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<u>Students' Attitudes towards Computer Assisted English learning</u>

<u>Case study: 2nd Year Computer Science LMD students</u>

<u>Chlef University</u>

Dissertation Submitted in Partial Fulfillment of the Requirements for

The Magister Degree in English For Specific Purposes

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Dedication

To my parents and my husband.

Abstract:

It is a fact that the use of computers becomes a revolution in the history of human life in all aspects, and the process of language learning and teaching could not be exempted from this. Many institutions around the world have integrated computer-assisted language learning (CALL) into their curricula. This study aims to investigate the students' attitudes towards the integration of computer in English for Specific Purposes class. Observation, a questionnaire for the students and another for the teacher are used to collect data from a sample composed of 40 students who are 2nd year LMD students and their teacher of English from the department of Computing in the University of Chlef, who participated in this study. The findings of the study revealed that students have positive attitudes towards CALL and towards the English language. The results also shed the light on the attitudes of the teacher towards CALL, which were positive as well.

Key Words: CALL, attitude, English for Specific Purposes, computers.

List of Abbreviations:

CBI: computer-based instruction.

ESL: English as a second language.

EFL: English as a foreign language.

ESP: English for specific purposes.

ILT: Information and Learning Technology.

FLT & FLL: foreign language teaching and foreign language learning.

CALI: computer assisted language instruction.

CALL: computer assisted language learning.

PC: personal computer.

TELL: Technology Enhanced Language Learning.

ICT: information and communication technology

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General introduction:

Several research studies have looked at ways of incorporating technology into classroom activities and language teaching, many researchers mention that for successful implementation of computer, learners' attitudes towards computers should also be taken into consideration. However, research that probes second language (L2) or foreign language students' attitudes towards these computer technology resources, and its use in class, is limited, even now the use of computers for teaching English language is very minimal.

Students will benefit from the general use of technology in class. This includes augmented motivation, improvement and mastery of basic skills; this will also promote a more student centered class. Additionally, again, it is beneficial, especially for low achieving students, when it is used to illustrate concepts, for example. Although, teachers are aware of these benefits, the use of computer to teach English language is still not very widespread, this is mainly due to:

- Limited time for the teachers to incorporate computers in the teaching   and learning.
- Very limited computers in schools.
- Teachers have limited computer knowledge or skills to integrate the computer in their lessons.

Teachers' and students' perceptions of integrating computers in the classroom are of great value since it plays a crucial role in predicting the level of achievement of students. For this reason, this study attempted mainly to confirm that belief and it is based on teachers' views and students' motivation and attitudes towards using computer in the English Language classroom.

The primary question of this study is:

What are the attitudes of second year LMD students, in the department of computing, towards computer assisted English classes in the University of Chlef?

This research aims to address the following supporting questions;

Question 1: What are the students' reasons for learning English?

Question 2: What are the attitudes of students towards English language?

Question 3: What are the students' attitudes towards using the computer in class when they are studying English?

Question 4: What are the teachers' views and attitudes towards implementing computer in English classes?

Question 5: Will the students prefer the traditional way of learning (only teacher based) or the new way (only computer based) or both (teacher and computer based)?

This study is directed by these hypotheses:

Hypothesis 1: The students will be motivated by more than one reason to study English.

Hypothesis 2: The students will perceive the English language positively.

Hypothesis 3: The students will have a positive attitude towards the use of computers in English classes.

Hypothesis 4: The teachers of English in the department of computing will appreciate teaching English with the aid of computer.

Hypothesis 5: The student will prefer being guided by both teacher and computer.

The necessary steps to answer the research questions are stated as objectives as follows:

- Investigate students' attitudes towards the use of computers in ESP class.
- Draw conclusions about the students' perception of the English language.
- Identify the opinions of teachers related to the use of computer appliances.
- Identify the main activities they perform with computers.
- Review of the related literature to develop a conceptual framework from which the theoretical foundations for the study questions have been constructed.
- Construct and implement the case study.
- Analyze the results obtained from the collected data.
- Arrive at conclusions from the data generated from the study.
- Suggest some implications that would help teachers and curriculum designers meet the learners' needs.
- Encourage the use of computer assisted language learning in English teaching.
- Updating the learning and teaching process.

Awareness of students' attitudes towards the integration of computers in English classes is a critical factor in predicting the efficacy of CALL in future implications. Attitudes are thought of to influence future behavior. The students' attitudes and motivation have been frequently considered to be the most critical factor for success within CALL environment. Knowing the attitudes affect the level of achievement later and students with positive attitudes towards CALL will perform better in acquiring new knowledge and improving the four skills. Terms like English as an international language, English as a global language, English as the

language of technology, English as a lingua franca and World Englishes all represent these aspects of English. It is taught in Algerian schools as a compulsory foreign language and it is taught in the universities as well. The overall goal of teaching this language is to enable the students to develop the four skills, and to communicate with other native English speakers, the fact that will open windows on the world for them. When we face reality, we find that their proficiency does not, mostly, reach its optimistic goals. The students at the end arrive at writing very few coherent and meaningful English sentences. Taking these results into consideration, many English language researchers have looked for ways to improve the students' level in general English, and in English for specific purposes. . Computer-assisted language learning (CALL) has been the crucial issue proposed as a possible solution to reinforce the students' capacity to use English in real situations. However, this method is not fully applied and explored in Algerian schools and universities in language teaching and learning yet. Thus, knowing the attitudes of students is important to go further in the future use of CALL, especially, when knowing that the students' positive attitudes are important in the success of CALL and in ESP contexts. The limited research and the importance of the field motivates the ongoing of this research besides the lack in the literature regarding studies on students' attitudes in Algeria, in particular, and students in general, in the Arab World has been another motive to conduct the present study.

The participants in this study are between 18-25 years-old. They are students from both genders, who attend the University of Chlef, in the department of computing, in their second year. All of them are enrolled in LMD system. A random sample of (40) students constitutes the target population of this case study to identify their attitudes towards English and towards the integration of computer in English for computing courses. Additionally, there is only one teacher of English in the department of computing; as a result she is the only one who will be asked in the due course of this study.

This paper consists of four chapters: two chapters that represent the theoretical background of the research paper and two chapters that represent its practical part.

This paper explores the subject of attitudes towards computer assisted English learning in the department of computing in the University of Chlef. It is organized in four chapters.

- Chapter 1 identifies the learning situation in the department of computing.
- Chapter 2 consists of a review of relevant literature related to CALL and attitudes.
- Chapter 3 describes the methodology involved in this study, the tools of study and reveals the analysis of the results of the study.

- Chapter 4 contains discussion of the results in relation to the research questions, conclusions, recommendations, suggestions and implication of the study for further development. In addition to bibliography and appendices section.

1-1: Introduction:

In this chapter we will shed the light on the learning situation in the department of computing, the teaching and learning situation, and the experience of the LMD system in the department, the university and the department requirements, the characteristics of the English module.

1-2: The Teaching Situation:

The context is a typical university setting where the medium of instruction and communication is not English and most of the times it is French. However, students are required to read some bibliographies in English. The English language is a compulsory module that the students have to attend one session per week and they are evaluated via a written exam at the end of each semester along the three years of the Bachelor degree. To help students increase both linguistic and academic skills, the teacher of English engaged them in a variety of activities, which were designed by the teacher him/herself to increase the students' knowledge related to the field of computing and to develop English language skills. The English or the ESP course would help ESP students to deal with authentic materials suitable for their specialization and provide them with the skills and strategies needed to meet their English requirements

1-3: The LMD System in the Department of Computing

The current research is concerned with a case study carried out at the Department of computing, in the University of Chlef. This university was founded twenty seven years ago. The department of computing, however, was founded just twelve years ago. The Computer Science Department contributes to the preparation of specialists in the field of computer programming and applications. The department leads also to the production of a generation of technical professionals who actively participate in the diffusion of e-culture among different strata of society and also contribute in advancing economic development through the conversion functionality in government and private sectors to fully electronic machine. Among its purposes also is to train students to have a university diploma in computing, these students will acquire skills that will improve their competency to be competent users of the computer and the related software. They will comprehend the nature of numerous modern software systems, and identify the distinct components that constitute them. They will be able to work in a team and to transmit computing ideas and knowledge. This diploma will also enable them to find work in computing-related industries. The students are taught in the LMD system which is started to be applied in the academic year (2008/2009). The "Licence" in the LMD system is accomplished through a three year curriculum, which was not the case in the classic system. It used to be accomplished in four years. This system was adopted by the Algerian university for a long time but some drawbacks appeared in the last decade. A change was necessary since the university system expectations were not satisfied with the classic approach. According to Megnounif (2010) the classic system deficiencies are:

> *"Educational programs no longer meet the new socio-economical data, training mono disciplinary in classical approach where concept of general culture is completely absent, a significant failure rate due primarily to uncertainty about the future among students, lack of motivation among teachers and students and Centralized management of the university".* Megnounif (2010: 2)

By the end of the third year in the LMD system, the students will have their "Licence" degree. Just recently, The Algerian government has begun a global reform of the system of higher education to achieve the new system requirements imposed by the future expectations of the country. "LMD" stands for License, Master and Doctorate. Adopting LMD system is very beneficial for the Algerian university since it is a standardized education system. Among the features of this system, the learners get credits that they can use wherever they go. If they stop for a while and resume studying there is no need to re-learn all the modules, just they give the credits that they have already been acquired. For the License in computing or in another field,

a learner must earn 120 credits. Wherever a student goes, if he has a Masters' degree, he can enter the Doctorate program and he can even change Majors if he decides to do so.

It is an attempt done by the government to apply the same reforms that are applied in developed countries. The purpose of this reform is to assist the Algerian educational system and research in order to go in the same path with the international ones. The LMD system is an Anglo Saxon programme adopted by most European countries and other countries in the world and it proved its success. Thus, the adoption of this system by the Algerian universities, the University of Chlef is no exception, is a step towards Globalization. The application of the LMD regime by the Algerian universities permit the establishment of a real re-foundation of the programmes that should be adequate to go in the same path with development in the world of education and science. Since this was a new system in the Algerian educational system, it is important to represent some of its key features. It is made of the Licence with 6 semesters (three years of study and the equivalence of the BA i.e. Bachelor Degree), a Master degree of two years (4 semesters) is the second phase whereas the last period is the Doctorate studies of three years of research (6semesters). The aim behind changing the system of teaching, mainly at the level of the University of Chlef is to follow the experience of the preceding Algerian universities in the adoption of LMD to enable the students to have equal chances to be accepted in different work fields and to create an overall innovation within the Algerian universities to allow them follow the flow of real foundations adequate with the evolution of scientific research and educational techniques. The system also is based on the so-called "Teaching Units" which the students should collect by the end of each semester. Another new element is the system of "Credits" which means that if students do not collect the needed credits, they may pass to the following semester with the credits got before but they still indebted until they get back what remains to gather the needed credits by the end. Talking about the department of computing in the University of Chlef or in other universities and departments there are six semesters in the first phase of this system which is the "Licence" degree. In each semester, students are expected to attend 400 hours. New subject fields have been added in this system to allow students have as much opportunities as possible when passing to the second phase of the system (i.e. the Master Degree) and also new divisions occur especially in the second year, for instance, the two sections WEB and IA appear in the second year in the department of computing which was not the case before.

1-4: University Requirements:

1-4-1: Admissions:

Access to university is open to holders of the *baccalaureate*. In addition to that, students must also meet other requirements set annually by the Ministry of Higher Education and Scientific Research based, mainly, on the following considerations:

➢ The student choice.
➢ Field of study in the *baccalaureate*.
➢ Average score in specific fields on the *baccalaureate.*
➢ The number of available seats in each field and jurisdiction.

1-4-2: Computing Faculty Requirements:

In the University of Chlef, which is the case in other universities in Algeria, in order to be accepted in the department of computing, the new 'Baccalaureate' holders are classified according to there streams (branches) in the secondary schools, priority is given to technical branches. There exist also other complementary conditions which are suitable for scientific branches. Those conditions are, besides the national classification, students of the scientific branches are asked to have 12/20 or more in mathematics and physics. After being accepted in computing department, the students will normally spend a period of three years study to graduate and obtain the computing 'Licence' degree. During this period students are theoretically assisted and trained to become either teachers in secondary or middle schools or to carry on post graduate studies at University upon an admission test. These years of graduation aim at consolidating the basis of the language already acquired in Secondary Schools (3 years of English learning).

