a great number of publications on task-based instruction. In contrast to that, little has been published to address the different aspects related

to technology-mediated TBLT such as curriculum design, the type of tasks to be implemented and many other issues.

There has been some discussion about the effectiveness of technology tools when mixed with task-based principles. Eskoz and Elola (2010), for instance, studied the role of web 2.0 tools and tasks in improving students' foreign language collaborative writing. Gonzalez-Lioret (2015) pointed out that technologies such as blogs, wikis, multiplayer online games and many others "fit perfectly within TBLT principles of learning by doing, authenticity, and meaning and goal orientation". The task- based approach encourages the use of authentic language and negotiation of meaning and their chances of naturally learning the language skills can be doubled with the integration of technology applications such as blogs and wikis.

Virtual Learning Environments are recently gaining popularity among practitioners as a pedagogical tool. They allow students to participate with each other in groups via internet to present knowledge and discuss activities. Weller (2007) defined Virtual Learning Environment (VLE) as "a software system that combines a number of different tools that are used to systematically deliver content online and facilitate the learning experience around that content". He further points that such virtual learning environment help improve e-learning . Second Life, Active Worlds, Final Fantasy are examples of VLE. Gonzalez (2015) stated that using such technologies is the best way of showing the interrelation between tasks and technology.

Games of quest-based nature can be the perfect nominee for task-based lessons. Gonzalez (2015) said that when students take parts in role-play games, they will use language to read instructions, find someone or ask for something. This would encourage the learning by doing; one of task-based principles. In addition to games, web 2.0 tools such as blogs, and

wikis are good options for technology-mediated tasks and their usefulness has been investigated especially for teaching the writing skills.

### 2.2.6. Challenges to Implementing Technology-mediated Task-based Teaching

There are a number of factors which can stand without the successful implementation of technology-mediated TBLT. Lai and Li (2011) stated that notwithstanding the valuable advantages technology brings into the TBLT class, it can pose a lot of demands on students, teachers as well as researchers. They alleged that in order for students to perform appropriately in technology- supported TBLT contexts, they must, first, have the adequate technological skills to manipulate the different tools i.e. digital literacy. Researchers such as ( Hampel, 2006; Kress, 2003; Reinders and White, 2010) pointed out that the problem is that students are not being fully conscious about the uses of technology and what it can afford to their learning.

Teachers, on the other hand, can be considered as one of the main reasons why the implementation of computer-assisted TBLT can go wrong. It is strongly believed that teachers must “go with the raw” and be ready for the updates, the new technologies and instruction softwares brought up every now and then. Chapelle (2001, p.2) reported that "anyone concerned with second language teaching and learning in the 21st century needs to grasp the nature of the unique technology-mediated tasks students can engage in for language acquisition”. In order to enhance the quality of language teaching, teachers have to embrace the changes brought in by technology and learn about the different ways the integration of CALL applications can effectively alter foreign language instruction

In addition to that, Lai and Li (2011) stated that the profession of foreign language instruction is becoming even more exhausting for teachers themselves because of the new

roles added to their list. They have to design task that meet with students' needs, increase their knowledge about the technologies to use, and monitor their collaborations. They stated that in addition to lacking the appropriate training in technology use, teachers appear not to trust the advantages of technology tools and the way they can help students overcome their intercultural and linguistic issues (Lai and Li, 2011). Designing tasks with technology poses a challenge to most teachers especially those who are less familiar with computer or any other form of ICT.

## Conclusion

Due to the remarkable influence exercised by the integration of communicative tasks in foreign language classes, practitioners in the field have widely accepted and embraced the task-based approach and developed it to suit foreign language students' needs. Whether it is grammar, vocabulary or any other language aspect within the task-based framework is believed to boost students' performance by providing chances of increasing their autonomy and their sense of collaboration.

The research in task-based instruction took a new direction especially with the appearance of educational technologies. Computer Assisted Language Learning was widely accepted among researchers and language teachers who are willing to improve the process of vocabulary teaching/learning. Therefore, the possible synergy of these two fields of study; task-based instruction and Computer Assisted Language Learning became the focus of researchers in the last decade. All the advantages accredited to task-based instruction will be boosted with the use of computer technology. For instance, collaboration will be more possible and also more effective if carried out in computer-mediated settings.

However, there are some factors hindering the effective implementation of computer-mediated task-based approach like the lack of knowledge of computer use and the unavailability of materials. These issues have to be considered before any attempt of adopting it in language learning contexts including the lack of proper digital skills.

## Chapter Three

## Computer-mediated Task-based Vocabulary Teaching

# Chapter Three

## Computer-mediated Task-based Vocabulary Learning

### Introduction

Vocabulary learning has occupied a vast area of research in foreign language learning. Considering its significance, researchers were always in an attempt to find the best ways to solve students' lexical issues and multiple remedies were suggested including the task-based approach and computer assisted language learning.

The chapter in hand aims at highlighting the significance of vocabulary in language learning. It sheds light on the various vocabulary teaching strategies that have always been implemented by students like dictionaries, word-part strategy, word cards and others. The chapter is also an attempt to explore the extent to which the task-based approach can improve vocabulary instruction. Moreover, it represents the set of new strategies added by the integration of computer assisted instruction to vocabulary teaching. It offers a detailed description of these strategies and how they can be used to solve vocabulary teaching and learning issues.

This chapter also explores the possible effects of using the task-based approach and computer assisted language combined together as an approach on vocabulary instruction and retention. In addition to electronic dictionaries and other applications devoted to vocabulary learning, there is a number of computer-based vocabulary learning techniques like eVoc strategies, Wordle, field trip, multimedia glossary and others that can help students achieve higher levels of vocabulary learning. These advantages maybe doubled when used in atask-based framework. Yet, these strategies require appropriate training for both teachers and students to avoid any potential problem related to technology use.

### 3.1. Vocabulary in Foreign Language Learning

What a speaker of a foreign language needs most to carry out a successful communication is an appropriate knowledge of that language vocabulary. Vocabulary; therefore, is essential for both receiving and producing a message in L2. In this regard, Singleton (2000, p.12) stated that "language is popularly conceived in terms of words". That is to say, delivering a message without knowing the grammar rules of final –s, possessive cases, English prepositions are unlikely to paralyze communication. However, with the absence of the necessary vocabulary, there is no way that communication can take place.

The period from 1970s and 1980s was characterized by a large negligence of vocabulary issues in the field of foreign language teaching. Levenston (1979, p.147) stated that "...one might almost say that second language lexica, learning has been a victim of discrimination". This marginalization was pronounced clearly by the early methods of language learning and teaching mainly the structural approaches which put great emphasis on grammar instruction. However, despite all this negligence, vocabulary continued to emerge as one such highly demanding area especially for foreign language students. Most students express their fears and hesitations about approaching a foreign language mainly because they lack the appropriate vocabulary size.

According to Schmitt, " the field of vocabulary studies is now anything but a neglected area" (1997, p.1). A considerable number of books were published to address the different vocabulary related issues which has made of vocabulary a rich field of investigation. Moreover, Schmitt (2010, p.4) emphasized the importance of vocabulary by stating that "students carry around dictionaries and not grammar books". Yet, and perhaps the most expressive and frequently used quote is of Wilkins (1972) in which he stated the following "….while without grammar little can be conveyed, without vocabulary nothing can be

conveyed (pp. 111-112). Having a poor knowledge of grammar rules affects but does not impede communication. Whereas, when someone lacks the appropriate vocabulary to use in a given context, communication cannot take place.

### 3.1.1. Vocabulary Knowledge and Reading

Reading as one of two receptive skills of the language relies significantly on the amount of vocabulary one possesses. Vocabulary knowledge can either facilitate or impede the comprehension of an L2 text. Laufer (1997, p. 31), one of the pioneers in the field of vocabulary research, noted that, "By far the greatest lexical obstacle to good reading is insufficient number of words in learners' lexicon .Lexis was found to be the best predictor of success in reading, better than syntax or general reading ability". A good vocabulary size facilitates text comprehension and when someone misses the proper lexical knowledge about a given topic, he subsequently fails in attaining the signification of the text.

Scholars such as Chall (1987) and Nation (2001) talked about the fact that the relationship between vocabulary size and reading comprehension is not "one sided" ( Nation, p.238). They are necessary for each other's development and enhancement; a rich vocabulary is mandatory for a successful reading and the latter is a contributing factor in enriching one's vocabulary knowledge. Chall (1987) and Nation (2001) have also mentioned that when the text contains words that do not exist in one's lexicon, that may stand in the way of understanding the text.

Researchers have also talked about the role reading plays in maximizing somebody's vocabulary size; the more one reads the greater his vocabulary stock will be. Reading is the first thing to be recommended for those who are willing to learn a foreign language and use its vocabulary. According to Nation (2001), students incidentally lear small numbers of words while reading. He believes that as the number of intelligible texts in increased, the amount of

words increases too. That is to say, one of the most effective ways for increasing vocabulary size and knowledge is reading; the more a student reads, the larger his vocabulary stock grows.

### 3.1.2. Vocabulary Knowledge and Writing

Students' knowledge of vocabulary related to a given topic depends on his/her ability to recall, to remember and to successfully use the learned vocabulary in a given context. Foreign language productive skills (writing and speaking) are determinants of students' mastery of the language lexis. Mahyer and Brause (1986) stated that writing depends on an individuals' ability to use words in order to talk about an incident. That is to say, being able to choose the correct word to successfully convey the desired meaning is a sign of a good lexical knowledge on the part of the user. The breadth and depth of a student's vocabulary will have a direct influence upon the descriptiveness, accuracy, and quality of his or her writing.

Laufer and Nation (1995) noted that "A well-written composition makes effective use of vocabulary" (p. 307). This is an indication of the extent to which a successful written production depends on vocabulary. Reading and writing are two skills which influence each other to a large extent; the mastery of one depends greatly on the other. Laflamme (1997) referred to reading and writing as "two analogous and complementary processes". That is to say, for a student to be able to write about any topic, he needs to spontaneously use the vocabulary he/she has learned through his readings.

## 3.2. Vocabulary Coverage and Reading Comprehension

Vocabulary knowledge is a sine quo non condition for reading comprehension. However, the question of concern to researchers and teachers is how much vocabulary is needed for a foreign language student to be able to read and understand a given text. To start with, text coverage or vocabulary knowledge is the term used to refer to " the percentage of running words in the text known by the reader" (Nation, 2006). Therefore, there has been a

growing interest among educators to find out about the number of vocabulary necessary for a good text comprehension. Different studies about this concern resulted in varying results as to the amount of words necessary for a text comprehension.

Nation (2006) insisted that vocabulary knowledge in mandatory for text comprehension. According to him, speakers of a foreign language need to know about 8.000 to 9.000 word families. Laufer and Kalovski (2010); however, proposed two thresholds; " an optimal one" and " a minimal one". According to them, for a great text coverage, a proportion of 8.000word families is needed. That is to say, in order for them to cover 98% of a text, they will need to know 8.000-9.000 word families. However, if the goal is a low text coverage, then an estimation of 5.000 word families.

Researchers like Nation have outlined a number of methods to determine the number of words needed to read a text. Nation (2006) stated that one way of deciding on the percentage of words needed by a foreign language student is to identify the number of words in a foreign language which the students have to set as their end goal. This approach was rejected mainly because of the belief that reaching that lexical level is not an easy task especially that the native speakers of the language themselves do not know every single word in their mother tongue. Another way is to set the number of words known by a native speaker as a goal. Nation (2006) also stated that we can decide the vocabulary learning goal by determining the amount of words needed to read a given text, a newspaper, or a novel. Finding the amount of vocabulary needed by students to read any type of text helps students to focus their efforts in order to achieve the required lexical level.

### 3.3.Vocabulary Nature

Research into vocabulary learning is leading to an abundance number of facts about the process of vocabulary learning and related it issues. Some studies are revealing ways of

successfully learning a foreing language vocabulary while others aim at gauging the size of vocabulary one must have in order to read and write in the second language. However, according to Read (2000), before assessing the vocabulary size, there is a need to first explain the nature of "words".

One might never think of defining " a word"; the only possible way someone would think of when defining a word is categorizing it into a verb, a noun and adjective and so on. However, as stated by Read (2000), defining the nature of "words" is a not a simple task. He further indicates that there are different things to refer to when talking about vocabulary. The first of these is making a distinction between two main concepts "tokens" and "types". A token is defined as the number of words in a given text. If, for instance, the word "child" is frequently occurring in a given text, it is counted each time we come across it. McCarthy (1990) said that if a text contains some 100 words, then it contains 100 tokens. Counting the number of "types" in a text; however, refers only to counting the word forms which is subsequently less than the number of tokens. Moreover, unlike "tokens", if a given word form occurs twice or more in a passage, it is just counted once.

Another notion included in deciding the nature of vocabulary is "lemmas". According to Nation (2001, p.10), " a lemma consists of a headword and some of its inflected forms". In other words, a lemma" is the base word we find at the head of a definition in a dictionary. Examples of lemmas can be; *do*: do, does, did, doing or *fruit*: fruits, fruity, fruitful. In addition to lemmas, "Word families" is one such interesting aspect of vocabulary knowledge frequently discussed. It is also used as the key unit of measuring the vocabulary size of a student. It is, therefore, defined by Nation (2001, p. 10) as consisting of " a headword, its inflected form and its closely related derived forms". He also stated that determining the vocabulary size using word families is a hard task for it is not always clear which words to be included in a given word family.

### 3.4. Aspects of Vocabulary Knowledge

Knowing a word does not only entail knowing its meaning. The notion of a *word* carries within it different aspects (form, meaning and use) that are considered of a great importance especially for language teachers who need to focus on given aspects of vocabulary knowledge to teach. The following table summarizes the main aspects of vocabulary knowledge as suggested by Nation (2001)

| | | | |
|---|---|---|---|
| **Form** | **Spoken** | **R**<br>**P** | What does the word sound like?<br>How is the word pronounced? |
| | **Written** | **R**<br>**P** | What does the word look like?<br>How is the word written and spelled? |
| | **Word parts** | **R**<br>**P** | What parts are recognizable in this word?<br>What word parts are needed to express the meaning? |
| **Meaning** | **Form and meaning** | **R**<br>**P** | What meaning does this word from signal.<br>What word form can be used to express this meaning? |
| | **Concept and referents** | **R**<br>**P** | What is included in the concept?<br>What items can the concept refer to? |
| | **Associations** | **R**<br>**P** | What other words this make us think of.<br>What other words could we use instead of this one |
| **Use** | **Grammatical functions** | **R**<br>**P** | In what patterns does the word occur?<br>In what matters must we use this word? |
| | **Collocation** | **R**<br>**P** | What words or types of words occur with this one?<br>What words or types of words must we use with this one. |
| | **Constraints on use (register, frequency)** | **R**<br>**P** | Where, when, and how often would we expect to meet this word?<br>Where, when and how often can we use this word? |

**Table 3.4:** Aspects of Word Knowledge. Nation (2001, p.41)

Nation (2001) divided word knowledge into three types; knowledge of form, knowledge of meaning and knowledge of use. Each one is in its turn divided into receptive and productive knowledge. Knowledge of form is related to knowing how the word is written and

pronounced (Milton, 2009). Within this category, Nation (2001)includes three other divisions to make the understanding of this type of knowledge easier. He, therefore, included the knowledge of the written form of the word as well its spoken form or the way it is pronounced in addition to the knowledge of word parts which deals with the prefixes and suffixes which make up the word.

In knowledge of meaning, a distinction is made between three different types of knowledge which are respectively; form and meaning that are related to the meaning carried out by a given a word and the form needed in order to convey the desired meaning (Nation, 2001). The other sub-divisions are concepts, referents and associations which, according to Milton, refer to the fact that: " a word in one language might require several translations or carry subtly different meanings and associations in another language" (Milton, 2009,p.14).

### 3.5. Vocabulary Types

A text of any type, whether scientific or literal, includes different types of vocabulary. The variation depends to a large extent on the frequency of word occurrence in a text. Nation (2001), a long term advocate of the approach of occurrence, has outlined four main types of vocabulary within a text which are respectively; high-frequency words, low-frequency words, academic words and technical words. These types vary according to their importance to the language student; some are what the student needs to be able to correctly use the language in general contexts while others are related to specific areas and should be learned by those belonging to certain fields of speciality.

#### 3.5.1. High-Frequency Words

According to Nation (2001), high-frequency vocabulary should be the target of any student and teacher because they make up a great proportion of vocabulary in any text. The

list of the high-fequency words is made up of the most recurrent 2.000word families (Schmitt and Schmitt, 2014). These words can, to a large context, guarantee a successful use of language because they cover almost every area and they are easy to learn.

According to Nation (2001), the high-frequency words list can be found in the classical General Service List of English Words including 2.000 word families with a number of 165 word families made up of a large collection of function words such as: the, some, to, because. The list was first presented by West (1953) and later revised by many researchers such as Schmitt and Schmitt (2014). They; therefore, agreed that : "given the increase in vocabulary research over the past 20 years, it seems reasonable to revisit the frequency issues to determine whether 2.000 is still the best boundary for high-frequency vocabulary, or whether an adjusted figure would prove more useful" (Schmitt and Schmitt, 2014, p.6) .

Subsequently, research in this regard led to the publication of the New General List of English Words by Dr. Charles Browne, Dr. Brent Culligan and Joseph Phillips in 2013 containing 2800 core vocabulary. The increasing number of fields in which people are engaged in and their need to express themselves and also to evolve in these domains require additional vocabulary and sometimes new one. In addition, some lexis belongs to certain eras and thus they cannot be used to talk about modern issues. That is why, lists of vocabulary; especially those of high-frequency lexis should be revised and adjusted to fit with language users' needs.

### 3.5.2. Low-frequency Words

This list, according to Nation (2001), contains a large number of words which cover only a small portion of the text and uncommonly found in any discourse. Deciding on the number of words to be included within the list of low-frequency words is still a difficult task to fulfil. Nation (2001) points out that depending on the corpus, varied answers will come out

and what is included in the list of low-frequency words following one corpus can be included in the high-frequency list of words based on another corpus.

### 3.5.3. Academic Word List

As the name suggests, the Academic Word List is a compilation of the most useful vocabulary for academic use. The best list for such a type of vocabulary was designed by Coxhead in 1998 including 570 word families which are considered of a paramount importance in students' academic career. However, research in this respect has shown that the number of word families making the boundary of the list is not a flexible one.

## 3.6. Intentional Versus Incidental Vocabulary Learning

Since the beginning of research into vocabulary learning, there were divergent views as to whether vocabulary is better learned in intentional or incidental manners .Incidental learning as opposed to intentional one is defined as the unplanned, unintentional learning (Hulstijn). Schmitt (2008) puts that incidental learning is the act of learning something while planning to learn another. It; therefore, refers to the act of unintentionally learning something i.e. without paying attention to it.

There have been a significant number of studies addressing the role of incidental learning in vocabulary learning (Nation, 2001; Hulistijn, 2001; Ramos, 2015). Nation (2001) notes that while reading, students incidentally learn new vocabulary and reinforce old one. Brown, Waring and Donkaewbua (2008) investigated the extent to which words can be learned from three different types of input; reading, reading-while listening and listening to stories. Results indicated that despite the fact that there was a number of vocabulary that could not be remembered, a small portion of other vocabulary were learned due to that frequent reoccurrence.

Another study was carried out by Hemmati and Asmawi (2005) in which they attempted to probe the capability of Iranian EFL students to incidentally learn new vocabulary which reading the graded-reader; the Little Princess. The aim of their research was to test students' knowledge of word form, word meaning and their ability of translating meanings. Research findings revealed that there was an increase in students' vocabulary knowledge including knowledge of form and meaning. The benefits of incidental vocabulary learning were also investigated with relation to reading by Warzecha (2012) from university of Yogyakarta, Indonesia. The researcher pointed out that the being previously underestimated, incidental leaning; especially when vocabulary learning is concerned, is gaining prominence over explicit and intentional learning.

These and other studies have confirmed the positive relationship existing between incidental learning and increase in vocabulary retention and learning. Promoting incidental learning has been a concern to other researches as well. Studies like the one performed by Ch'ng (2014) shed the light on one of the ways to be used in order to encourage incidental learning. He suggested that the verbal dramatization of words through readers' theatre activity can boost students' vocabulary learning. In addition, Srichamnong (2011) proposed word-focused activities such as filling the blanks, interactive- multiple choice gloss can help promote incidental vocabulary learning.

### 3.7. Language Learning Strategies

Learning strategies are analogous to the toolbox full of devices required for the accomplishment of a certain job. A student whose concern is to learn the vocabulary belonging to his area of speciality needs an appropriate strategy to approach his goal. At first, research in the area of language learning strategies revealed a lack of "consensus" over both definition and taxonomy of language learning strategies. Ellis (1994, p. 531) stated that "the

concept of “strategy” is somewhat a fuzzy one”. Giving a precise definition of the term “strategy” is difficult because they refer to both mental and behavioural acts.

Learning strategies are defined as the set of steps taken by students to improve their own learning (Oxford, 1990). Chamot (2004), defined the language learning strategies (LLS) as the set of actions deliberately used by students to do something. Stern (1992, p. 261) stated that “the concept of learning strategy is dependent on the assumption that learners consciously engage in activities to achieve certain goals”. A more comprehensive definition of learning strategies was given by Oxford in which she defined LLs as “....operations employed by the learner to aid the learning, storage, retrieval and use of information; specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more efficient, and more transferable to new situations.” (2001, p. 166). All these definitions, despite their different focuses, agreed on the fact that the term “strategy” refers to a set of actions made my students with the aim of improving their own learning.

In addition to the issue of defining learning strategies, there was a disagreement among researchers such as Wenden and Rubin 1987; O'Malley et al. 1985; Oxford 1990; Stern 1992; Ellis 1994 and others as to the classification of LLSs. Rubin’s classification (1978) was based on his distinction between direct and indirect strategies. He distinguished three main types of strategies which are: learning strategies, communication strategies and social strategies. O’Malley et al. (1985), on his turn, classified LLSs into three categories; metacognitivie, cognitive and socioaffective strategies.

As for Stern (1992), he presented a classification of five types of strategies which are namely: management and planning strategies, cognitive strategies, communicative-experiential strategies, interpersonal strategies and affective strategies. Most of the taxonomies that have been suggested to learning strategies were shadowed by Oxford’s

classification ( direct and indirect strategies). Oxford's list of learning strategies is classified into the following main categories:

1- Those referring to the behaviours of successful language learners;
2- Those based on psychological functions ( cognitive, metacognitivie and affective);
3- Those based on linguistic aspects (e.g. monitoring)
4- Those based on language skills or knowledge (e.g. oral production, vocabulary learning);and
5- Those based on different types (or styles) of students.

Dornyei (2005) criticized the existing classifications of language learning strategies. He noted that despite his belief in the importance of these learning strategies, he "became increasingly puzzled over the years about the lack of an unambiguous theoretical definition of the learning strategy construct". He added that although the proposed definitions of LLSs have provided useful and logical information about students' styles of learning, they failed to draw the difference between "learning" and "learning strategy use"(2005, p. 164). Takac (2005) also added that the reason why there exists a problem in setting one clear categorization of strategies lies in the variation of approaches to defining learning strategies and the different norms they used in the classification.

### 3.8. Vocabulary Learning Strategies

The increasing appreciation of the importance of vocabulary in language learning has led to a burst in the amount of research studies investigating ways of promoting vocabulary learning. Historical accounts reveal that there was a noticeable lack of interest in vocabulary learning strategies. But later, when vocabulary gained its prominence, researchers began to explore it for information about the nature of vocabulary and how to approach it.

Simply defined, Vocabulary Learning Strategies (VLS) are seen as a subset of language learning strategies (Nation, 2008). Schmitt (2000) stated that research into Vocabulary Learning Strategies begun as interests in the language teaching profession shifted away from

teacher-centered to student-centred teaching. He further added that vocabulary learning strategies play an important role in students' process of vocabulary learning regarding their reliance on the different strategies. Alharthi (2014) stated that the use of vocabulary learning strategies is a crucial factor in promoting students' vocabulary growth. He also added that, according to research studies, the integration of VLS has yielded to productive results.

According to Takac (2008), there are two directions of research from which the study of vocabulary learning strategies is derived. The first direction has to do with the early studies of language learning strategies which have lately proven that most of the strategies being used are in fact vocabulary learning strategies. As for the second, Takac (2008) notes, is related to the studies investigating the usefulness of "individual" strategy use in vocabulary learning which have resulted in an "independent" subcategory of strategies called vocabulary learning strategies. (Takac, 2008)

### 3.8.1. Taxonomies of Vocabulary Learning Strategies

Research in this area has been prone to many attempts of identifying an appropriate categorization of vocabulary learning strategies. Many proposals were presented by researches such as Gu and Johnson, 1996; Schmitt, 1997; Nation, 2001 and others. Records show that the first classification was suggested by Oxford (1990) as it has been mentioned earlier. Schmitt (1997) stated that the taxonomy proposed by Oxford (1990) " …seemed best able to capture and organize the wide of the vocabulary learning strategies identified". Oxford's taxonomy was divided into the following classes; social, memory, cognitive and metacognitivie.

Schmitt (1997) stated that although Oxford's taxonomy shaped most of the recent classifications of vocabulary strategies, it was "unsatisfactory". He, therefore, decided to add another category which he called "determination strategies". According to Schmitt (2001),

students frequently prefer using mechanical strategies (memorization, repetition and taking notes) over complex ones. Schmitt's' taxonomy of vocabulary learning strategies is made up of five main groups which are respectively; determination strategies, social strategies, memory strategies, cognitive strategies and metacognitivie strategies.

Gu and Johsnon's (1996) classification included beliefs about vocabulary learning, metacognitivie regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies (rehearsal), memory strategies (encoding), and activation strategies. Nation (2001); however, offered a distinctive view of vocabulary learning strategies classification. He states that his list of strategies is an attempt to split up aspects of vocabulary knowledge from sources of vocabulary knowledge and learning processes. The following table represents a summary of Nation's taxonomy divisions:

| **General class of strategies** | **Types of strategies** |
|---|---|
| *Planning*: choosing what to focus on and when to focus on it | Choosing words<br>Choosing the aspects of word knowledge<br>Choosing strategies<br>Planning repetition |
| *Sources*: Finding information about words | Analysing the word<br>Using context<br>Consulting a reference source in L1 or L2<br>Using parallels in L1 and L2 |
| *Processes*: Establishing knowledge | Noticing<br>Retrieving<br>Generating |

**Table 3.5**: A Taxonomy of Kinds of Vocabulary Learning Strategies (Nation, 2001, p.218)

The classification of vocabulary learning strategies imposes an issue in addition to the one of terminology. However, they are by no means necessary factors for an effective teaching/learning of second language vocabulary. However, among all the taxonomies that have been proposed by researchers, Schmitt's classification of VLS is the one utilized by most vocabulary related research.

### 3.8.2. Research on the Effectiveness of Vocabulary Learning Strategies

Many research studies were conducted in order to confirm the hypothesis about the effectiveness of vocabulary learning strategies in EFL contexts. Cheung (2004) investigated the impact of vocabulary learning strategies on the academic achievement of low students. His study aimed at comparing the impact of two different methods in vocabulary learning; the Keyword method and the combined context method on Chinese students' vocabulary learning. The results showed that the group using the Keyword method achieved better results than of the group using the combined context method.

