PEOPLE' DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
UNIVERSITY OF TLEMCEN
FACULTY OF LETTERS AND LANGUAGES
DEPARTMENT OF ENGLISH

Effects of Computerized Programmes on the Development of Reading Comprehension Skills: Case of Second-Year EFL Students at the University of Tlemcen

Extended essay submitted to the Department of English as a Partial fulfilment of the requirements for the Master's Degree in Language Studies.

Presented by: **Supervised by:**

Miss. Djahida BOUKLATA   **Pr. Ali BAICHE**

BOARD OF EXAMINERS:

Pr. Smail Benmoussat   President (University of Tlemcen)

Pr. Ali Baiche   Supervisor (University of Tlemcen)

Dr. Nawal Benmostefa   Examiner (University of Tlemcen)

Academic Year: 2015/2016

Dedications

I have a big pleasure to dedicate the fruit of my studies
with love to: the fountain of pity, to the present in my
heart,

my father.

The candle of my life, my lovely mother

I also dedicate this work to all my family, and all those who
believe in the richness of learning.

Acknowledgements

Abstract

This extended essay tried to shed light on the effects of computerized programmes on developing reading comprehension skills use by EFL students in their academic studies, in the environment where technology devices are used. The study aimed to investigate the benefits of the advances in technologies that make change in the texts and tools available to teachers and students; these technological advances have created to be used as instructional tools for literacy education. For this purpose, the researcher used tow research tools, a questionnaire for students and an interview for teachers. In this research work, quantitative and qualitative data were used. The sample was purposely chosen by the researcher of about twenty five (25) second year students at English department, University of Tlemcen. The results obtained from this investigation demonstrate the necessity of implementing CALL programmes in teaching English to bring better outcomes in students' academic achievement of English. In the light of these results, this study suggested that EFL teachers should use computer as a tool in order to develop and enhance the students' attitudes towards learning in general and reading in particular especially at the academic level.

TABLE OF CONTENTS

Chapter One: Literature Review

Chapter Two: Research Design and Instruments

List of Tables

List of Figures

List of Acronyms

CALL Computer Assisted Language Learning

EFL English as a Foreign Language

ELL English Language Learning

ICT Information and Communications Technology

LMD License-Master-Doctorate

L1 First Language

L2 Second Language

Technology has invaded our lives in many domains, especially the area of education. It has supplied a many tools that have been so prominent and important in the development of education. Computers as one of these tools has been used in various educational institutions. The applications of computer in language learning is known as Computer Assisted Language Learning (CALL), it is a language learning and teaching approach in which the computer is used as a tool for presentation, assisting students and evaluating learning material. Moreover, it includes a wide range of activities, courseware development, pedagogical practice and research to all language skills especially reading.

Reading is the skill that is considered the main source of learning in English language. With the rapid development of technology, the main goal of teaching has been geared towards motivating students to be attentive readers to avoid boredom. In this research work, the researcher focuses on the effectiveness of CALL programmes on developing reading skills in higher education of second year EFL students at the University of Tlemcen.

In this study, the statement problem that is mentioned leads to the formulation of three research questions that are listed as follows:

1. Do CALL instructions have effects on EFL learners' reading comprehension?
2. How can new technologies help learners to improve their reading level?

Three hypotheses were arisen in order to answer the above questions:

1. CALL programmes have positive effects on EFL learners' reading comprehension.
2. Using new technology helps students to improve their reading level through various activities such as videos, using the internet, dictionaries, e-books…

GNERAL INTRODUCTON

In this study, the researcher presented various methods and procedures that are followed to investigate the effects of using technology on developing reading comprehension. Case study was selected to examine second year EFL students and teachers who use computer in classrooms. In this case, both quantitative and qualitative approaches were used to collect data. In fact, two research instruments have been utilized. The first one is the students' questionnaire designed to explore the effect of computerized programmes in the development of reading comprehension skills. The second is an interview for teachers to discover their point of view as well as their expectations about using computerized programs in EFL classrooms.

This research work entails two main chapters to present significant data. Chapter one deals with the literature review. It gives at first some concepts related to the nature of reading as a very important skill including definition of the term reading, the importance, the purposes, models and types of reading, in addition to some reading comprehension skills. Then, the researcher shows the importance of using technology in teaching and learning. Finally, the researcher presents some advantages and disadvantages of using Computerized Assisted Language Learning (CALL), the importance of using (CALL) in reading class, and gives some technological tools that can be used to enhance students' reading abilities.

The second chapter includes the research methodology and the data analysis used to answer the research questions and confirm the hypotheses. In fact, it contains two research instruments, the students' questionnaire used to identify the impact of computer applications on the students' achievements in reading comprehension; and the teachers' interview in order to examine teachers' attitudes towards using technology in classroom. It provides the interpretations and the discussions of both teachers' and learners' answers, and the research approach (combination of quantitative and qualitative methods). Then it offers some recommendations to teaching and assessing reading comprehension via CALL applications using new approaches and technological tools in order to increase learners' reading

comprehension and developing their attitudes towards not only reading but also learning.

Computer Base Learning and

Its Effect on Reading Comprehension skills

1.1 Introduction

1.2 Nature of Reading

   1.2.1Definition of Reading

   1.2.2 Importance of reading

   1.2.3 Reading Purposes

  1.3   Models of Reading

   1.3.1The Bottom-up Model

   1.3.2 The Top- down Model

   1.3.3 The Interactive Model

1.4 Types of Reading

   1.4.1 Intensive Reading

   1.4.2 Extensive reading

1.5 Some Reading Comprehension Skills

   1.5.1 Skimming

   1.5.2 Scanning

   1.5.3 Inferring

   1.5.4 Not-taking

1.6 Technology in the Learning Process

1.7 Computer Assisted Language Learning

   1.7.1 Advantages of Computer Assisted Language Learning (CALL)

   1.7.2 Disadvantages Computer Assisted Language Learning (CALL)

1.8 CALL and reading skills

   1.8.1 Use of Computer Reading-Based Programs

   1.8.2 Using Computers in Reading class

   1.8.2.1 Video Based Lessons

   1.8.2.2 Using of Multimedia Software

   1.8.2.3 Browsing the Internet

1.1 Introduction

Technology is now recognised as an instructional tool used in the classroom to enhance and enrich teaching and learning. The availability of new information technology is contributing to many innovations in classroom activities. Strategies and techniques now are used to support technology in teaching and learning enable teachers to work collaboratively with students while the students themselves become more immersed in their own learning. Students trying to learn English as a second language need further language support. They need to practice in reading language, speaking language, and writing language in order to develop their experience and skills (Ybarra & Green, 2003).

For doing such tasks, students are in need of using various technological tools which can help them learn the language easily and effectively. Among these tools are online English language learning web sites, computer assisted language learning programmes, presentation software, electronic dictionaries, chatting and email messaging programmes, and video-clips.

Many researchers mention that technology may help foreign language learners develop their reading skills, but the question that should be raised is that how does the use of technology enhance the learners' reading skills?

We start this chapter by the nature of reading, by defining reading and showing its importance, and other points that we seek to explain such as reading purposes, the three main models of reading which are: the bottom-up model, the top-down model and the interactive model; and we will set some types of reading. Then this chapter will give a theoretical overview about the use of technology in classroom, reading skills, and advantages and disadvantages of using CALL programmes.

1.2 Nature of Reading

Reading as an unobservable mental activity involves the reader ability to read the text and his ability to comprehend it. With the number of different theories,

there is no general acceptance, so, many questions about reading process and reading product are raised. As Urquhart and Weir (1998:13) say:

> **We all know what reading is. And many of us have suffered, at some time or the other, from the type of bore who stops any argument or discussion with 'Ah, it depends on what you mean…'. So it is with some reluctance that we begin this part with an attempt to define reading, to say what we mean by the term. Our excuse is that people do use the term in different ways, and that while this may be permissible when everybody is conscious of the differences, on occasions it can cause real confusion and difficulty.**

Definitions of reading are generally based on two perspectives, one focusing on the process of reading and the other focusing on result of that process, the product.

1.2.1 Definition of Reading

The notion of reading has been investigated by many researchers and psychologists, Beck and Margaret (2005) describes reading as a complex process composed of a number of interacting sub-processes and abilities. Moreover, Florence (1995:1) has defined reading as a "mental, or cognitive, process which involves a reader in trying to follow and respond to a message from a writer who is in distant in space and time."

Furthermore, reading is a complex activity that involves both perception and thought. It consists of two related process: word recognition and comprehension. Word recognition refers to the process of perceiving how written symbols correspond to one's spoken language. Comprehension is the process of making sense of words, sentences and connected text. Since reading is a complex process of problem solving, students would find that they read with reference to a particular world of knowledge and experience from other times and places when they could recapture their mental processing (Baiche, 2010).

1.2.2 Importance of Reading

Reading as a complex skill is very important to success in society where a great deal of information in written form. Reading as a process involving many

cognitive processes has attracted the attention of many cognitive scientists. It helps people to be good readers, which can pronounce each word in the passage and then understand the meaning of words; it improves spelling and helps to expand the vocabulary. Students can comprehend what they have read and discover new things, a student who know how to read can educate himself in any area. Understanding the written words is one way the mind grows in its ability, so reading is important to develop the mind.