1-5: The Activities of the Department of Computing:

Department of Computer Science and Information Technology in the University of Chlef contributes in hosting seminars and scientific meetings to inform faculty and students on what's new in the world of computers and information technology. It organized the fifth scientific days (les cinquièmes journées scientifiques), the 13th and 14th April, which they called the info days. This manifestation was an opportunity for researchers from different universities of Algeria to present their works related to different domains in

computing, these works are discussed and the best articles are chosen to be published in the magazine of "Nature et Technologie". Competitions were organized between computing students and gifts were distributed.

1-6: The Learning Context:

1-6-1: The English Module in the Department:
1-6-1-1: Aims of English Teaching in the Department:

For historical reasons, French stands as a second language. English on the other hand stands as a foreign language in Algeria. Algerian learners meet it only in the classroom whereas the *"national environment is far from being supportive"* Baloto (1996:31). The teaching of English as a foreign language in Algeria is inspired by the importance of the language that enjoys high level of presence in world. It can also be another way to diminish French interference:

"In a situation where the French language has lost much of its ground in the socio-cultural and educational environments of the country; the introduction of English is being heralded as the magic solution to all possible ills-including economic, technological and educational ones" Miliani (2003:13)

The increasing demand for English to match particular needs gives birth to English for Specific Purposes (ESP). Practitioners have included other sub-areas within the general study of ESP, among which English for Science and Technology (EST) is one. It is concerned with the discourse of scientific and technical English. The facts that English is an international language and is therefore the language of science have made the area of English for Science and Technology a "driving force", as claimed by Flowerdew (1990). Hence, the department has integrated the English module within the computing programme so as to keep pace with scientific developments. On the behalf of the University of Chlef, English is taught for almost all scientific fields. In such a setting, learning English is not for the sake of the language itself, but rather for the learner's purpose for learning the language, i.e., the objective of computing students for learning English is to realize meaning while reading texts since the computing literature is mostly written in English.

English in the department of computing is considered as a secondary module, this is due to the fact that the curriculum of English receives no particular attention from the developers of curriculum. According to the national curriculum, students study English as a compulsory subject. The administrators do not impose any kind of specifications of the content of courses

and methodology with regard to the curriculum provide they only give the time table to the teacher, who is a part time teacher since the organization of this department, who will decide upon the courses referring to what he has already studied in the university. Thus, he is the one who "knows" what the students need and what they do not. No communicative activities and techniques are used to teach English at the department of computing. The emphasis is, in most of times, on structure development and more mechanical tasks and activities. We can say that the grammar- translation method is still "valid" in teaching ESP in the department of computing. The results of these procedures are, to a given extent, boring lessons, dissatisfaction of the students who tend to talk to one another during the course and do anything else rather than paying attention to the teacher and the focus on the final marks only. The latter has many drawbacks which will be stated in the next parts. The teacher of English as well is influenced by that situation. When the course of English is being neglected, the teacher feels that his/her self-esteem is being diminished and led him/her in most of the times to quit the job (which was the case for the teacher of English that of (IA) section), being a part-time teacher and not financially motivated.

1-6-1-2: The Role of Teachers of English:

Since the beginning of this department teachers are recruited in order to give courses to computing students. Unlike the majority of other ''computing modules'' a "BA" in English or a license is enough to be accepted to teach there. They are not under supervision and cannot be required to use specific teaching methods. The teacher of English requires that students are to be taught the four skills (listening, speaking, reading, and writing) besides other skills like taking notes and doing oral presentation in a way that is at the reach of each student so they can improve across the whole range of skills. Teachers are asked to select items that are appropriate to their students' grade or level.

1-6-1-3: Time Allocation:

Algerian universities begin their academic year in October. They finish the first semester by February and the second semester by June till July.

The timing of English, in the department of computing in the University of Chlef, is after a whole long day of studying, be it on Wednesday from 11:00 to 12:30 for (WEB) section, between 2 modules in the morning and one in the afternoon and on Thursday from 11:00 to 12:30 for (IA) section after other modules starting from 8:30 and at the end of the week. That in itself gives us an idea about the importance given to the course and the poor expectation of both the administration as well as the students. The rate of absence in the English course is naturally the highest. Obviously, the question of how many hours are devoted for the language

course has a crucial effect on what level of achievement can be reached. The instance of the department of computing with only one hour and a half per week during three academic years allocated to the English course inevitably determines the level of proficiency and the course content. The teacher must use the time allocated efficiently and set his/her objectives to what can reasonably be achieved in the time available.

1-6-1-4: The Group Size:

The module of English took a form of (CM) that is all the groups are gathered in one large room. The teacher usually passes the tendency sheet to the students to write down their names and put their signatures. This helps the teacher to supervise the students and calculate their absences, if any; because more than 3 unjustified absences for a student exclude him completely. The number of students in each course is, officially, 40 students but only around 20 to 25 regularly attend.

1-6-1-5: The Teacher Training:

Many higher educational institutions whose main objective is to train EFL teachers exit in Algeria, and which award degrees in EFL teaching. Practically, the methodology of EFL teaching is not the same as that of ESP teaching. This means that general teachers of English are recruited in universities as part time teachers to teach English for Specific Purposes (ESP). Evidently, it is important to note that there is no training for the teacher of general English, be it in this department or another, to teach ESP. In the absence of specialized institutions devoted to the training of teachers of ESP, each teacher relies on his own experience in deciding about the strategies and improves himself individually. Observation shows that many Algerian English teachers teach just the same way they were taught.

1-6-1-6: Concentration on Marks:

The concentration on marks as a measure of success or failure is among the factors that decreases the learner's intrinsic motivation:

"The fact that our school system relies heavily on grades may help explain why the average college graduate reads few books. Like all extrinsic rewards, grades induce temporary compliance but not necessarily a lifelong disposition to learn" Travis & Wade (1997: 232)

Concentration on marks has many drawbacks:

➤ It makes the learner concerned with exams and marks rather than the value he gets from what he is learning.

➤ It decreases his curiosity to learn things and do further researches apart from the syllabus.

> ➢ It pushes weak pupils to cheat in exams.
> ➢ It transforms knowledge from a precious thing to be sought into numbers and scores.

1-6-2: The Library and Access to the Net in the Department :

University libraries have remained as public stores, with poor holdings and reading rooms used mainly by the students just before exams. The library of the department is composed of rooms with some shelves of more or less old books which do not meet the curricula. The date of publication of the books found in the library ranges from 1973 to 2008. They are run, when possible, for few hours a week by voluntary teachers. Even homework is ordered at cybercafés and final print-outs are handed over to teachers without having been studied. Academic and research library collections are built to meet the specific research and information needs of the institutions' academic and research programs. The effectiveness of library collections is measured by the extent to which they facilitate research activities and students' projects and assignments. Developing a relevant, up to date, balanced and usable collection is an important aspect of library services. There is an urgent need for libraries to become more virtual and digital. Sometimes the time table of the students does not allow them to join the university libraries and fetch the necessary books for them, for that reason and especially those students are inclined towards using the net and joining cyber café. The foundation of a digital library will help students to find the books, articles and theses they need, which is a project to be done by the University of Chlef. In addition to that, the internet is one important source for the students to fulfill their homework and practice but what is found in the department is that the access to the internet is restricted to the fifth year students (engineers), but the other students can not use it. When we asked the administers they claimed that they did not have enough, updated materials.

1-7: General Details about Computer Science Students:

Number of students   : 169 divided into 02 groups (options)

(01)   ------------   114 (IA)
(02)   ------------   56 (WEB)

They form 04 groups each group is divided into two (IA) and (WEB)

(IA) 114

Female 54 / male 60

- White year: 08 males

- Abandoned: 05 (04 males and 01 female)

- Excluded: 07 (03 females and 04 males)

(WEB) 56

Female 37/ male 18

- White year: 08(06 males and02 females).

- Abandoned: 04(03 males and 01 female).

- Excluded: 01 female.

1-8: The learners' misconceptions about English:

The teacher should fight the following beliefs towards English learning in the department of computing, the following beliefs are collected from informal interviews with the students:

> ➢ Students grew up with a belief that English cannot be learned in state schools and only private institutions can provide high quality of education.

> ➢ They consider English as a secondary module, that's why they did not regularly attend it, however, they have another module related to computer science which they study it 1 hour and a half per week but they attend it!

> ➢ For them, the teachers are not properly qualified to teach ESP and are not aware of their needs.

> ➢ They believe that the ESP course, which is more or less GE course for them, is fun time. They can get the passing mark in the final exam even if they did not attend the course.

> ➢ They agree that the administration also considers ESP as a secondary module. Thus, there is a tendency to provide facilities necessary for other subjects but not for English. The projector for instance, which is supposed to be shared, is used

primarily by other subject teachers and never by the English ones, under the common belief that the other subjects are the primary ones.

The role of the teacher of English can be:

➢ A careful course design and a good preparation.

➢ Conducting needs analysis of the students.

➢ Do further studies about the field of study.

➢ Cooperation with other modules teachers' and administration.

1-10: Conclusion:

We have presented the learning and the teaching situation in the department of computing, we have found that the system applied is the LMD system; we have got also information about the library, access to the net and the misconceptions of the students about English. The next chapter will be about literature review, in which we will review literature of Computer Assisted Language Learning and the importance of knowing the attitudes of both learners and teachers.

2-1: Introduction:

The focus of this review will concern the use of computer technology as an aid to learning and teaching in schools, it will concern attitudes' definitions and the importance of knowing them in educational contexts besides introducing some studies that concern the students' attitudes, definitions of computer assisted language learning and its history, including the main phases that constitute the development of the CALL. We will sum up also the relationship between attitudes and motivation and advantages of computer assisted language learning and teaching and end with Cultural perceptions and the integration of technology in education.

2-2: Attitudes towards Computers, Studies and Definitions:

If students are to adopt computer technologies, they must have the right kind of attitudes toward computers. Researchers have investigated the relationship between computer attitudes and computer adoption or uptake. The importance of attitudes and beliefs for learning to use new technologies is widely acknowledged, DeYoung and Spence, (2004); Loyd and Gressard, (1984); Ray, Sormunen, and Harris, (1999); Saade and Galloway, (2005).

Regarding the meaning of attitudes, different researchers gave different, but somehow related, definitions of the word, attitudes are:

"Learned predispositions to respond positively or negatively to certain objects, situations, concepts, or persons". Aiken (1980: 2)

Attitude is defined also as a characteristic that is an indicator of the individual's understanding and feelings towards a subject that motivates him to show either positive or negative behavior. Attitudes affect success and failure of the education process directly. While positive attitudes provide success and higher achievement of the students during education period, negative attitudes provide a complete failure, Gagne, Briggs & Wager, (1992).

In addition, making conscious and suitable decisions in curriculum developing studies toward computer studies are possible with knowing attitudes of students (Reece & Gable, 1982). The motivation to learn second language is achieved only when the learners hold positive attitudes; this has long been recognized as an important attribute for the success of the learning process as claimed by Gardner & Lambert (1972) and Gardner (2000).

According to Deci and Ryan (2000) the student's attitude plays a key role to successful L2 acquisition, and once the student is motivated; a set of behaviors will give desired outcomes and results.

Calvin (1991) links motivation directly with needs and attitudes and mentions that while researchers try to identify main components of motivation:

> '*Teachers are mainly concerned about their students' attitudes towards and interests in language learning.*' Calvin (1991:11)

As this research is focused on student attitudes it should be mentioned that social psychology believes that:

> '*Attitudes exert a directive influence on behavior since someone's attitude towards a target influences the overall pattern of the person's responses to the target.*' Dornyei (2001a:29).