Another study was carried out my Rahimy and Shams (2012) who tried to examine the effect of vocabulary learning strategies on Iranian EFL students' performance. Using a questionnaire of vocabulary learning strategies, Rahimy and Shams (2012) gathered some details about the approach or the kind of strategies students make use of to learn vocabulary. The results revealed the effective role played by VLSs and their influence on students' performance. Mizumoto and Takeuchi (2009) investigated the usefulness of VLSs using a test and a questionnaire with two groups; experimental and control group. The results of their study indicated that as a result of effective strategy training and use, the experimental group scored better than the control group in the vocabulary test.

### 3.8.3. Commonly Used Word Study Strategies

There were different views as to which vocabulary learning strategy is more appropriate than others. The bulk of research carried out in this regard revealed a plethora of word study strategies. Although there is a significant number of studies supporting the case for incidental vocabulary learning as opposed to intentional learning. Nation (2001) stated that intentional study of words make up of 25% of the whole process of vocabulary learning. He; therefore, presented three main word study strategies which are namely; the study of word parts,

dictionary use and word cards. These strategies are the most frequently used word study techniques used by EFL students; especially beginners.

To start with, the study of word part is considered as one of the important strategies students use to analyse a word and know its meaning. The reason is that most words in English do change their forms and thus their meaning by adding a prefix or a suffix. Nation (2001) indicated that there are two good points about knowing the affixation of words and its roots. It can be used as a way of learning new words by lining them to already known words or prefixes. Furthermore, word study is useful as a strategy because it helps examine whether a given word has been correctly guessed from context (Nation, 2001). Affixation can be used when meeting the word for the first time and it can lead to good results provided that the student is aware of the different prefixes and suffixes and their meanings.

According to Nation (2001), learning unfamiliar words using the word part strategy includes the following two steps:

1. Break the unknown word into parts which requires students recognize prefixes and suffixes occur in words.
2. Relate the meaning of the word parts to the meaning of the whole word which requires students know the meaning of the common word parts and also requires students should be able to re-express the dictionary definition of a word to include the meaning of its prefix, stem and suffix.

Teaching words parts is effective especially for students with reading difficulties because it helps them recognise new words, decode words quickly and accurately and understand the meaning of words. In addition to that, Stahl (1999, p.44) commented on the significance of word study as a strategy and stated explained:

> While words like *geologist, interdependent,* and *substandard* can often be figured out from context, decomposing such words into known parts like *geo-*, *-logist*, *inter-*,*depend,* etc., not only makes the words themselves more memorable, but, in combination with sentence context, may be a useful strategy in determining the meaning of unknown words.

### 3.8.3.1. Dictionary Use

One such essential tool that seems not to lose its importance among students and especially those learning a foreign language is the “dictionary”. According to the online Business Dictionary, the word « dictionary » is defined as: “ a reference source of words in a language or discipline, arranged alphabetically.” It provides synonyms, opposites, pronunciation and spelling of words along with lists of idiomatic expressions with situations where they can be used. Dictionary also comes in different forms; monolingual, bilingual, and with many editions devoted to given fields of speciality; medicine, commerce, engineering.

According to Nation (2001), dictionary can be used for different reasons. It can be used for comprehension or decoding the meanings of new words. It can also be used to check the meaning of words guessed from context. The second reason for dictionary use; Nation notes, is production or encoding. When a student uses dictionary for production, he wants to look up an unfamiliar word for speech, writing or translation. They can also use it to check the spelling, meaning or pronunciation of words. In addition, the dictionary can be used to find a synonym to be used instead of another one (Nation, 2001). The last purpose for dictionary use is learning.

A distinction; therefore, can be made between traditional and electronic or an online dictionary. A traditional, is a paper or printed dictionary while the electronic dictionary is the one available on CDs mobile phones, computers. Whether it is printed or electronic, a student is always in a pressing need to look words up especially when they fail to guess the meaning from contexts. However, students seem to prefer the use of electronic and online dictionaries because they provide them with rapid access to the words they need.

### 3.8.3.2. Word Cards Strategy

Nation (2001) stated that word card strategy is a manner of enriching one’s vocabulary size through deliberate and conscious learning. It is defined by Chan Diaz (2015) as: “ a small

paper index , card where the learner writes the word to be learned on one side and its corresponding translation on the other side in order to learn vocabulary explicitly". Despite if being already employed by many students, this strategy does not always lead to the desired outcome. For the reason of making an effective use of word card strategy, Nation (2001) suggested a set of steps which were paraphrased by Takac (2008) as follows:

**a.** The choice of the lexical item; learners need to learn and note useful i.e. frequent lexical items, and avoid confused ones;

**b.** Creating word cards of a small size (5 x 4 cm). The word to be learnt (separately or in a sentence is written on one side of the card and its meaning ( preferably its L1 translation to which a picture can be added) is written on the other side;

**c.** Using the word cards.

Keeping word cards of the lexical items students come across helps eliminate list effects and encourages the recall of word form and meaning. This strategy also does not require special skills on the part of students which is the case with other word learning strategies such as dictionaries.

### 3.9. Computer Assisted Vocabulary Learning

Researchers' interest in vocabulary learning has increased since computer technology has swept the world of second/foreign language teaching. Computer-mediated-communication, chats, softwares and many others computer-based tools have proven to be significantly helpful in improving students' vocabulary learning.. Ma and Kelly (2006) mentioned that vocabulary has received an interest on the part of researchers in the field of computer assisted instruction. They have also added that the activities included in the first CALL programmes were single type activities such as gap filling, speed reading and vocabulary games.

There is a growing number of researchers investigating the impact of computer technologies in vocabulary instruction (Laufer and Hill, 2000; Al-Seghayer, 2001; Basoz and

Cubuku, 2014). El-Seghayer (2001), for instance, examined the impact of multimedia annotation modes on L2 vocabulary learning of ESL students. The participants were taught with a hypermedia- learning programme for reading comprehension provided with narrative English texts with annotations, graphics, videos and sound. The findings showed that using video while teaching vocabulary is more effective than using a picture because it is believed that a video can create a mental image and helps create a mixture of modalities (vivid images, sounds and printed text).

Laufer and Hill (2000) examined the effect of electronic dictionaries on students' incidental vocabulary learning. Results indicated that electronic dictionaries helped reinforce students' lexical retention. Basoz and Cubukcu (2014) have also investigated the extent to which students' achievements were altered after the use of CALL programs. Their study results revealed a positive contribution of computer assisted instruction in terms of vocabulary gain.

### 3.9.1. Computer Assisted Vocabulary Learning Strategies

The arrival of computers and other educational technologies have changed the fashion with which foreign language vocabulary was taught. However, having a good strategy or technique is a sine quo non condition for a prosperous process of vocabulary learning. In fact, little research has been done to talk about the vocabulary learning strategies in CALL context and much focus has been placed on vocabulary learning softwares and computer programmes.

There were a number of computer-based techniques designed for vocabulary learning such as computer based vocabulary games, computer flashcards, websites. In addition to that, a group of vocabulary learning strategies was presented by Delton and Gresham (2011) which contained 10 different computer and web assisted strategies ."eVoc" , then, was the term used these two researchers to refer to this new taxonomy of vocabulary learning strategies. They

have proposed 10 eVoc strategies divided into three main categories depending on their purpose; word teaching and learning strategies, on demand digital language tools and expanding wide reading, and incidental word learning with digital tools.

#### 3.9.1.1. Word Teaching and Learning Strategies

As for the first group, Dalton and Gresham (2011) included five main strategies which they considered essential to help students become autonomous students. One way of showing the link between words within a text is by using visual displays and graphic organizers. They stated that there are two effective word mapping tools which can be very useful for visual representation; *wordle* and *wordshift*. Those are free word application available on the internet which allows the creation of word clouds which is cut and pasted into the application.


**Figure 3.5**: Word Cloud for Bees Using Wordle. (Dalton and Gresham, 2011)

Another way is by taking what is called "a vocabulary digital field trip" where a teacher uses a post about a given topic and students seat on a carpet, observe and learn vocabulary as their instructor guides their trip. The third strategy in this category is learning through online games. As the name suggests, these games are available in internet and students can enjoy many choices such as crossword puzzles, picture-word matches, word scrambles. As for the fourth strategy, Dalton and Gresham (2011) state that students will use the different media forms to express their knowledge of vocabulary. They pointed out that students can use graphics, pictures, sounds and audiotapes to illustrate their knowledge. They can, for instance, create captions or multimedia glossaries to show their understanding of a given vocabulary.

The last eVoc strategy; however, is represented by a set of online word reference tools that can be used as teaching aids. (Dalton and Gresham, 2011)

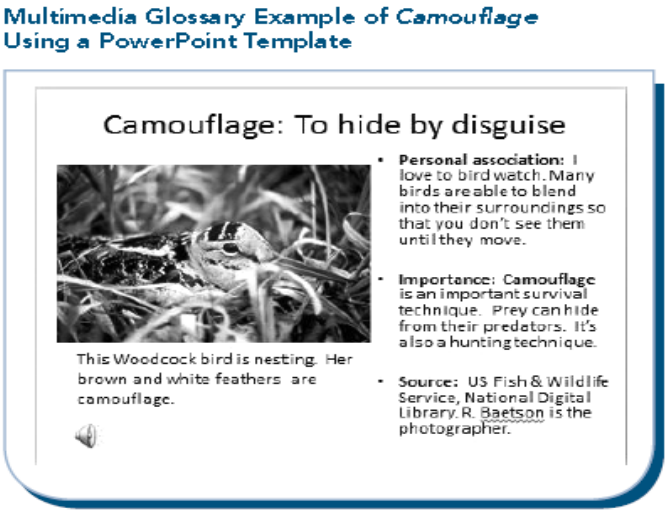


**Figure 3.6:** Multimedia Glossary Example of Camouflage Using a PowerPoint Template. (Daltona and Gresham, 2011)

### 3.9.1.2. On-demand Digital Language Tools

According to Dalton and Gresham (2011), the strategies falling within this category are important tools for providing users with immediate help while engaged in reading. These tools can either be online dictionaries and thesaurus, or browse toolbar which allows for a prompt access to a word definition with one click. Online translators are also thought to be one of these just-in-time tools because they offer students' bilingual versions of the language items they look for or encounter when reading a text.

### 3.9.1.3. Wide and Deep Reading

The three remaining electronic vocabulary learning strategies are essential for reading comprehension and incidental vocabulary learning. According to Dalton and Gresham (2011), internet has become an important source of information students rely on when having homework as it is rich with up-to- date topics which are of inertest to students. Teachers can increase their students' reading rates and subsequently improve their vocabulary size by supplying them with different online text options. One more way, Dalton and Gresham

believe it is helpful for expanding is by listening to digital text with text to speech application (TTS). According to them, text-to-speech tools are important especially for struggling readers suffering from anxiety and poor comprehension.

The last eVoc strategy of this group encourages students to learn vocabulary when socially engaged in a given activity. Free Rice is one of those spaces where users can learn vocabulary while playing and having fun. In this game, participants are given set of choices for a given word and they are supposed to click the correct answer. In doing so, students will gain 10 grains of rice which will later be donated for people in need to end starvation all over the word. These and other strategies are essential tools for vocabulary learning. In fact, they play a crucial role in encouraging learning via technology. It helps release the stress students used to feel in the classroom with the teacher around. It also teaches them automaticity and enhances their communication skills.

### 3.9.2. Computer-based Lexical Aids

Owing to the rapid technological advancements, computer assisted language learning is now offering the process of vocabulary learning an abundant number of applications which added fun and efficacy to word learning. These applications or so called computer-based lexical aids can include: glossaries, vocabulary softwares and flashcards.

To start with, computer based lexical gloss is an important way of learning vocabulary. A study conducted by Abraham B. (2008) has investigated the role computer assisted glosses played in students' reading comprehension and incidental learning of vocabulary. The research presented a meta-analysis of 11 studies of computer-based glosses which posteriorly revealed positive and promising results as to the integration of such type of glossaries in students' learning. In addition to that, hypertext dictionaries played an important role in improving reading comprehension and also vocabulary learning A study by Yun (2011)

examined the impact of hypertext glosses use on students' vocabulary learning in computerized settings. Both researches revealed that the implementation of hypertext glosses has a positive influence on students' vocabulary knowledge.

Another computer based vocabulary teaching tool which has been widely used by scholars is the CAVOCA (Computer Assisted Vocabulary Acquisition) software. This application, as noted by Groot (2000), is " designed on the basis of generally accepted about the way how mental lexicon is structured and operate." The way this software functions helps learners to meet the new word in a systematic and sequenced manner. Three sections; therefore, can be distinguished within this software; deduction, usage and examples. It is believed that going through these three stages, CAVOCA reinforces the retention of the acquired word.

In addition to CAVOCA, Chanier and Selva (1998) tried to emphasize the role multimedia plays in vocabulary learning and presented the ALEXIA software which was basically designed for teaching French as a foreign language. The ALEXIA system contains a corpus of texts, a general and a personal dictionary in addition to lexical activities. Chanier and Selva (1998) noted that ALEXIA is " a first step for offering learners representations they can easily interpret. Visual representations which can cover a significant part of the lexicon are computable, extendable and interactive". Providing a visual exhibition oof any lexical item has a great role in giving students' a clearer picture of the meaning conveyed by the lexical item. This is better done through computer software such as ALEXIA which enhances students' lexical knowledge by giving them comprehensible interpretations of lexicon.

Furthermore, researchers interested in vocabulary learning such as Ntaion (2001) have talked about the ways word cards contribute in ameliorating students' vocabulary learning and retention. In CALL contexts, computer based flashcards participated greatly in boosting the

process of vocabulary learning. A number of flashcards softwares, therefore, have been suggested and examined; vTrain, SuperMemo, Anki, Quizlet. Computer-based flashcard programmes are effective for their ability to record students' advancements over time and can sequence words in a fashion that helps users learn more difficult words than easy ones (Altiner 2011).

## 3.10. Teaching Vocabulary in Computer-mediated Task-based Contexts

Since the merging up of CALL and task-based teaching together as two influential fields, enthusiastic attempts have been made to find applications for technology-mediated TBLT in the different aspects of foreign language teaching. In terms of vocabulary, evidence on the effectiveness of computer assisted TBLT in vocabulary instruction and learning are scarce. In fact, very recent studies are now turning their attention to investigate the successfulness of the different CALL application for teaching vocabulary in task-based contexts. There are interests; however, in examining the effect of virtual worlds task-based learning and other softwares on vocabulary learning. Some others are investigating the role of task-based computer-mediated communication on students' lexical development.

### 3.10.1. Task-based Vocabulary Learning

The way the task-based approach supported foreign language learning by opening the door to meaning and student centred learning has encouraged researchers to investigate its impact on different language aspects. Therefore, researchers such as Newton, 1995; Sarani and Sahebi, 2012 ; Koshsima and Saed, 2016. Sarani and Sahebi (2012), for example, studied the influence of task-based instruction on Persian literature students' vocabulary knowledge. The study made use of two groups; control and experimental. As for the first, students were taught using the traditional method; while the second group was taught technical vocabularies

using task-based framework. After that, results of the pre and the post test were compared which revealed that task-based approach was more efficient in teaching technical vocabulary of ESP students.

"Learning Vocabulary Without Tears" was the title of a paper written by Wanlu (2011) in which the impact of task-based activities like jigsaw and information-gap tasks was investigated with relation to vocabulary learning. The researcher used both pre and post tests in addition to a questionnaire to examine the effect of these task-based activities. The analysis of results showed some improvement in terms of word recognition when implementing the information gap task. Whereas, concerning the depth of word knowledge and vocabulary retention, results were not that promising. A similar study was carried out with Iranian with Iranian EFL students. The researchers; Hedayatipanah, Mirzaei and Azizifar (2015) worked with accounting students at scientific and applied university of technology. They; therefore, studied the role of task-based approach framework in enhancing students' ESP vocabulary. The research finding revealed that teaching ESP vocabulary using the TBA stages exerted a positive impact on students' lexical knowledge.

### 3.10.2. Task-based Vocabulary Activities

The sort of activities used in most task-based studies dealing with vocabulary instruction support communication skills and encourages interaction of meaning among students. A number of task-based activities have been suggested, searched and implemented by scholars and teachers in EFL/ESL settings like for instance; jigsaw, fill in the gaps, stimulations and others. Willis and Willis (2007) proposed a set of questions which, according to her, can help determine whether a given activity is "task-like". According to them, these criteria present guidelines for planning activities.

**a-** Does the activity engage the learners' interest?

**b-** Is there a primary focus on meaning?

**c-** Is there an outcome?

**d-** Is success judged in terms of outcome? Is completion a priority?

**e-** Does the activity relate to real world activities?

In addition to that, Willis and Willis (2007) listed seven types of tasks to suit any given topic the teacher chooses. These types are respectively: listing, matching, ordering and sorting, comparing, problem solving, sharing personal experience, projects and creative tasks.

### 3.11. Research on Technology-mediated Task-based Vocabulary Teaching

This new field resulting from the bonding together of computer assisted language learning (CALL) and task-based language learning (TBLT) is still a young one and more researchers are needed to explore the way this merging up contributes to the betterment of foreign language teaching. Despite its newness, there are few studies which dealt with technology-mediated TBLT studies in relation with vocabulary learning.. Kutlu ( 2015 ) said that :" since the words are pivotal in meaning as suggested by Wolsey et al., such a computer mediated approach may lead to success if it is combined with a task-based i+Instruction (TBI) approach".

The study presented by Kutlu( 2015) examined the impact of a task-based instruction software on vocabulary learning. The researcher stated that despite the effectiveness of CALL and TBLT and the promising results they are expected to lead to when combined together, results of the study revealed that the implication of this task-based software did not show a big impact on students' vocabulary. Yet, he alleged that future research is still needed in this regard to answer the questions about how can technology TBLT be effectively used in vocabulary instruction.

Computer-mediated communication has always been taken as an important computer-based tool that offers language students a more authentic language input. Studies on this

regard tried to investigate its availability as far as the oral skill is concerned and research was conducted with task-based contexts. Yanguas (2012), for example, investigated the possible differences existing between two different types of CMC oral interaction; video and audio CMC Vs. traditional face-to-face oral communication. The research aimed at revealing whether or not technology is going to alter the student's ability to recognize and produce. Therefore, results obtained showed a no worth noting difference as for the production; however, improvement at the level of recognition was reported in addition to the positive attitudes showed by the participants as far as technology based CMC is concerned.

Moreover, Smith (2004) examined the possible links between negotiated meaning, students uptake and lexical learning in task-based computer-mediated communication. Smith (2004) stated that while attempting to examine the role of task-mediated CMC in vocabulary learning, the researcher should pay a significant attention to the small differences of interaction in addition to the "subtle indications of acquisition rather than learner uptake per se."

According to De La Fuente (2003), mixing CALL applications with task-based principles can subsequently lead to a promotion in vocabulary. In addition to that, Teng ( 2010) presented as study in which he talked about the role of synchronous computer-mediated communication on the negotiation of meaning and the students' foreign language vocabulary. The study focused on the possibility of ameliorating students' lexical recognition and retention by means of the negotiation of meaning. The results; therefore, showed that the use of synchronous CMC( online chars) can be used as an effective pedagogical tool since the findings revealed the participants ability to recognize and recall the targeted vocabulary.

## Conclusion

Vocabulary is by no means an important components of any language and having a goof stock of a foreign language words is a pre-requisite for a successful language use. A multitude of vocabulary teaching/ learning strategies have been suggested like: guessing from context strategy, dictionary use and word cards. Yet, even with these strategies, the process of vocabulary learning did not reach the required level. Several issues have been addressed that could not be figured out until the arrival of computer technologies.

Computer assisted language learning is offering the research into vocabulary learning a plethora of applications which, as research revealed, have yielded to promising results. It has been indicated that using technology such as CMC and vocabulary softwares improves students' recognition of vocabulary and strengthen the retention of the newly acquired one. In addition to that, research has reported the impact that task-based principles could have when used to teach foreign language vocabulary.

Both of CALL and TBLT worked separately to boost vocabulary learning. However, there was an increased attention, in the very recent years, to merge them together to have a compatible approach for vocabulary instruction. Computer assisted language learning and task-based teaching, when combined together, can lead to the improvement of foreign language teaching. Studies have been carried out on the effectiveness of this combination on different language aspects such as writing and speaking. However, as far as vocabulary learning is concerned, research in this area is very scarce which means that this area needs to be investigated for more details as to how design vocabulary teaching courses based on technology-mediated task-based principles. Therefore, the aim of the present study is to investigate the extent to which the combination of computer assisted language learning (CALL) and task-based instruction (TBLT) can be effective in improving students' vocabulary learning.

# Chapter Four

# Research Methodology

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# Research Methodology

## Introduction

In the field of foreign language teaching, the teacher is a researcher. He is in a continuous search or quest for solutions to the issues he is confronted with in his career. Researches are conducted with the aim of investigating phenomena or issues related to language teaching and learning. Any piece of scientific study is addressed to probe the set of difficulties faced by teachers or students in the course of language teaching and learning. After having spotted the areas of deficiencies, researchers conducting these studies start looking for possible answers or solutions to these problems. In other words, the essence of any research is to try to understand what goes on in a language classroom.

Researchers cannot carry out any kind of scientific research without a clear 'road map' to make its conduction effective. Therefore, the aim of this chapter is to identity the set of components which make up a good research methodology. This entails a description of the type of the study (experimental or quasi-experimental), the population and the sample, methodology, piloting and case study. It also spots the key features of the research tools being used in the study which are questionnaires and texts in addition to explaining the benefits of the pilot study. Moreover, it deals with the triangulation of the data collected with the different tools and how they work together to provide the results.

## 4.1. Methodology and Research Design

A research is defined by Goddard and Melville (2001, p.1) as the process of "...answering unanswered questions or creating that which does not currently exists".

Researchers carry out research in order to solve problems and explore possible solutions to overcome difficulties. In the same vein, Rajeskar et al. (2006) described research as a rational quest for valuable data to answer the set of questions asked a given topic by means of logical analysis. Research objectives can better be divided into six main one which are accordingly as suggested by (Rajeskar et al., 2006, p.1) as follows:

1. To **discover** new facts;
2. to **verify** and test important facts;
3. to **analyze** an event or process or phenomenon to identify the cause and effect relationship;
4. to **develop** new scientific tools, concepts and theories to solve and understand scientific and nonscientific problems;
5. to **find** solutions to scientific, nonscientific and social problems and
6. to **overcome** or solve the problems occurring in our everyday life.

Following the above mentioned objectives, the current research aimed at solving secondary school students' lexical problems. It is also an attempt to verify the extent to which the implementation of technology mediated task-based approach can be effective in improving students' vocabulary issues. Through this study, the researcher tried to find some solutions to students' and teachers' problems with vocabulary teaching and learning.

Moreover, Kothari (2004) put that the motivation behind conducting a scientific research is to find out answers by using scientific means. He further mentioned that: "The main aim of research is to find out the truth which is hidden and which has not been discovered as yet". He, therefore, listed the following groupings of research objectives to provide a detailed view of research objectives:

1. To gain familiarity with a phenomenon or to achieve new insights into it (studies with this object in view are termed as exploratory or formulative research studies);

2. To portray accurately the characteristics of a particular individual, situation or a group (studies with this object in view are known as descriptive research studies);

3. To determine the frequency with which something occurs or with which it is associated with something else (studies with this object in view are known as diagnostic research studies);

4. To test a hypothesis of a causal relationship between variables (such studies are known as hypothesis-testing research studies).

### 4.1.1. Research Methodology

Before saying what "research methodology" is, a distinction must be made between a "research method" and "research methodology". These two expressions cannot be used interchangeably because each of which cares about certain aspects of research. Rajasekar (2006) outlined the key differences and similarities between a "method" and a "methodology". The following table sums up the distinction made to the earlier mentioned terms as laid out by Rajesekar et al. (2006):

| Research Methodology | Research Method |
|---|---|
| - A systematic way to solve a problem.<br>- A science of studying of how research is to be carried out.<br>- The study of methods by which knowledge is gained.<br>- Its aim is to give the work plan of research. | - The various procedures, schemes, algorithms, etc. used in research.<br>- They are essentially planned, scientific and value neutral.<br>- They include theoretical procedures, experimental studies, numerical schemes, statistical approaches, etc.<br>- Help us collect samples, data and find solutions to a problem.<br>- They accept only those explanations which can be verified by experiments. |

**Table 4.6.**: The Nature of Research Methodology and Research Method (Rajeskar et al., 2006, p.2)

A research methodology, as mentioned by Rajesekar et al. (2006, p.2) is a way of answering questions and it aims at drawing the plan for a researcher to follow. However, the term method can be used to englobe the set of technique used for data collection and its purposes.

### 4.1.2. Research Design

According to Burns and Grove (2001, p. 223), research design is defined as a " blueprint for conducting a study that maximizes control over factors" which could influence the outcomes. A research design is a systematic plan to study a scientific problem. The design of a study defines the study type (descriptive, correlational, semi-experimental, experimental, review, meta-analytic). The type of the study used in the present research is "quasi-experimental". Quasi- experiments are like any other experiments except for one aspect. According to Shadish, Cook and Campbell (2002, p.14): "quasi-experiments lack random assignment" unlike true experiments. Campbell and Stanely (1963) noted that when the research is lacking the complete control over the assignment of participants to groups, the research then is not a true experiment. This study; therefore, is quasi- experimental because the participants were not randomly assigned to groups.

In this study, we use Comparison Group pre-test and post-test design. It is the most common quasi experiment design. Two groups were used: control and experimental and to examine the extent to which the treatment was effective, we opted for the pre and the post tests. The two groups were given the same tests except that the treatment was given to one group only; the experimental group.

### 4.1.3. Combination of Methods

In the current research, we used a combination of methods in order to guarantee better results and this is called 'triangulation". Flick (2002, p.227) stated that: "triangulation is less

a strategy for validating results and procedure than an alternative to validation which increases scope, depth and consistency in methodological proceedings". Triangulation is used in both qualitative and quantitative data and aims at helping researchers back and validate the results of their researches. Moreover, Green and Thorogood (2004, pp-207-208) noted that:

> The notion of triangulation borrows a metaphor from navigation, with the idea that taking two readings will enable us to point out the "truth" more accurately than one. Thus, one method of data collection can be used to offset the weakness of another, or to 'check out' the validity of findings.

According to these two authors, using diverse methods in a research is like making two reading of a given text. The latter will help the reader unveil the true idea behind a given piece of writing. Similarly, the triangulation of research methods helps create a reliable research by helping researchers test their hypotheses with different tools and from different angles.

The decision upon the type of research method to be adopted is dictated by the nature of the subject to be investigated. Since that the current study aims at revealing information about the influence exercised by the integration of computer mediated vocabulary teaching/learning tools on the lexical performance of students of English and the teachers' attitudes about the role technology plays in easing their teaching of English vocabulary , we opted for using both qualitative and quantitative approaches. The combination of these two different types of approaches is not a new way of investigating a given topic.

It is noted by Teddlie and Tacgakkori (2003) that there is a noticed increasing interest by researchers in the triangulation of the different quantitative and qualitative research approaches. Working quantitatively and qualitatively helps make up for the weaknesses created by a single approach when used separately. According to the National Research Council (2002), educational research findings are better conducted when based using a mixture of methods.