1.2.3 The Purposes of Reading

Students make connection between what they read on the text and what they already know; they interpret and integrate ideas and information in the text, so they need to draw on their background knowledge and experiences. There are three main purposes, reading for pleasure, reading for literal understanding and reading for analysis, each purpose is connected with certain type of text.

Reading for analysis engages critical thinking skills through questioning and reflection, while in literacy reading, the reader engages with the text to establish vocabulary and basic concepts in the subject. For students, emphasis is place on reading to learn and pleasure using text based on interests. Students can learn from texts, and that can occur in academic contexts to learn a considerable amount of information from a text. They can integrate information and decide what information and how to integrate it for their gaols.

1.3 Models of Reading

Models of reading were set to describe the way a reader uses to construct meaning from written text. These models are of an ideal reader, show what a reader does, what his needs are, and trying to address these needs in class. According to Florence.D (1995:57):

> **The term 'model' as used here refers to a formalized, usually visually represented theory of what goes on in the eyes and the mind when readers are comprehending (or miscomprehension) text. Thus, we might characterize a model as a systematic set of guesses or predictions about a hidden process, which are then subjected to 'testing' through experimental studies.**

Different theories mention that reading occurs through two main models : Bottom-up and top-down models.

1.3.1 Bottom-up Model

This model emphasizes the written or printed texts, part to whole processing of text. It moves from sounds to whole words, sentences, paragraphs; which means that the readers need to identify letter features, link these features to recognize letters, combine letters to recognize spelling patterns, link these patterns to recognize words, continue to sentence, paragraph, and text-level processing. All these steps contribute to get the exact meaning of the read passage (Gough, 1985). Dechant (1991) sees that the bottom-up models are those models which:

> **Operate on the principle that the written text is hierarchically organized (i.e., on the grapho-phonic, phonemic, syllabic, morphemic, word and sentence levels) and that the reader first processes the smallest linguistic unit, gradually compiling the smaller units to decipher and comprehend the higher units (e.g, sentence syntax).**

In this case, the bottom-up model focuses first on the recognition of the written form and neglecting the understanding of meaning, it emphasizes a single direction, and this is a disadvantage noticed by some researchers such as Rumelhart (1977).

1.3.2 Top-down Model

The top-down model emerges and has been developed as a reaction to the weaknesses of the bottom-up model. It suggested that readers bring meaning to the text based on their prior experience and interpret the text based on their previous knowledge about language (Goodman, 1988; Smith, 1994 & Richard & Julian, 1998:14). Carrel et al. (1983: 556-567) state, "Efficient reading comprehension requires the ability to relate textual materials to one's own knowledge. Comprehension words, sentences and entire texts involves more than just relying on one linguistic knowledge". This view identifies reading as a kind of "psycholinguistic guessing game" (Goodman, 1988). As Florence (1995:61) states:

The reading process is represented as a series of four primary cycles: optical, perceptual, syntactic and meaning in the controlling role: 'the readers focus, if they are to be productive, is on meaning, so each cycle melts into the next and the readers leap towards meaning.'

This model based on the graph aphonic, semantic, syntactic and pragmatic cues of the reader used to make predictions of meaning. According to the top-down model readers when read so quickly they avoid the letter sound correspondence, they focus on the graphic information when they are not sure about a word.

1.3.3 Interactive Model

This model combines the bottom up and top-down models. The first one focuses on the written form and the second concerns with what the reader brings to the text, so the two models complete each other and both are needed to make meaning from the text. Rumelhart (1977) has proposed the interactive model; according to him, reading is an interactive process. This process consists of an interaction between different sources of information such as orthographic, syntactic, lexical and semantic information (Florence, 1995:64). These types of information are helpful in the interpretation of the exact meaning of the text.

But teachers of English as a foreign language (EFL) must be especially attuned to students' language problems, to mismatches in any given text between the writer's and the students' background knowledge, "…knowledge of the phonology, syntax and vocabulary of the target language, and again to varying degrees, knowledge of the culture of the target language" (Florence,1995:80). And to the problem of introducing students to materials these students might need to read in English and the uses we normally make of these materials.

1.4 Types of Reading

There are two types of reading intensive and extensive reading. The former used to teach or practice specific reading strategies or skills; however, the latter involves reading of large quantities of materials, directly and fluently.

11

1.4.1 Intensive Reading

As an attention to grammatical forms, it focuses on surface structure details such as grammar. Its aim is to build more language knowledge. Students need to have their aims clear in mind when understanding intensive reading, they need to read intensively a long passage if they want to list the events chronologically. This type of reading helps students to understand vocabulary by deducing the meaning of words in context. It helps them to keep information for long periods of time, therefore, students who neglect intensive reading when they use reading to gather information just before the exam, they will forget this information after the exam. Gilner & Morals (2010:14) state:

> **Intensive approaches simply to do not prepare students to use the language purposefully. Students spend too much time and energy trying to understand the individual words (that is, they have not developed a large sight vocabulary) and are unable to move beyond word-level analysis. Word-by word processing inhibits the ability to see the conditions between and across ideas, to understand how the information is organized, to grasp the intention of the author.**

This type is very useful in the academic studies; it can provide learners multiple opportunities to become familiar with different topics and text.

1.4.2 Extensive Reading

Extensive reading involves reading for pleasure, because its purpose is to read in order to reach enjoyment, and this is connected to students' choice and pleasure in reading, "it could only be that the texts were also being read for ordinary real-word purposes of pleasure and information" (Richard & Julian,1998:5). According to Grabe (2009:290) extensive reading can help foreign language learners to increase their reading motivation and develop their vocabulary knowledge, it make them read fluently. Fluency in reading means to decode and read phrase and whole sentences easily, it differs from one reader to another according to the different reading abilities. It involves rapidity, automaticity and recognition.

1.5 Some Reading Strategies

The first thing that the instructor should know is that there are different reading strategies, and teaching students to apply these strategies when they read is very important to be effective readers who know which strategy to use and when. According to Mcnamara (2007:6), reading strategies are cognitive and behavioural actions that readers use to improve their comprehension in a given text. Mcnamara explains this when he said:

> **A reading comprehension strategy is a cognitive or behavioural action that is enacted under particular contextual conditions, with the goal of improving some aspect of comprehension. Consider a very simple-minded strategy for purposes of illustration.**

1.5.1 Skimming

Students use this strategy when they read quickly to get the general idea of the text, for example, the reader can make a quick look through the pages of a newspaper to get the main information. There are three types of skimming: skimming to overview, skimming to preview (Re-reading) and skimming to review

1.5.2 Scanning

The same thing in skimming, scanning also means to look at a text quickly in order to get a specific information or idea. It involves moving eyes to find key words and concepts that make the general idea clear. Grellet (1996:19) says:

> **When scanning, we only try to locate specific information and often we do not even follow the linearity of the passage to do so. We simply let our eyes wander over the text until we find what we are looking for, whether it be a name, a date or a less specific piece of information.**

Scanning is a helpful technique used to gain time and get the main idea in few minutes, and it help students to search information such as definitions or a name of person or place. Students can use both skimming and scanning to increase keeping more of important information and details which they in a reading text**.**

1.5.3 Inferring

Making inferences is very important to draw conclusions, make predictions, and use information to guess ideas about the text and about the writer (Harvey & Goudvis, 2000). Using inferences is a useful way to identify unfamiliar words in the text; it is better than using dictionary.

1.5.4 Note-taking

This strategy is very useful to enhance students' reading comprehension through several steps such as organizing their ideas, arranging new knowledge, selecting the important information, which means students record the essential information captured from another source. It help students to save time and effort.

1.6 Technology in the Learning Process

Technology is an opportunity to encourage reading, writing, critical thing and lifelong learning. According to the early research, the introduction of computers into learning and teaching environments makes changes in classrooms and teachers' and students' habits. Moreover, Graddol (1997:16) states that:

> **Technology lies at the heart of the globalization process; affecting education work and culture. The use of English language has increased rapidly after 1960. At present the role and status of English is that it is the language of social context, communication across borders, and key subject in curriculum and language of education.**

1.7 Computer Assisted Language Learning

The use of communication and technology plays an important role in all educational system; therefore, computers have significant role in the learning process, especially foe teaching English for a second language learner. Indeed, most of EFL classes use computer as a medium to facilitate language learning which is called Computer Assisted Language Learning (CALL).

CALL is a programme derived from Computer Assisted Learning which is implemented to language, in this case computer is a tutor used to improve language learning (Hartoyo, 2006:21). Ates et al. (2006:1) states that "CALL is a language

learning and teaching approach in which the computer is used as a tool for presentation, assisting students, evaluating learning material, and has an interactional element". In both definitions, CALL focuses on the applications of computer in language learning.

1.7.1 Advantages of Computer Assisted Language Learning (CALL)

Many researchers speak about the importance of integrating computer in teaching reading in classrooms, they argue that it is useful for both teachers and students. It has improved the students' ability to read texts in English and comprehend them as well at short time since reading speed is enhanced (Alkahtani, 1999).