Clearly then a student's attitudes towards a course are directly related to the amount of motivation they will experience, Yang & Lau (2003). In addition to that, researchers add:

> "*Positive attitudes usually help learners to maintain their interest long enough to achieve language mastery.*" Rubin & Thompson (1982:6)

Many factors might lead to the students' low proficiency in English. One might be attributed to computing students' motivation towards English language they are exposed to. This is, mainly, because students' motivation has been widely accepted as a key factor which influences the rate of success in second/foreign language learning, McDonough (1983); Ellis (1994). McDonough states that:

> "*Motivation of the students is one of the most important factors influencing their success or failure in learning the language*". McDonough (1983:142)

Students' attitudes are closely related to the future motivation of the student and knowing this should be the prime concern in language learning process. This is because an ESL/EFL/ESP learner's motivation in language learning is affected by his/her attitudes towards learning the language. Gardner and Lambert state that:

> "*His [the learner] motivation to learn is thought to be determined by his attitudes towards the other group in particular and by his orientation towards the learning task itself*". Gardner and Lambert (1972: 3)

In addition, Lifrieri states that:

> "*Attitudes are necessary but insufficient indirect conditions for linguistic attainment. Only when paired up with motivation proper do attitudinal tendencies relate to the levels of student engagement in language learning, and to attainment*". Lifrieri (2005:14)

All in all, a better understanding of students' motivation and attitudes may assist ESL/EFL teachers and curriculum designers to plan language teaching programs that generate the attitudes and motivation most contributing to the production of more successful ESL/EFL learners Gardner & Lambert(1972); Midraj(1998, 2003).

Additionally, in CALL environment, recognizing the students' attitudes can help material writers develop and teachers select activities and tasks that suit students' expectations, and even motivate the teachers who will work with those students who hold positive attitude Midraj et al(2008).

Likert (1932), cited in Gardner (1980), defines the term attitude as:

> *"An inference which is made on the basis of a complex of beliefs about the attitude object".* Gardner (1980: 267)

Gardner, based on Likert's definition, defines attitude as:

> *"The total of a man's instinctions and feelings, prejudice or bias, preconceived notions, fears, threats, and convictions about any specified topic".* Gardner (1980 : 267)

Baker defines attitudes as:

> *"A hypothetical construct used to explain the direction and persistence of human behavior".* Baker (1992: 10)

In the relation between attitudes and motivation, Gardner considers attitudes as constituents of motivation in language learning. According to him:

> *"Motivation ... refers to the combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language".* Gardner (1985: 10)

Learning a language is closely related to the attitudes towards the languages and the way they are taught, Starks & Paltridge,(1996). Karahan declares that:

> *"Positive language attitudes let learner have positive orientation towards learning English".* Karahan (2007:48)

As such, attitudes play a very crucial role in language learning as they would appear to influence students' success or failure in their learning. Many studies reveal that positive attitude facilitates learning. If the learners are reluctant to learn or they do not have a positive attitude, they do not produce any result.

Computer self-efficacy has been considered to be closely related to performance. It affects it positively during computer training (Webster & Martocchio, 1992). A student's confidence about computer skills may affect the willingness to learn using computers, Zhang & Espinoza (1998). Levine & Donitsa-Schmidt (1997) confirm that students' computer-related attitudes are also linked to their experiences that concern the usage of computers. The successful integration of computers in the language classroom is highly conditioned by the learners' acceptance; the latter is greatly influenced by the learners' attitudes. For this reason students'

attitudes toward computers have been studied with different samples and instruments by many researchers since the 1980s. Attitude has been found to be a predictor of the adoption of new technologies such as computers, Anderson et al. (1979).

Positive teacher attitudes toward computers are widely recognized as a necessary condition for effective use of technology in the classroom, Woodrow (1992).

2-3: Attitudes and motivation:

Gardner and Lambert (1972) define "attitude" as the determination revealed by the learner when he strives for a goal to achieve it, however "motivation" is seen in terms of the impelling reasons that push learner for a given goal. For them not necessarily exists a relationship between the two. However Gardner (in Ellis 1985) argues that there is a link between attitudes and motivation because motivation supports the learner orientation. Brown (1981) uses the term 'attitudes' to mean to the amount of ideas that the learner has towards the target language and towards his own culture.

To sum up, Gardner and Lambert (1972) explains the theory, briefly as follows:

> *"This theory, maintains that the successful learner of a second language must be psychologically prepared to adopt various aspects of behavior which characterize members of another linguistic-cultural group. The learner's ethnocentric tendencies and his attitudes toward the members of the other group are believed to determine how successful he will be, relatively learning the language. His motivation to learn is thought to be determined by his attitudes toward the other group in particular and toward the learning task itself".* Cited in Sayeedur (2005: 12).

To conclude, according to previous studies Language learning is affected by the attitudes of the learners, students with positive attitudes towards English and towards the integration of computer in class will promote the enhancement of new technologies in days to come. In other words, taking precautions by analyzing attitudes of students toward computer allows integrating computer in language learning and teaching in a more effective way. Otherwise, putting computer into the system without determining attitudes of students can reduce the expected chance of success in education and investments can be wasted. Therefore, it is seen necessary that determining attitudes that are pre-condition of success of students and teachers who use computer system.

2-4: Students' Attitudes towards CALL:

Numerous studies were published to report the students' attitudes towards CALL. Authors wrote books entirely devoted for the discussion of different CALL issues. For example, Kulik and Kulik (1991) stated that a meta-analysis of findings from 254 controlled evaluation studies showed that computer-based instruction (CBI) usually produces positive effects on students. The studies covered learners of all age levels from kindergarten pupils to adult students. A list of studies were discussed in Kilickaya (2005) research, the results of those studies offer the researchers and teachers very important insights in the learners' attitudes towards computer assisted language learning, among the studies he stated, Finkbeiner (2001); Ayres (2002); Allum (2002); Mitra (1997); Dewhurst, et al. (2000); Stricker and Rock (2004); Shaw and Marlow (1999); Holmes (1998). Kilickaya (2005) details the summary of those researches, he mentions that Finkbeiner (2001) organized a questionnaire and collected data from 82 undergraduate EFL learners to identify their attitudes towards CALL and cooperative learning. The results he arrived at were that ESL (English as a Second Language) learners owe positive attitudes towards CALL and recommended the implementation of CALL in everyday study life in order to succeed in it. In another case study, and stated in the same article, conducted by Ayres (2002), aiming at collecting empirical statistics to evaluate how much learners valued the use of CALL in their course.157 non-native undergraduates from certificate and diploma courses at the school of English and Applied Linguistics were taught in a CALL environment. It was found that university learners appreciated learning by computer. Also in another study carried by Mitra (1997), learners' attitudes towards computers were discovered to be very important since it would affect the learners' view of CALL. Allum (2002) argued that students had positive feelings about CALL and suggested that CALL should be mixed with the regular classes. Similarly, Dewhurst et al. (2000) discussed that students became more positive after they had experienced using CALL.

Ayres (2002) had participants of 157 non-native speaker undergraduates who were enrolled in various certificate and diploma courses at the School of English and Applied Linguistics. The results indicated that learners favoured classroom-based teaching over using a computer. They did not see it as a worthwhile replacement for classroom-based learning but, it had high face validity with learners. Stricker and Rock (2004) studied the attitudes of the test takers who took the computer-based TOEFL in the spring and summer of 1999; a total of 689 test takers. Results revealed that positive attitudes towards computer-based testing but negative towards

admission tests. Shaw and Marlow (1999) stated that in their study, the participants of 99 sports science and nutrition undergraduates were uncomfortable with computers, were unhappy about the lack of personal contact and preferred to learn in a more traditional way. Holmes (1998) studied the influence of CALL in 100 Japanese first-year students' language classroom. Agreement as regards the benefits of CALL in language education was stated, but the students' real reason was to communicate internationally.

Lim & Shen (2006) examined the impact of Computer Assisted Language Learning (CALL) on Korean TAFE college students in an EFL reading classroom, mainly; they focused on perceptions of learning effectiveness, tutor, classroom interest and difficulty. Results showed that most students in the CALL class revealed positive responses. Students in computer based English class claimed that their learning environment facilitates their learning.

> *"It offered Opportunities for collaboration and mutual support, as well as for exposure to, and interaction with, a variety of interesting, enjoyable and useful materials and tasks"*. Lim (2005:1)

Students with positive attitudes toward CALL can improve their level of learning and they are able to exploit different strategies via CALL and thus achieve more in the exams. Smith (2000) conducted a study in which he examined the students' positive or negative responses toward CALL as a language learning approach. The conclusion he arrived at is that students with positive attitudes toward CALL are able to benefit more from technology in learning language and developing their skills than students with negative attitudes.

2-5: Computer Assisted Language Learning:

2-5-1: Definition of Computer Assisted Language Learning:

These acronyms "CALL" stands for Computer Assisted Language Learning which is considered, narrowly, as an approach to language teaching and learning in which the computer supports the courses. Davies claims:

> *"Computer is used as an aid to the presentation, reinforcement and assessment of material to be learned, usually including a substantial interactive element"*.
> Davies (2002: 1)

Computer Assisted Language Learning (CALL), according to Levy (1997) who provides the following concise definition, is:

> *"The search for and study of applications of the computer in language teaching and learning"*. Levy (1997: 1)

For researchers, Davies (2002), Davies et al. (2011)), this definition summarizes most of CALL characteristics.

CALL is a term used by specialists to elucidate the use of computers as part of a language course, Gündüz (2005). She adds that according to the traditional view of CALL, it is

considered as a way of *'presenting, reinforcing and testing'* the different language skills. This process can be described as follows:

> *"The learner is first presented with a rule and some examples, and then answers a series of questions which test her/his knowledge of the rule and the computer gives appropriate feedback and awards a mark, which may be stored for later inspection for the teacher"* , Gündüz (2005: 197).

However, this traditional view does not depict the whole truth concerning computer assisted language learning approach. It implies the substitution of the teacher by the computer; it suggests that the lesson in CALL environment is realized only by the interaction which takes place between the computer and the learner. As a result of this view, the key role of the teacher is ignored, Jones & Fortescue (1987) show that that description of CALL does not present the computer as it is in reality, so they consider the computer as flexible tool, which can be used by both teachers and learners to accomplish many tasks in different ways and for different objectives, and like other teaching tool, the work with computers, does not overcome the ordinary classroom work and like lessons in ordinary classrooms, CALL lessons, need to be carefully selected. In other words the role of teachers as active component in the process of teaching is always present.

The term 'computer assisted language learning' is self explanatory, the emphasis is on the use of computer in the process of teaching and learning, as an aid to enhance the teacher's capacities to teach in more effective way, so the objective of CALL is not the replacement of the teacher. Taken solely, CALL is not able to cover the whole process and syllabus since it is not a self contained approach, Kennedy (1989).

2-5-2: History of CALL:

The use of computers in schools, in the teaching and learning of Foreign Languages (FLT & FLL) dates back to the 1960s, but it was not until the introduction of the personal computer (PC) in the late 1970s that computers became accessible to a wider audience. CALL is a term that was coined in the 1980s. It replaces the older term CALI (Computer Assisted Language Instruction) mainly because the term CALI was associated with programmed learning, which is more teacher-centered than a learner-centered approach which depends on behaviorism's stimulus/response theory's component. Since the beginning of this approach, CALL witnessed many changes like, embracing the communicative approach and the

implementation of a wide range of new technologies. Davies, Walker, Rendall and Hewer mention:

> *"CALL now includes highly interactive and communicative support for listening, speaking, reading and writing, including extensive use of multimedia CD-ROMs and the Internet"*. Davies G., Walker R., Rendall H. & Hewer S. (2011: 3)

Technology Enhanced Language Learning (TELL) appeared as an alternative term to CALL, in the late 1980s, in an attempt, to provide a more accurate description of the activities of CALL. Brown (1988: 6) writes:

> *"Learning a foreign language can enrich the education of every pupil socially and intellectually and be vocationally relevant. The new technology should form an integral part of a modern language department's overall teaching strategy. By these means, to coin a communicative-sounding acronym, TELL (Technology Enhanced Language Learning) can help produce telling results in language performance both in school and in the wider world. It therefore has a place in every modern language department.''*

However, CALL has remained the dominant term. It is the term most commonly used by scholars, teachers, and students to describe the use of computers in language teaching and learning process, or as a means of 'presenting', 'reinforcing', and 'testing' particular language items, Gündüz (2005). Contrary to popular opinion, CALL is not a new phenomenon. The introduction of Computer Assisted Language Learning traces back to the 1960's (Delcloque 2000). CALL materials focus on learning, and not teaching. They are used in teaching to assist the language learning process Technology has to be treated as an aid and not as a panacea (Davies 1997).

CALL has developed gradually over the last 50 years; Warschauer (1996) categorized this development in three, somewhat, distinct phases that he refers to as behavioristic CALL, communicative CALL, and integrative *CALL*. According to Warschauer (1996), when introducing a new phase we do not necessarily reject the methods of a previous phase. Each phase gain acceptance gradually and slowly, and not the first time it was introduced.