The following table was drawn by Mack et al., (2005, p.5) to present the key differences between the qualitative and the quantitative researches:

| | Quantitative | Qualitative |
|---|---|---|
| **General framework** | Seek to confirm hypotheses about Phenomena Instruments use more rigid style of eliciting and categorizing responses to questions Use highly structured methods such as questionnaires, surveys, and structured observation | Seek to explore phenomena Instruments use more flexible, iterative style of eliciting and categorizing responses to questions Use semi-structured methods such as in-depth interviews, focus groups, and participant observation |
| **Analytical objectives** | To quantify variation To predict causal relationships To describe characteristics of a population | To describe variation To describe and explain relationships To describe individual experiences To describe group norms |
| **Question format** | Close-ended | Open-ended |
| **Data format** | Numerical (obtained by assigning numerical values to responses) | Textual (obtained from audiotapes, videotapes, and field notes) |
| **Flexibility in study design** | Study design is stable from beginning to end Participant responses do not influence or determine how and which questions researchers ask next Study design is subject to statistical assumptions and conditions | Some aspects of the study are flexible (for example, the addition, exclusion, or wording of particular interview questions) Participant responses affect how and which questions researchers ask next Study design is iterative, that is, data collection and research questions are adjusted according to what is learned |

**Table 4**.7: Basic Differences between Quantitative and Qualitative Research Methods ( Mack et al., 2005, p.3)

Briefly defined, quantitative data is the type of information that can be measured in numbers. According to Brown (1989), this type of data can be obtained through "measures which can lend themselves to be turned into numbers and statistics". Qualitative data; unlike quantitative data, are gathered using techniques such as photos, maps, observations; documents and others (Neuman, 2017).

The qualitative inquiry has long been championed by many fields such as biology, psychology, anthropology and recently has been adopted by the educational field. It is used as a means of gathering information that cannot be expressed in form of numbers and statistics such as feelings, motivation, values and behaviors. However, many researchers such as Merriam (1998) pointed to some drawbacks of the qualitative approach such as its reliability, validity and generalizabilty of foundations.

Unlike the qualitative approach of inquiry, quantitative research is believed to lead to more reliable foundations. The term experiment has been defined as a situation in which the researcher observes the relationship between two variables and deliberately producing a change in one and looking to see whether alteration produces in the other." Such type of research generally involves having two groups which are selected randomly. One of the two groups is a control group which receives no treatment; while, the experimental group is the one which receives the treatment. Both groups are given a pre and a post tests which results are used to study the difference between the performances of each group and to decide on the validity of the hypothesis.

The study in hand uses both qualitative and quantitative research approaches as a way of assuring the validity of our research. We opted for questionnaires and tests as tools for gathering data to help us conduct this research. Questionnaires, as qualitative research approaches, were administered before the experiment to both teachers and students. They were opted for to help us gather information about participants' attitudes towards using computers and instructional tools. Another type of research methods was used which is testing. This quantitative research method was opted for to help us find out whether the treatment used in the experiment was effective or no. This was realized by comparing the performances of the control and the experimental group through the findings obtained the pre-test and the post-test results.

### 4.2. Research Questions

Questions are necessary tools to satisfy researchers' curiosity about the different issues they may encounter in the different fields of study. Mason (2002, p.20) defined research questions as : " are vehicles that you will rely upon to move you you're your broad research interest to your specific research focus and project, and therefore their importance cannot be overstated". Raising questions helps us find our way in a research by highlighting the areas which are worth investigation. Research questions, then, are of a great value. Sunderland stressed their importance stating the following: "the key to any empirical research project. Without research questions, you will flounder; with them, you will be guided in terms of data needed, data collection methods and data analysis" (Cited in Litosseliti, 2010, p.9).

It should be noted that research questions are not like any other type of questions. They have to be well refined to satisfy the scientific requirements of any research design. They do not have to be broad; they must be straight to the point. Green and Thorogood (2004, p.28) stated that: "A research question is more than the title of the study or the description of the topic you are interested in. Ideally, it frames fairly precisely what questions will be answered, and identifies clearly how it will addressed".

Therefore, the questions which the present study attempts to answer are:

1. What makes the process of vocabulary learning difficult?
2. How can computers contribute to the development of vocabulary learning among secondary school students?
3. What effects would the integration of computer assisted instruction and task-based approach have on vocabulary learning?

As for the first question, we attempted to address it through the teachers' and students' questions about which area of the English language is causing difficulties to students. The

first question was to identify what language area teachers struggle with together with their students. The second question, however, was addressed to check the degree of students' lexical knowledge.

**a.** Which of the following areas causes a problem to your students when asked to write something in English?

**a.** Grammar ☐ b. Vocabulary ☐ c. Spelling ☐

**b.** How do you rate your students' vocabulary knowledge/use?

a. Very high ☐ b. Average ☐ c. Low ☐

The same question was addressed through students' questionnaire. Questions included the following:

**a.** Is it difficult to write in English because of:

**a.** Grammar rules ☐ b. Vocabulary ☐ c. Spelling ☐

**b.** When reading a text, do you find it easy to understand its content?

a. Always ☐ b. Sometimes ☐ c. Never ☐

As for the second and the third questions, they were addressed in the experiment by means of pre and post tests. In order to examine the influence of computer mediated task-based approach on vocabulary learning, students in both control and experimental groups answered a pre-test before one of them receives the treatment which was a set of computer based quizzes presented through the task-based approach on students' lexical development. After that, they had to answer a post-test and a comparison of results took place in order to determine the efficacy of computer mediated task-based approach on vocabulary learning.

### 4.3. Hypothesis

Kumar (2005) put that a hypothesis is the second key component to be formulated when conducting a research. He, therefore, stated that: "Hypotheses bring clarity, specificity and focus to a research problem, but are not essential for a study" (Kumar, 2005, p.130). He further added that putting a hypothesis is not mandatory in a research for that many studies

are carried out without the formulation of a single hypothesis. A researcher also can include more than one hypothesis in his research if the need calls to. According to Kumar (2005, p131) A hypothesis can be characterized as follows:

1. It is a tentative proposition.
2. Its validity is unknown.
3. In most cases, it specifies a relationship between two or more variables.

Therefore, as Kumar stated, a hypothesis is a supposition a researcher makes about a given topic of concern and which validity is uncertain. Generally speaking, a hypothesis is designed in order to find out the influence of one variable on another. Haber (2014, p.41) stated that the hypothesis has to be written in "clear, simple and concise terms". If these criterions are fulfilled, it will be easy for the readers of the statements to find out about the variables, the population and also to anticipate the results of the statement.

Kumar (2005) mentioned that in testing a hypothesis, a researcher goes through three main steps which are respectively; 1) constructing a hypothesis; 2) gathering appropriate evidence; and 3) analyzing evidence to draw conclusions as to its validity. These three steps are shown in the following diagram as drawn by Kumar (2005):

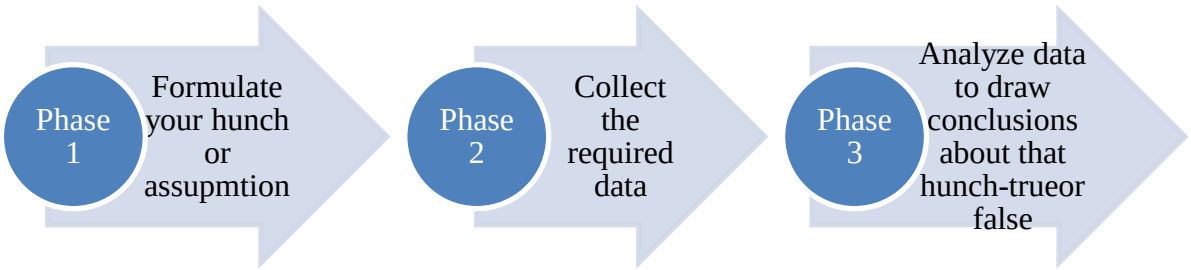


**Figure 4**. 7 : The Process of Testing a Hypothesis (Adapted from Kumar,2005, p.132)

According to the above diagram, the researcher starts first by making a thesis about a certain topic. Then, he moves to gathering necessary information or data and analyze it to check the validity of the suggested hypothesis. Therefore, as far as computer mediated task-based teaching is concerned, we made assumptions about its effectiveness in solving secondary school students' lexical issues. The present study is conducted with the aim of investigating the following hypothesis:

- Third year secondary school students' vocabulary learning would be improved if they were taught using the computer mediated task-based approach to teaching.

## 4.4. Population and Sample

Key components of any scientific study are the population and the sampling with which the researcher is going to conduct his research with. The descriptions of these two elements are briefly presented by Dorney (2003, pp.70-71) as follows:

> Broadly speaking, the sample is the group of people whom researchers actually examine and the population is the group of people whom the survey is about. For example, the population in a study might be EFL learners in Taiwanese secondary schools and the actual sample might involve three Taiwanese secondary classes. That is, the target population of a study consists of all the people to whom the survey's findings are to be applied or generalized. Dorney (2003)

### 4.4.1. Population

In statistics, the term population is used to refer to "the entire group about which some information is required to be ascertained" (Banerjee and Chaudhury, 2010). It does not necessarily refer to a group of people; we can also say a population of rats, heights, weights or events. The selection of the population can be done in two ways; either by using pre existing

groups (true experimental group) or those designed for the experiment (quasi experimental groups).

In this research, the target population is third year secondary school students of scientific streams from Sirin Lekhmissi Secondary School- Souk Ahras. The total number of pupils in the scientific streams during the school year 2017-2018 is 120 pupils scattered over 4 groups of 30 in each. These classes study English for 3 hours per week.

### 4.4.2. Sample

A sample is a representative of the population selected for the study. The results obtained from the sample's answers will be generalized to the whole population. The sample of this study consists of 30 pupils divided into two groups; a control (15 pupils) and an experimental group (15 pupils). The reason why we have chosen to work with scientific streams students is because of the nature of their program of English. Unlike their literary steam counterparts, students of the scientific streams deal with minimal lessons with topics they can enjoy. Another reason why we opted for this number of participants in each group goes back to the fact that we excluded those who had to repeat the year and who must have dealt with the syllabus before.

## 4.5. Variables

Researchers carry out their studies in order to investigate the influence of one variable on another. Variables are the set of characteristics or features that differ from person to person or from an object to another. There are many types of variables including: dependent and independent variables moderator variables, intervening variables and control variables. (Macky and Gass, 2005). The types of variables this study is concerned with are the dependent and independent ones. Belnaves and Caputi (2001) state that the independent

variable is the one which causes the results or which influences the dependent variable. The dependent variable is defined by Macky and Gass (2005, p. 103) as : " the one we measure to see the effects the independent variable has on it".

In the present study, the independent variable is the *computer mediated task-based approach* and the dependent variable is *students' vocabulary acquisition*. In other words, this research aims at investigating the impact of computer mediated task-based approach on improving students' vocabulary knowledge. The effect was measured by students' scores in the pre-test and the post-test.

## 4.6. Instrumentation

For a researcher to be able to confirm the validity of his hypothesis, he can use different research tools like tests, questionnaires, observation, interviews and others. The study in hand uses two main research tools which are respectively: the questionnaire and the test.

### 4.6.1. The Questionnaire

Questionnaires play a vital role in any experimental study. According to Dorney and Taguchi (2010), questionnaires are a common research method and this is due to the fact that they are easily organized and also able of collecting a great deal of information in a way that is easily handled. Dorney (2003, p.3) states that "Because the essence of scientific research is trying to find answers to questions in systematic manner, it is no wonder that the questionnaire has become one of the most popular research instruments applied in the social sciences". It is, in other words, most researchers' first choice to help them find answers to their different questions about certain issues. According to Brown (2001, p.6), "Questionnaires are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers". That was a simple description of questionnaires.

They are a set of questions given to a group of participants or respondents to provide answers to.

However, the construction of the questionnaires is not that easy tasks for there are some stepts to be taken into account when designing them. According to Dorney (2005, pp.16-17), the process of preparing for questionnaires include the following:

1. Deciding on the general features of the questionnaire, such as the length, the format, and the main parts.
2. Writing effective items/questions and drawing up an item pool
3. Selecting and sequencing the items.
4. Writing appropriate instructions and examples.
5. Piloting the questionnaire and conducting item analysis.

When designing a questionnaire, the researcher must consider the language to be used and the relationship of the questions with the hypothesis and the research questions formulated in the study. Swetnam (2004, pp. 60-40) suggested the following points to be taken into account by researchers when designing questionnaires:

1. Language used by the researcher must be simple, direct and appropriate to the target population".
2. "Attempt to relate each question to your research questions or hypothesis and you will find that many can be edited out. Also remember that if the scoring system for the answers is complex, extra hours may be required that are not budgeted for".
3. "Questionnaires, more than any other instrument, need the application of the 'so what?' test. You need constantly to relate every section to your research questions".
4. "Despite all these strictures a good questionnaire can be invaluable for producing large amounts of valid, handleable data with a high degree of objectivity".

Cohen, Manion and Morrison (2005, p.358) put that: “The appearance of the questionnaire is vitally important. It must look easy, attractive and interesting rather than complicated, unclear, forbidding and boring”. The questions to be included in the questionnaire have to be presented in a manner that invites respondents to answer without making them feel burdened by their complexity or bored.

As for the administration of questionnaires, Dorney (2003) stated that there are two types of questionnaire administration; one-to-one administration and group administration. As for the first, Dorney (2003, p.81) defined it as the type that:

> refers to a situation when someone delivers the questionnaire by hand to the designated person and arranges the completed form to be picked up later (e. g., handing out questionnaires to colleagues at work). This is a much more personal form of administration than mail surveys and therefore the chances for the questionnaires to be returned are significantly better.

On the other hand, Dorney (2003, p.81) stated that group administration is:

> the most common method of having questionnaires completed. One reason for this is that the typical targets of the surveys are language students studying within institutional contexts, and it is often possible to arrange to administer the instrument to them while they are assembled together, for example, as part of a lesson or slotted between certain other organized activities. The other reason for the popularity of this administration format is that it can overcome some of the problems just mentioned with regard to postal surveys or one to-one administration. (Dorney, 2003, p.81)

The researcher in this study used both one-to-one and group administrations of questionnaires. Because of the limited number of teachers (10 teachers), we opted for the one-to- one type of administration especially that some of them were colleagues at work. However, as far as students’ questionnaire is concerned, it used the second type which is group administration. As it was earlier mentioned by Dorney (2003), the targets or the samples for this questionnaire are students within the same school which makes their response rate of about 100%.

### 4.6.2. Validation and Piloting

Questionnaires cannot be directly administered without the piloting which has long been a significant step in the design of questionnaires. Oppenhein (1992, p.47) put that: "Questionnaires cannot be fully-fledged; they have to be created or adapted, fashioned and developed to maturity after many abortive test flights. In fact, every aspect of a survey has to be tried out beforehand to make sure it works as intended". Piloting the questionnaires helps the researchers check the value of his survey and therefore handle any problem that may hinder the success of his study. McKay (2004, p.41) states that:

> The value of a survey is increased by piloting the instrument; that is, giving the survey to a group of teachers or learners who are similar to the group that will be surveyed. The purpose of piloting a survey is to find out what problems exist in the clarity of the directions and which items might be confusing or difficult.

Yet, sometimes, some researchers omit the stage of piloting; not because they are not interested in it but because of time constraints. However, choosing not to pilot a questionnaire before handing it to the chosen sample can jeopardize the quality of the researcher. It is a stepwise procedure which should not be omitted by researchers. According to Moser and Kalton (1971)

> The importance of the piloting is in sharp contrast with the reality that so many researchers completely omit the pilot stage from their research design. Although this is understandable from a personal point of view because researchers at this stage are eager to get down to the survey and see the results, from a measurement perspective this practice is untenable. Regardless of how experienced the questionnaire designer is, any attempt to shortcut the piloting stage will seriously jeopardize the psychometric quality of the questionnaire (Cited in Dorney, 2003, p.65)

As it has been asserted by the above mentioned scholars, pretesting or piloting a questionnaire is very important. It allows researchers to highlight problems like the inappropriate questions or excessive details. Doreny (2003, p.63) states that through the information obtained from piloting questionnaires " we can make alterations and fine-tune the final version of the questionnaire". He, further, notes that pretesting questionnaires can help shed light on the potential areas of difficulties. According to Dorney (2003, p.64), piloting a questionnaires makes it easy for the researchers to spot questions:

- Whose wording may be ambiguous;
- Which are too difficult for the respondent to reply to;
- which may, or should be, eliminated because, contrary to the initial expectations, they do not provide any unique information or because they turn out to measure something irrelevant;
- which - in the case of open-ended questions - are problematic to code into a small set of meaningful categories.

### 4.6.3. Teachers' Questionnaire

Asking questions is the most natural way of satisfying our curiosity surrounding a given subject. Questionnaires are said to be the most often used device of gathering data in statistical research (Dorney, 2003). Some of the questions included in the questionnaire are open-ended. Teachers' questionnaire aims specifically at answers key questions about teachers' experience in a given teaching field, their method and even issues they encounter. The teachers' questionnaire included in our study proposes options among which teachers have to choose. These questions were an attempt to figure out teachers' evident struggles with vocabulary teaching and the remedies they apply to overcome these issues. Also, the teachers' questionnaire was a tool to reveal the extent to which teachers apply technology in their vocabulary instruction. (See appendix 1)

### 4.6.4. Students' Questionnaire

Students' questionnaire contained half-closed questions with options to choose from in addition to other questions which require students to provide justifications or examples. This questionnaire served as a tool of gathering necessary data about key issues faced by students in the process of learning the vocabulary of a foreign language. This was mainly addressed in the second section of the questionnaire:

In addition to lexical difficulties, students' questionnaire also attempted to find out about students computer skills and the extent to which they use technology to improve their lexical knowledge. The following are examples of the questions included in the questionnaire about computer assisted vocabulary learning. (See appendix 2)

### 4.6.5. The Experiment

The study aimed at testing the impact of the treatment which is the computer-mediated task-based approach on pupils' vocabulary learning. The group that received the treatment is the experimental group and it is made up of 15 pupils. The teacher introduced computer-mediated task-based lessons for two hours a week for six months period. The first session was devoted to explain to the members of the group how they are going to use the computers and for what reasons. They were also divided into groups of three to help increase their concentration during the lessons and to give each one of them equivalent chances to work with the devices.

The list of words introduced to the experimental group is related to themes of units they study in their 3$^{rd}$ year which are respectively: Ethics in business, food safety and advertisement and finally astronomy and space exploration. The target vocabulary was presented through computers using quizzes designed with PowerPoint in addition to the

computer software called Hotpotatoes. Videos and texts with comprehension questions were also introduced with computers. (See appendix 5)

The instruction of vocabulary through computers followed the task-based approach design. Computers were not used in each of the three phases of the task-based instruction. Sometimes, it was necessary to start the lesson with a vocabulary quiz to make the students motivated and to give them a clue about the vocabulary they will deal with. Computer-based quizzes were also used at the end of the lesson to check students' comprehension. Furthermore, the HotPotatoes software was sometimes used to design texts with comprehension questions and also multiples choice questions.

### 4.7.Methods of Analyzing Data

Different methods are required in order to analyze the data obtained by qualitative and quantitative research. For both types, labeling and decoding data is needed in order to understand the big picture and also to discriminate between common and different points. To start with, qualitative data analysis (QDA) refers to the set of steps we go through as we move from qualitative data that have been collected to a sort of interpretation of people or situations been investigated. Points distinguishing qualitative data from quantitative one are the open-ended nature of questions as they move from general to more specified questions in addition to the preliminary analysis which is an inherent part of the qualitative data analysis. Five steps are needed in the process of qualitative data analysis which are respectively; organizing the data, identifying framework, sorting data in the framework, using framework in data analysis and second order analysis.

Quantitative data analysis, on the other hand, dictates the use of inferential statistics. In other words, this type of data analysis involves the techniques by which the experimenters change data into statistical forms. In analyzing that type of data; therefore, we can compute

frequencies and percentages, determine central tendency measures (mean, mode and median) and also calculate estimates of dispersion (low-high, range and standard deviation) (Richards and Rodgers, 2002). Once these have been calculated, the next step, then, is to compare between the two means using the t-test.

The t-test is a proper statistical measure that would help us reveal the relationship between the use of computer-mediated task-based approach and vocabulary enhancement. Brown and Rodgers (2002) pointed out that the t-test is the most appropriate tool which is frequently used by second language researchers to compare the mean scores of two groups. Kothari (2004, p.196) mentioned that:

> The relevant test statistic, t, is calculated from the sample data and then compared with its probable value based on t-distribution (to be read from the table that gives probable values of t for different levels of significance for different degrees of freedom) at a specified level of significance for concerning degrees of freedom for accepting or rejecting the null hypothesis. It may be noted that t-test applies only in case of small sample(s) when population variance is unknown.

However, in some cases, the t-test can be used to compare the performance of the same group tested under two different conditions. The t-test is also an effective statistical measure because it can be applied to both small and large groups. In the current research, the t-test was used to compare the means if the experimental and the control group before and after the treatment.

## Conclusion

Learning vocabulary is considered highly significant especially for those with academic needs. Observing the situation in high school, one can conclude that vocabulary learning is highly neglected by students as well as teachers. This is primarily due to the difficulty of teaching or learning new vocabulary and the absence of the proper knowledge of effective vocabulary teaching/learning strategies.

The present study, therefore, is an attempt to reveal the effect of the integration of the new approach called computer mediated task-based approach in vocabulary instruction. This experiment is carried out with the use of specific analysis tools and methodology which have been discussed earlier.

## Chapter Five

## Situation Analysis

# Chapter Five

# Analysis of the Questionnaires

## Introduction

In this chapter, both teachers and students' questionnaires are described and analysed. As for the teachers' questionnaire, it deals with teachers' approaches of teaching foreign language vocabulary and their perceptions of integrating technology in lexical instruction as well as the implementation of technology mediated task-based approach in vocabulary teaching. Students' questionnaire; however, investigates students' vocabulary learning issues and their use of computer technology to deal with these issues.

## 5.1.Teachers' Questionnaire

### 5.1.1. Aim of the Questionnaire

The questionnaire was handed to 10 secondary school teachers from different high schools in the city of Souk Ahras. It was designed with the aim of revealing some important information about teachers' perceptions of vocabulary teaching strategies as well as students' attitudes towards vocabulary learning. It primarily aimed at investigating the teachers' experiences in teaching new lexical items of English language and also to test their knowledge of computer technology.

### 5.1.2. Description of the Questionnaire

The questionnaire was made up of three main sections. As for the first one, it consisted of three questions which the teachers had to answer about their teaching experience, the levels they taught in addition to the language teaching method they are familiar with. The second

section of the questionnaire was made up of 10 questions about teachers' methods of teaching new vocabulary. Precisely, it aims at answering some questions about whether or not the teachers use the mother tongue to teach a target vocabulary or whether they let students find the meaning of the words themselves or they help them by giving the explanation. The last section; however, was designed to answer some questions about teachers' use of technology; more specifically computers to teach unknown vocabulary in their classes. Also, it included some questions about the implementation of computer mediated task-based approach in vocabulary instruction.

### 5.1.3. Piloting of the Questionnaire

The first draft of the questionnaire was given to 10 teachers of secondary school to test its validity before handing it to the sample. These teachers have nothing to do with the sample and they work at different schools. In the first draft, we did not include the first part about the teaching experience. After the respondents have finished answering the questionnaire, we felt that we did not know anything about their experience in the field. That is why we added the tree questions about the years of the experience, the levels they have been teaching and finally the teaching method they are familiar with. We believe that finding out about the method these teachers use most of the time would help us anticipate whether they were eclectic and if they were so, we wanted to know if the task-based approach was one of the methods they use.

In the third part of the questionnaires about computer –assisted vocabulary learning, the respondents were asked about their familiarity with the use of computers to teach new vocabulary. Some of them stated that they rarely use ICTs in their classroom for vocabulary instruction. That is why we thought that it is better to include another question about the factors than can hinder the successful use of computers and other forms of ICTs in vocabulary teaching.

The last part of the questionnaire included questions about technology-mediated task-based approach and whether teachers think it is effective in vocabulary instruction. Some of the respondents, especially those with a long time experience, found some difficulties in grasping the notion of computer mediated task-based instruction. This led us to include a small passage at the beginning of the questionnaire to enable the respondents understand what the research is about and to make the questions included in this part less ambiguous as much as possible.

### 5.1.4. Analysis and Interpretation of Teachers' Questionnaire

**Section One: Teaching Experience**

1. **How many years have you been teaching in secondary school?**

| **Teachers** | **Years of Experience** |
|---|---|
| **T 01** | **22** |
| T 02 | **03** |
| **T 03** | **05** |
| **T 04** | **17** |
| **T 05** | **04** |
| **T 06** | **16** |
| **T 07** | **20** |
| **T 08** | **17** |
| **T 09** | **04** |
| **T 10** | **03** |

**Table 5.8:** Teachers' Years of Experience in Secondary School**.**

The first question of this section aimed at gathering information about the teachers' years of experience. As it is shown in the above table, most of teachers are considered as

experienced ones due to the period they spent in the career. Two of the respondents said that they have been teaching for three years while two others said for four. Another teacher said that he/she has been working in the field for five years. As for the other five teachers, their years of experience range from 16, 17, 20 and 22 years.

2. **What level (s) have you been teaching?**

   **a.** 1st level ☐

   **b.** 2nd level ☐

   **c.** 3rd level ☐

| **Teachers** | **Levels** |
|---|---|
| **T 01** | 1st+2nd+3rd |
| **T 02** | 1st+2nd+3rd |
| **T 03** | 1st+2nd+3rd |
| **T 04** | 1st+2nd+3rd |
| **T 05** | 2nd+3rd |
| **T 06** | 1st+2nd+3rd |
| **T 07** | 1st+2nd+3rd |
| **T 08** | 1st+2nd+3rd |
| **T 09** | 1st+2nd+3rd |
| **T 10** | 1st+2nd |

**Table 5.9:** Teaching Experience of Teachers by Level

The results show that all of the 10 respondents have taught more than one level while most of them have taught them all**.** As revealed by the teachers' answers, only two of them

have worked with two levels; one with 1st and 2nd levels and the other with 2nd and the 3rd levels. The remaining eight teachers have taught all the levels; 1st, 2nd and 3rd .

**3. Which teaching approach are you acquainted with?**

| Teachers | Preferred method(s) |
|---|---|
| **T 1** | Competency Based Approach |
| **T2** | Task- based Approach and Communicative Approach |
| **T3** | Competency Based Approach |
| **T4** | Task-based Approach and Communicative Approach |
| **T5** | Competency Based Approach |
| **T6** | Presentation, Practice, Production (PPP) and Communicative Approach |
| **T7** | Presentation, Practice, Production (PPP**)** |
| **T8** | Eclectic method |
| **T9** | Competency Based Approach |
| **T10** | Presentation, Practice, Production (PPP) and Communicative Approach |

**Table 5.10:** Teachers' Preferred Method of Teaching

The aim behind this question was to find out which teaching method(s) the teachers are familiar with. Three of the respondents answered that they only use the competency-based approach to language teaching. As for the other seven, they said that they use different methods which means that they are eclectic.