Traditional tools used in teaching language classrooms can be boring and make students lose interest and motivation in learning. Whereas, a computer can collect and manage information at high speeds, it has the potential to motivate students to perform repetitive tasks without boredom. As educational psychologists Eloff and Eberson (2004:139) propose that, "Learners can be assigned to computerize programmes to increase motivation". Rather, Donaldson and Haggston (2006:37) pointed to an important link motivation, CALL programmes and feedback by stating, "Motivation is an important element in language learning which can be fostered in software, courseware and language web pages through appropriate feedback".

Students can be more interesting and challenging in reading by many activities that CALL can provide, such as games, animated graphics and problem-solving techniques ; "CALL offers much in terms of access to information and new tools to learn using this information" (Erben et al., 2009: 158). Students can choose appropriate timing for learning since the use of computer provide flexibility. CALL programmes enable students to learn anywhere, anytime, anyhow and anything they want.

Teachers by using computer database they can classify and differentiate the types of errors, and that leads them to analyze students mistakes. Using computer

allows students to repeat and revise their lessons in any time they want. Therefore, CALL technology has a big importance, which makes its effectiveness very clear in language learning process. As Warshauer claimed, "the truly powerful technologies are so integrated…computers will have taken their place as a natural and powerful part of the language learning process." (qtd. In Brett & Gonzalez, 2009: 354).

1.7.2 Disadvantages of computer Assisted language Learning

It is true that technology is widely integrated in language teaching and learning because of its benefits, but the use of computers and their applications as effective tools is still limited. The number of computers that are used in many educational areas is insufficient, in this case technological tools benefits only learners who have personal computers, as well as the Hardware problems. Some teachers are not aware of these problems, because of their weaknesses in using technological tools; and computers' applications are constantly developing in the field of TEFL (Teaching English as a Foreign Language). In addition, teachers do not have training in many technological methods such as CALL, which can obstruct the use of the applications of these programmes.

1.8 CALL and Reading Skills

Reading is an important communicative skill, depends on the vocabulary and background knowledge of second language learners (Costantinescu, 2007).It helps English language learners in speaking, broaden their vocabulary and find information, which enable them to gain new knowledge. According to Grabe (2009), "virtually all second language reading researchers agree that vocabulary development is a critical component of reading comprehension". Technology has been developed constantly giving birth to newer products and projects, which prove successful among students, motivating them and keeping them interested in the learning; but using only technology is not enough to improve learners' reading ability. It needs some methods that should be taken in consideration to make change in teaching reading comprehension

1.8.1 Use of Computer Reading-Based Programmes

Learners can raise their interest of reading by using computers which provide them with simple and easy ways to understand text. Therefore, teachers can use Reading –Based Computer programmes to develop their students' vocabulary, fluency, and comprehension. According to Ybarra & Green (2003), this also can enable EFL students to increase their interaction with texts, motivate them and enhance their abilities to read. These programmes can give students the opportunity to generate their own utterances and sentences.

In addition, computer programmes have positive impact in EFL students' reading speeds and language development, they help readers to increase their reading speeds in English, some students find themselves slowly readers in English which make it frustrating for them to read. They make students better in reading class, and improve their ability to read on paper and from a computer. They can allow teachers to track students' behaviour and manage students outside classroom in order to make them more responsible for work outside classroom.

Learning computer programmes can be easily applied to examine exercises performed by students. They are used to correct learners' answers and create tests to understand manner easily (Alkahtani, 1999). Some software designed on CALL included text reconstruction programmes, for example, words were mixed and students had to arrange them into a meaningful text. Computer –based reading readers are distinguishing from auto tape transcription in which the presentations of material are easily controlled and synchronized through both auditory and visual sensory channels. This system proved to be a strong compensatory and enabling student read with great comprehension.

1.8.2 Using Computers in a Reading Class

Technology in classroom can produce more relevant and consistent interaction than what is produced in the traditional classrooms, it help students participating actively in the learning process. In this case, students can improve their reading abilities and create fresh ideas if the correct use of computer mixed

with the traditional methods, and this will help them to think critically and connect the past ideas to the fresh ideas of the future.

Modern media technology such as CD.ROMs and modern presentation software such as Microsoft PowerPoint become widely available to students; and teachers are pushed to use these technological tools to enhance their instruction in order to engage students in learning more deeply. Therefore, using computers in classroom can promote the effectiveness of reading material in terms of pronunciation, vocabulary, and use different words in different contexts. Students when using computers are actively making choices about how to generate, obtain, manipulate, or display information. By using computers, teachers can provide their students with suggestions and resources (outside resources)

1.8.2.1 Video Based Lessons

Videos are being very effective tool used to support pedagogy and learning especially English language practices, speaking, listening and writing, in addition to stimulate the development of reading; it has great motivational and cross-cultural comparison potential. Is the best means to achieve higher levels in reading, and leads students to use compelling way more than printed resources. Teachers often use video in their lectures to enrich lessons and visualize knowledge to give their students better understanding. Using video can facilitate comprehension and transfer of knowledge in many domains especially in interactive presentation (Park & Hopkins, 1993).

Video also can give the effect of an issue and the grand scope of things that cannot be described with words alone. Teachers can use video for developing various reading strategies by giving students opportunities to practice these strategies in a good way; for example, they can use predicting what will happen next and then summarize what actually happened in the video.

1.8.2.2 Use of Multimedia Software

Multimedia as computer programmes are capable of promoting educational activities, they can increase the motivation for learners to develop their vocabulary

and reading skills using a mixture of text, graphics, sound, video and animation. Multimedia Software in general can facilitate developing the educational material to students easily; it has a positive impact on cognitive achievement, academic achievement, comprehension and application.

1.8.2.3 Browsing the Internet

The Internet as a modern technological way is very useful in all fields of life especially in the educational one. Through the internet, students can develop their English language skills including reading and motivate them to read, since it based on written form. Students can use Web sites that are made to enhance the reading abilities of English language learners; in this case, the internet can provide readers with a large number of resources such as newspapers, magazines, journals, electronic libraries, dictionaries, encyclopaedia, and newsletters (Kenworth, 2004).

Therefore, browsing these resources can improve students vocabulary, "The internet connects learners to a wide range of discussions and information" (Chapelle, 2003:14), which means that they can choose web sites providing various articles on particular topics. Tlemcen University provides students with two websites that are helpful for EFL students and used to read a wide variety of interesting academic papers. First one, Students can consult online library catalogues of books in http://bibfac.univ-tlemcen.dz/bibflangues/opac_css/. The other one is for research works as thesis and articles in http://dspace.univ-tlemcen.dz.

1.8.2.4 Use of Electronic Dictionaries

This is another tool that technology has offered to English language learners, these dictionaries have specific functions that are not provide in printed dictionaries (Constantinescu, 2007). This tool can improve students' vocabulary; they can use it even in their smartphones, in which they can download and use many dictionaries such as Oxford dictionary and Cambridge dictionary.

1.8.2.5 Using E-books and E-libraries

E-books as a technological tool is a new version of books that is integrated in learning to facilitate the understanding with words explanation. It can motivate readers to read more books and enrich their vocabulary. Using e-books makes reading easier, more fluent, and less time consuming since all dictionaries (electronic dictionaries) of translation or explanation are available. According to Anderson and Horney (1999), e-books have the following features: visible digital text, the functional metaphor of a printed book, an organizing them, and any multimedia additions that enhance the text.

Readers can get e-books from E-libraries and downloading them, some of these e-books are free, and most of them are commercially available.

1.8.2.6 Mobiles Use in Developing Reading

One of the most attractive technological devices is the mobile phone which represents a revolution in education. Mobile learning is becoming more popular, because it is acceptable from anywhere. According to Sridhar (2006), the using of mobile phone technology has provided alternatives for students to learn without limits of time and space. Moreover, the use of mobiles improves reading skill of students by giving them the opportunity to use familiar mobile devices of reading or using electronic dictionaries   during lectures (Sridhar, 2006), since the mobile phones can have the same applications that are in a simple PC. In addition, mobile phones are used increasingly in language learning, with applications ranging from improving knowledge of vocabulary, idioms and grammar.

1.8.2.7 Reading CD-ROM Based Newspapers

Teachers use compact discs (CDs) to enhance classroom activities, which allows students to improve their background knowledge and vocabulary of words easily and effectively , for example, they can use newspapers stored in CD-ROMs, in addition they can use CDs to store a large quantity of digital information within few seconds (Seedhouse, 1994).