In accordance to Warschauer (1996), the behavioristic phase is the first phase of CALL, introduced in the 1950s and implemented in the 1960s and '70s, took its theoretical framework from the theories of behaviorism (stimulus-response). Rivers says:

> *"The behaviorist theory of stimulus-response learning, particularly as developed in the operant conditioning model of Skinner, considers all learning to be the establishment of habits as a result of reinforcement and reward".* Rivers (1981: 73)

Programs for this phase were based on the heavy repetition of language patterns until they are memorized and fully acquired by learners. The underlying principals behind these "drill and practice" activities, were, mainly as Warschauer (1996) explains them, the heavy repeated exposure to the same patterns is beneficial to learning of languages. The computer is ideal for delivering those patterns, since machines do not become bored because of the repetition. The use of computers also directs the class for a more student centered one, which gives opportunity for students to do more activities during the class time.

However, in the late 1970s and early 1980s, Warschauer (1996), behavioristic CALL was criticized owing to, first, behavioristic ideology, which was no longer so valid in the language learning and teaching process, and which had been discarded at both the theoretical and the pedagogical level, second, because of the introduction of the microcomputer which paved the way for new range of potentials. In addition to that, an urgent need was recommended to establish an interaction, be it computer- learner or learner- learner, as Stevens (1989) states in Warschauer (1996). As a result, a new phase was in the horizon.

The communicative CALL is considered as the second phase of CALL. It took its basis from the communicative approach theoretical framework to teaching which was predominant in the 1970s and 80s. The advocates of this phase believed that principles and the programs of the behavioristic phase did not place the students in authentic situations that would enhance their communicative capacities. John Underwood was among the prominent advocates of this approach, who, in 1984, suggested the main concerns of the communicative CALL. According to Underwood, communicative CALL emphasizes the use of forms rather than forms on their own. The teacher in the communicative CALL teaches grammatical patterns implicitly and encourages learners to deduce original sentences, and not only repeat prefabricated sentence patterns. Moreover, via the use of computers, the learners use the target languages in more real situations and environment that enable the learner to be creative and not just try to imitate the book according to Warschauer (1996). Wang adds:

> *"The purpose of the communicative CALL activity is not so much to have students discover the right answer, but rather to stimulate students' discussion, writing, or critical thinking."* Wang (2008 :41)

Despite the fact that communicative CALL was just like an apparent advance over behavioristic CALL, it submitted to criticism because teachers and researchers were no longer satisfied with its results, numerous teachers were in quest of finding new approaches to teach in a more integrative way, like the case of using task or project-based approaches to incorporate learners in authentic settings, and to include skills of language learning and use. Consequently, the challenge for researchers in the field of CALL was to develop new models that would satisfy the eagerness of those educators who were looking for change which could help integrate a range of aspects in the process of language learning and teaching.

Integrative CALL is the current stage; it arose in the mid 1990's. Luckily, advances in computer technology were providing the opportunities to achieve that change. The integrative CALL phase is based on two prominent technological developments in the mid-1990s. One was the appearance of commercial multimedia for language learning like CD-ROMs which became available for computer users. The other was the World Wide Web. The field of integrated CALL witnessed an unusual shift in terms of the used tools especially the increased access to the internet. This technology contributed in facilitating the communication between the individuals and the transmission of information among them whenever or wherever they are, Wang (2008). The new revolution in technology and language learning and teaching procedure, pushed the integration of all the skills, writing, reading speaking, and listening. The fore mentioned revolution helped also in integrating all forms of technology into the language learning and teaching process. Research in the field of Integrative CALL and related methods is still under development.

To sum up, we can say that the evolution of the computer assisted language learning field underwent three stages that can be categorized into, namely:

> ➢ The Behaviorist or the behavioristic or the structural phase in which the computer takes the role of a tutor. It is used as a tool for delivering varied instructional materials to provide a wide range of information.

> ➢ The Communicative phase in which the computer, with simulated programmes and software and its higher capacity to offer interactive learning, provides students with many choices and enables them to practice skills; it allows them also to interact with one another and use the language in more real situations.

> ➢ The Integrative phase, multimedia and Internet are used to enable Listening, Speaking, Reading and Writing skills to be combined in a single integrated

activity with the learner exercising a high degree of control over the path that they follow through the material

Stage	1970s–1980s: Structural CALL	1980s–1990s: Communicative CALL	21st Century: Integrative CALL
Technology	Mainframe	PCs	Multimedia and Internet
English-teaching paradigm	Grammar-translation and audio-lingual	Communicate [sic]language teaching	Content-Based, ESP/EAP
View of language	Structural (a formal structural system)	Cognitive (a mentally constructed system)	Socio-cognitive (developed in social interaction)
Principal use of computers	Drill and practice	Communicative exercises	Authentic discourse
Principal objective	Accuracy	And fluency	And agency

Table:2-1: Warschauer's three stages of CALL.

Source: Warschauer (2000).

2-6: Technology in English Language Learning and Teaching:

Since the emergence of language laboratories, technology has always been regarded as a new panacea for language teaching and learning, each teacher who thinks of making his courses as attractive as possible, he implements computer to redirect the attention of the students towards the intended content. Computer, as new medium, was viewed as synonymous with improved language pedagogy and consequently with better and more efficient language teaching and learning. Recently, there has been widespread interest in

using computers to teach foreign languages aiming at enhancing the learning process. Research in the field of computer-assisted language learning has certainly developed in the last 20 years, Warschauer (1996, 2000); Chapelle (1998, 2000); Levy (2000, 1997); Chapelle, &Hegelheimer (2000); Sullivan & Pratt (1996), Dunkel (1991).Computers in our classes can be seen in, mainly, two forms; either a focus of study in themselves (computing education) or a support for learning and teaching (educational technology).

For more than one decade, a lot of attention has been paid to the use of CALL in language teaching and learning. teachers of foreign languages have used the computer technology to afford a wide range of activities for their students and owing to the technological advancements we are witnessing , teachers began to believe in the use of computers in their teaching as an essential aid for their daily language teaching and learning process. Computers owe the potential to play an important role to enhance the foreign language teaching and learning. Moreover, different entities were interested in computer assisted language learning including researchers, teachers, curriculum designers and writers, the fact that many publications were all about CALL. Peterson (1998) claimed that CALL has developed to become a key aspect in many university language programs in Japan. This increase of interest in CALL had been supported by many CALL facilities found in many universities and schools.

Papert, in considering the integration of computer in learning as the turning point in the history of education, avers:

> *"We are at the point in the history of education when radical change is possible, and the possibility for that change is directly related to computers"* Papert (1980.23).

The rapid growth of computer technology we are witnessing nowadays led many foreign language researchers and teachers to look for ways of implementing computer and information technology in their teaching process, to enhance the acquisition of foreign languages; Virvou, Maras & Tsiriga (2000).

 Butler-Pascoe and Wiburg state that:

> *"The role of technology as resource for language teaching is expanding as more of these educators recognize its ability to support both independent and collaborative learning environments."* Wiburg (2003: 120)

 Additionally, language is no longer seen as a mere collection of words in sentences, however, as emphasized by Schiffrin (1994), language should be taught in a more communicative way,

in real contexts, she adds that this will be at the reach of both students and teachers only when using the computer.

As an educational authority, The American Council on the Teaching of Foreign Languages (1996) strongly recommends that all language teachers should use technology in their language teaching:

> *"Access to a variety of technologies ranging from computer-assisted instruction to interactive video, CD-ROMs, the Internet, E-mails, and the World Wide Web, will help students strengthen their linguistic skills and learn about contemporary culture and every day life in the target country''(1996:31)*

According to Holmes (2008), the focus will never be on the technology itself. Yet, it is the pedagogy that counts. It is worth bearing in mind that computers are only the tool. They are at our disposal to make acquiring a language easier and more enjoyable for, both, younger and adult learners. A technology-rich classroom offers prospects for a more project-based and small group orientated learning environment. Barrios (2004) claims that the students predict their courses to fit their needs and to be linked directly to their real-world.

Among the advantages of having a computer in the classroom is that Computers are fascinating, can communicate information, functioning as a tutor that provides software applications for foreign languages, and so on. Computers are upgradeable, and software is affordable. It's easy to update the program which will be used in more than one course than it is to update the program working knowledge of thousands of teachers now in those classrooms (Bennett, 1999), it guarantees the students autonomous by ''repeating lessons'', when necessarily and when needed until each lesson is fully grasped, computers keep transmitting information efficiently with an assured panache (Bennett, 1999). In addition to that, computers in education allow teachers to meet the learners' needs and how to improve their level of achievement in languages. They help them also to take the students' learning styles into consideration, how they learn and what the nature of information and learning is, Gulley (2003).

Anderson (1991) asserts that teachers should examine the effectiveness of technology in the teaching and learning process, in these rapid changes that occur on technology nowadays, according to him, the teacher should be conscious of the waves of change;

> *"Our tasks as administrator or teachers to be aware of the waves, to look critically at them and judge how effective these tools for teaching and learning are".*
> Anderson (1991: 25)

Additionally, computers permit teachers to work with small groups of students, as small as needed, to control the whole class. They help teachers meet the varying student needs and reassess how students learn and what the nature of useful information is Gulley (2003). Computers in the classroom also play an integral role on the effect of educational outcomes. It is easier to update a computer program in most of times used in many classrooms than it is to upgrade the knowledge and teaching strategies of thousands of teachers in those classrooms (Bennett, 1999).

Among the paramount differences between teachers and computers is that computers never get bored or tired and it is able to repeat the same thing several times without complaining. It can repeat whatever it is programmed whenever it is required, which is a very positive aspect especially for passive and slower students. CALL programs guarantee more autonomy for learners of second language as well as foreign language than the traditional classroom do. Based upon studies of CALL implementations by Blake in 1987, as referred to in Brennan (2009), in the University, we can tell that the educational technology integrated in the learning environment increases motivation for University students studying language. In contrast to traditional second language classroom study, students can study more independently, leaving the teacher more time to concentrate effort on those parts of second language teaching that are still hard or impossible by the computer, such as pronunciation, work on spoken dialogue, training for essay writing and presentation. Chitra claims:

> *"The computer offers students self-instructional tasks that let them master prerequisite skills and course objectives at a speed and level dictated by their own needs."* Chitra (2010: 75)

To confirm Chitra's view we state Brennan's view:

> *"Educational technology promises to democratize learning, increase access to multiple information resources, decentralize instruction, and remove hierarchies in communication and interaction in English language learning classrooms"* Brennan(2009:2).

In the following section we will summarize the main advantages of computer assisted language learning and teaching:

> ➢ Autonomy, since each student, the same class, has his own standards, interest, background, motivation and capacity of learning. CALL provides self-instructional tasks that enable students master the prerequisite skills and course objectives according to their own needs and capacities. We can say that CALL provides individualized instruction.

➢ Learning language no longer means imitating pre-produced language patterns, but rather it is acquiring language in a creative way, each student at his own pace.

➢ Learning at one's own style, because every student has his own ways of acquiring language, skills it's impossible to teachers identify and teach every student in his own learning style. CALL helps providing materials which are compatible with any learning style and the students select what is suitable according to their need, interest and style of learning. When they are doing so, students get involved and find the learning easier, fascinating and interesting.

➢ Immediate response to the activities which makes learning faster. With CALL, the correction of students' mistakes is made instantaneously with the assistance of technology. The learning process is speedy with instantaneous corrections and consolidating the correct forms of the language.

➢ Learners can study wherever they have access to a computer and Internet.

➢ Successfully completing computer-based courses enhances self-knowledge and self-confidence and encourages students to take responsibility for their learning.

2-7: Autonomous Learners:

In general, autonomous learners are more motivated than non-autonomous learners. In other words, autonomy leads to better, more effective work. The literature has provided evidence that learning autonomy increases motivation and consequently increases learning effectiveness. Knowles (1975) reported that there is evidence that learners who take the initiative in learning who are called proactive learners acquire things better than do people who receive knowledge from the teacher passively who are called reactive learners. Proactive learners learn with great motivation.

As suggested by Littlewood (2000) the main focus will be on what the learner can do in order to attain a considerable degree of autonomy, even though the success of the learner is, to a great extent, determined by the educational system and the requisite role of the teacher. For students, the ability to behave autonomously is dependent upon their teacher creating a classroom culture where autonomy is accepted.