**Section Two:** Vocabulary Teaching/Learning

**4.** Do your students get motivated when you ask them to write something in English?

a. Yes ☐ b. No ☐

| | Number | Percentage |
|---|---|---|
| **a.** Yes | 02 | 20% |
| **b.** No | 08 | 80% |

**Table 5.11:** Rate of Teachers Whose Students Get Motivated When Asked to Write in English

This question aims at revealing some information about how students react when they are assigned a writing task by their teachers. A number of 02 teachers (20%) answered that their students do get motivated when they ask them to write a paragraph in English.08 teachers (80%); however, said that their students do not get motivated when they are supposed to write in English.

**5.** Which of the following areas causes a problem to your students when writing in English?

a. Grammar ☐ b. Vocabulary ☐ c. Spelling ☐

| | Number | Percentage |
|---|---|---|
| **a.** Grammar | **02** | **20%** |
| **b.** Vocabulary | **06** | **60%** |
| **c.** Spelling | **02** | **20%** |

**Table 5.12:** Language Areas Causing Problems to Students in Writing

Teachers were asked to say which of the above areas poses challenge to students in writing the most; grammar, vocabulary or spelling. Results show that 02 teachers (20%) answered that grammar is the reason behind their students' poor writing. 06 other teachers put that vocabulary poses a great difficulty to students which affects their writing. 02 teachers (20%), however, stated that spelling is the reason standing behind students' lack of motivation when it comes to writing.

**6.** Do you present new words in every lesson?

a. Yes ☐ b. No ☐

| | Number | Percentage |
|---|---|---|
| **a.** Yes | **09** | **90%** |
| **b.** No | **01** | **10%** |

**Table 5.13:** Rate of Teachers Who Present New Words in Every Lesson

Teachers were asked whether they present new words in every lesson or not. Result show that 09 teachers (90%) answered that they present new vocabulary to their students in every lesson. Only 01 teacher (10%); however, said that she/he does not always present new words to his/her students.

**7.** How do you teach new vocabulary to your students?

| | Number | Percentage |
|---|---|---|
| **a.** You provide your students with the definition? | **03** | **30%** |
| **b.** You give the equivalent of the target word in Arabic? | **02** | **20%** |
| **c.** You present it in context and let them guess the meaning by themselves? | **05** | **50%** |

**Table 5.14:** Teachers' Strategies of Teaching New Vocabulary

The aim behind this question was to know how teachers frequently present new vocabulary to their students. 03 of informants (30%) stated that they usually give their students the definition of the word. 02 other teachers (20%); however, put that they teach new words by giving their equivalent in students' mother tongue (Arabic). A number of 05 teachers (50%), on the other hand, said that presenting new vocabulary in context and making students deduce its meanings in their way of teaching unfamiliar vocabulary to their classes.

**8.** How do you rate your students' vocabulary knowledge/use?

a. Very high ☐ b. Average ☐ c. Low ☐

| | Number | Percentage |
|---|---|---|
| **a.** Very high | **01** | **10%** |
| **b.** Average | **07** | **70%** |
| **c.** Low | **03** | **30%** |

**Table 5.15:** Teachers' Rating of Their Students' Vocabulary Knowledge/Use

Teachers were asked to rate their students' level of English vocabulary and use. Only one teacher (10%) reported that his/ her students have a very high knowledge of English vocabulary. A number of 07 (70%) teachers; however, rated their students vocabulary knowledge and use as average; whereas, 03 (30%) of the teachers mentioned that their students have a low vocabulary knowledge as well as use.

**9.** To what extent does your students' vocabulary knowledge influence the quality of their writing?

a. To a large extent ☐ b. To a some extent ☐

| | Number | Percentage |
|---|---|---|
| **a.** To a large extent | **08** | **80%** |
| **b.** To a some extent | **02** | **20%** |

**Table 5.16:** The Influence of Students' Vocabulary Knowledge on the Quality of Their Writing

Students' writings are greatly influenced by their level of vocabulary. Our respondents were asked to state the extent to which their students' lexical size impacts the quality of what they write. Results show that 08 of the teachers (80%) see that their students' writing is largely influenced by their vocabulary knowledge. The findings also reveal that 02 of our

respondents believe that their students' writing is influenced only to a some extent by their vocabulary knowledge.

**10.** How often do you examine your students' lexical development?

a. Always ☐ b. Often ☐ c. Never ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Always | **03** | **30%** |
| **b.** Often | **07** | **70%** |
| **c.** Never | **00** | **00%** |

**Table 5.17**: Teachers' Frequency of Testing Teir Students' Lexical Development

The aim behind this question was to find out how often teachers assess their students' vocabulary development. The findings show that a number of 03 teachers (30%) answered that they always check the degree to which their students' vocabulary is improving. On the other hand, 07 (70%) of our respondents stated that they often check their students' lexical progress; whereas, none of the teachers answered that they never examine their students' vocabulary development.

**11.** Which activities do you use to consolidate lexical items?

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Word association | 2 | 20% |
| **b.** MCQ activities | 7 | 70% |
| **c.** Vocabulary games | 5 | 50% |
| **d.** Fill in the gaps | 9 | 90% |
| **e.** Matching words with definitions/synonyms | 4 | 40% |

**Table 5.18**: Activities Used by Teachers to Consolidate Lexical Items

According to the above results, teachers tend to favor some activities over others. The type of activity that comes first in teachers' choices is "Fill in the gaps" with a number of 06 teachers who opted for it as their favorite consolidation activity. The type of activity that comes the second is "MCQ" activity with 7 teachers.

**Section Three**: Computer-Assisted Vocabulary Teaching

**12.** Do you use technology to present new vocabulary to your students?

a. Yes ☐ b. No ☐

**Say why**…….

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Yes | **08** | **80%** |
| **b.** No | **02** | **20%** |

**Table 5.19:** The Rate of Teachers Who Use Technology to Present New Vocabulary

This question was designed to gather some information about teachers' use of technology to teach English vocabulary to their secondary school students. The teachers were asked to say whether or not they use technology; especially computers to present and teach new lexical items. The results show that 08 (80%) out of 10 teacher answered that they use technology to teach new vocabulary to their students; whereas, two (20%) teachers said that they never use such an instructional tool to present new vocabulary.

**13.** Have you ever used computer-based vocabulary software in your class?

a. Yes ☐ b. No ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Yes | **06** | **60%** |
| **b.** No | **04** | **40%** |

**Table 5.20:** Rate of Teachers Who Used Computer-based Vocabulary Software in Their Classes

In this question, teachers were asked to say whether they have ever used to use a computer-based vocabulary software in their classes or not. The above findings reveal that 06 of the respondents (60%) stated that they use vocabulary softwares in their classes, whereas, 04 (40%) of them said they do not use any computer-based software for teaching vocabulary to their students.

**14.** Do you allow your students to use mobile phones or tabs to check unknown words?

a. Yes ☐ b. No ☐

**Say why**.....

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Yes | **06** | **60%** |
| **b.** No | **04** | **40%** |

**Table 5.21**: The Rate of Teachers Who Allow the Use of Mobile Phones or Tabs to Check Unknown Words

The above results show that 06 of the respondents answered that they using devices such as phones is permissible in their classes if it is for checking meaning of unfamiliar words. When asked why, they said that having students check the meanings of unknown words makes them independent and their need for the teacher to explain any term will be less than before and that would make them remember the words better. A number of 04 teachers stated that they do not allow their students to use those devices saying that this would distract their attention from the lesson.

**15. How do you think technology; especially computer, is going to influence your teaching of vocabulary?**

This question was directed to find out about the teachers' perceptions of computer use for vocabulary instruction. Most of them said that it will positively influence their work stating that the use of such instructional tools will make the presentation of new vocabulary easier for them and their students as well. Others have put that technology works better for

students because it will break the routine of presenting vocabulary in ordinary ways and that will increase students' motivation to vocabulary learning and use.

**16.** Are you familiar with any computer-based vocabulary strategy or software?

a. Yes ☐ b. No ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a. Yes** | 05 | 50% |
| **b. No** | 05 | 50% |

**Table 5.22**: Rate of Teachers Who Are Familiar with Computer-based Vocabulary Strategies or Softwares

This question aimed at revealing some information about whether or not teachers are acquainted with any computer based vocabulary strategies. The above findings reveal that 05 teachers (50%) said that they are used to such type of strategies while the other 05 (50%) respondents answered that they are not familiar with computer based vocabulary strategies softwares. Teachers who answered with no are apparently those with long years of experience because they, in general, lack the necessary computer skills.

**17.** According to you, what are the factors that can hinder the successful integration of technology in vocabulary instruction?

| | **Number** | **Percentage** |
|---|---|---|
| **a.** The unavailability of computer devices | 03 | 30% |
| **b.** Absence of appropriate computer knowledge and training | 04 | 40% |
| **c.** Time restriction | 09 | 90% |

**Table 5.23**: Factors Hindering the Successful Integration of Technology in Vocabulary Instruction

As far as this question is concerned, the respondents were asked to say which of the above mentioned three factors influences the effective implementation of computer

technology for vocabulary instruction in EFL classes. 03 teachers out of 10 said that the successful use of technology in EFL classes would be inhibited by the unavailability of computer devices which is common in Algerian schools settings. 04 teachers (40%); however, stated that the lack of necessary technology skills is the reason why they think the implementation of computer for vocabulary teaching will not come to fruition. Time restriction is the factor which 09 of our respondents believe it could be the reason standing behind the possible failure of computer based vocabulary instruction.

**Section Four:** Task-Based Vocabulary Teaching/Learning

**18.** While presenting a new vocabulary, how often do you try to teach them by referring students to real life situations?

a. Always ☐ b. Sometimes ☐ c. Never ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Always | **08** | **80%** |
| **b.** Sometimes | **02** | **20%** |
| **c.** Never | **00** | **00%** |

**Table 5.24**: Teachers' Frequency of Teaching Vocabulary by Relating it to Real Life Situations

The task-based approach is based on the tenet that teaching a language is more effective when students are referred to real life situations. For this matter, we asked our respondents about how often they teach English vocabulary through real life situations. A number of 08 teachers representing 80% answered that they always do that while only 02 teachers (20%) said they sometimes present new vocabulary by engaging students in authentic tasks.

**19.** Do you find that your students' vocabulary level inhibits the successful accomplishment of tasks you assign?

a. Yes ☐ b. No ☐

| | Number | Percentage |
|---|---|---|
| **a. Yes** | **10** | **100%** |
| **b. No** | **00** | **00%** |

**Table 5.25:** Rate of Teachers Who Find that Their Students' Vocabulary Level Inhibits the Successful Accomplishment of Tasks

A successful accomplishment of a task in a task-based lesson greatly depends on students' vocabulary knowledge. The teachers were asked whether their students' lexical size influences the degree to which they succeed in finishing a task. All of our respondents answered that their students' vocabulary knowledge inhibits the successful task fulfillment. Vocabulary is the corner stone necessary for doing any language task which is presumably the reason why all of respondents confirmed that their students' poor lexical knowledge influences their performance.

**20.** Which task-based vocabulary activities do you often use in your class?

| | Number | Percentage |
|---|---|---|
| **a.** Listening based activities (song, video, documentaries...) | **3** | **30%** |
| **b.** Speaking based activities (storytelling, picture talk...) | **3** | **30%** |
| **c.** Reading based activities (newspaper, short stories...) | **2** | **20%** |
| **d.** Writing based activities (jumbled letters, word chain...) | **2** | **20%** |

**Table 5.26**: Task-based Vocabulary Activities Used by Teachers

There are a diverse number of task-based activities, each devoted to focus on a particular language skill. In this question, teachers were asked to say which of the above

activities they often use for vocabulary teaching. A number of 03 teachers said that they use all of them, equally giving attention to the four language skills. A number of 02 teachers; however, answered that they often use listening and speaking based activities. 03 respondents put that they prefer using reading and writing based activities while 02 of them put that they like using speaking and reading based activities.

**21.** Do you think that the implementation of technology into task-based vocabulary instruction will help improve students' lexical abilities?

a. Yes ☐ b. No ☐

**Say why**……

| | **Number** | **Percentage** |
|---|---|---|
| a. Yes | **10** | **100%** |
| b. No | **00** | **00%** |

**Table 5.27:** Rate of Teachers Who Think That The Implementation of Technology in Task-based Vocabulary Instruction Will Help Improve Students' Lexical Abilities

Concerning this question, it was directed to find out whether teachers believe that using technology to support vocabulary teaching will help their students overcome their issues with English vocabulary. All of the 10 teachers answered positively on the question. When asked why, most of them stated that this will increase students' motivation to study since that most of them are familiar with technological devices. Others said that using technology will make the learning experience funnier and easier.

**22.** How do you think that computer mediated task-based instruction is going to influence the way you teach vocabulary in your class?

Unlike the above question, this one was aimed at finding out how technology is going to change the way teachers present new vocabulary in the classroom. Almost all of them

answered that technology allows them to be creative and innovative since it offers them different ways to present vocabulary in interesting ways. Others have noted that computer technology makes their job easier because it gives access to a variety of sources and also will lessen the burden of explaining new vocabulary over and over since students' interaction will be most of the time with the computer device from which he will receive the feedback on his answers.

## 5.2. Summary of the Findings

The questionnaire has tackled the issue of vocabulary teaching within the framework of computer mediated task based language teaching approach. It has investigated teachers' views of the different strategies of teaching unknown vocabulary to their secondary school students. It also examined teachers' perspectives of the implementation of computer technology in teaching foreign language vocabulary in task-based contexts. Throughout the analysis and the interpretation of the questionnaire and as for the teachers' answers to the first section about the teaching experience, we can say that most teachers have a good experience in the field of teaching. As far as the question related to teachers' preferred method/approach of teaching, the majority of our respondents said that they, most of the time, apply the competency based approach in their classes.

As noted earlier, the second section of the questionnaire aimed at revealing information about teachers' methods of teaching new vocabulary as well as their students' levels of vocabulary knowledge and how they tackle the various vocabulary learning issues. According to the teachers' answers, the majority of students have vocabulary related problems which have to do with the knowledge of words and their use which influence to a considerable extent the quality of writing. When asked about the activities they use in order to consolidate

lexical items, most of our respondents said that they use MSQ, fill in the gaps and also matching words with their definitions activities.

In the third section; however, teachers were asked about their computer skills and whether they use this technology to teach new vocabulary to their students. Some of them, those with a long teaching experience, claimed that they do not use computers in their classes simply because they lack the knowledge and skills of such technology. Other teachers; however, stated that they often use computer to present unknown vocabulary but little of them know any computer based vocabulary softwares.

## 5.3. Students' Questionnaire

### 5.3.2. Aim of the Questionnaire

The questionnaire was designed to help reveal necessary information concerning students' vocabulary learning related issues and strategies they opt for in order to overcome their struggle with the foreign language vocabulary. The questionnaire also aimed at revealing important information as to students' attitudes to computer mediated learning and their use of technology to improve their vocabulary skills.

### 5.3.3. Description of the Questionnaire

The questionnaire was distributed to 30 secondary school students from Sirin Lekhmissi Secondary School –Souk Ahras-. The questionnaire was made up of three main sections which are respectively; language learning, vocabulary learning and finally computer-aided vocabulary learning.

### 5.3.4. Piloting of the Questionnaire

Pretesting students' questionnaire was an important step. We needed to make sure that the questions included were not so complicated and that the language we used was appropriate for their level. We needed to test the questionnaire with students who share the

same features and level of the chosen sample. So, we handed the questionnaire to 15 pupils from the second class of 3 as (experimental science) at the same school. The aim of the questionnaire was explained to the group and they were also told about the anonymity of their answers.

While the respondents were filling the questionnaire, we noticed that some of them were unable to understand questions like the one in section two about the vocabulary learning strategies they are accustomed to. The options included word parts strategy (affixation), dictionary use and word cards. This made us think about giving the sample of the study a brief explanation of vocabulary learning strategies especially the ones included in this question.

As for the third section which is about computer- aided vocabulary learning, the respondents asked for some clarifications concerning the title of the section. It was necessary, then, to explain it to them. In addition, to that, another question was added to this part concerning the type of computer-based applications that students use to learn new vocabulary which was not included in the first draft.

Piloting the students' questionnaire played a significant role in improving the final draft. Through it, we could spot the possible areas of difficulties like the ambiguity of some questions and lack of some details. Pretesting the questionnaire led us to change the structure of some questions to make them easy to answer by the respondents.

### 5.3.5. Analysis and Interpretation of the Questionnaire

**Section One: English Learning**

**1.** Do you enjoy studying English?

**a.** Yes ☐ b. No ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Yes | **21** | **70%** |
| **b.** No | **09** | **30%** |

**Table 5.28:** Rate of Students Who Enjoy Studying English

The aim behind this question was to check the extent to which secondary school students prefer studying. Interestingly, a number of 21 respondents representing (70%) said that they enjoy studying English. The other remaining 09 participants answered that they do not enjoy studying English. Despite the fact that English poses a challenge to most of students at this level, they still enjoy it to some extent.

**2.** How do you like to express your ideas about a given topic

a. Speak about it ☐ b. Write about it ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Speak about it | **17** | **56.66%** |
| **b.** Write about it | **13** | **43.33%** |

**Table 5.29:** Students' Preferred Ways of Expressing Ideas

This question was an attempt to find the students' preferred way of expressing their ideas in English. The findings reveal that most of our respondents representing a number of 17 students (56.66%) prefer expressing their ideas about a given topic in English by speaking about it. 13 of our respondents (43.33%) said that they like expressing themselves by writing about the topic they are interested in. Seemingly, writing skill poses some difficulties to students the reason why they prefer speaking because it requires less thinking about the rules.

**Section Two: Vocabulary Learning**

**3.** How difficult is for you to write a paragraph in English?

a. Very difficult ☐ b. A bit difficult ☐ c. Not difficult at all ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Very difficult | **05** | **16.66%** |
| **b.** A bit difficult | **21** | **70%** |
| **c.** Not difficult at all | **04** | **13.33%** |

**Table 5.30:** Degree of Difficulty of Writing a Paragraph in English

As far as this question is concerned, students were asked to report the extent to which producing a piece of writing in English is difficult to them. A great number of our respondents 21 answered that it is a bit difficult to them to write in English; whereas, only few of them (05) said that it is a very difficult task for to write in English. The other remaining 04 participants said that writing something in English is not difficult at all. Writing is among the difficult tasks that cause a challenge to most EFL students especially at this level.

**4.** Is it difficult to write in English because of:

**a.** Grammar rules ☐ **b**. Vocabulary ☐ **c.** Spelling ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Grammar rules | **06** | **20%** |
| **b.** Vocabulary | **15** | **50%** |
| **c.** Spelling | **09** | **30%** |

**Table 5.31**: Factors Contributing to the Difficulty of Writing in English

The aim of this question was to find out the reason standing behind students' struggle with writing. 15 (50%) of out participants answered that vocabulary is responsible for their incompetency in writing. A number of 06 respondents; however, attributed the reason of their struggle to grammar rules while 09 other students answered that spelling is the language aspect which causes them difficulties in writing. According to the above results, vocabulary , more than grammar and spelling, is a challenge to most students.

**5.** When reading a text, do you find it easy to understand its content?

**a.** Always ☐ b. Sometimes ☐ c. Never ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Always | **01** | **3.33%** |
| **b.** Sometimes | **28** | **93.33%** |
| **c.** Never | **01** | **3.33%** |

**Table 5.32:** Rate of Students Who Always/Often or Never Find it Difficult to Understand a Text when Reading it

In this question, students were asked to rank their degree of understanding a text; whether they always find it easy to get the message of the text or not. Only one student (01 %) out of 30 respondents said that he/she always finds easy to understand a text in English. However, the great majority of participants answered that they are sometimes able to understand what a given text talks about while only one (01) respondent put that he never understands the content of a text. It is obvious that, to most students, grasping the meaning of words making up a given text is a challenging task that is why they seldom understand the intended message.

**6.** What do you do in order to find the meaning of a new word?

| | **Number** | **Percentage** |
|---|---|---|
| **a**. You first try to guess the meaning from context | **06** | **20%** |
| **b.** Use a dictionary | **07** | **23.33%** |
| **c.** Ask a teacher | **16** | **53.33%** |
| **d.** Ask a peer | **01** | **3.33%** |

**Table 5.33:** Students' Ways of Looking a New Word Up

The respondents were asked to select the strategy they generally use to find the meaning of a new word. The results revealed that 06 of the participants (20%) answered that they first try to guess the meaning of the new word from context while other 07 participants (23.33%) said that they first use the dictionary. About 53.33% of the respondents (16) answered that when meeting a word for the first time, they seek the teacher's help to know what the word entails; whereas, only one participant (3.33%) put that he/she asks a peer to get the meaning of the word. Students generally have a lack of awareness concerning vocabulary learning

strategies which probably explains why most of the participants answered that they ask the teacher to give them the definition of the word.

**7.** Which of the following word study strategies are you familiar with?

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Affixation (breaking a word into a prefix, root and suffix) | **10** | **33.33%** |
| **b.** Using a dictionary | **17** | **56.66%** |
| **c.** Word cards | **03** | **10%** |

**Table 5.34:** Word Study Strategies Students Are Familiar With

The question was directed to reveal necessary information about the word study strategies students are acquainted with. Our respondents were asked to select one of the three word study techniques; affixation, dictionary use and word cards. About 33.33% (10) of the participants stated that they generally use affixation as word study strategy. A number of 17 students (56.66%) said that they make use of dictionaries while a number of 3 participants (10%) said they use word cards. Smilingly, the reason why the majority of the participants opted for "b. Using a dictionary" is because of their familiarity with this technique and also because of the fact that it is easy to use unlike "a. Affixation" which required a knowledge of the main prefixes and suffixes and their meanings.

**8.** How often do you use a dictionary to check the meaning of unknown words?

a. Always ☐ b. Sometimes ☐ c. Never ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Always | **03** | **10%** |
| **b.** Sometimes | **22** | **73.33%** |
| **c.** Never | **05** | **16.66%** |

**Table 5.35:** Frequency of Checking the Meaning of Unknown Words by Students

Students, in this question, were asked to rate the degree of their use of a dictionary to find the meaning of unknown words. A number of three participants representing (10%) said that they always use a dictionary to check the meaning of unfamiliar vocabulary. 22 is the number of students who said that they sometimes check vocabulary using a dictionary while a number of 5 students (16.66%) answered that they never use a dictionary. Probably, the reason why students do not frequently use a dictionary to learn the meaning of unknown words is their reliance on the teacher to give them the definition or the equivalent of the target word in their native language without having to use a dictionary.

**9.** Do you prefer using:

| | **Number** | **Percentage** |
|---|---|---|
| **a.** An English-English dictionary | **01** | **3.33%** |
| **b.** An English- Arabic dictionary | **26** | **86.66%** |
| **c.** No answer | **03** | **10%** |

**Table 5.36:** Types of Dictionaries Students Prefer to Use

Students were asked about the type of dictionary they frequently use, an English-English dictionary or English – Arabic one. Only one participant said that he/she uses an English- English dictionary. Surprisingly, 26 of our informants (90%) answered that they prefer using an English- Arabic dictionary; whereas, 03 other participants gave no answer. Students, especially at this level, prefer using an English- Arabic dictionary because they always feel the need to know the equivalent of the word in English.

**10.** How do you acquire vocabulary outside the classroom?

| | Number | Percentage |
|---|---|---|
| **a.** Read books and stories | **00** | **00%** |
| **b.** Listen to songs | **20** | **66.66%** |
| **c.** Watch movies | **10** | **33.33%** |

**Table 5.37:** Students' Ways of Learning Vocabulary Outside the Classroom

We were interested in knowing the ways students learn vocabulary outside school settings. The results revealed that none of our informants (00%) learn vocabulary by reading books or stories while they show that a number of 20 participants (66.66%) acquire vocabulary through songs. However, a number of 10 students (33.33%) stated that watching movies helps them acquire new words. Listening to songs is indeed a good way of learning a foreign language vocabulary. Thanks to smart phones which are available to a large number of students, learning vocabulary is now funny and easy.

**11.** Do your teachers use strategies that fit your preferable manner of learning vocabulary?

a. Yes ☐ b. No ☐

| | Number | Percentage |
|---|---|---|
| **a.** Yes | **15** | **50%** |
| **b.** No | **15** | **50%** |

**Table 5.38**: Rate of Students who See that Their Teachers Use Strategies that Fit Their Preferable Manner of Learning Vocabulary

Teaching students according to their desires and needs is not an easy to achieve especially with large number classes. This question; therefore, was an attempt to find out whether students are satisfied with their way of vocabulary leaning and whether they feel that their teachers teach them in accordance to their preferred way of learning. Our findings show that half (15) of participants (50%) see that their teachers use their preferred way of learning

vocabulary. 15 of our respondents, on the other hand, put that their teachers do not use the vocabulary teaching strategies they prefer.

**Section Three**: Computer-aided Vocabulary Learning

**12.** How often do you use technology/computer to support your study?

a. Always ☐ b. Sometimes ☐ c. Never ☐

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Always | **08** | **26.66%** |
| **b.** Sometimes | **21** | **70%** |
| **c.** Never | **01** | **3.33%** |

**Table 5.39:** Rate of Students Who Use Technology to Support Their Studies

The aim of this question was to find the extent to which students depend on technology to support their leaning in any subject. A number of 08 students only (26.66%) said that they always use technology/ computer to overcome some of their learning issues. 21 of respondents said that they sometimes use technology to back their studies while only one student answered that he never use such tools in his/her study. Despite the widespread use of technology, students still have a limited knowledge of how can technology be implemented to improve their learning skills in any area which can probably explain the moderate use of technology by students.

**13.** How often do you use computers to learn new words?

a. Always ☐ b. Sometimes ☐ c. Never ☐

| | **Number** | **Percentage** |
|---|---|---|
| a. Always | **03** | **10%** |
| b. Sometimes | **23** | **76.66%** |
| c. Never | **04** | **13.33%** |

**Table 5.40:** Frequency of Using Computers to Learn New Words

This question seeks precise answers as to students' use of computer to learn new vocabulary. The above results show that 03 (10%) of our respondents stated that they always use computer to improve their vocabulary learning. 23 of the informants (76.66%) said that they sometimes use technology /computer to learn new vocabulary while a number of 04 (13.33%) said that they never use such a tool to help them learn a language vocabulary.

**14.** Do you prefer using electronic dictionaries over printed ones?

a. Yes ☐ b. No ☐

**Say why**……

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Yes | **26** | **86.66%** |
| **b.** No | **04** | **13.33%** |

**Table 5.41:** Rate of Students Who Prefer Using Electronic Dictionaries over Printed Ones

This question was an attempt to find out whether students prefer using electronic dictionaries. The great majority of students (26) said that they prefer electronic dictionaries because they are easy to use and provide a quick access to the word's meaning. 04 is the number of students who answered that they prefer using printed dictionaries over electronic ones.