1.8.3 Using Blending Learning in Teaching Reading

Technology has frequently benefited motivation and autonomy in language learning. It has created new environments for learning, new opportunities for synchronous and asynchronous collaboration. In this context, Blended Learning appears as a new approach in the teaching process, which combines two types of learning online and face-to-face learning. "Those who use blending learning environments are trying to maximize the benefits of both face to face and online methods using class time for what it does best" (Osguthorpe & Graham, 2003: 227). The following figure shows the use of blended learning approach by Heinze and Procter (2004):
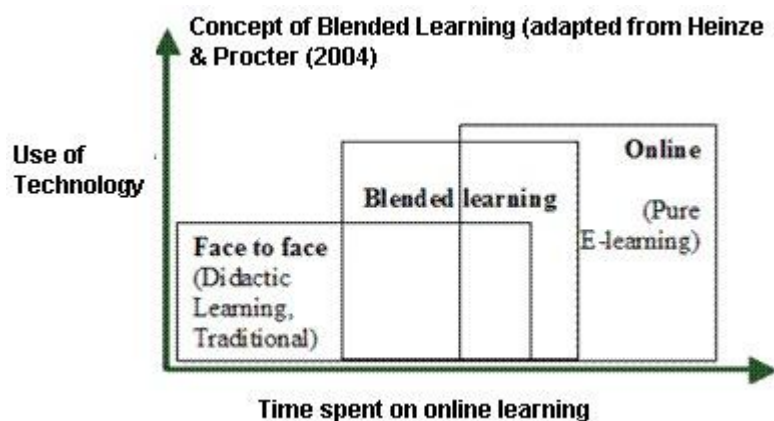
Figure 1.1 blended Conception of learning

Reading can be stressful for students, as Grabe (2009) says, "most of students take a dim view of becoming good, fluent readers", so they need to be more motivated in reading. The emergence of blended learning approach has great impact on learning and teaching process, it used in all levels and in EFL classroom too. It is the potential to the nature of the three goals of instruction, first, allow successful task outcomes by students on a consistent basis, second, promote students autonomy, and the third, support student collaboration (Grabe, 2009). This approach allows students to work at their own pace with understanding new concepts before moving on. Teachers can circulate and support individual students who may need individualized attention.

1.9 Conclusion

In this chapter, the researcher gave the readers a theoretical overview about reading skills, its definition, importance, purposes, reading models, and some types of reading. Then it has discovered the effect of technology in the learning process, mentioned to advantages and disadvantages of Computer Assisted Language learning (CALL), the importance of using CALL in reading and gave some technological tools such as videos, internet, electronic dictionaries and e-books that should be used to enhance reading comprehension.

Research Design and Instruments

2.1 Introduction

2.2. Research Objectives

2.3 The Sample Population

    2.3.1Teachers' Profile

    2.3.2 Students' Profile

2.4 The Research Instruments

    2.4.1 The Learners' Questionnaire

    2.4.2 The Teachers' Interview

2.5 Data Analysis Methods

    2.5.1 Quantitative Data Analysis

    2.5.2 Qualitative Data Analysis

2.6 Data Analysis

    2.6.1 Analysis of learners' Questionnaire

    2.6.2 Analysis of Teachers' Interview

2.7 Discussion of the Main Results

2.8 Suggestions and Recommendations

    2.8.1 Teachers' Role in the 21st Century

    2.8.2 Technology Tools to Support Reading in the Digital Age

2.9 Conclusion

2.1 Introduction

This chapter deals, in fact, with an explanation of the research methodology and design, focusing on data collection and analysis. It is used as a description of a case of study concerning the effect of computerized programmes in the development of reading comprehension skills. First, it presents the objectives of this research work, and provides the reader with some information about the sample population; the research instruments and data analysis methods used in this case study. Then, it denotes the analysis of collected data and gives a discussion of the main results. Finally, it gives some suggestions and recommendations that may help EFL learners and teachers to meet the challenges that face the use of technology in classroom.

2.2 Research Objectives

This research work aims at providing data that can help to improve the use of computerized programs for EFL teaching and learning. It tries to demonstrate the role of technology by providing a view concerning the learners and teachers reaction about its use. This study aims at discovering the strategies and the technological tools that the EFL teachers and learners use. It also tries to show the consequences of using computerized programmes and if the traditional methods of teaching/learning are still use or not. The main purpose of this study is to gather different points of view concerning the effect of computerize programmes for improving EFL students' reading comprehension skills at Tlemcen University.

2.3 The Sample Population

A sample population is another crucial element without it a research would not be conducted. Samples are used in statistical testing when the size population is too large. In this research, the researcher collected data from twenty-five second year EFL students and four English teachers, at Tlemcen University.

2.3.1 Teachers' Profile

Four EFL teachers were involved in this research work, two of them are male and two are female. They are teachers of ICT, phonetics, linguistics, R.M, ACCS, and American studies in the English department at Tlemcen University were selected, they are all Algerian teachers specialized in applied linguistics, sociolinguistics, civilization, translation and ESP. Two teachers have the doctorate degree whereas the others were all magister holders. The choice of those teachers was because they already dealt with the use of technological tools and materials.

2.3.2 Students' Profile

Regarding the purpose of this study, the researcher selected randomly a population of twenty-five second year EFL students from the English department at Tlemcen University, who studied English before for seven years. They are holders of baccalaureate from different branches (Science, Letters and Language/Humanities…). The researcher chose second year EFL students because they used language laboratory and audio-visual aids to learn the English language, they had the experience of using technological tools.

2.4 The research Instruments

The researcher used two research instruments a questionnaire for learners and an interview for teachers' to collect data needed for a sound investigation of EFL teachers and students' opinions about the effect of computerized programs in developing reading.

2.4.1 The Learners' Questionnaire

The questionnaire that has been provided in this research work is an important instrument which is designed in the form of written questions by a researcher then addressed to a sample population to be answered, Nunan (1992:231) states that "a questionnaire is an instrument for collection of data, usually in written form the subject".

The questionnaire was addressed to twenty-five second year EFL students to obtain their opinions about the effect of technology on developing reading skills. The researcher gave the students the questionnaire and asked them to answer the given questions; all the questions were answered except for some open-ended questions.

The researcher used close-ended, multiple choice and open-ended questions. The close-ended questions require answers with use of "yes" or "no", the multiple choice questions involve a set of responses or alternatives and respondents are required to give one or more and the open-ended questions require a long answer, they take longer to answer and difficult to analyse. The close-ended and multiple-choice questions provide quantitative data, whereas, open-ended questions provide qualitative data.

2.4.2 The Teachers' Interview

In addition to the use of questionnaire as a research instrument in this study, the researcher depended also on the use of the interview which is a research instrument used by a researcher in a form of a conversation between him and the informants to obtain information. Gillham (2000:1) defines it as "A conversation usually between two people. But it is a conversation where one person –the interviewer- is seeking the response for a particular purpose from the other person – interviewee".

There are three types of interview, the structured interview takes the form of an oral questionnaire, and it requires all the respondents to answer the same questions, which have the same wording. Therefore, it follows the format of questionnaire, but it is administered orally. The semi-structured interview involves an outline of the topic that will be discussed. Hence, the interviewer asked questions without following a specific order and wording. The unstructured interview takes the form of the general discussion since the researcher just explains the research the research topic to the informant who has to provide his opinion about it.

The interview is useful for collecting information about opinions and attitudes. The structured interview may used for the collection of qualitative and quantitative data. On the other hand, the semi-structured interview relies more on open-ended questions. It is time consuming and introduce bias (subjectivity). Successful interviewing can be considered both a skill and an art, and in order to interview people efficiently, the researcher needs time, experience and effort. S/he also needs "to establish and maintain good rapport to be able to control the pace and direction of the conversation as needed, and to know how to follow up important issues" (Johnson, 1992:88).

2.5 Data Analysis Methods

To analyse the questionnaire, the researcher depended on a mixture of data analysis methods which are quantitative and qualitative data analysis. In this respect, Dornyei (2007:268) claims, "the analysis of data should proceed independently for the quantitative and qualitative phases and miscing should occur only at the final interpretation stage". Using a combination of data quantitative and qualitative methods helps the researcher to obtain better results.

2.5.1 Quantitative Data Analysis

Realised on statistics and statistical technique that are employed for the description and analysis of information. As it is illustrated by Kothari (2004:5), the quantitative approach involves, "the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion". It informs the use of descriptive statics, which include frequencies, percentages, tabulation, graphic, and representation. Consequently, Jonker and Penink (2010:38) regard the quantitative approach as being, "purely scientific, justifiable, precise and based on facts often reflected in exact figures".

2.5.2 Qualitative Data Analysis

Formulate textual information provided in the form of text, it relies on the use of the technique of coding (coding = classify answers) which means summarizing the content of each response and classifying answers together

according to their content. To provide more explanations the researcher may use tables or diagrams to summarize and recapture the main points listed previously within the text. As it is defined by Hancock and Algozzine (2007:86), "any kind of research that produces findings not arrived at through statistical procedures or other means of quantification".

2.6 Data Analysis

In this part, the researcher will analyse data collected from the learners' questionnaire and teachers' interview. Two methods of data analysis will be adopted namely; qualitative and quantitative analysis.

2.6.1 Analysis of Learners' Questionnaire

In this part, the researcher distributed questionnaires to the sample population that consists of 25 second-year EFL student. This section will analyse the findings.