2-8: Steps forward to a learner centered approach:

The learner-centered approach is a paradigm shift from the traditional way of teaching, in which the teacher has the authoritative power to transmit knowledge. It allows enough space for the learners to participate in the process of their knowledge construction. However, the learner-centered approach does not mean totally deleting the teacher's roles; it demands

that teachers keep endorsing effective learning projects for and with the learners. Teachers should act as class facilitators to develop a learner-centered environment. In Figure (a), Brown (2001) shows the differences in objectives between the teacher-centered and the learner-centered approaches.

	Teacher-centered	*Learner-centered*
Transmission of Knowledge	Knowledge is transmitted from instructor to students such that what an instructor says is automatically internalized and learned by the students.	Knowledge is constructed by the students through gathering and synthesizing information and integrating it with skills such as inquiry, communication, as well as critical and creative thinking.
Use of Knowledge	Emphasis is on the acquisition of knowledge (frequently the memorization of information) outside the context in which it will be used.	Emphasis is on effectively using and communicating knowledge to address problems similar to those that will be experienced in real life.
Instructor's Role	The instructor is primary information giver and performance assessor.	The instructor is coach and facilitator. Both students and instructor assess learning performance together.
Assessment	Assessment is used to evaluate learning outcomes.	Assessment is used to diagnose learning problems and promote further learning, in addition to evaluating learning outcomes.
Learning Culture	Learning culture is competitive and individualistic.	Learning culture is cooperative, collaborative and supportive.

Table2-2: The teacher and learner centered approaches

Source: Brown, H. D. (2001)

2-9: Cultural Perceptions and the Integration of Technology in Education:

Experts in the field of ICT have mentioned that: *"the integration of ICT in education should occur in the light of the cultural conditions of the country and the prevailing school culture"* Albirini (2006b: 50).

Afshari et al. (2010) discuss the role that the culture of the users plays in the implementation of computer in education, as a matter of fact cultural barriers, be them organizational or societal, hamper the adoption of technology. They are of great importance, among others. Societies and institutions can guaranty the supply of all shapes of technology (computers,

internet…) overcoming most of the technical barriers. However, cultural barriers are harder to deal with. In the field of education, researchers noticed that directors' of institutions reactions to technology innovations are motivated by their cultural perceptions (Felton, 2006). According to Rogers (2003), cited in Afshari et al:

> *''a cultural perception is a very general idea of social system norms''.*
> Afshari et al (2010: 10)

It reflects also the cultural aptness of computers, Thomas (1987). Albirini (2006a) conducted a study about the teachers' attitudes toward ICT and what affect those attitudes. He collected data from high school English teachers about their perceptions of computer competence, computer attributes, computer access, and cultural perceptions. The results showed that computer attributes, cultural perceptions, and computer competence are factors that shape the teachers' attitudes towards computer. He declares also that cultural perceptions towards computer-related technologies affect both the initial acceptance of these technologies and future achievements regarding their usage. Similarly, Lee, Choi, Kim and Hong, (2007) carried out a study on the relationship between users' cultural profiles and technology adoption in Korea, Hong Kong, and Taiwan indicated that cultural factors have a great impact on the adoption of the web and the Internet services. The conclusion they arrived at is that cultural differences influence the adoption of technology, especially in third world countries.

To summarize all that we said about the importance of computer in technology: Chitra says,

> *"In the era of computers; it has become an essential element of learning and its importance cannot be neglected. Computer assisted learning techniques have enhanced the knowledge levels of students as well as teachers. Computer-assisted Language Learning is a continuing challenge that requires time and commitment."*
> Chitra (2010: 73)

It is clear that, the researcher emphasized the role that computer plays in enhancing the knowledge of both learners and teachers, she continues:

> *"As we approach the 21st century, what really matters is how we use technology. Computers can/will never substitute teachers but they offer new opportunities for better language practice. They may actually make the process of language learning significantly richer and play a key role in the reform of a country's educational system."* Chitra (2010: 73).

In this quotation she mentioned an important matter, usually regarded as a criticism to CALL, when she claimed that the computer will never replace the teachers in class, however, it only aid them. Chitra claims also:

"The next generation of students will feel a lot more confident with information technology than we do. As a result, they will also be able to use the Internet to communicate more effectively, practice language skills more thoroughly and solve language learning problems more easily." Chitra (2010: 73)

2-10: Conclusion:

As computer technology invades all the fields, education is no exception, many organizations and administrators around the world confess the importance of this technology in education and they commence to equip schools and universities with computer appliances to push forward the trend of computerized education. Hence, Algeria is among the countries that embraced this wave and makes its population aware of the importance of computer in the life of everyone by an initiative implemented by the government in 2005 to ensure a home computer ownership for every Algerian, which we hope that it will be the case in classes basically those of foreign languages.

Now that we have reviewed the related literature of Computer Assisted Language Learning, CALL, we move, in the next chapter, to introduce the main research tools used in the study and present a descriptive analysis of the results.

3-1: Introduction:

In this chapter, we will present the main research tools used in this case study and present the analysis of the results obtained from the questionnaire of students and teacher and the observation.

3-2: Data Collection Tools:

In this case study, the researcher intends to find answers to the previously mentioned questions. The main important question is to know the attitudes of students towards computer assisted English learning, since this field is not fully covered in Algerian contexts in previous studies; the findings of this study will bring more information to the field of language learning and teaching.

As far as the present study is concerned, the author of this thesis believes that a quantitative approach would serve better the aims the present research sets itself to achieve. This is motivated by the fact that this kind of approach allows the researcher to state the research problem using very specific and definable terms which in turn help to follow the set research aims. The use of this method allows the researcher to enjoy high reliability of data collection and contributes to the objectivity of the conclusions reached. More importantly, this kind of method helps to determine whether the predictive hypothesis underlying the present research holds true (Frankfort-Nachmias Nachmias, 1992).

The quality of research depends to a large extent on the quality of the data collection instruments used. The present research makes use of two research instruments. Resort to this choice is motivated by the belief that human beings are complex and their lives are ever changing; the more methods researchers use to study them, the better their chances to gain some understanding of how they construct their lives and the stories they tell us about them are Fontana & Frey (2000).

The researcher is also aware that the use of three research instruments guaranties the research validity and enhances its objectivity. These instruments also give insights into the teachers' and the learners' conception and understanding of the use of technology in education as a necessary component of foreign language teaching within the Algerian context.

The research instruments used for gathering information to investigate both learners' and teachers' attitudes towards CALL in an Algerian context sample (the department of computing in the University of Chlef) are: A questionnaire for the students, a questionnaire for the teachers and observation

3-2-1: The Questionnaire:

A questionnaire is research instrument used for gathering information in the form of a series of questions about a particular subject. According to Tuckman (1994), through these questions the researcher aims to collect data about the participants' opinions, attitudes, interests and background. The importance of questionnaires, along with other instrument types such as tape recording, role plays, and interviews, in foreign language teaching and learning research was due to their recognized advantages as instruments for collecting information. These advantages include:

- The participants find questionnaires, somehow, easy to complete and preserve their privacy since it is in most of times anonymous.
- A large number of participants are reached easily.
- Researchers in second language teaching find the data collected via questionnaires accurate, relevant, and relatively easy to analyze.
- Because questionnaires are relatively accurate, relevant, to complete and to analyze, this saves time and financial resources.

The questionnaire is mainly based on the theoretical part of the present research which includes a review of the literature (Chapters Two) related to: definition of attitudes and computer assisted language learning, relationship between them, the importance of using computer in foreign language teaching and learning.

The questionnaire is addressed to teachers and students. It makes use mainly of the technique of close-ended questions but not exclusively. Very briefly, the respondents are given at least two options to choose from by ticking one or more of them.

The reason for choosing the questionnaire is that it helps the researcher identifying the student enthusiasm and attitudes towards CALL.

- Numeric question items: these questions ask for specific background information Such as gender and age.
- Open ended question which is that that allows respondents to answer using their own style. This type of questions was meant to achieve free responses and aim to determine the students' and teachers attitudes towards CALL.
- Close ended questions (multiple-choice answers): **"dichotomous"** questions are one type of close-ended questions which permit respondents to select one of two answer choices (e.g. 'Yes' or 'No'). The second type is the multi-choice questions which allow respondents to select one of many answer choices.

Sometimes, if none of the items provided applies, the respondent has the option 'Other' category followed generally followed by an open-ended question of the kind "Please specify" (which is not used in the questionnaire in this study)

3-2-2: Observation:

Observation can be defined as a process in which observers study some real-life situations and record significant events. It aimed at evaluating the behavior of the individuals in controlled and uncontrolled situations. Observations are generally classified into these types:

> Participant observation: in which the researcher/observer actually becomes more or less one of the participants and assumes different roles, as a visitor, a listener, a learner, or as a participant observer.

> Non-participant observation: in which the researcher/observer assumes a position in which his/her attendance is not felt by the group.

> Structured observation: it is a formal observation intended to give systematic description in order to check casual hypotheses generally executed in controlled situations like classrooms settings. Before starting, the observer sets up the objectives in terms of which he/she needs to analyze the problem or the situation and bears in mind the time constraints within which He/she has to make the observation.

> Unstructured observation: it is associated with participant observation and is often an exploratory exercise in within which it may not be possible to categorize behavior before the observation. The observer considers aspects of behavior in terms of their real situations.

Observation is considered as a direct method for studying various aspects of human behavior. It gives the researcher the opportunity to record events at the time of occurrence.

There are cases when observation is not totally reliable especially when the participants may intentionally attempt to exhibit artificial behavior when he/she knows that he/she is being observed. For that reason the researcher attended the courses along the 2 months to avoid any kind of intended behavior. Besides, it is time consuming and costly.

3-3: Data Collection Procedure:

3-3-1: Piloting the Questionnaire:

As there are two main sections in the department of computing, 2nd year LMD students the researcher gave the primary means of data collection, which was through a questionnaire to the respondents at two main phases. The researcher took the questionnaire to the students' class at a prearranged time with their teacher of English. It was an opportunity for the researcher also to start the first phase of the observation. It was just after the end of the course of English that 2nd year (web) students filled in the questionnaires. The students were asked to complete the questionnaire in front of the researcher. They were encouraged to verbalize the reasons for their particular choice, or any other comments, opinions that they may have. Some rather insightful comments have been gained in the process. During this process the researcher asked some questions to the students and the teacher that will help later in this work. The whole process typically took about 30 minutes (in April). The researcher acknowledged that a questionnaire alone is unable to of identify the reasons behind the choice. However, this limitation is mitigated by two additional features of this research design: the presence of the researcher, and the informal interviews that took place between the researcher and the students that permitted them to state their reasons and opinions during and after the questionnaire. The latter adds substance to the data collected from the questionnaire and makes the result more concrete. The same happened for the 2nd section (IA), however, as the teacher of English is always absent the researcher could not give her the questionnaire, herself to complete, because, according to her, she has other duties with the pupils in the middle school at the same time scheduled for her course of English in the department of computing, which is from 11:00am to 12:30am. For the same reason also, the researcher gave the questionnaire to the students, just after the teacher of an other module left, and they completed it with the presence of the researcher and with other questions that will support the results.

The researcher took the questionnaire to the participants' class at a prearranged time. The students were asked to complete the questionnaire in front of the researcher. They were motivated to verbalize the reasons for their particular choice, or any other comments, opinions that they may have. Very important comments have been gained in the process. These were all registered by the researcher for later analysis. After the questionnaire had been completed, the researcher follows up with any additional questions necessary to elucidate the reasons

behind the student's particular choice and questions about their courses in the department. The whole process typically took around 30 minutes. In addition, observations of the general class environment of the participants were recorded. It is recognized that a questionnaire alone is not enough to identify the reasons behind the choice. In order to avoid that issue we added those features to the questionnaire.

- ➢ The presence of a comprehensive framework.
- ➢ The informal interview structure that permits the subjects to state their reasons and opinions during and after the questionnaire. The latter adds significance to the data collected from the questionnaire alone and makes the result more concrete.

As far as the teacher is concerned, she has been given the questionnaire to complete and to give it back after one week.

3-3-2: General Stages in the Process of Observation:

- ➢ Planning for Observation which includes definition of specific activities of the study to be observed; the nature the participants; the aim of observation and determination of the length of each observation period.

- ➢ Execution of observation which includes appropriate arrangement of specific conditions for the participants under study, a suitable role and physical positions for observing, focusing attention on the specific characteristics of behavior under observation and recording every tiny and crucial component and making the observation and recording the facts.