**15.** Which of the following computer-based applications do you use to learn vocabulary?

| | **Number** | **Percentage** |
|---|---|---|
| **a.** Online dictionaries | **00** | **00%** |
| **b.** Google translator | **29** | **96.66%** |
| **c.** Vocabulary software | **00** | **00%** |
| **d.** Online vocabulary games | **01** | **3.33%** |

**Table 5.42:** Computer-based Applications Students Use to Learn Vocabualry

This question was an attempt to find out which computer-based vocabulary application students are acquainted with. Surprisingly, 29 out of 30 informants answered that they are most familiar with Google translator while only 01 student said that she/he likes using online vocabulary games. Google translator represents one of the most popular computer based application to vocabulary learning. It is much easier to use especially that it offers the equivalent of the target word in their native language which why it was selected by almost all the participants.

**16.** You better remember and use a word when:

| | **Number** | **Percentage** |
|---|---|---|
| **a.** You check its meaning using a computer (online dictionaries) | **11** | **36.66%** |
| **b.** It is written on the board and explained by your teacher | **16** | **53.33%** |
| **c.** Explained by your peer | **03** | **10%** |

**Table 5.43:** Students' Ways of Remembering and Using Words

Students were asked to say whether they better remember a word when it is explained through the use of computer, by a teacher or by their peers. 36.66% (11) of the participants answered that they easily remember and use a word when they check its meaning using a computer based application such as online dictionaries. 53.33% (16) of students reported that they can better recall a word if it was explained by their teacher while only 03 pupils (10%) said that words are easily remembered if it was explained by a peer.

**17.** Do you think that using computers to learn English vocabulary will help you improve your lexical skills?

a. Yes ☐ b. No ☐

| | Number | Percentage |
|---|---|---|
| **a.** Yes | **28** | **93.33%** |
| **b.** No | **02** | **6.66%** |

**Table 5.44:** Rate of Students Who Think that Using Computers Will Help Improve Their Lexical Skills

As far as this question is concerned, students were asked if they think using computer technology can help boost their lexical skills. A number of 28 informants (93.33%) out of 30 believe that the integration of computer into their vocabulary learning would help improve their lexical skills. 02 students; however, think that the use of this technology would not help ameliorate their vocabulary knowledge.

**18.** If yes, is it helpful because:

| | Number | Percentage |
|---|---|---|
| **a.** It offers a quick access to information | **12** | **40%** |
| **b.** Provides a variety of sources | **08** | **26.66%** |
| **c.** It is funny and motivating | **07** | **23.33%** |

**Table 5.45:** The Reason Why Students Think Computers Will Improve Their Lexical Skills

Those who answered that they believe that technology especially computers can help solve their vocabulary issues were also asked to say why they think so. A number of 15 (40%) informants said that it offers them a quick access to information while a number of 08 participants (26.66%) said that they think that computers can help improve their vocabulary learning because it provides a variety of sources. 23.33% of our informants (07) stated that computers can be helpful because they are funny and motivating.

## 5.4. Summary of the Findings

The questionnaire directed to students targeted several points; vocabulary learning issues, vocabulary learning strategies and computerized vocabulary learning. The analysis and the interpretation of students' answers indicate that the majority of the respondents face difficulties with the writing skill which are mainly due to their poor lexical skills. When asked about which strategy they use in order to approach unfamiliar lexical terms, most of students claimed that they either use a dictionary; English-Arabic dictionary most of the time, or they ask their teachers or peers for an explanation. In addition to that, when students were asked about how often they use dictionaries to check up the meaning of unknown words, the majority of them answered that they sometimes use them while very few of them stated that they never make use of a dictionary to find the definition of unknown vocabulary.

Students' answers to questions related to computer assisted learning show that most of them use computer technology to help them in the different school subjects. Yet, as far as vocabulary learning is concerned, results reveal that computers are less used as a means for enhancing students' vocabulary knowledge. When asked about their favorite type of dictionaries; printed or electronic, almost all of them said that electronic dictionaries are their favorite because they provide an easy and quick access to information unlike printed ones. Students have also stated that the computer based application called " Google translator" is their best computer applications.

At the end of the questionnaires, our respondents were asked to say if they think that computers can help solve their vocabulary relates issues. While only few students said that applying computer technology in vocabulary instruction cannot help boost their lexical skills, the majority of them stated that they believe that computer use can help them overcome their vocabulary related problems because they offer them quick access t information in addition to the wide variety of helpful sources for vocabulary learning.

## 5.5. Correlation of the Results of the Two Questionnaires

The results from the analysis of the respondents' answers to the two questionnaires indicate that vocabulary causes some difficulties to both teachers and students. They also show that the respondents are considerably aware of the value of computer based applications in the process of vocabulary teaching/learning. The problem of vocabulary learning seems to be a persistent one no matter what teachers or students do to overcome the challenges met by instructors to explain a new vocabulary and by students to understand that word without going back to the mother tongue. Furthermore, the present research shows that most of the teachers, despite of their long experience in the teaching field, lack the required skills of manipulating the variety of computer based sources and their implementation for vocabulary instruction; instead they use the conventional ways of teaching new vocabulary like explaining it to their students.

Students' answers, on the other hand, show a certain degree of students' dependency on their teachers to give them the definition of the target word or its equivalent in their mother tongue which is most likely their preferred strategy of vocabulary exploration. As far as the role computer devices play in students' attempts to learn vocabulary, the respondents have indicated that the best and the easiest computer based application they use most of the time is "Google Translator". Still, when it comes to the use of any computer softwares for learning vocabulary, students appear to lack the basic skills for that.

As far as the part about task based teaching is concerned, most of teachers appear not to have a clear knowledge of what teaching with task -based principles refers to. Many teachers are familiar with competency based teaching as well as the PPP approach (Presentation, Practice and Production). Yet, as it is concluded from their answers, they sometimes try to

introduce new vocabulary using some authentic language presented through documentaries, videos, songs and others forms.

Therefore, the whole process of vocabulary teaching/learning should be reshaped. New strategies and tools have to be integrated in classrooms to facilitate teachers' job of introducing new vocabulary to students. Using computers is advantageous because it increases students' motivation towards vocabulary learning. Furthermore, thanks to the diverse types of media available, students will have extra chances of learning new words, their synonyms and antonyms without reference to their native language.

**Conclusion**

The results from the analysis of both teachers' and students' questionnaires helped us reveal significant information about the respondents struggles with the foreign language vocabulary. It also provided us with some answers as to teachers' and students' preferable ways of approaching unknown vocabulary as well as their attitudes towards using computer technology for vocabulary instruction. The respondents' answers to the questionnaires helped us spot the light on key weakness areas as far as computer assisted learning/teaching is concerned. It also led to some significant information as to what teachers and students need in order to have effective results in terms of teaching and learning new lexical items. This helped us to ensure that this study is worth investigating.

## Chapter Six

## Analysis of the Findings

# Chapter Six

# Analysis of the Findings

## Introduction

The current chapter presents an analysis of the pre-test and post-test results. It also attempts to provide some details about students' performance in both tests and checks whether their understanding and vocabulary knowledge have been improved or not.

## 6.1. The Pre-test

### 6.1.1. Aim of the Pre-test

The pre-test was designed with the aim of checking students' knowledge of some vocabulary before they come across them in the upcoming three units.

### 6.1.2. Description of the Pre-test

The test is made up of three sections; definitions, synonyms and opposites. The test includes 40 vocabulary expressions divided into three themes; ethics, food and astronomy. Students in the test were given options from which they had to pick up the right answer.

### 6.1.3. Analysis and Interpretation of the Pre-test Results

#### 6.1.3.1. The Experimental Group's Pre-test Results

| | **Number** | **Percentage** |
|---|---|---|
| **Correct Answers** | **182** | **27.03%** |
| **Wrong Answers** | **318** | **47.7%** |

**Table 6.46. The Experimental Group's Pre-test Results**

The analysis of the experimental group's pre-test results shows that the students failed to find the correct answers to most of the words in the test. The overall number of correct answers was 182 with a percentage of 27.03%. Among all the answers of the experimental

group, 318 was the number of wrong answers. This can be attributed to the fact that most of the vocabulary presented to the group is new to students.

#### 6.1.3.2. The Control Group's Pre-test Results

| | **Number** | **Percentage** |
|---|---|---|
| **Correct Answers** | **177** | **26.55%** |
| **Wrong Answers** | **330** | **49.65** |

**Table 6.47. The Control Group's Pre-test Results**

The performance of the control group in the pre-test was not different from that of the experimental group. As shown in the table above, the wrong answers outnumbered the right ones. Only 177 correct answers were given by the students in the control group , whereas the number of wrong answers was 330 which indicates that students struggled in the test because of the newness of the vocabulary.

## 6.2. Post-test

### 6.2.1. Aim of the Post-test

The results that will be obtained from the post-test will help us compare the experimental group's performance before and after the treatment.. In other words, the post-test results will give us insights into whether the use of the computer-mediated task-based approach helped students in the experimental group improve their lexical knowledge of the target vocabulary or not.

### 6.2.2. Description of the Post-test

The post-test was distributed to the groups six months after they had the pre-test. It was taken right after they have finished with the third unit of the program. Unlike the pre-test, the post-test was made up of four tasks (definitions, synonyms and opposites). The first task was divided into two sections; the first a text about corruption which included 08 gaps students

had to fill in with appropriate terms such as bribery, money laundering and others. As for the second section, it included a number of 04 sentences with missing words that students have to find using the provided definitions as in the first section.

The second task of the test was about synonyms. It was made up of 14 sentences with missing words and a set of 05 options. The students, then, were asked to pick up two items which are considered as synonyms. As for the last task, it was made up of six items and the participants were asked to find their opposites either by adding the prefix to the word or by giving a word of the opposite meaning.

### 6.2.3. Analysis and Interpretation of the Post-test Results

#### 6.2.3.1. The Experimental Group's Post-test Results

| | Number | Percentage |
|---|---|---|
| **Correct Answers** | **336** | **50.4%** |
| **Wrong Answers** | **277** | **41.55%** |

**Table 6.48. The Experimental Group's Post-test Results**

According to the obtained results and after the implelemntation of the treatement, the lexical performance of students from the experimental group became better as the number of correct answers was greater (336) than that of wrong answers (227). Students' increasing familiarity with the targeted vocabulary and the integration of computer-assisted task-base approach to vocabulary instruction influenced students' performance as shown in the table above.

#### 6.2.3.2. The Control Group's Post-test Results

| | Number | Percentage |
|---|---|---|
| **Correct Answers** | **139** | **20.85%** |
| **Wrong Answers** | **479** | **71.85%** |

**Table 6.49. The Control Group's Post-test Results**

The obtained results show that there is no big difference between the control and the group performances in the pre and the post tests. The number of wrong answers of the control group in the post-test exceeds that of the correct answers. This indicates a persistent weakness among the group's members in terms of identifying the appropriate lexical expressions.

### 6.3.The Experimental Group Achievements in the Vocabulary Pre-test

The table below presents the results obtained by the members of the experimental group in the pre-test. It precisely shows the number of correct answers obtained by each learnes in the test where they were asked to choose the appropriate answers from the options they were given. As presented in the table, the mean scores and standard deviations have been calculated.

To find the mean and the standard deviation of or sample, the following formula will be used: $\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{n} (xi-\mu)^2}$

1. The number one step is to work out the mean of the sample using the formula $\mu = \frac{X}{N}$ where X is the sum of the pre-test scores divided by the number of participants.
2. The number two step is what was referred to in the above formula as $(x_i-\mu)$, where for each number, we subtract the mean and square the results.
3. After that we find out the mean of those squared differences using the formula $\frac{1}{N}\sum_{I+1}^{N}(xi-\mu)$
4. The last step in this procedure is to find the square of the above results which is called "the variance": $\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{n} (xi-\mu)^2}$

- **Experimental Group's Achievements in the Vocabulary Pre-test**

| **Students** | **X** | **( X-$\bar{X}$)** | **(X-$\bar{X}$)²** |
|---|---|---|---|
| **1** | 18 | 3.74 | 13.98 |
| **2** | 10 | -4.26 | 18.14 |
| **3** | 13 | -1.26 | 1.58 |
| **4** | 18 | 3.74 | 13.98 |
| **5** | 20 | 5.74 | 32.94 |
| **6** | 08 | -6.26 | 39.58 |
| **7** | 10 | -4.26 | 18.14 |
| **8** | 11 | -3.26 | 10.62 |
| **9** | 13 | -1.26 | 1.58 |
| **10** | 15 | 0.74 | 0.54 |
| **11** | 22 | 7.74 | 59.90 |
| **12** | 15 | 0.74 | 0.54 |
| **13** | 11 | -3.26 | 10.62 |
| **14** | 17 | 2.74 | 7.50 |
| **15** | 13 | -1.26 | 1.58 |
| **N= 15** | X= $\frac{\sum x}{N}$ =$\frac{214}{15}$ =14.26 | | $\mu=\frac{1}{N}\sum_{i=1}^{n}(xi-\mu)^2$ =$\frac{1}{15}$ ×230.82=15.38 |

**Table 6.50:** Experimental Group's Achievements in the Vocabulary Pre-test

$\sigma = \sqrt{15.38}$ = 3. 92

The table above displays the pre-test scores of each informant in the experimental group. Most of students' results varied between 8 and 22 correct answers out of 40. These results show that students of this group have, to some extent, succeeded in giving the correct answers at certain points which can mainly be attributed to their familiarity with some of the expressions included in the test in addition to the nature of the test itself. It was an MCQ test

where students were given a number of options which is believed to have helped them exclude certain options and opt for the correct ones.

### 6.4.Experimental Group's Achievements in the Vocabulary Post-test

| Students | X | $(X-\bar{X})$ | $(\bar{X}-X)^2$ |
|---|---|---|---|
| 1 | 22 | 02 | 04 |
| 2 | 11 | -09 | 81 |
| 3 | 19 | -01 | 1 |
| 4 | 15 | -05 | 25 |
| 5 | 07 | -13 | 169 |
| 6 | 32 | 12 | 144 |
| 7 | 26 | 06 | 36 |
| 8 | 25 | 05 | 25 |
| 9 | 13 | -07 | 49 |
| 10 | 34 | 14 | 196 |
| 11 | 31 | 11 | 121 |
| 12 | 24 | 04 | 16 |
| 13 | 18 | -02 | 04 |
| 14 | 08 | -12 | 144 |
| 15 | 15 | -05 | 25 |
| N= 15 | M= $\frac{\sum x}{N}$ =$\frac{300}{15}$ =20 | | $\mu=\frac{1}{N}\ \sum_{i=1}^{n}(xi-x)$ $\mu=\frac{1}{15}\ \sum_{i=1}^{n}\times\ 1040$ =69.33 |

**Table 6.51:** Experimental Group's Achievements in the Vocabulary Post-test

$\sigma\ = \sqrt{69.33}\ = 8.32$

The above table represents the scores obtained by the experimental group participants in the vocabulary post-test. Students' performance as far as the targeted expressions are concerned has improved as compared to the results of the pre-test. The number of correct answers as shown by answers of individual participants has increased considerably for the majority of the informants. Although the nature of the post-test was more challenging

compared to that of the pre-test, results were very promising. Students did not have clued for most of the targeted expressions and yet, most of them were able to give correct answers.

### 6.5.Comparison of the Experimental Group's Pre-test and Post-test Results

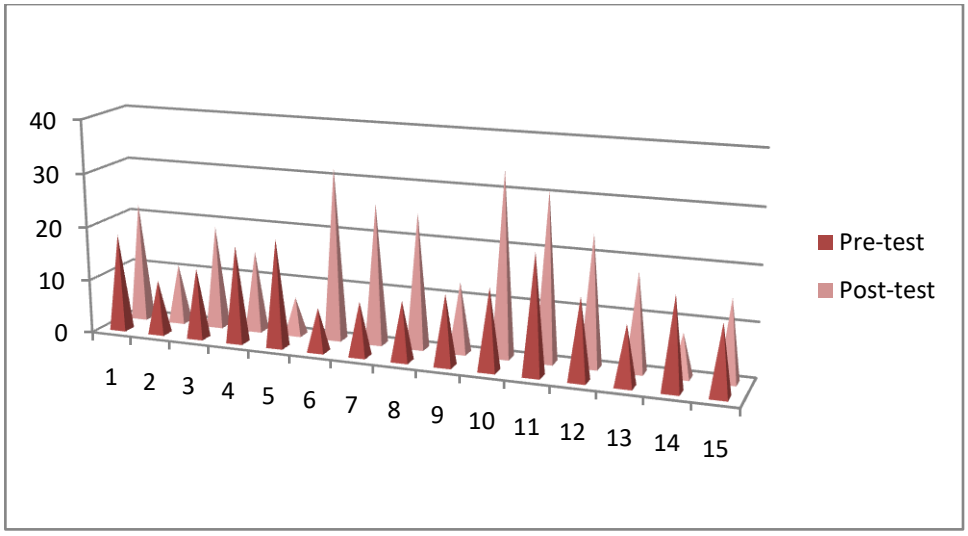


**Figure 6.8: Comparison of the Experimental Group's Pre and Post-tests Results**

- **Comparison of The Experimental Group's Pre and Post-test Results**

| N | Test | Means | Standard Deviation |
|---|---|---|---|
| 15 | **Pre-test** | 14.26 | 3.92 |
| | **Post-test** | 20 | 8.32 |
| | **Difference** | 5.74 | 4.4 |

**Table 6.52:** Comparison of the Experimental Group's Pre and Post-test Results

As shown in table (6.208) and figure (6.8), there are noticeable changes in informants' results. The results reveal that there is a progress in students' lexical knowledge. The graph show that most of students' performance has improved and the number of correct answers has increased. Also, as displayed in the table above, there is a considerable difference between the mean of the post-test and that of the pre-test. This progress is due to the treatment members of the experimental group received along the six months of the experiment.

### 6.6.Control Group's Achievements in the Vocabulary Pre-test

| Students | X | ( X-$\overline{X}$) | (X-$\overline{X}$)² |
|---|---|---|---|
| **1** | 19 | 4.07 | 16.56 |
| **2** | 14 | -0.93 | 0.86 |
| **3** | 12 | -2.93 | 8.58 |
| **4** | 09 | -5.93 | 35.93 |
| **5** | 19 | 4.07 | 16.56 |
| **6** | 16 | 1.07 | 1.14 |
| **7** | 16 | 1.07 | 1.14 |
| **8** | 22 | 7.07 | 49.58 |
| **9** | 14 | -0.93 | 0.86 |
| **10** | 12 | -2.93 | 8.58 |
| **11** | 12 | -2.93 | 8.58 |
| **12** | 15 | 0.07 | 0.49 |
| **13** | 16 | 1.07 | 1.14 |
| **14** | 16 | 1.07 | 1.14 |
| **15** | 12 | -2.93 | 8.58 |
| N=15 | M= $\frac{\sum x}{N}$ =$\frac{224}{15}$ =14.93 | | μ= $\frac{1}{N}$ $\sum_{i=1}^{n}(xi - x)$ =$\frac{1}{15}$ $\times 160.12 = 10.67$ |

**Table 6.53:** Control Group's Achievements in the Vocabulary Pre-test

$\sigma = \sqrt{10.67} = 3.26$

The above table shows the scores obtained by each informant of the control group and also displays the mean of the whole sample (14.93) with a standard deviation of 3.26. As indicated by the above results, students in the control group performed considerably well in the test which is justified by the number of correct answer obtained by each participant. This could be partially due to the students' familiarity with some of the lexical items presented in the test. However, participants' obtained scores are far less than the overall number of

targeted expressions which could mainly a result of the newness and the complexity of certain expressions.

### 6.7.Control Group's Achievements in the Vocabulary Post-test

| **Students** | **X** | **$(X-\overline{X})$** | **$(X-\overline{X})^2$** |
|---|---|---|---|
| 1 | 06 | 1.06 | 1.12 |
| 2 | 03 | -4.06 | 16.48 |
| 3 | 07 | -0.06 | 0.36 |
| 4 | 12 | 4.94 | 24.40 |
| 5 | 09 | 1.94 | 3.76 |
| 6 | 08 | 0.94 | 0.88 |
| 7 | 10 | 2.94 | 8.64 |
| 8 | 08 | 0.94 | 0.88 |
| 9 | 02 | -5.06 | 25.60 |
| 10 | 02 | -5.06 | 25.60 |
| 11 | 11 | 3.94 | 15.52 |
| 12 | 06 | -1.06 | 1.12 |
| 13 | 05 | -2.06 | 4.24 |
| 14 | 09 | 1.94 | 3.76 |
| 15 | 08 | 0.94 | 0.88 |
| N=15 | M= $\frac{\sum x}{N}$ =$\frac{106}{15}$ =7.06 | | $\mu=\frac{1}{N}\ \sum_{i=1}^{n}(xi-x)$ $\mu=\frac{1}{15}\sum_{i=1}^{n}\times 133.24$ =8.88 |

**Table 6.54:** Control Group's Achievements in the Vocabulary Post-test

$\sigma = \sqrt{8.88}$ = 2.97

Students' performance in the post-test show that the majority of participants failed in finding the right answers of certain questions. The results have varied between 03 for the lowest score and 12 for the best. The overall mean as shown in the above table is 7.06 with a standard deviation of 2.97. This indicates that informants of this group are still struggling with

their lexical problems. These results can also be attributed to the method of vocabulary instruction that has been used in the classroom that could not help them improve their lexical skills.

### 6.8.Comparison of the Control Group's Pre and Post-tests Results

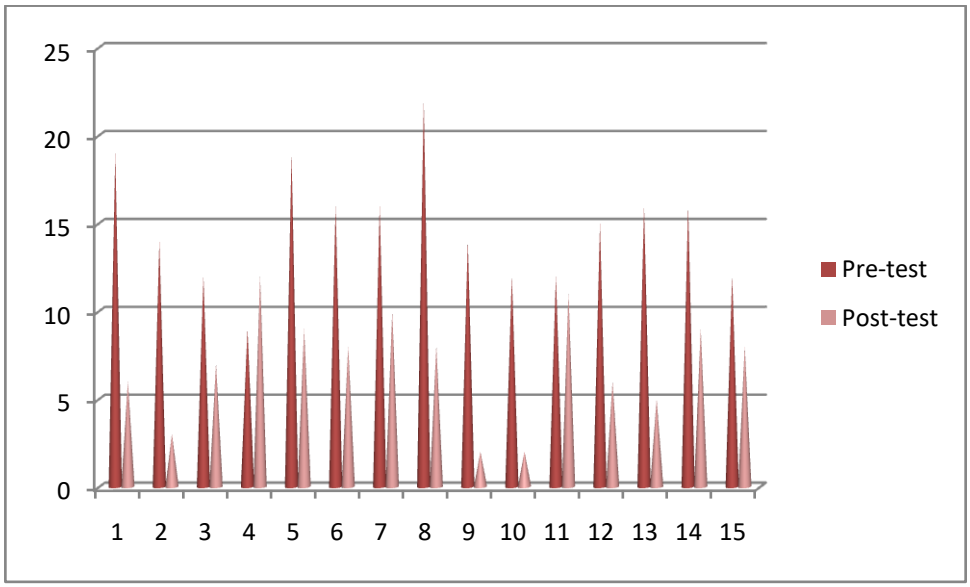


**Figure 6.9: Comparison of the Control Group's Pre-test and Post-test Results**

- **Comparison of the Control Group's Pre-test and Post-test Results**

| N | Tests | Means | Standard Deviation |
|---|---|---|---|
| **15** | Pre-test | 14.93 | 3.26 |
| | Post-test | 7.06 | 2.97 |
| | Difference | -7.87 | -0.29 |

**Table 6.55:** Comparison of the Control Group's Pre-test and Post-test Results

A comparison of scores obtained by the control group's informants in both the pre and the post-tests reveal that participants' performance in the pre-test was better than that in the post-test; the number of wrong answers has considerably increased in the post-test. This can partially be attributed to the difficulty of the post –test. Most important of all, using traditional manners in teaching unknown vocabulary ,as it was the case with the control group, did not

have any positive impacts on students' performance as they were still lacking the necessary knowledge of certain expressions.

### 6.9.Comparative Evaluation between the Experimental and the Control Groups' Achievements in the Pre and the Post-tests

| Experimental Group | | | | Control Group | | | |
|---|---|---|---|---|---|---|---|
| **N** | **Tests** | **Means** | **SD** | **N** | **Tests** | **Means** | **SD** |
| **15** | Pre-test | 14.26 | 3.92 | **15** | Pre-test | 14.93 | 3.26 |
| | Post-test | 20 | 8.32 | | Post-test | 7.06 | 2.97 |
| | Difference | 5.74 | 4.4 | | Difference | -7.87 | -0.29 |

**Table 6.56:** Comparative Evaluation between the Experimental and the Control Groups' Achievements in the Pre-rest and the Post-test

We can notice from the results displayed in the table above that both the experimental and the control group obtained nearly the same results in the pre-test with a mean of 14.26 for the experimental group and 14.93 for the control group. This entails that the performance of the two groups before teaching them the targeted vocabulary is similar and that students share approximately the same background knowledge of the terms presented in the pre-test. However, significant changes have been recorded after the exposition of the experimental group to the treatment which was the use of the computer mediated task based approach to vocabulary instruction. Students moved from a mean of 14.26 in the pre-test to 20 in the post test with a difference of 5.74. Whereas, the control group was not exposed to any special treatment; vocabulary instruction took place with traditional lexical teaching ways and no technology was implemented. A slight decrease in the results of the latter has been recorded with a mean of 7.06 in the post test which is far less than that of the pre-test which was 14.93.

A difference in means scores between the experimental group and the control group in the post-test is 12.94 which indicates that the difference between the two groups is significant.

The considerable progress of the participants in the experimental group in the area of vocabulary learning confirms the assumptions of this research. It proves the positive impacts of the computer-mediated task based approach when in vocabulary instruction.

### 6.10. Hypothesis Testing (inferential statistics)

After having described participants' performance in both the pre and the post tests using descriptive analysis, a statistical test is the next step of the research. In order to examine the validity of the suggested hypotheses, we opted for a t-test in order to compare the means of the pre and the post tests. A t-test is one of the most frequently used procedures in statistics. Therefore, two types of t-tests are distinguished; an independent t-test/ unpaired test and a dependent t-test/ paired test. As for the former, Macky and Gass (2005, p.273) state, is used with two different group; an experimental and a control group. The latter; however, is used with the same group being tested before and after.

The independent t-test is the type of t-test appropriate for our study because we have used two different groups with two different vocabulary teaching methods. The experiment in hand is one-tailed since we are attempting to test the effectiveness of the computer-mediated task based approach in vocabulary teaching/learning. The aim behind using a statistical test is to find out whether the obtained results could have taken place under the null hypothesis. If the likelihood of this event to happen is less than or equal to 0.05, the null hypothesis then is rejected in favor of the alternative hypothesis.