This questionnaire consisted of two parts, the first one is about reading and is built up by six questions analysed as follow:

1. Question 1: this question was addressed to check whether the students read in their free time or they prefer to do other things like playing sport or connecting with friends. The majority of the students (13), represented the percentage of 52% stated that they prefer reading their free time. Ten (10) students, representing the percentage of 40% said that they prefer connecting with friends while two (2) respondents, representing the percentage of 8% prefer playing sport. This is well displayed in the following table:

Student Answer	Frequency	Percentage
Reading	13	52%
Playing sport	2	8%
Connecting with friends	10	40%
Total	25	100%

Table 2.1 Students' Habits.
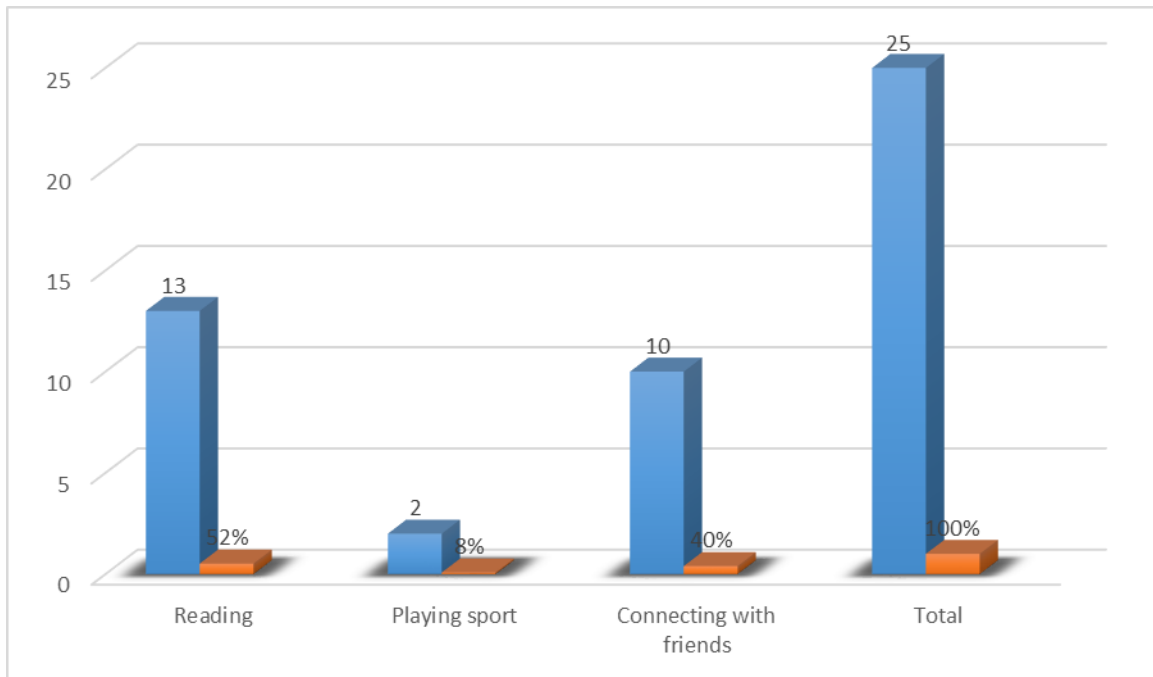
Figure 2.1 Students' Habits.

2. Question 2: this question asked students about the importance of reading. The majority of the informants (24), representing the percentage of 96%, answered by "yes" and the remaining, one (1) student, representing the percentage of 4% answered by "no". This is well displayed in the following table:

Student's Answer	Frequency	Percentage
Yes	24	96%
No	1	4%
Total	25	100%

  Table 2.2 Reading is Important.

Figure 2.2 Reading is Important.

3. Question 3: twenty first students (21), representing the percentage of 84%,   find differences between reading in L1 and reading in L2 in terms of culture, vocabulary, difficulties in indirect meaning in L2 and pronunciation and spelling mistakes. In the other hand, four students (4), representing the percentage of 16%, do not find any difference between reading in L1 and reading in L2. This is well displayed in the following table:

Student Answer	Frequency	Percentage
Yes	21	84%
No	4	16%
Total	25	100%

Table 2.3 Deference between Reading in L1 and Reading in L2

4. Question 4: seventeen students (17), representing the percentage of 68% use some reading strategies such as skimming, scanning, drawing conclusions, inferring and eight students (8), representing the percentage of 32% do not aware of any reading strategies. This is well displayed in the following table:

Student Answer	Frequency	Percentage
Yes	17	68%
No	8	32%
Total	25	100%

Table 2.4 The Use of Reading strategies.
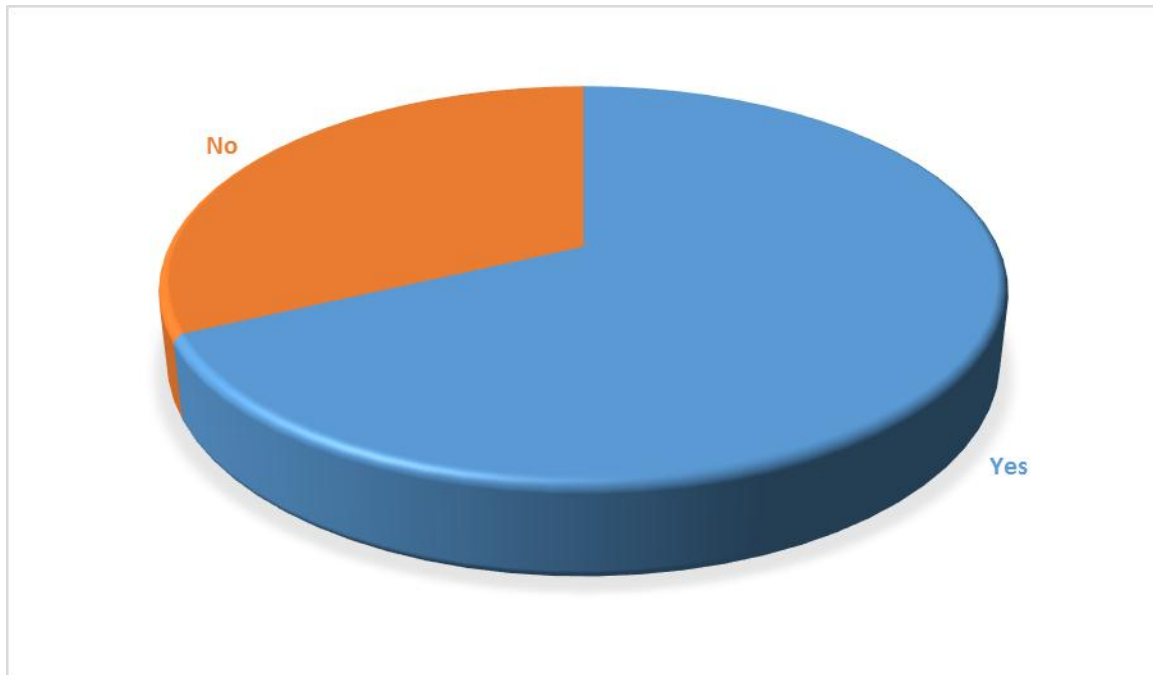
Figure 2.4 The Use of Reading Strategies.

5. Question 5: seventeen students (17), representing the percentage of 68% use pre-reading task like pick up the new words that seem to be difficult and eight students (8), representing the percentage of 32% do no nothing. Shown as bellow:

Student Answer	Frequency	Percentage
Using pre- reading	17	68%
Do nothing	8	32%
Total	25	100%

Table 2.5 using pre-reading

6. Question 6: when asking students if they check their understanding of the text. The majority of the informants (21), from 84% of the learners expressed their using the strategy of checking understanding of the text whereas four (4) informants, representing the percentage of 16% said that they did not. This is well displayed as bellow:

Student Answer	Frequency	Percentage
Yes	21	84%
No	4	16%
Total	25	100%

Table 2.6 Check understanding

The second part of learners' questionnaire was about technology as follow:

7. Question 7: this question is about the opinion of the students about the necessity of using technology in the classroom. The majority of the informants (24), representing the percentage of 96%, answered by "yes" and the remaining, one (1) student, representing the percentage of 4% answered by "no". The following table illustrates their answers:

Student' Answer	Frequency	Percentage
Yes	24	96%
No	1	4%
Total	25	100%

Table 2.7 Necessity of Using Technology in Classroom
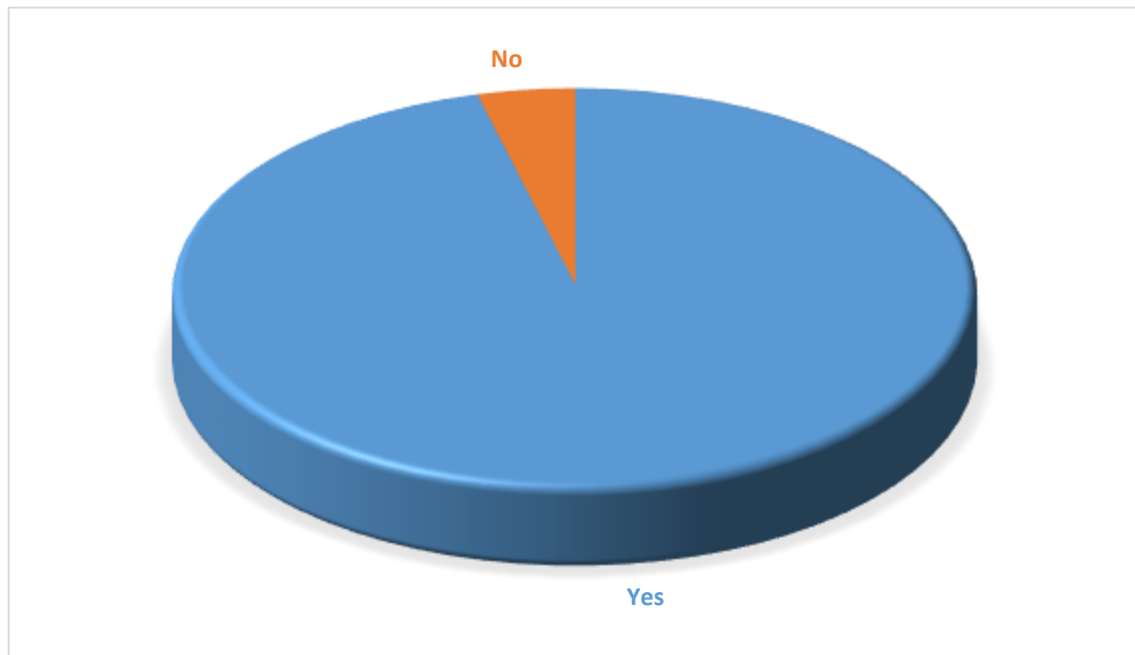
Figure 2.7 Necessity of Using Technology in Classroom.