- ➢ Recording and analyzing the observation data should take place either simultaneously or just after the observation. In this case study, the observer recorded her observations simultaneously with the actual event and analyzed immediately after she has observed while the details are still fresh in her mind. In doing so, the observer took utmost care to minimize the influence of her biases, attitudes and personal views on the observation report. Therefore, the observer carefully and objectively recorded the relevant data. Subjectivity and emotional involvement negatively affect the results of the study.

In order to start the observation of the courses, the researcher met the teacher in order to give her an appointment and to tell her about the timing of the course (the pre-observation meeting). The course took place in a room in the building in which the department of computing is.

The researcher went looking for the teacher who was supervising the students' exams in another department. After meeting her, the researcher explained for her the purpose of that meeting which was to share information that helped both the teacher and observer prepare for the observation. Information exchanged during this meeting include the purpose of the observation, course information (including the syllabus), class activities on the days of the observation, what will happen during the observation, and observation follow up opportunities. After the agreement that took place between the teacher and the observer/researcher, the latter started joining the courses along 2 months.

3-4: The sample of the study:

This study was conducted at the University of Chlef, department of Computing. The sample of study consists of 2nd year LMD students. They study English one hour and half per week. They are divided into 2 sections; "WEB" and "IA", the teachers in the department see the importance of this division in order to facilitate the assessment of the students on one side and to help the student to concentrate on a field rather than another on the other side. These 2 sections, called groups in the administration, appear in the academic year 2010/2011. The aim of this study is to obtain information regarding the attitudes of students towards the integration of computer in English classes. One sample of participants (40 students) was chosen at random from the following population: The 2nd year LMD students of the department of computing during the academic year 2011/2012. They were chosen at random from 114 IA students and 56% WEB. The selected sample is characterized by regular attendance of the module of English. We chose this method because random sampling permits legitimate generalization from the survey results to the population of interest, according to Brown (2001) *"each individual in the population must have an equal chance of being selected"*, which will enhance objectivity in research.

The researcher selected 2nd year LMD students rather than the other academic years mainly because the students are somehow mature when compared to the 1st year students, they do not know a lot about the regime in the university, this place is considered as the transition phase between the secondary regime and the higher education. Unlike in the university, in the

secondary school students are accustomed to be given all the necessary information they need by the teacher. This led us to think of the 1ˢᵗ year students are not capable enough to know what is suitable for them and which is not. They will consider everything as new and good. University teachers need also to try and understand the differences between school and university, with particular regard to how they can best orient their students towards continued and enhanced learning in their 1ˢᵗyear

3.5: The Results and Analysis of the Students' Questionnaire:

Before analyzing the results, it is necessary to mention that the analysis will be in the same sequence that the questions or statements or tables appear in the questionnaires. However, in the discussion of the results will be in part according to the research questions sequence. A questionnaire divided into 3 main parts was distributed to 2ⁿᵈ year (LMD) students. It started by identifying the gender of the respondents by putting a cross in the suitable box then mentioning their age. In the first part, the students will choose the answer they prefer by putting a cross either in "yes" box or "no" box. In the second part, two almost contradictory questions are put together in the same table; again the students choose the suitable answer for them by putting a cross in the preferred answer. After piloting the questionnaire the following results, including personal information about the students, are obtained:

➢ Number of female students: 23.

➢ Number of male students: 17.

➢ The students belong to "20 to 26" age group.

40 students participated in the questionnaire, 23 females and 17 males. It was expected to have a minority of women represented in the sample, since research shows that women are usually under-represented in technological fields (Sidiropoulou, 1991), however, it is not the case in this study, one can explain this by the fact that this is the main characteristic of Algerian schools and population in general(depending on observation of many sections and faculties in the university), It also shows a tendency of women to earn degrees in technological fields (Costello & Krimgold, 1996), making a notable gain in reversing the

0 to 05 hours/a day		05 to 10 hours/a day		10 to 15 hours/a day		15 hours and more	
N of S	Percentage	N of S	Percentage	N of S	Percentage	N of S	Percentage
00	**00**	**12**	**30%**	**25**	**62,5%**	**03**	**7,5%**

Table 3-5-1: the use of computers in a day

The aim of this question is to know the period of time that the students in this sample of study usually spend in front of their computers in a day time; the results reveal that 30% spend from 5 to 10 hours in a day. The highest percentage is that of the students who spend from 10 to 15 hours in a day. Moreover, 7,5% spend 15 hours and more in a day.

The age group of these students range from 19 to 25. The reasons for choosing this age group were that the students are somehow aware of what they study in the department. They would

	Yes		No		Unanswered	
	frequency	percentages	frequency	percentages	frequency	percentages
1- I prefer working alone without sharing with the other students.	17	42,5%	23	57,5%	00	00%
2- I can learn more from books than from a computer.	27	67,5%	12	30%	01	2,5%
3- I rely on my teacher to tell me what is important for me.	22	55%	18	45%	00	00%
4-I prefer learning using pens and papers.	10	25%	30	75%	00	00%
5- I am very confident when it comes to working with technology at home/at work/at university.	38	95%	2	5%	00	00%

probably be oriented towards life after their final exams in the third year. Thus, they overcome the state of transition from Secondary school to the university and recognize, to a given extent, the rules in the university preparing for the working life. They have probably considered the meaning and importance of the different modules they study, likely more than younger students (1st year)

Table 3-5-2: the response percentages of the student's general ways of learning

- "I prefer working alone without sharing with the other students".

In order to know whether the students are Active learners tend to like group work or reflective learners, who prefer working alone, the researcher ask this question aiming at knowing about the learning styles of the students.   42,5% students prefer working alone and 57,5% prefer sharing with the others.

- "I can learn more from books than from a computer".

By looking for the answer to this, the researcher aims at knowing whether students still prefer learning from books or they shift there preference to the technology aspect and prefer learning using computers instead. 30% still inclined to learning from books, the others i.e., 67,5% prefer learning from computers rather than from books. Only one student, 2,5% do not answer.

- "I rely on my teacher to tell me what is important for me".

The aim of this question is to know whether students are autonomous or they depend on their teachers to deliver the data they need in their studies. Results reveal that 55% of the students depend on their teachers to guide them, while 45% are autonomous students.

- "I prefer writing using pens and papers".The purpose behind asking such question is to know whether the students still prefer learning in the traditional way or they are looking for new ways. This helps the researcher to determine the efficiency of the CALL among the students. 25% of the students prefer studying using pens and papers, while 75% do not prefer learning this way.

"I am very confident when it comes to working with technology at home/at work/at university". Being self-confident when dealing with technology affects the use of technology itself in education, this pushes the researcher to ask this question in order to measure the readiness of students to deal with technology. 95% of the students are self confident when dealing with technology, while only 5% are not.

Being self-confident when dealing with technology affects the use of technology itself in education, this pushes the researcher to ask this question in order to measure the readiness of

	Yes		No		Unanswered	
	frequency	percentages	frequency	percentages	frequency	percentages
1- I learn English because I need it in my studies	36	90%	4	10%	00	00%
2- I learn it because it is a module in this department only	14	35%	22	55%	4	10%
4- I learn English to understand the English culture.	10	25%	30	75%	00	00%
4- I learn it for personal development	32	80%	6	15%	2	5%

students to deal with technology. 95% of the students are self confident when dealing with technology, while only 5% are not.

Table 3-5-3: the students motivating reasons to learn English

Basic reasons towards learning can give further insights into the students' perception which can likely influence their learning behavior. The purpose of these questions is to know what motivate learners to study English and if they study English just because they need it in their studies or for other reasons, the results indicate that 90% are motivated to learn English by their studies. 35% indicate that they learn it because it is a compulsory module in the department only. 80% of the students state that they learn English for personal development. 10% of the students do not answer the 2nd question, i.e., if they learn English just because it is a module only. 5% of the students also do not answer the 4th question, i.e., if they learn it for personal development. This can be because the students do not understand the real aim or the meaning of the questions.

Table 3-5-4: Students' attitudes towards English.

The aim of this part is to identify the students' attitudes towards English. The results reveal that the percentage of liking English is 95%.

	Yes		No		Unanswered	
	frequency	percentages	frequency	percentages	frequency	percentages
1-I have a computer at home	38	95%	2	5%	00	00%
2-I frequently use the computer at home	37	92,5%	3	7,5%	00	00%

Table 3-5-5 the computer ownership and the frequency of its use at home.

- "I have a computer at home"

The availability of material at home will help the students to practice and do their researches any time they need to do so. This motivates the researcher to ask this question. 95% of the students have computer at home, while only 5 % do not have it at home.

- " I frequently use the computer at home"

Believing that working with the computer frequently will enhance self confidence to take risk and not to be afraid from mistakes in learning pushes the researcher to ask this question. 92,5% of the students say that they frequently use the computer at home and 7,5% say that they do not use it frequently at home. No unanswered questions are calculated.

1- I enjoy doing things on computer	2- I am tired of using a computer.

	Yes		No	
	Frequency	Percentage	Frequency	Percentage
I personally like *English*	38	95%	2	5%

Frequency	Percentage	Frequency	Percentage
34	85%	6	15%

Table:3-5-6 the attitudes of students towards the use of computer

The aim of this is to know the attitudes of students towards the use of computer. Results show that 85% enjoy doing things on computer however only 15% are tired of using it.

1- I concentrate in reading on computer when I use it.		2- I prefer reading from books.	
Frequency	Percentage	Frequency	Percentage
38	95%	2	5%

Table:3-5-7 the students' preferable learning methods

Those contradictory statements enable the researcher to find out which way of learning is suitable for the learners, either the traditional way (reading from books) or reading from computer. Regarding the learning methods, the results reveal that 38 students from the population i.e. 95% concentrate on the computer while 2 students, who constitute 5%, prefer reading from books.

I would study better if I could use computers more often.		I think that it takes a long time to finish when I study using a computer.	
Frequency	Percentage	Frequency	Percentage
28	70%	12	30%
I believe that I can do all my studies with the help of the computer.		I believe that computers can not help me in my studies.	
Frequency	Percentage	Frequency	Percentage
34	85%	6	15%

Table:3-5-8 the students' attitudes towards studying using computer

By asking these questions, the researcher aims to know the general attitudes of students towards using computer in studying. Results show that 70% believe that they would study better if they had the chance to use computers more often. 30% still believe that it takes a long time to finish when they study using computers. Moreover, 85% consider that they can do all

their studies with the aid of the computer, 15% think that computers can not help them in their studies.

Studying with computers relaxes me and gives me chances to learn many new things.		Studying with a computer makes me nervous and does not satisfy me.	
Frequency	Percentage	Frequency	Percentage
34	85%	6	15%

Table:3-5-9 the relationship between computer use and students behavior

The computer use in education affects the students' behavior. The majority of students i.e. 85% believe that studying with computer is relaxing and gives chances to learn novel things; only 15% see that studying with computers make them nervous and does not satisfy them

If I do not understand my teacher I search myself.		I depend on my teacher to give me everything.	
Frequency	Percentage	Frequency	Percentage
28	70%	12	30%

Table:3-5-10 the students' self-reliance in the learning process.

The aim of these statements is to know whether the students are self-reliant or they depend on their teachers in the process of learning. 70% mention that they are depend on their own to study, i.e. if they do not understand something they search using their proper ways. Yet, 30% mention that they depend on their teacher in everything.

Studying English on computer is enjoyable.		I feel bad if I will use the computer in studying English.	
Frequency	Percentage	Frequency	Percentage
36	90%	4	10%

I believe that the more teachers of English use computers, the more I will enjoy English.		Using computer in English class is not important at all.	
Frequency	**Percentage**	**Frequency**	**Percentage**
28	70%	12	30%
I believe that I can improve my language using the benefits of computers.		Using computers in learning languages is not important.	
Frequency	**Percentage**	**Frequency**	**Percentage**
32	80%	8%	20%

Table:3-5-11 the attitudes of students towards the use of computer in English courses

In order to identify the attitudes of students towards the use of computer in English courses, the researcher suggested these contradictory statements. 36 students, that is, 90%, mention that studying English on computer is enjoyable, however, 4 students, that is, 10%, mention that they will not appreciate the use of computer in English courses. In the second part, results reveal that 28 students who constitute 70% from the whole population believe that the more teachers of English use computers, the more they will enjoy English, this is on one hand. On the other hand, 12 students, that is 30%, believe that computer in English classes is not important. In the third part, results demonstrate that 80% think that they can improve their language skills using the benefits of computers. 20% think that computer, as a tool, is not important in learning languages.