The aim of this research is to confirm the alternative hypothesis (H1) which means that there is a noticeable difference between the pre-test and the post-test means, and to reject the null hypothesis (H0) which entails that there is no significant difference between the pre-test and the post-test scores. Therefore, the present research attempts to confirm that the

implementation of the computer-mediated task based approach for vocabulary teaching/learning as a treatment in the experimental group is effective. To do this, we have opted for:

- The independent sampled test for hypothesis checking.
- We used a p-value of 0.05 which entails that 5% of the results are due to chance while 95% of the results is sure. A small p-value indicates that the null hypothesis is unlikely to be true and if it is even smaller, the rejection of the null hypothesis is certain.
- Degree of freedom appropriate for the test is $N_1+N_2-2$

The following procedure will be used to calculate the independent test:

**1.** Calculate the two samples means $\overline{X_1}$ , $\overline{X_2}$ using the formula

$\bar{x}= \frac{\sum x}{N}$

**2.** Calculate the two samples variances $\overline{S_1}, \overline{S_2}$ using the formula

$S^2 = \frac{\sum x}{N} - \overline{X}^2$

**3.** Substitute the values $\overline{X_1}, \overline{X_2}, S_1, S_2, N_1, N_2$ in the computational formula for t

$t(N_1+N_2-2) = \frac{(X1-X2)\sqrt{(N1+N2-2)(N1N2)}}{\sqrt{(N1S12+N2S22)(N1N2)}}$

- **Hypothesis Testing**

The alternative hypothesis suggested in this research is:

**$H_1$**= Third year secondary school scientific stream students' vocabulary learning would be improved if they were taught using computer mediated task-based approach

**The null hypothesis**

**$H_0$**= Third year secondary school scientific stream students' vocabulary learning would not be improved if they were taught using computer mediated task-based approach.

$\alpha$=0.05

**Degree of freedom**: $n_1+n_2-2 = 15+15-2 = 28$

Before calculating the t-test, we have first to find the means and the squared means in order to calculate the differences between the pre-test and the post-test means of the control group and the experimental group.

| **Students** | **Experimental Group $X_1$** | **Control Group $X_2$** | **$\bar{X}_1$** | **$\bar{X}_2$** |
|---|---|---|---|---|
| 1 | 22 | 06 | 484 | 36 |
| 2 | 11 | 03 | 121 | 09 |
| 3 | 19 | 07 | 361 | 49 |
| 4 | 15 | 12 | 225 | 144 |
| 5 | 07 | 09 | 49 | 81 |
| 6 | 32 | 08 | 1024 | 64 |
| 7 | 26 | 10 | 676 | 100 |
| 8 | 25 | 08 | 625 | 64 |
| 9 | 13 | 02 | 169 | 04 |
| 10 | 34 | 02 | 1156 | 04 |
| 11 | 31 | 11 | 961 | 121 |
| 12 | 24 | 06 | 576 | 36 |
| 13 | 18 | 05 | 324 | 25 |
| 14 | 08 | 09 | 64 | 81 |
| 15 | 15 | 08 | 225 | 64 |
| | $\sum x_1=300$ | $\sum x_2 = 106$ | $\sum x^2_1 = 7040$ | $\sum x^2_2 = 882$ |

**Table 6.57**: The Experimental and the Control Groups' Scores Differences

- **Calculation of the T-test**

$\bar{X}_1 = \frac{\sum x_1}{N_1} = \frac{300}{15} = 20$

$\mathbf{S_1}^2 = \frac{\sum {x_1}^2}{N_1} - \overline{X_1}^2 = \frac{7040}{15} - 20^2 = 69.33$

$\overline{\mathbf{X_2}} = \frac{\sum x_2}{N_2} = \frac{106}{15} = 7.06$

$\mathbf{S^2_2} = \frac{\sum {x_2}^2}{N_2} - \overline{X^2}_2 = \frac{882}{15} - 7.06^2 = 8.96$

$$t(N_1 + N_2 - 2) = \frac{(X1 - X2)\sqrt{(N1+N2-2)(N1N2)}}{\sqrt{(N1S12+N2S22)(N1N2)}}$$

$$= (20-7.06)\frac{\sqrt{(15+15-2)(15\times15)}}{\sqrt{(15\times69.33+15\times8.96)(15+15)}}$$

$$= 12.94\frac{\sqrt{28\times225}}{\sqrt{1174.35\times30}} = \frac{12.94\times79.37}{187.69}$$

**t** =5.47

**Critical value**= 1.70.

- **Calculating t-test Value**

| N | Tests | Mean | SD | T- test value | Alpha level |
|---|---|---|---|---|---|
| **15** | Pre-test | 14.26 | 3.92 | 5.47 / / | 0.05 |
| | Post-test | 20 | 8.32 | | |
| | Difference | 5.74 | 4.4 | | |

**Table 6.58**: t-test Value

After having calculated the t-test value as shown in the above table, we found that there is a considerable difference in students' vocabulary performance of t (5.47) which is greater than the critical value (1.70). These results affirm that students' lexical knowledge has improved after receiving the treatment which proves to be effective in terms of increasing students' lexical knowledge and skills. Therefore, as the above findings reveal, the null hypothesis was rejected and the alternative hypothesis accepted.

### 6.11. Summary of the Quantitative Findings

The aim behind carrying out the research in hand was to test the validity of the suggested hypothesis about the impact of implementing computer-mediated task-based approach on improving students' lexical performance. Considering the results obtained from both the pre-test and the post-test, we can conclude that the above mentioned hypothesis was accepted. The results we got from the analysis of students' pre-test answers, we noticed an absence of the proper vocabulary knowledge related to the three basic units the sample in hand was supposed to learn along the school year which are namely; Ethics in Business, Safety First and Astronomy. The two groups included in the study; the control and the treatment group, were taught using two different approaches; a traditional approach and a computer-mediated task-based approach. The experimental group, being taught with the last approach, scored better than the control group in the post-test. The implementation of the computer-mediated approach to vocabulary teaching was, to a considerable extent, effective. For more precision, students who acquired vocabulary in task-based class aided with computer technology showed better chances of recalling and using vocabulary they were taught. Whereas, the control group's scores in the post-test revealed no different as their performance has reiterated and it was lower than their score in the pre-test.

# General Conclusion and Recommendations

Vocabulary learning has always been an issue for foreign language students. In secondary school settings, students are always asked to write paragraphs and essays about the different subjects they deal with in their school curriculum. Yet, most of these students are inhibited by their poor lexical size and sometimes get frustrated for the insufficient results led out by their endless attempts to increase their vocabulary knowledge.

In fact, as mentioned in this research, several attempts were made by scholars to find ways in order to improve students' vocabulary learning. therefore, the present study was conducted with the aim of investigating the influence of using the computer mediated task-based approach on vocabulary learning of secondary school students. It highlighted the basic lexical issues encountered by these students in their process of learning English as a foreign language and the strategies used by both teachers and students to overcome them.

The study aimed at showing the impact of computer-assisted language learning on improving the process of teaching vocabulary. Furthermore, it shed light on key computer-based strategies students are using to learn new vocabulary. Moreover, this research presented the possible ways through which the synergy of computer assisted language learning and the task-based approach can help facilitate vocabulary teaching and learning through the implementation of softwares and vocabulary quizzes.

The possible contribution of merging up the fields of computer assisted language learning and the task-based approach was first addressed in the theoretical part. In the first chapter, we talked about computer assisted language learning and its role in improving second language learning. After that, the combination of the task-based approach and computer mediated language learning was explored through the set of studies which have proven its

efficacy. The last chapter provided an overview of the main strategies used by teachers and students to overcome lexical issues. It also discussed the findings revealed by some studies about the role of computer mediated task-based approach in improving students' vocabulary learning. The practical part, however, was mainly devoted to the analysis of the findings of the experiment along with those of the questionnaires.

The conduction of this quasi experimental research required the use of different data collection tools (triangulation of methods) including teachers and students questionnaires in addition to pre- and post- tests. The aim behind teachers' and students' questionnaires was to analyze the situation to confirm that this research is worth conducting. They also aimed at exploring the strategies being used by high school teachers to introduce new lexical items as well as the students' ways of learning new words outside the school. The pre-test, however, aimed at knowing the students' level in vocabulary. As for the post-test, it helped reveal whether the treatment used in the experiment was effective or not.

The analysis of the questionnaires results proved that the problem of vocabulary existed among high school students. Teachers said that their students' poor lexical knowledge stands on the way of successful language learning. As for the implementation of computer and any other sort of technology to teach new vocabulary, the teachers answered that they find difficulties in implementing such instructional tool due to the lack of appropriate computer skills in addition to the unavailability of these devices. Students, on the other hand, stated that vocabulary is their biggest obstacle. Their answers showed that the strategies they use in order to find the meanings of unknown words were 'Google translator', bilingual dictionaries, asking peers and teachers. According to the findings, students, like teachers, need to be trained in computer use and how to implement the different computer strategies and softwares to improve vocabulary learning.

The analysis of the pre-test results showed that most of the students found difficulties guessing the correct answers even when they were given clues to help them find the expected answer. In addition to that, students in both the control and the experiment groups showed a limited knowledge of the group of vocabulary that was given in the test. The pre-test results confirmed that students have problems with vocabulary learning. This is mainly due to the absence of the appropriate vocabulary teaching/learning strategies.

Based on the findings brought by the experiment which investigated the role of computer-mediated task-based instruction in solving students' lexical problems, we have found that the integration of this new way of teaching can help ameliorate students' vocabulary level. The comparison of students' scores in the pre-test and the post-test allowed us to examine the extent to which the integration of computer-mediated task-based approach in vocabulary learning can be effective. The study of the control groups' results in the pre and the post-tests showed that their performance before the experiment was better than after. A slight decrease in the results has been recorded with a mean of 7.06 on the post-test which is far less than that of the pre-test which was 14.93. However, a comparison of the experimental group's results before and after the treatment indicated that there was a clear improvement in the students' lexical performance as the unpaired t-test value of 5.74 is greater the critical value ( 1.70) for twenty- eight degrees

- **Recommendations**

. Learning English vocabulary with computer based quizzes and other applications makes students motivated to meet new vocabulary. In addition to that, teaching with the task-based approach engages students in authentic language practices. Subsequently, the combination of these two fields can help students overcome their lexical problems.

The implication of computer-mediated task-based approach into foreign language teaching and to vocabulary learning can help, in many ways, foster and improve the quality of teaching and learning. The implementation of such an approach increases students' motivation towards vocabulary learning, allows for less teacher intervention, provides students with authentic and more real-life language use and offers opportunities for group work and collaboration.

- **Increasing Students' Motivation**

A language classroom that makes use of computer technology and adapts the task-based framework to language teaching offers its students a positive learning atmosphere; one which is less stressing and more encouraging. Both the task-based approach and computer-mediated language learning improve the quality of the materials to be taught in foreign language classes by making them more authentic which makes language learning a fun process. Moreover, the application of computer -mediated task-based approach to teach English language vocabulary helps lessen the tension that usually comes with learning a new vocabulary. As a result to the reactive quizzes, hyperlinked texts as well as CMC tools, teachers can offer their students a desirable experience of learning a new vocabulary through which they would be motivated to engage in.

- **Less Teacher Intervention**

With the currently applied approaches and methods, teachers try to get students depend on themselves in their learning. Still, students' dependence on their teachers cannot be fully realized. The teacher has to be there to provide feedback and to guide his class in tasks by giving them instructions and correcting their wrong answers. However, the implementation of computer-mediated task-based approach is likely to reduce teachers' intervention and increases students' autonomy. This is mainly due to the fact that most of students' interaction

is going to be with computers. As far as vocabulary learning is concerned, teachers can create a set of interactive vocabulary quizzes with the use of PowerPoint. Students, then, will not have to wait for their teachers' feedback. With one click, the computer will automatically tell if the answer is correct or wrong and shows the corrections. In addition to that, learning in such settings will allow students' collaboration and they will work on solving tasks together without calling out their teachers.

- **Authentic Language**

Learning with computer technology does not only add fun to the learning process; it provides countless authentic language materials. Students will benefit from a limitless access to authentic language sources. For instance, a text about any given topic can be enhanced by adding hyperlinks that enable students to have access to other sources to expand their knowledge. Moreover, if a text contains any difficult vocabulary, the student does not have to ask for the teachers' explanation; he can rather click on the hyperlinked word and he can instantly get a picture presenting the vocabulary or he can simply get the definition of the word with some examples.

- **Allows Collaboration and Group Work**

Group work is more possible through the integration of computer devices. Furthermore, teaching English through the task-based approach gives students opportunities to work with their fellow peers on solving multiple tasks. It encourages interactive communication and pushes them to do tasks using a specific vocabulary related to the language subject they are dealing with. These advantages, therefore, are multiplied if the task-based approach is merged up with computer-mediated learning. In addition to that, learning vocabulary in computer mediated task-based settings will be more effective because it reduces tension and increases

fun. In other words, learning vocabulary in friendly atmosphere with someone who shares the same level of lexical knowledge will be more helpful.

- **Encourages Vocabulary Learning Outside School Settings**

Computer-mediated task-based approach does not only motivate students towards vocabulary learning and increases their participation in the class. It also encourages them to try learning new vocabulary when they are outside school. Students being born in this era when massive digital changes took place cannot accept, to a large extent, learning information with traditional ways like digital migrants were taught. The point is that when students are taught using computers, this is going to encourage outside-school-learning. Students will rely on their digital skills of using computers,tabs or phones to learn new words either by using online dictionaries, Google translators or the set of vocabulary quizzes available online. They will never be like empty vessels waiting to be filled or fed by their teachers. They will come to the classrooms ready to meet the lexical challenges they encounter while studying English. Technology puts at students' disposal learning materials that once were unavailable except for teachers.

- **Enhances Vocabulary Retention**

Among the ways that can boost the functions of memory is the use of coloured images and sounds like music. Vocabulary retention can be better if learning takes place in contexts where words are presented along with pictures or videos. Similarly, learning vocabulary with the computer-mediated task-based approach does not only motivate students to learn new lexical items but it also makes their retention of the vocabulary easier. For instance, creating interactive vocabulary quizzes with the use of Powerpoint helps students remember the words that were presented in the quiz, especially that thses quizzes are designed to help the students

acoorplish the tasks on their own or with the assistance of their peers. As mentioned earlier, the less interference of teachers makes students responsible of their own learning the thing that doubles their chances of learning and using vocabulary successfully.

- **Iproves Teachers' Professional Development**

The use of task-based principles to teach a foreign language and especially vocabulary gives teachers a variety of ways to present the materials in a way that is more efficient. Task-based approach encourages authentic language use which is better attained by getting resources from the real life. Using the task-based approach helps teachers bring the appropriate materials to their students that can guatantee better scores. The implementation of technology, on the other hand, can also give the right type of assistance to teachers owing to the unlimited applications, sofwtares and ideas it offers them to make their jobs easier. Teachers' biggest concern is how to make tasks and texts comprehensible and easier to answer by their students. Sticking to the traditional ways of teaching vocabulary cannot give teachers the resuls they also expect. That is why using the computer-mediated task-based approach is of the best ways of improving teacehrs' professional development.

- **Limitations to the Implemntation of Computer-lediated Task-based Approach in Vocabulary Instruction**

Despite the answers provided to the set of questions and issues mentioned in this study and which make a good basis for future research, some limitations have been identified. We should; therefore, refer to these limitations in order for future research to provide the proper answers to the set of issues which were not be pursued in this inquiry.

- **The Limited Time of the Experiment**

First of all, this study was carried out in a six months period which did not allow us to get enough data to test the suggested hypothesis. Extra time; therefore, was needed in order to be able to prove the extent to which the integration of computer-mediated task based approach is effective for vocabulary instruction. In addition to that, some students in the experimental group had problems with using computers as a result to their unfamiliarity with them. That is why, time was needed in order to train these students of how to use computers and work with the computer mediated quizzes and softwares. If enough time was found to prepare students, results would have been much better.

- **Scarcity of Research into the Role of Computer-mediated task-Based Approach on Vocabulary Teaching**

The most important limitation which we should emphasize on is the absence of adequate research talking about computer-mediated task-based vocabulary learning. Very little studies have addressed the combination of task-based approach and computer assisted language learning and their relationship with vocabulary learning. Due to the newness of research on computer-mediated task based instruction, very little studies were carried to investigate its impact on vocabulary learning.

- **The Poor Lexical Level of Some Students**

Background knowledge is necessary to build new level of information related to any field. Integrating computer in lexical instruction was supposed to facilitate learning and reduce students' dependence on the teacher. Unfortunately, this was not the case at some points of the study. Few students were unable to understand some instructions or even guess the information conveyed through some statements. That is to say, in order for students to be

able to distinguish between ethical and unethical practices from the clues provided to them in some tasks, they were supposed to guess correct answers from the hints. Still,this was difficult for them because they lacked the knowledge of even the simplest words.

- **The unavailability of Enough Computer Devices**

The core of this experiment was to prove the role of computer-mediated task-based approach in improving students' lexical knowledge. This required the use of computers to facilitate the research. However, the researcher managed to get only few computer devices which meant that students had to work in groups of at least three participants. Results could have been better if students were able to work in groups of two participants. That would have helped them increase their focus and subsequently improve vocabulary learning and retention.

- **Lack of the Approparite Technology Skills**

Lack of computer training of both teachers and students caused some difficulties. Students unfamiliar with computer based quizzes and hyperlinked texts could hardly participate in the tasks with their peers and sometimes they felt isolated. However, this was the case of only few students. With some instructions and guidance on the part of the teacher, these students could overcome their problems with computer use.

- **Implications for Future Research**

Several conclusions can be drawn based on the set of limitations and issues which have been identified in the study. To start with, extra studies should be conducted in order to have enough data to support the integration of the computer-mediated task-based approach in vocabulary instruction. As it was mentioned earlier in the research, studies done in this field

focused mainly on oral skills that is so say the role of computer-mediated task-based instruction in oral communication and very little dealt with its relationship with vocabulary teaching.

Approaches to vocabulary teaching must be reviewed and adapted so as to fit the needs of students most of whom were born in the digital era. Subsequently, teachers of secondary school level should think of considering the task-based approach as an alternative to the traditional language teaching approaches they are familiar with. They; therefore, should use such an approach or present new vocabulary and also train their students to work in such settings. In this way, students will have extra chances of learning through authentic language use

Training in computer use is necessary to make computer based instruction more common in schools. Therefore, both teachers and students need a special training to develop their computer skills. Most importantly, teachers should learn about how to effectively integrate technology in task-based classrooms and how to use this combination to teacher their classes the new vocabulary.

Finally, vocabulary is of a paramount importance and so effective learning strategies should be integrated. Computer-mediated task-based approach offers good learning settings that would help effective vocabulary instruction. Students will be engaged in tasks that involve authentic language which is presented through computer technology and this would subsequently double their chances of learning and recalling target vocabulary.

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# Appendices

## Appendix One

## Teachers' Questionnaire

***Technology mediated task-based approach***

Task-based approach is an approach to language teaching which aims at teaching language aspects such as vocabulary by engaging students in real life tasks and by making use of authentic language materials like newspapers, videos, web articles… Technology mediated task based approach; therefore, is an attempt to teach language points through the integration of technology (computers) into task-based lessons

***Dear teacher,***

You are kindly requested to fill in this questionnaire which is an attempt to gather information needed for the accomplishment of a doctoral thesis. We direct it to investigate about issues related to vocabulary learning/teaching and the role played by computer aided task-based approach in improving vocabulary teaching/learning. We would be so grateful if you would sincerely answer the following questions, so please, give as precise answers as you can. Be sure that the answers you will provide will certainly remain confidential and will only be used for research purposes. Please, put a tick "√" in the appropriate box, give a full answer whenever necessary, and justify your answer wherever it is needed. Thank you for your time and for your collaboration.

**Ms.** Aisha REFFAS.

**Section One:** Teaching Experience

**1.** How many years have you been teaching in secondary school ?.....years

**2.** What level (s) have you been teaching?

**a.** 1st level

**b.** 2nd level

**c.** 3rd level.

**3.** Which teaching method(s) are you acquainted with?

……

……

**Section Two:** Vocabulary Teaching/Learning

**4.** Do your students get motivated when you ask them to write something in English?

**a**.Yes ☐ **b.** No ☐

**5.** Which of the following areas causes a problem to your students when writing in English?

**a.** Grammar ☐ **b.** Vocabulary ☐ **c.** Spelling ☐

**6.** Do you present new words in every lesson?

**a.** Yes ☐ **b**. No ☐

**7.** How do you teach new vocabulary in your class?

**a.** You provide your students with the definition ☐

**b.** You give the equivalent of the target word in Arabic ☐

**c.** You present it in context and let them guess the meaning by themselves ☐

**8.** How do you rate your students' vocabulary knowledge/use?

**a.** Very High ☐ **b**. Average ☐ **c.** Low ☐

**9.** To what extent does your students' vocabulary knowledge influence the quality of their writing?

**a.** To a large extent ☐ **b.** To a some Extent ☐

**10.** Do you make a kind of needs analysis to know about your pupils' needs and learning styles to teaching vocabulary?

**a.** Yes ☐ **b**. No ☐

**11.** …….

**12.** How often do you examine your students' lexical development?

**a.** Always ☐ **b**. Often ☐ **c.** Never ☐

**13.** Which activities do you use to consolidate lexical items?

**a.** Word association.☐

**b.** MCQ activities.☐

**c.** Vocabulary games☐

**d.** Fill in the gaps. ☐

**e.** Matching words with definitions/synonyms. ☐

**Section Three:** Computer -Assisted Vocabulary Teaching.

**14.** Do you use technology to present new vocabulary to your students?

**a.** Yes ☐ **b**. No ☐

**15.** Say why.....

**16.** Have you ever used a computer-based vocabulary software in your class?

**a.** Yes ☐ **b**.No ☐

**17.** Do you allow your students to use mobile phones or tabs to check unknown words?

**a.** Yes ☐ b. No ☐

**18.** How do you think technology; especially computer, is going to influence your teaching of vocabulary?

……

……

**19.** Are you familiar with any computer-based vocabulary strategy or software?

**a.** Yes ☐ **b**. No ☐

**20.** According to you, what are the factors that can hinder the successful integration of technology in vocabulary instruction?

**a.** The unavailability of computer devices ☐

**b.** Absence of appropriate computer knowledge and training. ☐

**c.** Time restriction. ☐

**Section Four**: Task-Based Vocabulary Teaching /Learning

**21.** While presenting new vocabulary, how often do you try to teach them by referring students to real life situations?

**a.** Always ☐ **b.** Sometimes ☐ **c**. Never ☐

**22.** Do you assign your students to communicative tasks where they are asked to work out solutions to a given problem?

**a.** Yes ☐ **b**. No ☐

**23.** Do you find that your students' vocabulary level inhibits the successful accomplishment of tasks you assign?

**a.** Yes ☐ **b**. No ☐

**24.** Which task-based vocabulary teaching activities you often use in your class?

a. Listening based activities (song, videos, documentaries..) ☐

b. Speaking based activities (story knitting, picture talk…) ☐

c. Reading based activities (newspaper, short stories…) ☐

d. Writing based activities( jumbled letters, word chain ☐

e. Have you ever used technology to support the above task-based vocabulary teaching activities?

**a.** Yes ☐ **b.** No ☐

**25.** Do you think that the implementation of computer technology into task-based vocabulary instruction will help improve students' lexical abilities ?

**a.** Yes ☐ **b**. No ☐

Say why ……

**26.** How do you think that computer mediated task-based instruction is going to influence the way you teach vocabulary in your class?

……

……

***Thank you for your collaboration***

*Appendix Two*

# Students' Questionnaire

**Dear students,**

You are kindly asked to answer this questionnaire. Your answers will help in the preparation of a research work. Please, read every question carefully then answer by ticking (√) the answers you think appropriate or by providing full statements**.**

**Section one:** English learning

**1.** How much do you enjoy studying English?

**a.** Very much ☐ **b**. A little☐ **c.** Not at all ☐

**2.** Which of the following language skills do you prefer the most?

**a.** Reading ☐ **b.** Listening☐ **c.** Speaking☐ **d**. Writing☐

**3.** How do you like to express your ideas about a given topic?

**a.** Speaking about it ☐ **b.** Writing about it ☐

**Section two:** Vocabulary learning

**4.** How difficult is for you to write a paragraph or an essay in English?

a. Very difficult ☐ **b.** A bit difficult ☐ **c.** Not difficult at all ☐

**5.** Is it difficult to write in English because of :

a. Grammar rules ☐ **b**.Vocabulary ☐ **c**. Spelling ☐

**6.** When reading a text, do you find it easy to understand its content?

**a.** Always ☐ **b**. Sometimes☐ **c.** Never ☐

**7.** What do you do in order to find the meaning of a new word?

a. You first try to guess the meaning from context ☐

b. Use a dictionary ☐

c. Ask a teacher ☐

d. Ask a peer ☐

**8.** Which of the following word study strategies are you familiar with?

**a.** Affixation ( breaking a word into a prefix, root and suffix) ☐

**b.** Using dictionaries ☐

**c.** Word cards ☐

**9.** How often do you use a dictionary to check the definition of unknown words ?

**a.** Always ☐ **b.** Sometimes ☐ **c** Never ☐

**10.** Do you prefer using :

**a.** An English- English dictionary ☐ **b.** An English-Arabic dictionary ☐

**11.** How do you acquire vocabulary outside the classroom?

**a.** Read books and stories ☐ **b**. Listen to songs ☐ **c.** watch movies ☐

**12.** Do your teachers use strategies that fit your preferable manner of learning vocabulary?

**a.** Yes ☐ **b**.No ☐

**Section three**: Computer-Aided Vocabulary learning

**13.** How often do you use technology/computer to support your study?

**a.** Always ☐ **b**. sometimes ☐ **c.** Never ☐

**14.** How often do you use computers to learn new words?

**a.** Always ☐ **b.** Sometimes ☐ **c.** Never ☐

**15.** Do you prefer using electronic dictionaries over printed ones?

**a.** Yes ☐ **b**. No ☐

Say why……

……

**16.** Which of the following computer-based applications do you use to learn vocabulary?

a. Online dictionaries ☐

b. Google translator ☐

c. Vocabulary softwares ☐

d. Vocabulary games ☐

**17.** You better remember and use a word when you :

**a.** Check its definition using a computer (online dictionary, …) ☐

**b.** Written on a board and explained by your teacher ☐

**c.** Explained by your peer ☐

**18.** Do you think that using computers to study English vocabulary will help improve your lexical skills?

**a.** Yes ☐ **b**. No ☐

**19.** If yes, is it helpful because:

**a.** It offers a quick access to information? ☐

**b.** Provides a variety of sources? ☐

**c.** It is funny and motivating? ☐

***Thank you***

## *Appendix Three*

### *Pre-Test*

**Unit one:** Ethics in Business

Answer the following question by ticking(√) the correct answer

1. A corrupt citizen is someone who :
   - **a.** Works against the law ☐
   - **b.** Works for the law.☐
   - **c.** Teaches law.☐
2. The act of giving someone money in order to help you win a contract or get a job is called :
   - **a.** Financial help.☐
   - **b.** Bribery. ☐
   - **c.** Commerce.☐
3. When an employer steals money, for example, from the company he works for
   - **a.** Counterfeiting ☐
   - **b.** Embezzlement ☐
   - **c.** Fraud ☐
4. Revealing confidential information to the police about the illegal practices in a company:
   - **a.** Whistle blowing ☐
   - **b.** Reporting☐
   - **c.** Investing ☐
5. When you use all available procedures including deception to hide the true financial position of your company is called :
   - **a.** Revealing financial position.☐
   - **b.** Improving financial position☐
   - **c.** False accounting.☐
6. To deceive (to defraud) is to :
   - **a.** Lying to someone and makinh him believe that something is true while it is not ☐