8. Question 8: twenty three informants (23), representing the percentage of 92% prefer using technological aids because this new generation are digital natives and it is fun, easy, time saver, faster, more comfortable, develop the four skills, provide rich information and motivate students better than the ancient methods. However, tow informants (2), representing the percentage of 8%, mentioned that they prefer the ancient methods are better because technology and Internet are new fashion that they do not need to work hard and that the book remains the best way of reading. The following table illustrates their answers:

Student Answer	Frequency	Percentage
Tchnological aids	23	92%
Ancient methods	2	8%
Total	25	100%

Table 2.8 New Technological tools or Ancient Methods.
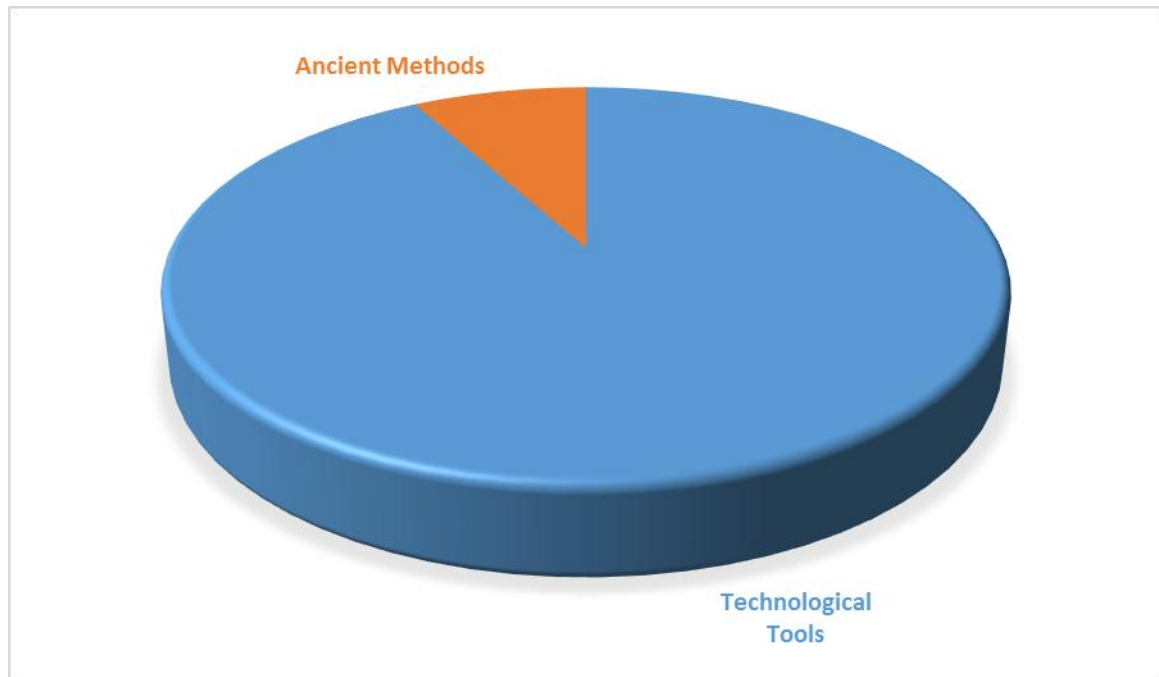
Figure 2.8 Technological Tools or Ancient Methods.

9. Question 9: all the students believe that technology is a helpful tool for learning a language especially reading skills throughout number strategies.

10. Question 10: fourteen (14) students representing the percentage of 56% are disagree that using technology in the class takes up too much time and six students (6) representing the percentage of 24% neutral. Whereas five (5) students, representing the percentage of 20% agree. As shown below:

Student Answer	Frequency	Percentage
Agree	5	20%
Neutral	6	24%
Disagree	14	56%
Total	25	100%

Table 2.10 Technology and Loss Time.
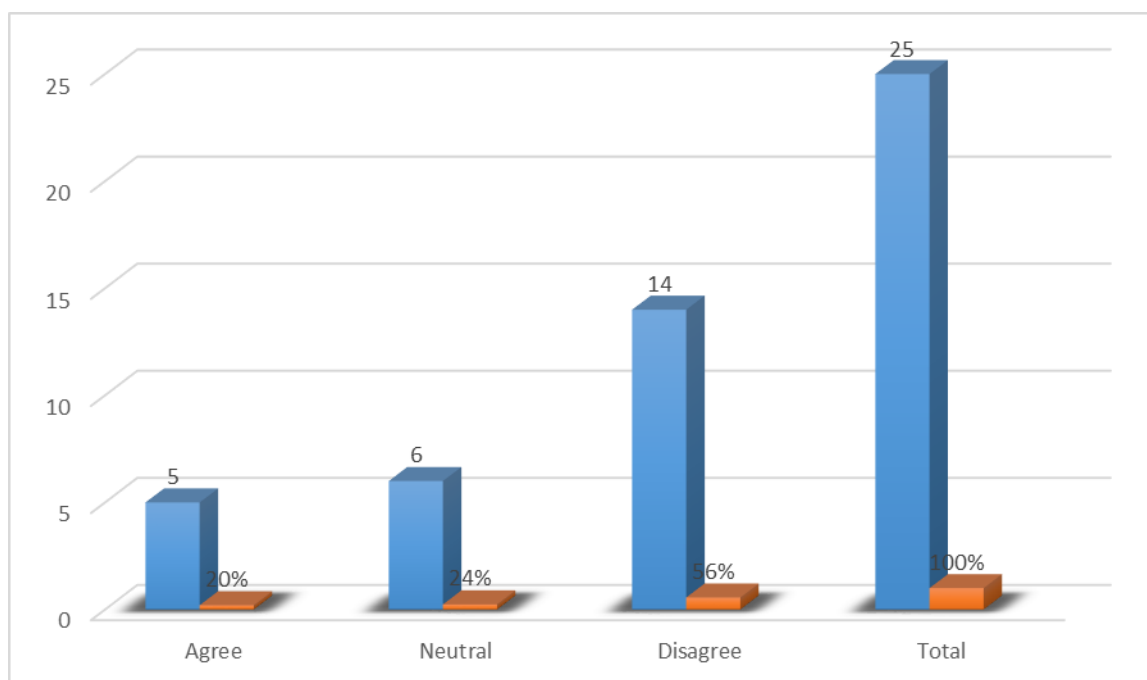
Figure 2.10 Technology and Loss Time.

11. Question 11: concerning this question all the students (25) representing the percentage of 100%, are agree that students should know how to use technology in the class. The following table illustrates their answers:

Student Answer	Frequency	Percentage
Agree	25	100%
Neutral	0	0%
Disagree	0	0%
Total	25	100%

Table 2.11 Students Should Know Using Technology

12. Question 12: most of the students (22), representing the percentage of 80% agree that using the benefits of internet can improve students' reading skills. On the other hand, two (2) students, representing the percentage of 8% are neutral and one student representing the percentage of 4% is disagree. The following table illustrates their answers:

Student Answer	Frequency	Percentage
Agree	22	88%
Neutral	2	8%
Disagree	1	4%
Total	25	100%

Table 2.12 Internet Improve Reading skills.
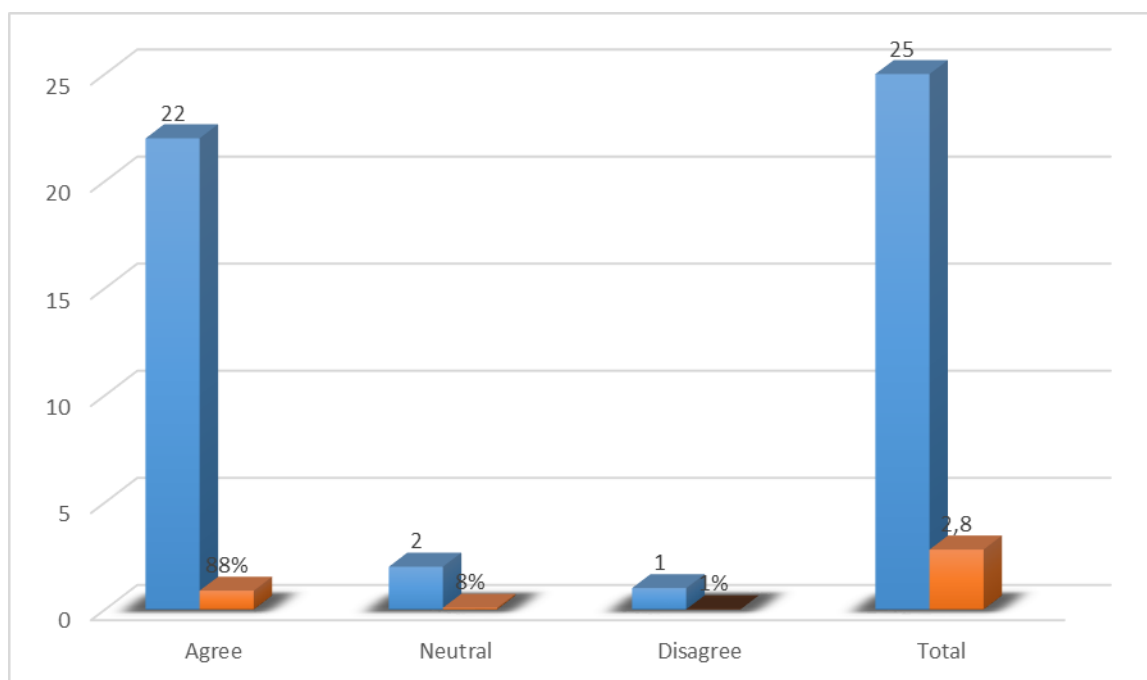
Figure 2.12 Internet Improve Reading Skills.