11- I prefer studying English guided only by computers.		12- I prefer the guidance of computer and teacher.	
Frequency	**Percentage**	**Frequency**	**Percentage**
16	40%	24	60%

Table:3-5-12 the students' preferable method of receiving English courses

The aim of this part is to identify the preferable way of being taught English, either guided only by computers or guided by both computer and teacher. The results reveal that 40% of the

students prefer being guided only by computers, whereas 60% of the students prefer being guided by both computer and teachers.

C-	Agree		No idea		Disagree	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1-computer makes it possible to experiment with different options.		80%		15%		5%
2-computer gives immediate correction.		55%		45%		00%
3-computer improves my spelling.		65%		20%		15%
4-it helps me to learn more vocabulary.		75%		10%		15%
5-it develops my reading skills.		60%		30%		10%
6-it develops my listening skills.		50%		30%		20%
7-it develops my speaking skills.		45%		30%		25%

Table3-5-13: the computer and the four skills

Concerning the table which shows the students' attitudes towards in terms of the four skills, writing speaking reading and listening, and using computers in learning English as a foreign language, it was found that 80% agree that computer makes it possible to experiment with different options.75% agree that the computer helps to learn more vocabulary.65% agree that it improves spelling, 60% agree that it develops the reading skills.55% agree that it gives immediate correction.50% agree that it develops the listening skills and 45% agree that it develops the speaking skills.

	chatting in chat rooms	writing e-mails	playing games	surfing the Internet	listening to music	watching videos	writing texts, learning(e.g. online courses, using dictionaries	working with educational software	doing research for university (looking for information, using search engines like GOOGLE)
Percentages of use	80%	65%	55%	55%	50%	50%	55%	30%	65%

Table:3-5-14 what students like best interacting with the computer

The aim of this part is to know which activities that the students usually like best interacting with their computer. They are allowed to choose more than one activity. The results show that 80% prefer chatting in chat rooms, 65% prefer writing email and do research for university via search engines mainly Google. Besides, 55% prefer playing games, surfing the Internet and writing texts and learning. 50% prefer listening to music and watch videos. Yet, 30% prefer working with educational software.

3-6: The analysis of the results of the teacher's questionnaire:

The teacher's questionnaire aims at collecting information from the teacher in the department mainly to know the attitudes of teachers towards the implementation of the computer in their courses of English for computing purposes. Moreover, the teacher was asked about the reasons that affect the teacher's use of computer technology in English courses, the pedagogical effectiveness of the use of computer and the requirements of the use of computers in class.

In order to facilitate the analyses of the questionnaire, it was divided into 6 parts; the first part was devoted for the teacher profile. The second part determined the attitudes of teachers towards computers. The third part summarized the reasons that affect the teacher's use of computers in class. The fourth part summarized briefly some of the pedagogical consequences of the use of computer on the teaching and learning process. The fifth part emphasized on the

requirements of the use of computer in the class. The sixth part, the last one, was an open ended question which aimed to know if the teacher has integrated one the computer related technology in one of her classes.

According to the first part of the questionnaire the results reveal that the teacher is a female non native speaker of English. She has BA in English obtained from the University of Chlef with teaching experience, consisting of 8 months in the University. She is a part-time teacher. She taught mainly scientific branches; computing, architecture and biology in the University of Chlef. She taught both English and French languages for them. Before she joined the university, she taught French and English for one year.

	agree	disagree	No idea
1- Increases academic achievement	X		
2- Is effective because I believe I can implement it successfully.			X
3- Is too costly in terms of resources, time and effort.		X	
4- Makes teachers feel more competent as educators	X		
5- Gives teachers the opportunity to be learning facilitators instead of information providers	X		
6- Could reduce the number of teachers employed in the future		X	
7- Will increase the amount of stress and anxiety for students		X	
8- Is only successful if computer technology is part of the students' home environment	X		

Table: 3-6-1: the teacher's attitudes towards the use of the computer technology in English classes

The aim of this part is to know about the teachers attitudes towards the use of the computer technology in English classes. As it is shown on table (), the results reveal that the teacher agree with the statements 1, 4, 5 and 8, in other words, she finds that the use of computer in the English classes increases academic achievement, makes teachers feel more competent and gives them the opportunity to be learning facilitators instead of information providers. The

teacher believes also that it is successful only if the computer technology is part of the student's home environments, these on one hand. On the other hand, the teacher disagrees with the statements 3, 6 and 7, that is to say, she does not find the computer technology is not too costly in terms of resources, time and effort. Besides, she does not believe that it could reduce the number of teachers employed in the future and it will not increase the amount of stress and anxiety for students. The teacher has no idea with regard to the 2nd statement; if it is effective because she believes she can implement it successfully this can be due to the fact that she did not use it before.

	Important	Not important
1- Teachers should have access to computer at home.	**X**	
2- The training of teachers in the uses of technology for learning	**X**	
3- The teacher should motivate students to get more involved in learning activities.	**X**	
4- Is effective if teachers participate in the selection of computer programs to be integrated.	**X**	

Table: 3-6-2: the reasons that affect the teacher's successful use of computer in English class

The aim of this part is to identify the reasons that affect the teacher's successful use of computer in English class and to classify them in terms of their importance. According to the results shown on table, the teacher finds that the teacher's access to computer at home is an important reason; also the training of the teacher in the uses of technology for learning is important. She believes that the teacher should motivate the students to get more involved in the activities via the computer and that the use of computer is effective if the teacher participate in the selection of computer technologies to be integrated. She considers them all as important.

	Always	Sometimes	Never
1- Enhances the teachers' professional development.	X		
2- Results in students neglecting important traditional learning resources (e.g., library books).		X	
3- Limits my choices of instructional materials			X
4- Makes classroom management more difficult.			X
5- difficult because some students know more about computers than many teachers do		X	
6- Eases the pressure on me as a teacher.	X		
7- Helps accommodate students' personal learning styles.	X		
8- Improves student learning of critical concepts and ideas.	X		
9- Is a valuable instructional tool.	X		
10- Promotes the development of communication skills	X		

Table: 3-6-3: the pedagogical results of the use of computer on the learning and teaching of English.

The aim of this part is to reveal some of the results of the use of computer on the teaching and learning of English from the point of view of the teacher. The results show that the teacher finds that the use of computer always enhances her professional development, eases the pressure on her, help her to accommodate with the distinct learning styles of the students, helps the students to acquire different concepts and ideas, promotes the development of communication skills and she considers the computer as a valuable instructional tool. The teacher also adds that the use of computer sometimes results in the neglect of important traditional learning resources and is sometimes difficult because some students know more about computers than many teachers do.

	Yes	No
1- Is successful only if technical staff regularly maintains computers.	X	
2- Demands that too much time be spent on technical problems.		X
3- Requires the students' computing skills	X	
4- Requires software-skills training.	X	
5- Effective if only the teacher is able to deal with computers.	X	

Table: 3-6-4: Requirements of the use of computer related technologies in English class.

The aim of this part is to suggest some requirements of the use of computer in English class in accordance to the teacher. As described in the table, the teacher sees that the use of computer requires a regular maintenance by the technical staff; however it does not demand that too much time should be spent on technical problems. She also finds that it requires the students computing skills and software-skills training and is effective if only the teacher is able to deal with computer related technologies.

The last open ended question was:

"*Have you integrated computer technology in one of your classes? If yes explain in what ways?"*

The aim of this question was to find out if the teacher has experienced the use of technology in her classes and to asses that experience, if found, and to see to what extent the teacher is aware of use of technology to promote learning.

The answer was that the teacher never used computer technology in her classes. This can be because of her short experience in teaching.

3-7: The Analysis of the Results of the Observation:

In this section, we are going to describe, briefly, the main characteristics of the courses that the researcher attended along two months. Starting from the first course, it was the same as the preceding courses, in which the teacher suggested a passage to be read and discussed via different activities about it. It was usually related to the field of computing. The lesson observed was on Wednesday from 11:00 to 12:30 am. The students, the four groups, met in large room consisted of tables gathered in 4 rows, white board and the desk of the teacher at the front in the left side. The number of attendants usually ranged from 17 to 22. The teacher greeted the students and introduced the content of the lesson. Then, she distributed the texts, only, typed on handouts i.e. without the tailored activities and devoted 10 minutes to read the passages silently. After silent reading, she recommended that some students read one by one the different paragraphs to the others. The major tasks of the lesson were to help students read passages, answer questions, recognize whether the statements are true or false and acquire new special terms related to computing. The teacher explained, asked questions, clarified ambiguous words, the ones she asked them to underline in the text, either in English or by giving French translations and insisted on the students to give their answers and participate.

That was the summary of the general description of the courses of English in which the teacher prepared for the lessons by suggesting texts and activities and addressed different tasks. However, by the end of the year, the teacher asked students to work in groups each group consisted of 4 students or more. She proposed many topics for the students to select one, read about it, organize it in a form of a project and present it orally in front of their classmates. Each session one group passed and discussed many issues related to the project, the members talked one by one and the teacher asked questions.

Among the major characteristics of the groups were that in each group there was one student with higher level in English than the others and all of them relied on him/her to answer and explain for the teacher. If they were obliged by the teacher to answer, they code switched and arrived at talking in Arabic.

3-8: Analyses and Reflections on the Results:

The main questions that the researcher used to guide her reflection and note-taking were the following:

- ➢ What do the students like to do and not to do most in the course of English?

- ➢ How do those students with high English proficiency and those with low English proficiency practice in class?

- ➢ What are the skills that the students usually participate in?

- ➢ What are the skills that the students seldom participate in willingly?

- ➢ Are they happy to come to the English course? Do students feel stress free?

- ➢ Is the class a teacher- centered one or a learner- centered one?

3-8-1: The class observation:

- The class was carried on in a large class that contained tables gathered in 4 rows and a desk for the teacher at the front and next to a white board (WB). There was no kind of newspaper articles and posters on the wall.
- No apparent use of computer related technologies in the class.

3-8-2: The Teacher Observation:

- Along the period of observation, the teacher usually come on time, just one time she came 20 minutes late because she had a meeting in the department.
- The teacher always has an informal discussion with her students, either in English or in French before starting the course.
- She uses only texts and topics related to the field of computing which is the specialty of students. In other words, the teacher together with the students discussed only computing related matters.
- The teacher made use of English only never used Arabic, the students' L1. To help students' understanding, she repeated, rephrased, modified, and gave French translations. In order to make sure that students understood her directions or questions, she often circulated and talked to students individually after giving instructions to all.
- If she received no answer, and generally she did not receive, the teacher pointed students to answer.

- The teacher asked the students to answer calling them by their first names and insisted on some to answer.
- The teacher did not get much verbal reaction. Even when the students responded, their voice was very low and could hardly be heard.
- The teacher tried to motivate students to answer regularly, this was by simplifying the question to make it clearer.
- The teacher tries to establish a learner- centered "atmosphere", she believes that class should be student-centered and interactive. This is by giving the word to students to answer or to state their ideas, work in groups on one similar topic and even she asks them to write on the board activities or the answer that they give. Yet, it is often a teacher-centered because the students are "passive recipients" especially when they refuse to answer.
- The teacher needed to remind them to concentrate on the course frequently.
- The teacher encouraged students to speak; sometimes she asked them to express themselves even in French.
- She refused collective answers and encouraged each student to participate individually; it can be in order to know the level of each student, on one hand, and to allow them to have the habit to use English and to cope with their errors.
- The supervision of the teacher is very important especially for unmotivated students. *There was a need for smaller classes and more scheduled time.*
- The teacher taught only terms and not expressions or **real situations**.
- The students' silence obliged the teacher to use grammar translation method frequently.
- It is a teacher centered classroom.

3-8-3: The Students' Observation:

- They rarely answer willingly.
- Nearly, each class the same students attend and the same ones who answer.
- Students with middle proficiency in English usually speak in class, express their ideas, negotiate with the teacher and enhance themselves in various activities. Among those students a holder of BA in English, the others studied English the same as the others; apparently they are good in English. However, students with low proficiency in English ten to keep silent all the time refuse to read or to speak if asked by the teacher and if they answer they speak in a low voice, incorrect English, and in most of the times they speak in Arabic.