**b.** Tell someone the truth ☐

**c.** Convince someone to do something that is wrong ☐

**7.** When a group of people work together to stop bad practices/corruption is called :

**a.** Playing in an anti-corruption society ☐

**b.** Joining an anti-corruption society ☐

**c.** Militating an anti-corruption society. ☐

**8.** Revealing confidential information to the police about the illegal practices of a company, for example:

**a.** Reporting ☐

**b.** Whistle blowing ☐

**c.** Counterfeiting ☐

**9.** In order for criminal organizations to hide the origins of money they get from drugs and other practices, they do what we call :

**a.** Money laundering ☐

**b.** Money investment. ☐

**c.** Money saving ☐

**10.** Making a copy of a product to deceive people is called :

**a.** Marketing. ☐

**b.** Counterfeiting. ☐

**c.** Stealing ☐

**11.** To refuse to buy a product as a protest

**b.** To purchase ☐

**c.** To boycott ☐

**d.** To protest ☐

**Section Two** : **Synonymes**

**1.** Ethics =

a. Morals ☐

b. Principles ☐

c. Values ☐

**2.** We say « bribery » or =

**a.** Theft ☐

**b.** Under table payment ☐

**c.** Donation ☐

3. ***Break*** the law =
    a. Violate the law ☐
    b. Support the law. ☐
    c. Strengthen the law. ☐
4. ***Eradicate*** corruption =
    a. Fight corruption ☐
    b. Combat corruption ☐
    c. Increase corruption ☐
5. ***A counterfeit*** product is =
    a. A copied product ☐
    b. An original product ☐
    c. A stolen product ☐
6. ***Authentic*** means =
    a. Original ☐
    b. Cheap ☐
    c. Forged ☐
7. ***To purchase*** a product is =
    a. To buy a product ☐
    b. To sell a product ☐
    c. To borrow a product. ☐

**Section Three : Opposites**

1. Ehical ≠
    a. Inethical ☐
    b. Unethical ☐
    c. Disethical ☐
2. Moral≠
    a. Demoral ☐
    b. Immoral ☐
    c. Inmoral ☐
3. Corrupt civil servant≠
    a. Honest civil servant ☐
    b. Ethical civil servant ☐
    c. Good civil servant ☐
4. Prosperity ≠

**a.** Poverty ☐

**b.** Richness ☐

**c.** Success ☐

**5.** To Punish ≠

**a.** To encourage ☐

**b.** To reward ☐

**c.** To suffer ☐

**6.** Counterfeit ≠

**a.** Fake ☐

**b.** Genuine ☐

**c.** Authentic ☐

**Unit two:** Safety First

**Section One :**

**1.** To refuse to buy a product as a protest

**a.** To purchase ☐

**b.** To boycott ☐

**c.** To protest ☐

**2.** A picture, short film or a song that tries to persuade people to buy a product for instance.

**a.** Marketing ☐

**b.** Invention ☐

**c.** Advertisement ☐

**3.** The fact of being extremely fat, in a way that is dangerous for health

**a.** Fat ☐

**b.** Obese ☐

**c.** Fit ☐

**4.** Eating as much food as someone needs to make sure they have the right amount of energy.

**a.** Energy efficiency ☐

**b.** Energy preservation ☐

**c.** Energy balance ☐

**Section Two**

5. Advertisement=
   - **a.** Publicity ☐
   - **b.** Marketing ☐
   - **c.** Shopping☐
6. Persuade =
   - **a.** Invite ☐
   - **b.** Approve ☐
   - **c.** Convince ☐
7. Sufficient amount of=
   - **a.** Enough amount of☐
   - **b.** Extra amount of ☐
   - **c.** Small amount of ☐
8. Flavor=
   - **a.** Taste ☐
   - **b.** Choice ☐
   - **c.** Preference ☐

**Unit Three**: Astronomy and the Solar System

**Section one:** Definitions

Tick (√) the correct answer

1. The scientific study of stars, space and planets:
   - **a.** Astrology ☐
   - **b.** Astronomy ☐
   - **c.** Asteroid ☐
   - **d.** Atrocious ☐
2. A group of stars, gas and dust held together by the gravity
   - **a.** Atmosphere ☐
   - **b.** Black hole ☐
   - **c.** Air ☐
   - **d.** Galaxy ☐

**3.** The sun and its planets

**a.** Space system ☐

**b.** Planets system ☐

**c.** Solar system ☐

**d.** Stars system ☐

**4.** The explosion of a star in the space

**a.** Star explosion ☐

**b.** Anova ☐

**c.** Supernova ☐

**d.** Astronomical explosion ☐

**5.** A machine that is launched into space to send information such as that of weather

**a.** Rocket ☐

**b.** Spaceship ☐

**c.** Satellite ☐

**d.** Telescope ☐

**6.** Rocky, airless planets that orbit the sun

**a.** Star ☐

**b.** Asteroids ☐

**c.** Fireball ☐

**d.** Meteoroid ☐

**7.** An optical instrument designed to make distant objects appear nearer.

**a.** Magnifier ☐

**b.** Spyglass ☐

**c.** Telescope ☐

**d.** Space glass ☐

**Part Two:** Synonyms

**8.** Spherical =

**a.** Round ☐

**b.** Spatial ☐

**c.** Astronomical ☐

**d.** Solar ☐

**9.** To orbit =

**a.** To hover over ☐ ☐

**b.** To travel around

**c.** To fly in the space ☐

**d.** To gravitate ☐

**10.** Spaceship =

**a.** Space vehicle ☐

**b.** Space machine ☐

**c.** Spacecraft ☐

**d.** Comet ☐

**Section one:** Definitions

Tick (√) the correct answer

**11.** The scientific study of stars, space and planets:

a. Astrology ☐

**b.** Astronomy ☐

**c.** Asteroid ☐

**d.** Atrocious ☐

**12.** A group of stars, gas and dust held together by the gravity

**a.** Atmosphere ☐

**b.** Black hole ☐

**c.** Air ☐

**d.** Galaxy ☐

**13.** The sun and its planets

**a.** Space system ☐

**b.** Planets system ☐

**c.** Solar system ☐

**d.** Stars system ☐

**14.** The explosion of a star in the space

**a.** Star explosion ☐

**b.** Anova ☐

**c.** Supernova ☐

**d.** Astronomical explosion ☐

**15.** A machine that is launched into space to send information such as that of weather

**a.** Rocket ☐

**b.** Spaceship ☐

☐

**c.** Satellite

**d.** Telescope ☐

**16.** Rocky, airless planets that orbit the sun

**a.** Star ☐

**b.** Asteroids ☐

**c.** Fireball ☐

**d.** Meteoroid ☐

**17.** An optical instrument designed to make distant objects appear nearer. ☐

**a.** Magnifier

**b.** .Spyglass ☐

**c.** Telescope ☐

**d.** Space glass ☐

**Part Two:** Synonyms

**18.** Spherical =

**a.** Round ☐

**b.** Spatial ☐

**c.** Astronomical ☐

**d.** Solar ☐

**19.** To orbit =

**a.** To hover over ☐

**b.** To travel around ☐

**c.** To fly in the space ☐

**d.** To gravitate ☐

**20.** Spaceship =

**a.** Space vehicle ☐

**b.** Space machine ☐

**c.** Spacecraft ☐

**d.** Comet ☐

***Appendix Four***

***Post-Test***

**Task 1:**

## Section (A)

*Fill in the following gaps with the appropriate terms. The definitions given below can help you guess the missing words.*

…….(1) is a federal crime involving the imitation of products with the aim of …….(2) consumers. Billions of products are being yearly counterfeited making it difficult for buyers to distinguish between the real and the fake ones. In addition to that, corruption involves many forms of illegal practices such as …….(3) which is the process of making illegally gained money (dirty money) appear legal. Many countries, especially developing ones are socially and economically suffering due to the influence of other federal crimes such .....……(4),…….(5) and …….(6). Corruption levels can be decreased in many ways like for instance……(7)and ……..(8)

### Section (B)

**1.** It is high time governments passed strict laws to punish ……..(9) people.
**2.** ……(10) people have high rates of health problems as a results of the excessive amount of fat.
**3.** …….(11) of fast food has a big role in the high levels of obesity.
**4.** Health campaigns all over the world are calling consumers to …….(12) fatty and sugary products.

**Definitions**

**(1)** Making copies of products to defraud consumers.
**(2)** Trying to convince someone that something is true while it is not.
**(3)** Hiding the origins of money from criminal practices by investing them in legal projects.
**(4)** Giving someone money to illegally help you win a contract or get a job.
**(5)** Using all available procedures including deception to hide the true financial position of your company.
**(6)** Stealing money or anything from the company you work for.
**(7)** Revealing confidential information to the police about the illegal practices of a company.
**(8)** Joining a group to stop bad practices or corruption.
**(9)** Any person who disobeys/ breaks laws.
**(10)** People who are extremely fat in a way that is dangerous to their health.
**(11)** Pictures, videos presented on TV or any social media showing kinds of products such as food, makeup….etc
**(12)** The act of refusing to buy certain products.

**Task 02:** *Fill in the gaps with appropriate words*

1. Creating an energy……. …(13) requires eating the right amount of food your body needs to perform the regular routines like studying and exercising.
2. ……..(14), the study of space and planets is an interesting branch of science which allows us to know a lot about the universe and our Milky Way……....(15)
3. Our …… (16)includes the sun and the nine planets which orbit around it.
4. …… (17) are some rocky and airless planets that turn around the sun.
5. There are invisible stars that we cannot see in a clear night sly unless we use …… (18) with special instruments.
6. There are two types of …….(19); natural and artificial. As for the artificial ones, they are used for communication, including broadcasting television programmers and relaying telephone calls.
7. …… (20)is such an interesting event that takes place in space when a star explodes at the end of its lifetime.

**Task 3:** *from each list, tick **two** possible synonyms that can be used to fill in the gaps in each of the following sentences*

**1.** Every company must have a……(21) to control its employers' behaviors.

- **a.** A set of principles ☐
- **b.** A code of ethics ☐
- **c.** A set of lessons ☐
- **d.** A set of moral values ☐
- **e.** A set of laws ☐

2. I heard in today's news that there was a police officer who was arrested for receiving……(22)

- **a.** A help ☐
- **b.** A bribe ☐
- **c.** A tip ☐
- **d.** An under table payment ☐
- **e.** A payment ☐

**3.** Governments must pass strict laws to stop ……(23)

- **a.** Law reinforcement ☐
- **b.** Law breaking ☐
- **c.** Law department ☐
- **d.** Law violation ☐
- **e**. Law design ☐

**4.** It is high time public authorities did something to…….(24)corruption.

- **a.** To encourage ☐
- **b.** To eradicate ☐
- **c.** To increase ☐
- **d.** To fight ☐
- **e.** To deceive ☐

**5.** Some consumers prefer……..(25) products for their cheap products.

- **a.** Expensive ☐
- **b.** Original ☐
- **c.** Counterfeit ☐
- **d.** Copied ☐
- **e.** Cheap ☐

**6**. Products are imitated to such perfection that it is difficult to distinguish between ……(26) and fake ones.

**a.** Copied ☐
**b.** Original ☐
**c.** Authentic ☐
**d.** Sold ☐
**e.** Stolen ☐

**7.** It is important to check food labels before……..(27)them

**a.** Selling ☐
**b.** Purchasing ☐
**c.** Borrowing ☐
**d.** Buying ☐
**e.** Imitating ☐

**8**. When people watch…….(28) of fast food, they feel the desire of eating them even if they are unhealthy.

**a.** Documentaries ☐
**b.** Publicities ☐
**c.** Junk foods ☐
**d.** Series ☐
**e.** Advertisements ☐

**9.** TV ads are designed to…….(29)consumers and get them buy the products they are presenting.

**a.** Approve ☐
**b.** Persuade ☐
**c.** Influence ☐
**d.** Convince ☐
**e.** Counterfeit ☐

**10.** People get sick for not eating…….(30)vitamins

**a.** Enough amount of ☐
**b.** Extra amount of ☐
**c.** Excessive amount of ☐
**d.** Small amount of ☐
**e.** Sufficient amount of ☐

**11**. People get addicted to fast food because of its…….(31)

**a.** Price ☐
**b.** Benefits ☐
**c.** Taste ☐
**d**. Amount ☐
**e**. Taste ☐

**12.** Many people believe that Earth has a……..(32) shape, while others believe it is elliptical.

**a.** Cylindrical ☐
**b.** Round ☐
**c.** Pyramidal ☐
**d.** Rectangular ☐
**e.** Spherical ☐

**13**. There are nine planets which ……..(33) the sun.

**a.** Hover above ☐
**b.** Orbit around ☐
**c.** Fly above ☐
☐

**d.** Turn around
**e.** Travel around ☐

**14.** NASA uses…….(34) to learn about space and unveil its secrets.

**a.** Space telescope ☐
**b.** Spacecrafts ☐
**c.** Satellites ☐
**d.** Spaceships
**e.** Space stations ☐

**Task 4**: Provide the opposites of the following words

**1.** Ethical ≠……..(35)
**2.** Moral ≠……(36)
**3.** Corrupt ≠…….(37)
**4.** Prosperity ≠…….(38)
**5.** To punish ≠…….(39)
**6.** Counterfeit≠……(40)( Other than authentic, real and original)

***Thank you for your collaboration***

# *Appendix Five*

## *Lesson Plans*

**Unit One**: Ethics in Business

## LESSON PLAN 1

### CORRUPTION

**Settings:** Sirin Lekhmissi Secondary School.
**Level:** 3rd year scientific stream.
**Unit:** Ethics in Business
**Aids:** Computers, white board.
**Time**: 60 mns.
**Language Focus**: Vocabulary.

**Pre- Task Phase:** before starting, the class will be divided into groups of four and each of which will be using a computer.
To introduce the unit, the teacher presents a computer- based quiz in which students are asked to match words with their corresponding pictures**.**

**( 10 mns)**

**Task Cycle**

**Task:** at this phase, students will be given another computer-based task using Hot Potato software where they will have to match words like (fraud, embezzlement, money laundering) with their definitions. **(10 mns)**

**Planning:** students organize and prepare their answers for the next step. **(5mns)**

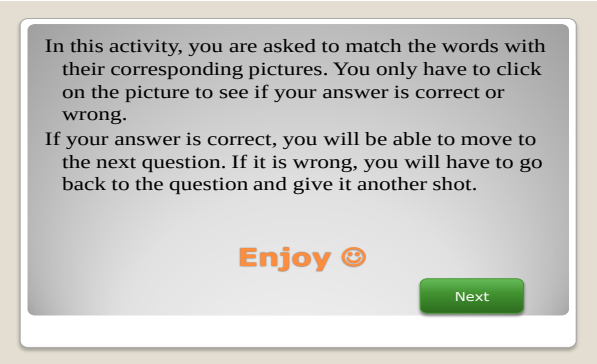
**Reporting:** at this point, some groups will represent their answers to the class. **(10mns)**

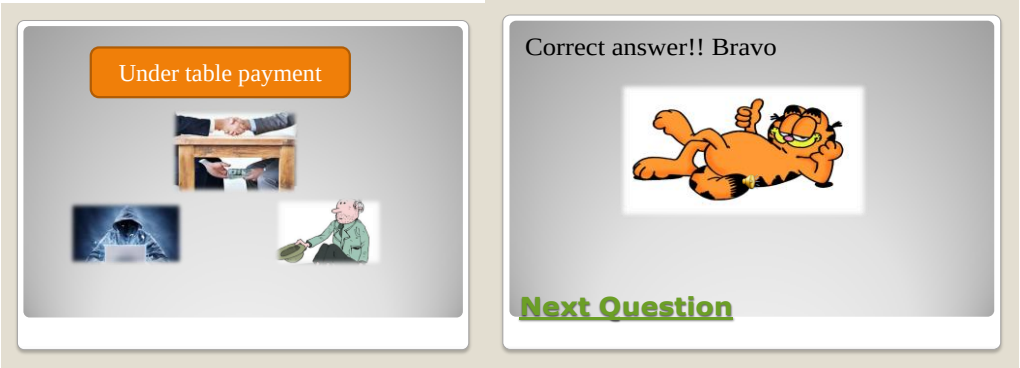
**Language Focus**

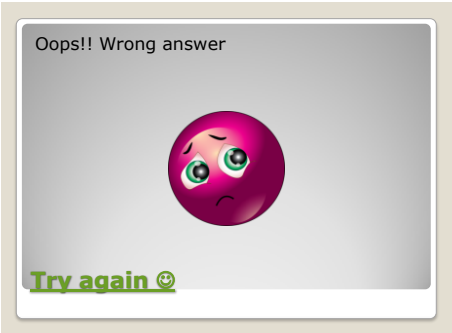
**Analysis** : the teacher writes on the board the set of vocabulary students dealt with in the previous tasks and give them the correct answers.

**Practice:** students are given a homework which consists of a variety of vocabulary activities.

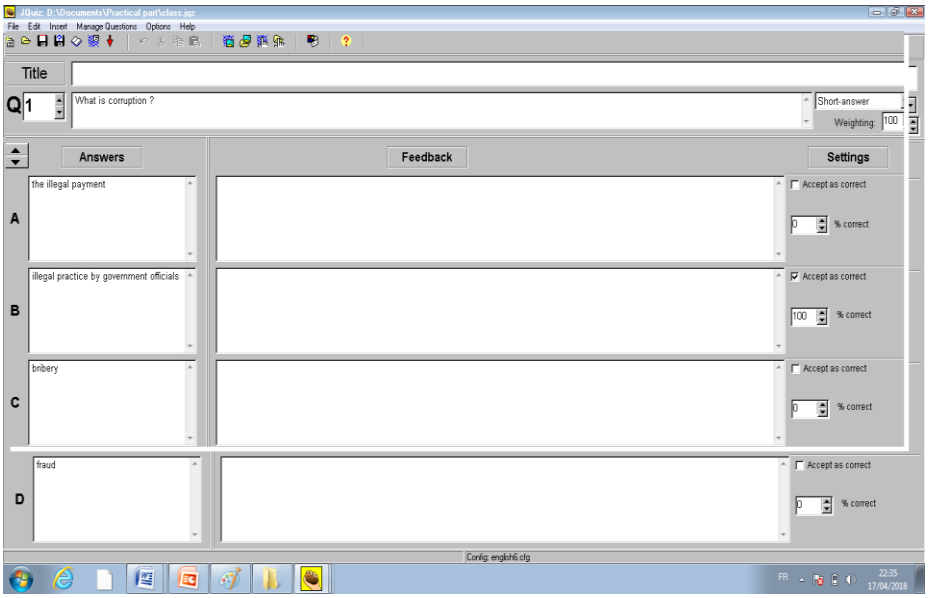
- **Screenshots of the computer based quiz used in the pre-task phase of the first lesson**



- **Screen shots of a computer-based quiz used in the task-cycle phase using the Hot Potatoes Software**



# LESSON PLAN 2

## THE COST OF CORRUPTION

**Unit:** Ethics in Business
**Language focus:** vocabulary.
**Aids:** Computers, white board.
**Time:** 60 mns.

**Pre-Task:** a video showing how corruption affects people's lives will be presented to students to give them an idea about the lesson's theme; effects/the costs of corruption. The video is about a midince student who bribes his teacher to pass the exam and he eventually becomes the doctor who fails to treat his wife during a surgery after which she dies. After that, interaction between the teacher and her students will take place concerning the content of the video.

**Time: 10 mns.**

**Task Cycle**

**Task :** the teacher will present a web-article about the possible effects of corruption on development. She will also explain the tasks and give some instructions about the way to do the computer based tasks.

**Time: 10 mns**

**Planning:** Students will read the text and answer some questions about the content. **Time: 20 mns**.

**Report**: the students will present their answers and the teacher provides feedback on the content and comments**.** **Time: 10 mns.**

**Language Focus**

Teacher writes some answers on the board and highlights the vocabulary she wants to emphasize while students take notes of the language they need.

- **Screenshots of the video included in the pre-task phase**

# LESSON PLAN 3
## ERADICATING CORRUPTION

**Unit:** Ethics in Business
**Language focus:** vocabulary.
**Aids:** Computers, white board.
**Time:** 60 mns

**Pre-task :** as a warm up activity, the teacher, along with her students, checks the previously acquired vocabulary using a computer based quiz designed with the HotPhotatoes software.

**Time: 10 mns**

**Task Cycle**

**Task :** students will watch a video about ways of eradicating corruption and they will be asked to design a poster to help stop the spread of this phenomena. Also, they will be handed some envelopes containing some pictures and needed vocabulary to help them design the posters.

The teacher explains the task to her class and shows them a pre-made poster to give them an idea about how to design it.
**Time: 15 mns**

**Planning:** each of the groups will be responsible of designing their own posters using the content of the envelop. They will ;therefore, have to organize their ideas and work on the poster which they will present to their class.
**Time: 30 mns**

**Report:** at this point, students are going to share the results of the task with their classmates. They will post it in front of the class

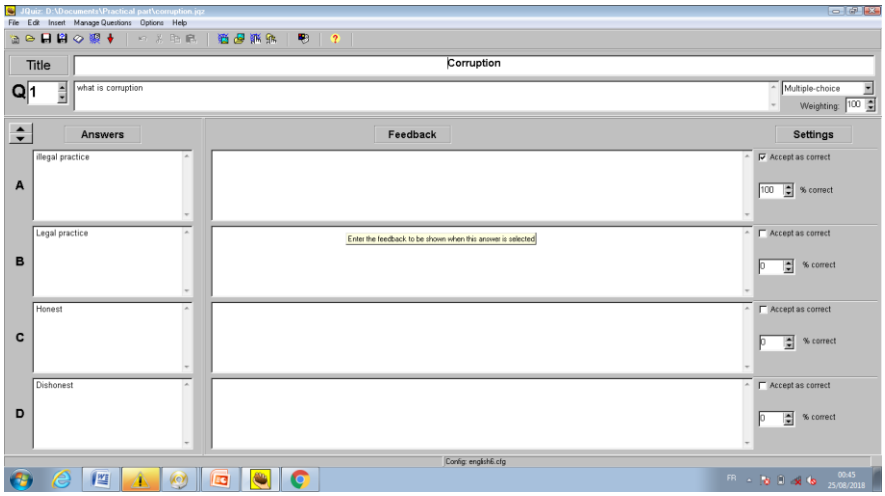
**Language Focus**

**Analysis :** after the presentation, the teacher makes some comments and provides necessary feedback

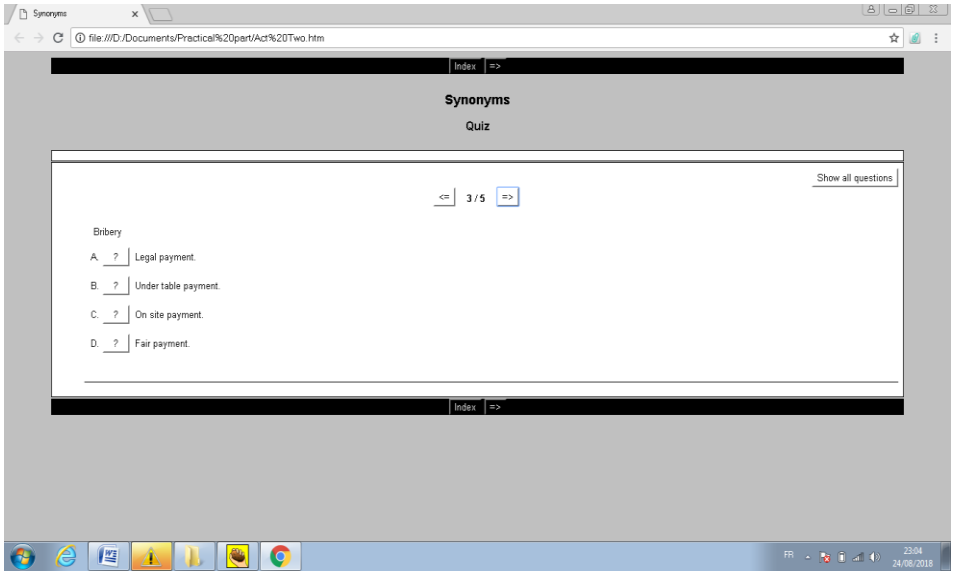
**Practice :** as a post activity, the teacher gives her students some handouts with a text made by the teacher containing necessary grammar and vocabulary points.

The text is followed by two activities for grammar (expressing condition) and for vocabulary ( synonyms)

- **Screenshots of the computer based quiz used in the pre-task phase**




- **Screenshots of the computer based quiz used in the language focus phase**



# LESSON PLAN 4

## CORRUPTION OPPOSITION WISH LIST

**Unit:** Ethics in Business
**Language focus:** vocabulary, grammar.
**Aids:** Computers, white board.
**Time:** 60 mns.

**Pre-task:** at this level, students must have acquired some vocabulary related to the theme of corruption. The focus; then, is shifted a little bit to grammar. The teacher; therefore, explain the notion of expressing wishes and gives her class an idea about wish types ( past wish, present wish, future wish) **Time: 10 mns**

**Task Cycle**

**Task :** the teacher presents a new computer-based quiz to her students which would help them understand the difference between the three types of wishes. In groups, students do the task and interact with each other as they try to answer the questions. After she explains the instructions of the first step, the teacher also presents another task to the class. The students will be asked to prepare a "corruption opposition wish list". A list of some corruption related situations will be handed to help them make their list of wishes.

**Time:10 mns**

**Planning:** 15 mns will be devoted for the accomplishment of each of the two above tasks. The first one will be performed in groups with the help of computers. The students try to understand each of the sentences and answer the questions by clicking on the right box. The second task; however, will be performed by individual students.

**Time: 30 mns**

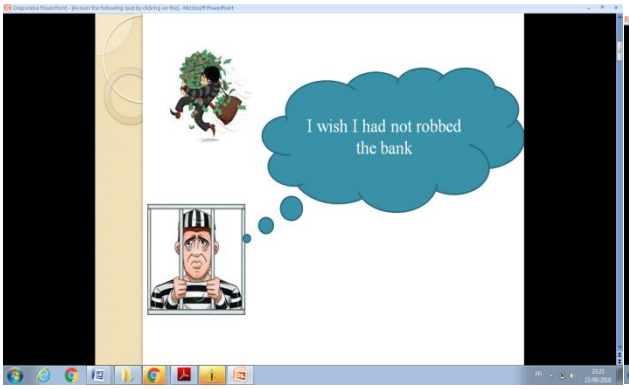
**Reporting**: students share the results with their classmates as the teacher comments and provides necessary feedback**.** **Time: 15**

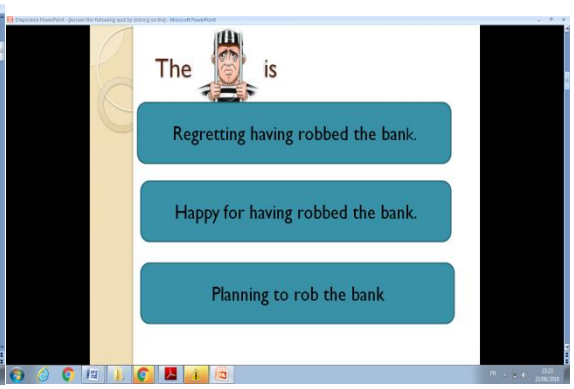
**Analysis** : The teacher highlights the notion of expressing wishes and provides a brief explanation of the rules



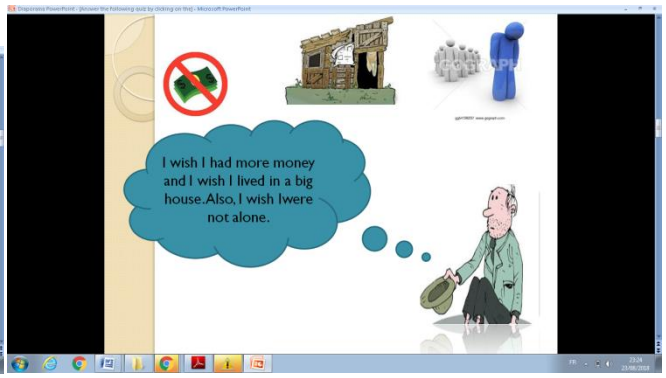
**Practice**: the teacher distributes some handouts for the practice of the grammar students have learned in the course of the lesson.