2.6.2 Analysis of Teachers' Interview

Another sample has been chosen to provide the present research work with the necessary data. This sample consisted of four teachers, currently working in the department of foreign languages at the University of Tlemcen. The interviewees chosen confirmed that they dealt with technology as part of their academic and private life.

As far as the importance of using technology for EFL teaching and learning the interviewees all agree about it. Its importance is crucial, especially for languages, as it represents a new innovative way of teaching and helps in creating

an appropriate atmosphere for both the learners and teachers as well as creating a virtual environment where the learners can really practice that language.

The informants seemed to prefer the use of technology during their classroom practice as the learners can be directly exposed to authentic materials, this is considered as a good opportunity to test their knowledge and refine their lacuna. The interviewees agree that the educational system has changed positively through the introduction of technology and whatever development of the technology, they cannot neglect the presence of the teachers. At this present time, one cannot work without technology, but also cannot replace them by technology; they should go hand to hand.

The role of the teacher, however, has been altered. The interviewees maintained that there was a total change of the role of teachers nowadays, because they shifted from being the only source of information, to just being guiders and evaluators.

2.7 Discussion of the Main Results

In the present work, the researcher used students' questionnaire and teachers' interview as instruments. They were addressed to examine the effect of computerized programs in reading.

After analysing the data collected, the present research work proved the hypothesis that the researcher had proposed because the teachers expressed the big importance to teaching reading with technology and suggested that technology enhance learners' reading skills . Most of the students seemed to be more motivated to use technology because they confirmed that it has positive effects and its use enhances their language level. They suggest that technology is a relevant and helpful tool that cannot be neglected nowadays when learning foreign language. They indicated that using technology in classroom can prepar them for the digital future, they believe that technology helps them retain information better. Because this generation is digital in native they prefer using technology and consider the ancient methods as boring.

The researcher suggested that there are many technological tools such as computers and audio visual aids that can be used within the education system to improve EFL teaching and learning. The findings of this research revealed that CALL Programs have positive effect on EFL learner's reading comprehension is a true hypothesis. CALL programs creates enjoyable environment that makes the learner enjoy his studies and it develops the four skills at once through technological tools. It changes the role of the teacher from teacher centre to a guided and commentator.

The second hypothesis which suggested is that the use of technology helps students to improve their reading level through various activities such as videos, using e-books and electronic dictionaries. After the data collection and analysis, had proved this hypothesis. Most of teachers feel comfortable when using technological tools such as computers and the internet to teach their students. Most of the students had the feeling of wanting to use technology in their classroom. They prefer its use because it helps them to develop their reading level through an enjoyable process.

Finally, most of EFL teachers and learners supported the use of technological tools in learning. They recognized the importance of its use. All the teachers agreed that learners today are much more engaged on the use of technology in and outside the classroom. However, the teachers and the learners need professional training concerning the use of CALL programs to avoid exposure to problems when they use it.

2.8 Suggestions and Recommendations

EFL students have unprecedented possibilities to acquire the four basic skills, namely listening, speaking, reading and writing, in multimedia CALL environment. By incorporating computer Hardware and Software components, the university EFL class has been observed as dynamic, attention-grasping and providing the students with new authentic ways of developing their reading skills. The results of this study have proved the increase of students' reading to complete

the learning tasks presented through new technological tools, materials and methods.

2.8.1 Teachers' Role the 21st Century

Teachers perform different roles when making decisions about the planning and teaching of lessons. It is often helpful to use metaphors to describe what teachers do. Some teachers say that they are like actors because they feel they are always on stage. Others see themselves as orchestral conductors because they direct conversations and set the tone and pace of the class. The ways teachers can lead are as varied as teachers themselves. Teachers as leaders assume a wide range of roles to support school and student success.

Whether these roles are assigned formally or shared informally, they build the entire school's capacity to improve. A teacher's role involve more than simply standing in front of a classroom and lecturing .In fact , even though a teacher spends the majority of the day in the classroom , the actual teaching component is only part of the job. An effective teacher owns smoothly and all students receive a quality education. Because teachers can lead in a variety of ways, many teachers can serve as leaders among their peers.

- **Teacher Education for the Future**

Teacher education - rather than teacher training - needs to change in the near future. Some experts say it is too late to begin the changes, as we need new competencies in teaching right now. The need of a generation of teachers who aim to develop learners instead of teaching them, who help their students to become independent (learning to learn), who provide students with motivation and interest for life-long learning and urge them to become autonomous learners, is essential in the education of the future.

Teacher's development may take a step back to see the large picture of what goes on in learning and how the relationship between teachers and students influence learning. It is also a continuous process of transforming human potential into human performance, according to Benmoussat:

> **Development is shaped as a distinct concept in the teacher's thinking about learning .It is a helpful and insightful approach to explore the process involved in the teaching/learning mechanism in order to develop and improve the teacher's profession.**
>
> **(Benmoussat, 2003:229)**

The technical skills of teachers contribute to the realisation of CALL premises. Therefore, university administrators need to:

-Define the teachers' existing technical skills and the limitations in their CALL knowledge in order to be able to design training programs.

-Developing the teachers' technology skills on the bases of the predefined educational goals they want to get with the assistance of CALL.

-Convincing teachers that they need to become lifelong learners as technology introduces an incredible quantity of inventions every day.

Recommendations for learners:

-Learners have to use various technological tools to develop their reading abilities. They should be familiar with using computers and internet and capable of interacting with these techniques in order to get god results. On the other hand, using reading-based computer programmes can make learners more interested in reading. In addition, network chatting using the target language can help the learners to develop their vocabulary.

2.8.2 Technology Tools to Support Reading in the Digital Age

We are living in a digital age, and the new generation is digital in native. So, the advances in digital technologies provide students with much of technological tools which can help them to increase their reading ability. Teachers can benefit their students by using technological advances which offer great promise as instructional tools for literacy education.

There are some digital devices that are proposed for developing students' reading comprehension. For example, E-reading technology that refers to the hardware and software, used to display a digital text. Students can use this tool in their laptops, tablets and smartphones, and that allows them to read easily in any time and everywhere. It make them more interactive with the text. The Wiggle Works is another programme which can help to keep track of their activity and performance.

Therefore, the use of technology in the field of education has certain place, it plays significant role in the learning process. It is used to support, pedagogy and learning not to replace the teacher, which means the new technologies work to gather with the instructors to enhance and enrich learning. In fact, technology allows the teacher to do his or her job effectively, it changes the role of the teacher from teacher centre to guide and commentator; in this case, the responsibility for learning is shifted to the students.

2.9 Conclusion

This chapter was a practical part of this research since it focused on the analysis and interpretation of the collected information starting from the learners' questionnaire, to teacher's interview. The results were analysed quantitatively and qualitatively and the general interpretation of the collected data was discussed. Then it provided recommendations for successful integration of new technological tools to improve learners' reading skill.

General Conclusion

The integration of technologies in learning has brought positive changes to pedagogy and teaching methods all over the world. It has completely changed how teachers teach and students learn; teachers are learning how to teach with emerging technologies, while students are using advanced technology to shape how they learn. By using new technological tools in the classroom, teachers can prepare their students for a successful life outside of school.

In this research work the researcher began his work with the literature review which included the definition of reading, importance of reading, reading purposes, models of reading, and types of reading. The researcher mentioned the importance of technology, and presented its advantages and disadvantages in the learning process. Then the researcher provided some of the tools that technology offers.

The second chapter dealt with the collection and the analysis of information relate to the topic of this study. For this study, two types of research instruments have been used to elicit data; a questionnaire and an interview. For the analysis of the data, two different methods were applied, quantitative and qualitative data analysis. Concerning the area of research and the participant, a sample of second year EFL learners (25) was selected from English department at Tlemcen university, and four teachers holding different titles, as well as, since they are in touch with technology on a daily basis.

Based on the opinions of participants, the researcher has tried to prove the research hypotheses. Through the previously mentioned instruments, the researcher dealt with questions concerning their attitude towards the use of technology and its impact on their studies. Concerning the interview, the researcher attempted to gather information as out the importance of technology in classroom, the impact of technology on reading, and if the use of CALL program is problematic. Then, provided recommendations and suggestions for the incorporation of technological tools as the main challenges in the classroom that are being coped with. As a result, the students' reading comprehension can be increased through using technology.

General Conclusion

Finally, the present study has tried to give a general idea about the effects of computerized programmes on the development of reading comprehension, through investigating many aspects such as the importance of technology in reading, its advantages. Moreover, this research work tried to provide an outcome of CALL programs on reading. Nevertheless, it attempted to raise attention towards future research about technology and the future of English language teaching and learning.

BIBLIOGRAPHY

Brett, D. & Gonzalez, L. (2009). *Technology-Enhanced Materials, the Handbook of Language Teaching.* UK: Black well Publishing Ltd.

Chapelle, A. C. (2003). *English Language Learning and Technology: Lectures on Applied Linguistics in the Age of Information and Communication Technology.* Amsterdam/Philadelphia: John Benjamins Publishing Company.

Carrel, P. et al. (1983). *Schemata Theory and ESL Reading.* TESOL QUARTERLY.

Dechant, E. (1991). *Understanding and Teaching Reading: an Interactive Model.* Hills dale, NJ: Laurence Erlbaum.

Donaldson, P.R. & Haggstron, A.M. (2006). *Changing Language Education through CALL.* UK: Taylor and Francis e-library.

Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University.

Eloff, I. & Ebersohn, L. (2004). *Keys to Educational Psychology*. Cape Town: UCT.

Erben et al. (2009). *Teaching English Language Learners through Technology*. UK: Routledge.

Gillham, B. (2000). *The Research Interview*. New York Continuum.

Gilner, L. & Morals,F. (2010). *Extensive Reading and Involving students' protypes.* Journal of Applied Linguistics.

Grabe, W. (2009). *Reading in a Second Language: Moving from Theories to Practice*. New York: Cambridge University Press.

Grellet, F. (1996). *Developing Reading Skills*. NY: Cambridge University Press.

Goodman, K. S. (1988). *Interactive Approaches to L2 Reading*. Cambridge: CUP.

Gough, (1985). *One Second of Reading. Theoretical Models and Process of Reading* (3rd ed.). New York, DE: International Reading Association.

Hancock, D. R. & Algozzine, B. (2006). *Case Study Research: a Practical Guide for Beginning Researchers*. New York: Teachers College Press.

Harvey, S. & Goudvis, A. (2000). *Strategies that Work Teaching Comprehension to Enhance Understanding*. York, ME Stenhouse Publishers.

Heinze, A. & Procter, C. (2004). *Reflections on the Use of Blended Learning*. University of Salford, Salford.

Johnson, D. M. (1992). *Approaches to Research in Second Language Learning*. Longman.

Jonker, J. & Penink, B. (2010). *The Essence of Research Methodology: A Concise Guide for Master and PhD Students in Management Science*. London: Springer.

Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New York: New Age International Ltd Publishers.

Mcnamara, D. S. (2007). *Reading Comprehension Strategies: Theories Interactions and Technologies*. Laurence Erablaum.

Nunan, D. (1992). *Language Teaching Methodology: a Textbook for Teachers*. New York and London: Phoenix ELT.

Osguthorpe, R. T. & Graham, C. (2003). *Blended Learning Environments: Definitions and Directions*: Quarterly Review of Distance Education, 4(3).

Park, O. & Hopkins, R. (1993). *Instructional Conditions for Using Dynamic Display*. A Review Instructional Science, 21.

Richard, D. & Julian, B. (1998). Extensive Reading in the Second Language Classroom. Cambridge University Press.

Rumelhart, D. (1989). *The Architecture of Mind: A Comprehension Approach.* Cambridge, MA: MIT Press.

Smith, F. (1994). *Understanding Reading* (5th ed). Hillsdale, NJ: Laurence Erlbaum.

Sridhar, K. S. (2006). *Telecommunications and Growth: Cansal Model, Quantitative and Qualitative Evidence.* Economic and Political Weekly.

Urquhart, S. & Weir, S. (1998). *Reading in a Second Language: Process, Product and Practice*. London.

THESES:

Baiche,A. (2010). *Innovation and change in language Education: A Critical Reflection on Teaching and Learning of EFL in Secondary Education in Algeria.* Unpublished Doctoral theses: University of Oran.

Benmoussat, S. (2003). *Mediating Language and Culture: An Analysis of the Cultural Dimensions in the Newly Designed ELT Textbooks*. Unpublished Doctoral theses: University of Tlemcen.

Electronic Sources

Alkahtani, S. (1999). Teaching ESL Reading Using Computers. *The Internet TESL Journal, 5*(11). Retrieved from http://iteslj.org/Techniques/Alkahtani-ComputeReading/. (February 25, 2016).

Anderson-Inman, L. & Horney, M. (1999). *Electronic books: Reading and Studying with Supportive resources*, from http://www.readingonline.org/electronic/ebook

Constantinescu, A. I. (2007). Using Technology to assist in Vocabulary Acquisition and Reading Comprehension. *The Internet TESL Journal, 13*(2). Retrieved from http://iteslj.org/Articles/Constantinescu-Vocabulary.html. (February 25, 2016)

Kenworthy, R. C. (2004). Developing Writing Skills in a Foreign Language via the Internet. *The Internet TESL Journal, 10*(10). Retrieved from http://itjsl.org/Techniques/Kenworth-WritingSkills-html. (February 22, 2016)

Miller, D. (2004). *Reading for Comprehension and Not-Taking*. Retrieved from: http://www/smarttutorreferrals.com/articals/study-skills/reading-not-taking.

Sharma, P. (2009). *Controversies in Using Technology in Language Teaching.* Retrieved from http://www.teachingenglish.org.ukarticles/controversies-using-technology-language-teaching.

Seedhous, P. (1994). Using Newspapers on CD-ROM as a Resource. *TESL-EJ, 1*(2). Retrieved from http://www.teslej.org/wordpress/issues/volum1/ej02/ej02a3/. (February 25, 2016)

Ybarra, R. & Green, T. (2003). Using Technology to Help ESL/EFL Students Develop Language Skills. *Internet TESL Journal, 9*(3). Retrieved from http://iteslj.org/Articals/Ybarra-Technology.htm. (February 25,2016).

Smart, M. P. (2007). What Is Successful Technology Integration? IN: http://www.edutapia.org/technology-integration-guide-description. (February 21, 2016).

Smart, M. P. (2008). The Word and the World: Technology Aids English Language Learners. In: http://www.edutapia.org/technology-software-english-language-learners. (February 25, 2016)

Appendix "A"

Students' questionnaire:

Dear students.

We have this questionnaire concerning the effect of computerized programs in the development of reading comprehension skills. We would be so grateful if you could answer the following questions or put a cross (x) on the appropriate answer.

Part one:

Gender: male ☐   female ☐

Part two:

1-What kinds of things do you like to do in your free time?

-Reading ☐   -Playing sport ☐   -Connecting with friends ☐

2-Do you think that it is important to read?

Yes ☐   No ☐

3-Do you think reading in your L1 is different than reading in your L2?

……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………

4-Are you aware of any reading strategies you use when reading?

……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
…………………………………………………………………………

5-What do you do before you start reading a text?

……………………………………………………………………………………
……………………………………………………………………………………
…………………………………………………………………………………

6-During reading, do you check your understanding of the text?

Yes ☐   No ☐

-If yes, what strategies do you use for checking?

……
…………………………………………………………………………………....

7-Is technology necessary in EFL classrooms?

     Yes ☐   No ☐

8-Do you prefer the ancient methods of teaching a foreign language or using technological aids?

     Technological aids ☐   Ancient methods ☐

9-According to you, how can technological tools help you develop your reading abilities?

……
……
……
……
……………………………………………………………………………

10-Using technology in the class takes up too much time.

-Agree ☐   -Strong agree ☐   - Neutral ☐

    -Disagree ☐   -Strongly disagree ☐

11-Students should know how to use technology in the class.

-Agree ☐   -Strong agree ☐   - Neutral ☐

    -Disagree ☐   -Strongly disagree ☐

12- Using the benefits of internet can improve students' reading skills.

-Agree ☐   -Strong agree ☐   - Neutral ☐

    -Disagree ☐   -Strongly disagree ☐

Thank you.

2

Appendix ''B''

Teachers' Questionnaire :

Dear teachers, this questionnaire is designed to show the effect of computerized programs in developing reading comprehension skills. Please would you give your most thorough responseto the questions below?

Your speciality:

Your teaching experience:

Modules in charge of:

1-How can the skill of reading develop?

………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………

2-why do students need multiple strategies in reading?

………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………

3-How will students receive high-quality, explicit, and systematic instruction in the reading classroom?

………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………

4-Do you prefer the using of technology in your reading or using ancient methods?

5-What are the benefits of using technology in language teaching/learning?

………………………………………………………………………………………
………………………………………………………………………………………

……
……

6-Does the use of technology improve students reading skills?

      Yes ☐   No ☐

 -How?

……
……
……
……

7-What are your attitudes towards using technology?

……
……
……
……

8-Are there any comment to add?

……
……
……

Thank you