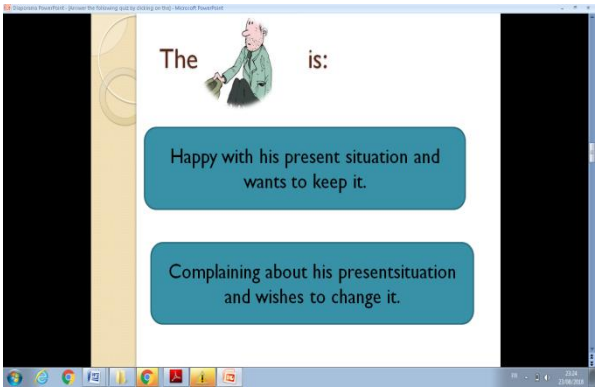
- **Screenshots of the computer based quiz used in the task-cycle phase**

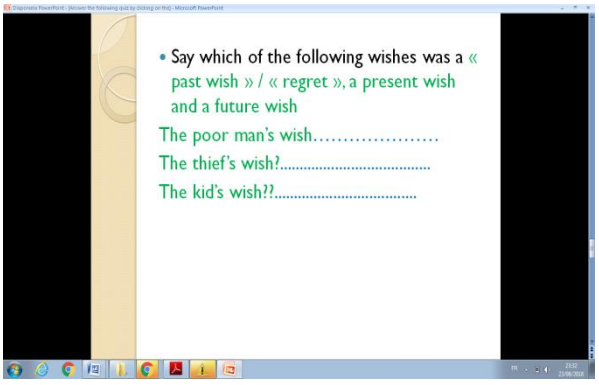


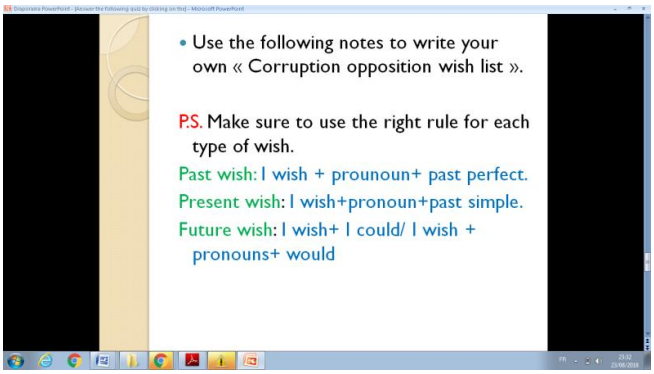








• Use the following notes to write your own « Corruption opposition wish list ».
P.S. Make sure to use the right rule for each type of wish.
Past wish: I wish + prounoun+ past perfect.
Present wish: I wish+pronoun+past simple.
Future wish: I wish+ I could/ I wish + pronouns+ would

# LESSON PLAN 5

## AN ANTI CORRUPTION PROGRAMME

**Unit:** Ethics in Business.
**Language focus:** Vocabulary, grammar.
**Teaching aids**: computers.

**Pre-task :** the students will be given a sample of an anti corruption program in their computers which would give them an idea about the task. The program will be presented in a PPT format with an emphasis on the required vocabulary they will use to write their anti corruption program.

Time: 15 mns

### Task Cycle

**Task :** the teacher explains the task to her class in which they are asked to write an anti-corruption programme using the notes she provides them in the handouts.

**Time: 10 mns**

**Planning:** in this stage, the students first work individually and jot down any ideas they have for the speech. After that, they will share what they have got as notes with their peers and work in groups on the final version of the programme.

**Time: 45 mns**

**Reporting:** after designing the content of the speech, a representative of each group will read out loud their version. The students vote for the best speech to write on the board.

**Time: 30 mns**

### Language Focus

**Practice**: a handout containing some writing activities (matching, gap filling) will be given to students to reinforce the knowledge they got from the task of writing the anti corruption programme.

# LESSON PLAN 6

## CYBER CRIME

**Unit:** Ethics in Business:
**Language focus:** vocabulary**.**
**Teaching aids:** computers.
**Time**: 60 mns.

**Pre-task** : the teacher begins her lesson by sharing with her class her experience when her Facebook account was one hacked and initiates a discussion about the topic among her students. **Time: 10 mns**

### Task Cycle

**Task** : the students, in groups, reads a text about cyber crime and answer the computer-based tasks (true/false quiz and a matching task.)
**Time: 20 mns**

**Planning:** the members of the group interact with each other to answer the tasks and prepare their answers for report. **Time: 10 mns**

**Reporting:** the students orally share their answers with their colleagues while the teachers comments and provides feedback. **Time: 15 mns**

## Language Focus

**Analysis**: The teacher highlights some vocabulary related to the topic of cybercrime and explains their meanings.

# LESSON PLAN 7
## Counterfeiting

**Unit:** Ethics in Business:
**Language focus:** vocabulary**.**
**Teaching aids:** computers.
**Time**: 60 mns.

**Pre-task :** the teacher begins the lesson by showing her class some pictures of products and asks them questions like if they prefer to buy fake or original products and why do they prefer doing so**.** **Time: 10: mns**

### Task Cycle

**Task :** the students will be given a text about counterfeiting including key vocabulary and the teachers explains for them what they have to do in the assigned tasks. **Time: 10 mns**

**Planning**: after reading the text, the students will answer some computer based tasks (answering the questions, matching words with their synonyms/antonyms). **Time: 20mns**

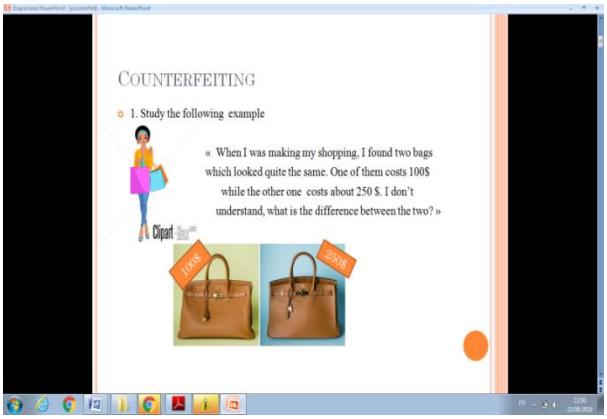
**Reporting:** the students will orally share their answers with the class. **Time: 10 mns**

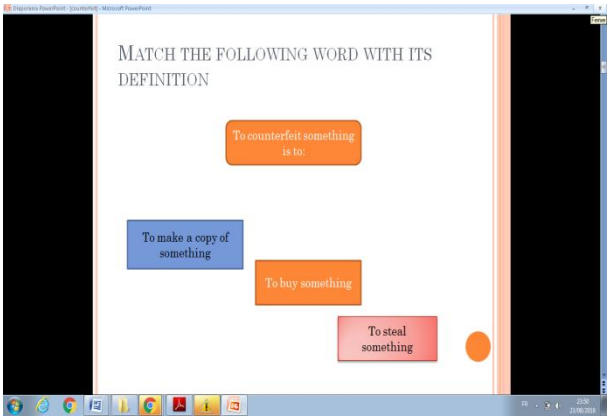
### Language Focus

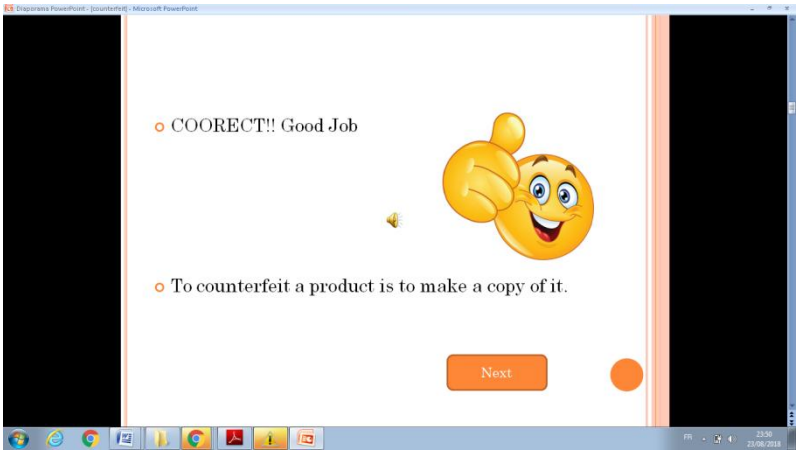
**Analysis**: The teacher writes some key vocabulary on the board and emphasizes their synonyms/opposites. **Time: 20 mns**

**Practice**: the students will perform some computer-based vocabulary tasks in order to reinforce the words they have learned from the text.

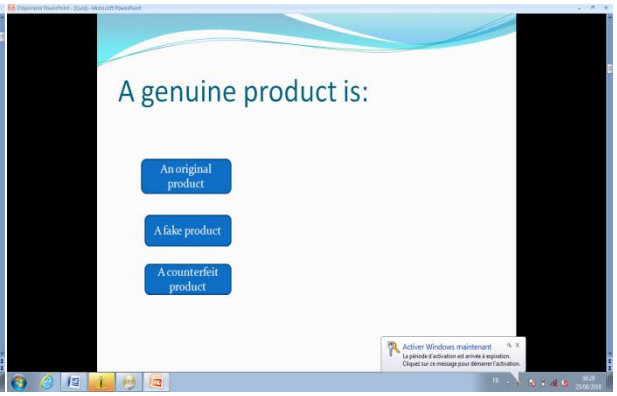
- **Screenshots**




- **Screenshots of the computer based quiz used in the language focus phase**

# Lesson Plan N°8

## Obesity

**Unit Two**: Safety First
**Language Focus**: Vocabulary
**Teaching Aids**: Computers
**Time**: 60 mns.

**Pre-Task**: This lesson serves as an introduction to the current unit. Therefore, it will aim at presenting the most frequent key vocabulary related to food safety and obesity. For this reason, students will start with a computer based quiz in which they will get introduced to the main concepts related to the unit. Time: 15 mns.

### Task- cycle

**Task:** A text about obesity will be presented using the Hot Potatoes software. Students are asked to answer the questions related to the text together with a vocabulary quiz. **10 mns**

**Planning:** At this point, members of the each group will be discussing and organizing their answers to share later on with their colleagues. **10 mns**

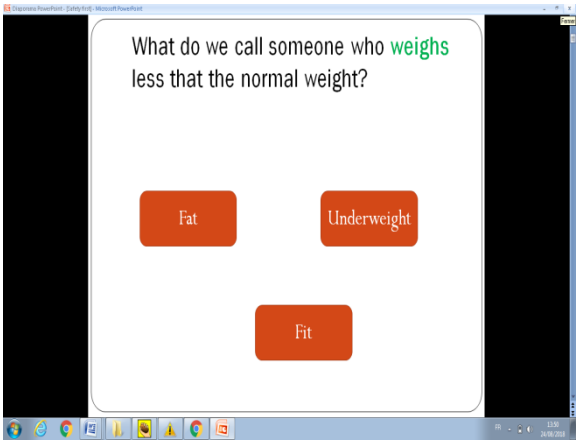
**Report:** This is the stage where students share the results of their work on the task with the rest of the class. **10 mns**

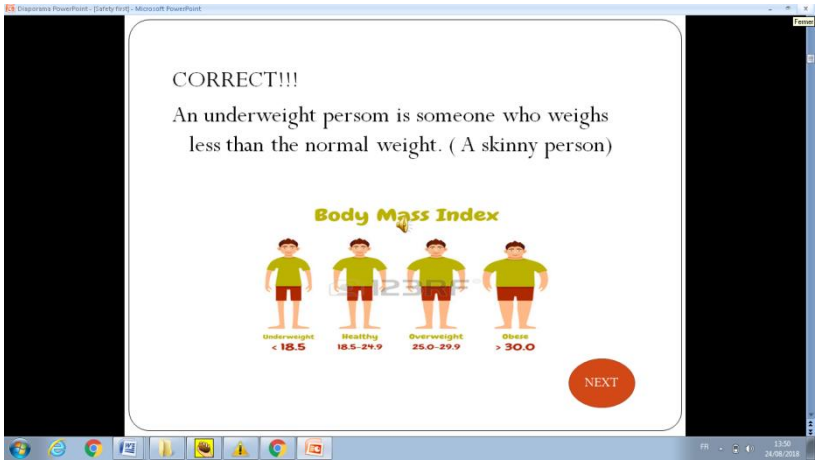
### Langauge Focus

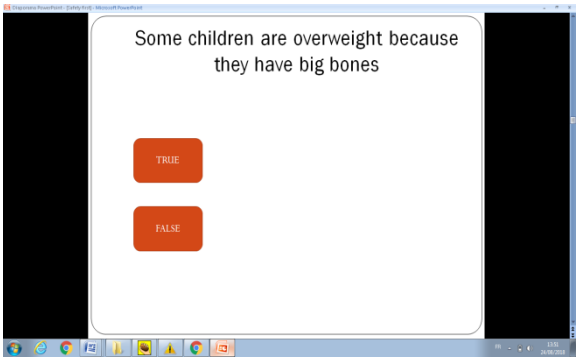
**Analysis:** The teacher writes on the board some vocabulary and explains if necessary. **15 mns**

**Practice:** As a homework, students are asked to write a short paragraph talking about obesity, its dangers and ways of preventing it.

- **Screenshots of the computer based quiz used in the task-cycle phase**

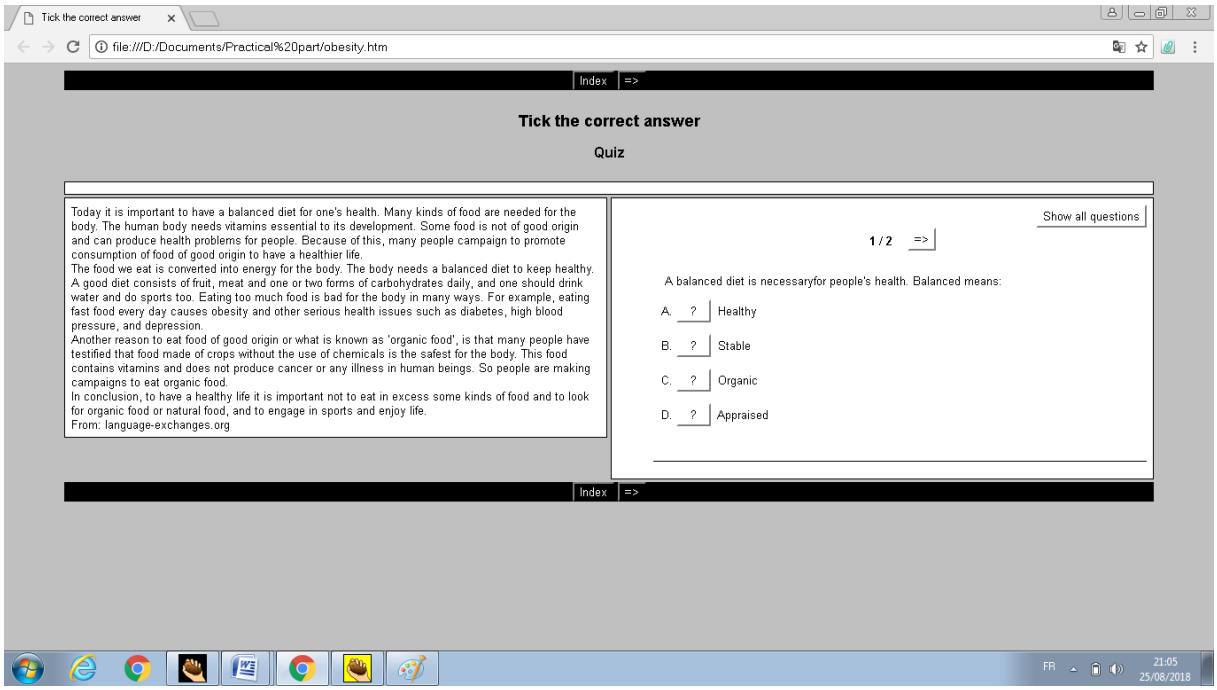



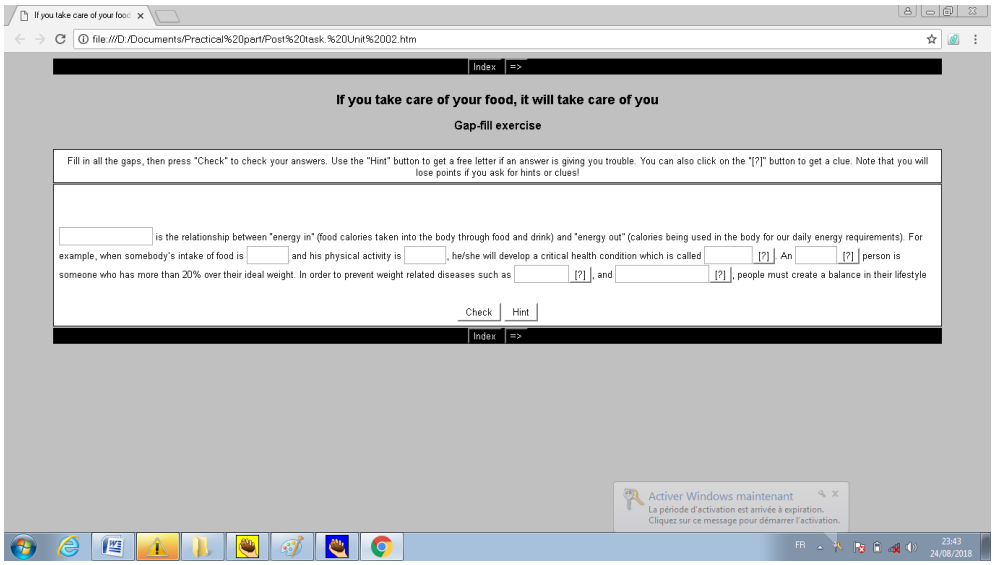





- **Screenshots**




- **Screenshots**



# LESSON PLAN N° 9

ASTRONOMY

**Unit Three**: Astronomy and the Solar System
**Language Focus**: Vocabulary
**Teaching Aids**: Computers
**Time**: 60 mns.

**Pre-Task** : This lesson serves as an introduction to the third unit. A vocabulary quiz designed with the PPT computer application will be used to give students an idea about the key vocabulary to be used in the upcoming lessons. **10 mns**

**Task- cycle**

**Task:** a text about text exploration will be presented to the class which contains a set of questions they have to answer. The text will follow the BAC typology to help students be familiar with such type of exams. **20 mns**

**Planning:** Students work on the tasks together and organize their answers. **10 mns**

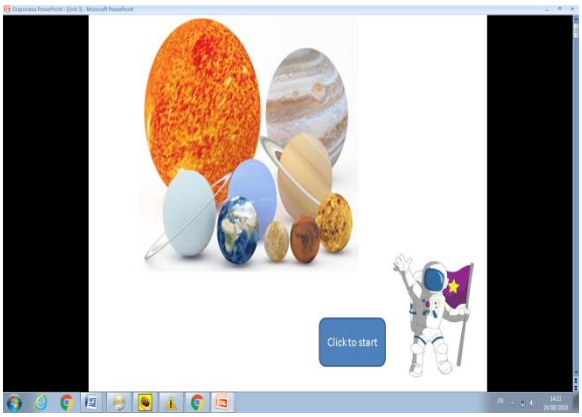
**Report:** representatives of each group will read their answers to the tasks and discuss with the rest of the class. **10 mns**

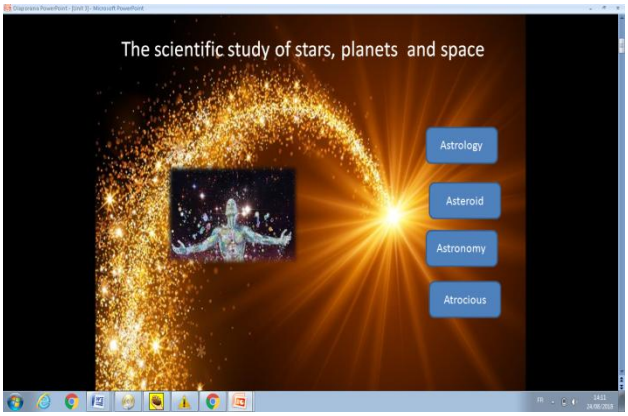
**Language Focus**

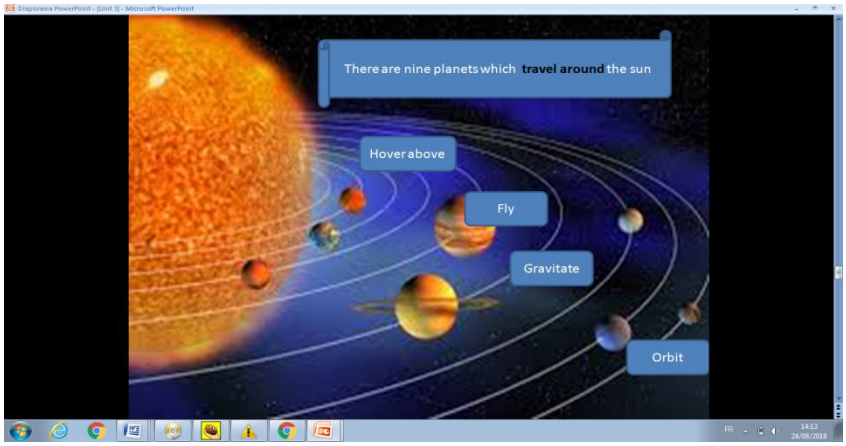
**Analysis:** Answers to be written on the board and the teacher highlights some concepts for discussion. **10mns**

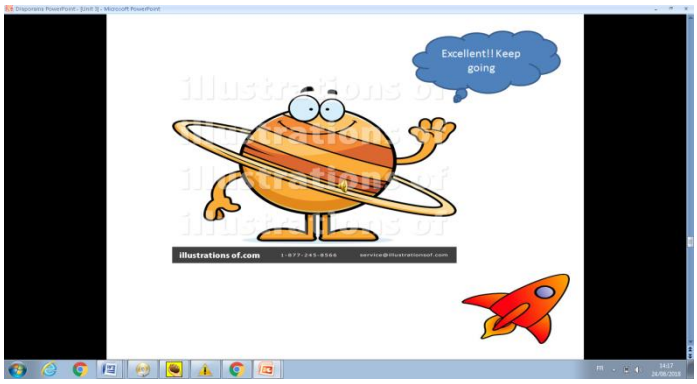
**Practice:** the teacher asks her students to write a short paragraph talking about the benefits of space explorations to humanity.

- **Screenshots**



**Résumé**

De nombreux apprenants algériens rencontrent des difficultés dans le processus d'apprentissage de l'anglais comme langue étrangère. Parmi eux, l'acquisition / la rétention de vocabulaire est la plus persistante malgré les efforts des enseignants pour les aider à surmonter leurs problèmes lexicaux. Cette recherche de méthodes mixtes a étudié l'impact de l'approche basée sur les tâches assistée par ordinateur sur l'acquisition de vocabulaire des élèves de troisième année du secondaire de l'école secondaire Sirine Lekhmissi, Souk Ahras.L'échantillon comprenait 30 participants répartis en deux groupes: un groupe de traitement (n = 15 ) et un groupe témoin (n = 15). Avant le traitement, deux pré-questionnaires ont été administrés à dix (n = 10) enseignants des écoles secondaires de Souk-Hras en plus de trente élèves de la même population afin de confirmer que cette étude valait la peine d'être entreprise. Ensuite, un test de vocabulaire fait par l'enseignant a été donné comme pré-test à l'échantillon suivi d'une instruction de vocabulaire à travers laquelle le groupe témoin a été exposé au vocabulaire en utilisant le tableau, des images, des postures et des dictionnaires. Le même vocabulaire a été présenté au groupe expérimental en utilisant l'approche basée sur les tâches et les quiz informatiques créés par les enseignants et le logiciel Hot Potatoe. À la fin de cette quasi-expérience, les résultats du post-test ont révélé que l'approche basée sur les tâches assistée par ordinateur était plus efficace que la façon traditionnelle d'enseigner le vocabulaire, car la valeur non appariée du test t (5,47) était supérieure à la valeur critique (1,70) pour vingt-huit degrés de liberté. Cette approche peut être plus efficace si les conditions nécessaires sont réunies, notamment la disponibilité d’ordinateurs en plus de la formation des enseignants et des apprenants à l’utilisation des ordinateurs.

## الملخص

يواجه العديد من المتعلمين الجزائريين صعوبات في عملية تعلم اللغة الإنجليزية كلغة أجنبية. من بينها ، اكتساب / الاحتفاظ بالمفردات هو الأكثر ثباتًا على الرغم من جهود المعلمين لمساعدتهم على التغلب على مشكلاتهم اللغوية. بحثت طرق البحث المختلطة هذه عن تأثير النهج القائم على المهام باستخدام الحاسوب على اكتساب المفردات من طلاب المرحلة الثانوية الثالثة من مدرسة سيرين لخميسي الثانوية ، سوق أهراس. وشملت العينة 30 مشاركًا مقسمة إلى مجموعتين: مجموعة العلاج (ن = 15) ) ومجموعة الاختبار (ن = 15). قبل العلاج ، قبل التجربة تم توزيع اسبيانيين ل عشرة (ن = 10) معلمين من المدارس الثانوية في سوق اه راس ، بالإضافة إلى ثلاثين تلميذا من نفس العينة من أجل تأكيد أن هذه الدراسة كانت تستحق القيام بها. بعد ذلك ، تم إجراء اختبار للمفردات من صنع المعلم كاختبار مسبق للعينة متبوعًا بتعليمات المفردات التي من خلالها تعرضت مجموعة الاختبار للمفردات باستخدام اللوحة والصور والم شاهد والقواميس. تم تقديم نفس المفردات للمجموعة التجريبية باستخدام النهج القائم على المهام ومسابقات الكمبيوتر التي صنعها المعلمون وبرنامج Hot Potatoe Software القائم على المهام . في نهاية هذه التجربة شبه التجريبية ، كشفت نتائج ما بعد الاختبار أن النهج القائم على الحاسوب كان أكثر فاعلية من الطريقة التقليدية لتدريس المفردات لأن قيمة اختبار t غير المقيدة (5.47) كانت أكبر من القيمة الحرجة ( 1.70) بثمانية وعشرين درجة من الحرية. يمكن أن يكون هذا النهج أكثر نجاحًا إذا تم توفير الشروط اللازمة بما في ذلك توفر أجهزة الكمبيوتر بالإضافة إلى تدريب المعلمين والمتعلمين على استخدام الكمبيوتر.