- The marks of the students range from 4,5 to 19.
- In most of the times, when the students enter to the class, they looked stress-free and we can say happy (friendly teacher and not important module), but after, around half an hour, they looked tired and bored (they keep looking to the clock and do other activities to make the time passed quickly)……this pushed us to think of an other way of teaching. We suggest adding the number of hours e.g. at least 2 times a week in each session 1 hour and a half, that half is devoted, let's saying, for late comers and technical problems and for the teacher to explain and the students to understand and ask the questions they need to know.
- Apparently, students like best writing in a way that they just copy what is written on the board. Besides, they do not have the skill or the habit to note-taking. In fact, the silence of the students all the time was a hindrance for the researcher to decide upon which skill the students prefer, hence, all decisions are possible.
- The students seemed to be curious about the text the teacher asked them to read. They enjoyed reading it silently but they became anxious after she asked them to read the passage loudly in front of their classmates.
- The less motivated students would follow the teacher's instructions while she was beside them, but they were distracted after a while.
- They concentrate on the lesson just when they are supervised.
- Less motivated students needed regular supervision.
- Some students were very interested in the course even if they need more motivation to study.
- Students who sat at the front, usually, concentrate better than those who sat at the back. This can be owing to the fact that those at the front are closer to the teacher which is not the case for those at the back, unless the teacher was walking beside them. We suggest that the shape of the arrangement of the tables should be re-organized to fit both the learners and the teacher.
- When they were reading the passage, the students' pronunciation was to a given extent so weak and they can not pronounce all the words from that passage. They even pronounce English words as French ones.
- Students' chat among them was so notable and took too much time in the course.
- The students tend to sit at the back to escape the teacher's remarks and questions.

- Seemingly, low proficiency students did not speak aloud (in the academic context) because of the lack of confidence in speaking English in front of the teacher or the other students.

- Less then 10 students were, to a given extent, highly motivated when compared to others.

- Students find great difficulties in expressing themselves in English.

- Giving collective answer was a sign that the students lack self confidence when asked to form coherent sentence and say them for the others. (Weakness in forming sentences and in speaking).

- In more than one occasion they express their positive attitudes towards the use of technology in classroom and they were curious about it.

- Seemingly, the students lack the habit and the skill to take notes in English.

- Those students with middle proficiency in English are both males and females, but they are very few they are more or less four students.

-   They lack the skill of presenting an expose in English orally.

- Among the critical characteristics of the oral presentations were that the teacher was the only one who concentrated on the content of the project, which was not the case for the other students who did not take notes, noisy.

- The main "activity" that they prefer is that when the members of the group, who were presenting, were speaking, not because they listened to them and took notes as it normally should be, but because it was an opportunity for them to discuss and do other things.

3-8-4: The Lesson Observation:

- The use of textbook is very important in class, yet, it is not the case here in this course (it is the case in all departments and modules). Then again, both teacher and students did not use it. Choices are left for the teacher to select what she perceived to be beneficial for the learners.

- Students and teacher generally did not follow any guidelines in the process of teaching and learning.

- In-class activities include reading passages, answering questions, look for the meaning of words and do oral presentations.

- In general, the main topics that were discussed that took the form of oral presentations are related to computing field.

- The teacher selected a text to be studied, in the first session that the researcher attended, which was about laptops but which did not contain computing related vocabulary in general.

Ordinarily, students ask themselves about the reason of learning such and such a thin. This question springs from the fact that they do not know the purpose of the curriculum except to have a passing mark that enables them to pass to the following year. They attend the courses to receive pieces of knowledge, memorize them then give them back in the exams to move to the next year. They do not know what they will benefit from what they learn in computing field. On the other hand, the teacher does not know what their learners need to learn. Here, the gap widens between the two who are supposed to work in collaboration to achieve success and development.

3-9: Conclusion:

In this chapter, the researcher introduced the population of interest, the tools of research; presented and analyzed the results of the study starting from the questionnaires of the students and the teacher to the observation of the class, the lesson, the teacher and the students.

In the next chapter, the researcher will discuss the results and arrive at suggestions and recommendations in the light of the outcomes of the study.

4-1: Introduction:

In this chapter we will discuss the findings of this study with reference to the hypotheses of the study and to the research questions we started with. We previously mentioned a number of hypotheses aiming at arriving at confirming or denying them. After collecting the data and summarizing the results in the preceding chapter, we will discuss them to arrive at suggesting some amelioration to the way English is being taught in the department of computing in the University of Chlef. We will also state some implications of the study and recommendations and end by the limitations of the study and final conclusions.

4-2: Discussion of the Results:

After reviewing the relevant literature and gathering the necessary data, attention shifts towards discussing the research questions of this project in the light of both previous studies and this one. As mentioned previously we are exploring the students' attitudes towards computer assisted English learning in the department of computing, University of Chlef. In order to do so, 3 research tools are used. Questionnaire for students and another one for teachers besides an observation along two months.

This research is based on one principal question which is followed by a number of secondary research questions to arrive at convenient results. That principal question is:

What are the attitudes of second year LMD students, in the department of computing, towards computer assisted English classes in the University of Chlef?

Research Question 1:

What are the students' reasons for learning English?

The answer for this question can be drawn from the students' choices for the following statements in the questionnaire administered for the students.

A-1: I learn English because I need it in my studies (Instrumental motivation).

A-2: I learn it because it is a module in the department only (Instrumental motivation).

A-4: I learn it for personal development (Personal motivation).

A-6: I learn English to understand the English culture (integrative motivation).

The aim was to identify which kind of motivation the students have towards learning the English language and then identify their reasons for learning English. According to the results, the majority of students, who constitute 90%, say that they learn it because they need it in their studies; this means that they are instrumentally motivated. Also just 35% say that they study it because it is a university requirement and aware of the great role that English plays in the modern world and the fact that it is the language of science. Hence, the instrumental motivation comes as the first source of motivation for the students. The personal

or developmental motivation comes as the second source of motivation of the students (80%). Finally, for the integrative type of motivation only 25% state "I learn English to understand the European culture" as an important motive to learn the English language.

This part was conducted to determine which of the three types of motivation -instrumental, integrative and personal - could be the primary source of computing students' motivation towards learning the English language. The findings show that students' demonstrated greater emphasis on instrumental reasons for learning the English language including utilitarian (e.g. in conversations that took place during the completion of the questionnaire the students mentioned that enable me to get a job easily) and academic reasons (e.g. enable me to carry my tasks more efficiently, it is a university requirement and to understand better the literature of computing issues which is in most of times written in English). This apparently reinforces the idea that the students see English as playing a vital role in their lives, either currently or in the future.

Furthermore, emphasizing the pertinent role of English in the computing world, computing students should face this fact since important books, articles and journals written in English are of great importance .Personal causes (e.g. for a personal development and to enhance their status) were also regarded as important motives by the students. Yet, for the last motivational aspect namely, integrative motivation, the students' responses provide evidence that they, the majority, do not learn English because they want to understand the European culture. This might be caused by a growing feeling of national confidence and the fact that the students are aware of the differences between the cultures. On the other hand, another interpretation of the current results, especially the 35% who mentioned that they are interested in the European culture, might be attributed to the students' desires to know and understand the culture of the West but not to fully integrate in that culture. The latter reason might be more acceptable and applicable as results from the interviews showed that the majority of the students rejected to learn the language to be a part of the culture of the English speaking World i.e. to be bicultural. In addition to that, some of them explained that they wished to learn about the western culture so as to broaden their horizon and familiarize themselves with that culture. On the whole, the results indicate that computing students chose to be bilingual but, to a given extent, not bicultural. The most reasonable explanation for that might be that the students' attitudes towards English are motivated and associated with utilitarian reasons. Westernization has been rejected and replaced by a positive attitude that looks at English as a tool for modernization and, according to them, a prerequisite for finding jobs, particularly in

the private sector and go further in their studies, this will enable them to function effectively in both their academic and professional settings.

It has been reported that motivation has positive effects on learning language skills. Aacken (1999) argues that there is a positive relationship between positive student attitudes towards CALL and instrumental motivation which lead to gain control over language effectively. Warschauer (1996) adds that the use of computer in language class enhances the students' motivation to learn language skills such as Writing and improve communication and interaction.

Seemingly, the students lack the language skills that enable them to function effectively. Having great desires for learning the language is considered as one of the main components of language learning motivation (Gardner, 2006).

Research Question 2:

What are the attitudes of students towards English language?

The answer for this question can be drawn from the students' choices for the following statement in the questionnaire administered for the students. (See appendix 1)

A-3: I personally like English.

The results obtained from (A-3) are considered as a direct answer to the second research question. Concerning the students' English language attitudes, interesting findings were obtained, 95% say that they like English.

It is not surprising that the students agreed that English language is very important to the development of the country. This is because, they might be aware of the international role English language has been playing on the world arena as the language of technology and Science. That overwhelming percentage of liking English might stem from the students' urgent needs, particularly in scientific sections like computing, to be equipped with a good level in English prior to entering higher education. For example, many students during the interview clearly admitted and showed a great desire to study English and attend English courses as well as completing the questionnaire piloted in English, for them, because they finished secondary schooling with poor level in both language and communication skills they failed to cope with the academic requirements at the university.

In accordance to the abovementioned discussion, the students owe very positive attitude towards English and that they are interested and confident in learning English. The latter will motivate, on the other side, the teacher to work with them and to seize this opportunity to give them the background they need. The positive view of the courses of English and English in general is due to the fact that students are aware of its importance as the language of

technology and that many publications in the domain are in English. In an interview with a teacher of computing from the same department, he mentioned the urgent need to help students to develop their knowledge of English for computing. He gave the example of an important book in the field called '*The Art of Computing'* written in English in around 300 pages, when translated into French the same version was in 3 volumes, for him this means that the information included within it lost there intended meanings and the whole essence of the book is lost in the translation as many of the technical terms are in English, i.e. to translate only one term, a whole sentence will be used to approximate the real meaning.

Research Question 3:

Will the students accept using the computer in class when they are studying English?

After conducting this research, it is important to know the real attitudes of students towards using computers in learning English in the university, which is the main concern of the current study. The response for this question can be taken from the results of the following statements numbered as they appear in the students' questionnaire.

A-11: I enjoy lessons on computer.

B-1: I enjoy doing things on computer.

B-3: I concentrate on computer when I use it.

B-5: I would work better if I could use computers more often.

B-7: I know that computers give me chances to learn many new things.

B-1: Studying English with computer is enjoyable.

B-13: I believe that the more teachers use computers, the more I will enjoy English.

B-15: I believe I can do all my studies with the help of computers.

B-17: I believe that I can improve English skills using the benefits of computers.

The answer of the students for this research question is supported by other statements that give clarity and some correlations.

A-8: I am very confident when it comes to working with technology at home/at work/at university.

A-7: I have a compute at home.

A-10: I frequently use the computer at home.

A-9: I can learn more from books than from computers.

A-12: I prefer studying using pens and papers.

According to the results, students' general attitudes toward computers are found highly positive. This perception can be explained by several factors. This could be because the students in this department were more exposed and had more opportunities to the use the

computer for course related activities. High socioeconomic status Miura (1987) and access to computers Gattiker & Hlavka (1992); were defined as important factors to have positive attitudes toward computers. the computer ownership at homes and the amount of its use (A-7 and A-10) were seen clear, hence, we consider them as positive points that confirm the positive attitudes they have towards computers in English classes since students are aware of their importance and perceive them as important tools at home and elsewhere. As a result, what the student will experience in an English assisted class is just a change at the level of the environment or the atmosphere he is in, in other words, what he will do in class is just what he is used t do at home just in an academic way.

One important fact, as far as the results are concerned, there is no significant difference between males' and females' attitudes towards computer. Both genders have positive attitudes towards computer assisted English classes.

95% of respondents consider themselves able to effectively utilize the services offered by computers and technology in general which is a good starting point if the use of computers in class is decided.

In response to the statement "I believe that I can improve my language skills using the benefits of computers". 80% of the students show their agreement with the idea which means that they expect to learn English well in a computer assisted classroom and have positive attitudes towards the use of computer, or the services it affords, and are aware of its uses when it comes to learning English.

In response to the statement "studying with computers relaxes me and gives me chances to learn many new things"80% show their agreement. This shows their positive attitude on one hand and guaranties their concentration on courses on the other hand. The latter is missing in our classes especially the class of "WEB", the one under the current study. Among the results of observation that correlate with this idea, is that students, almost all, do not concentrate at all with the teacher and the course being explained. Therefore, this negative behavior can be mitigated by the use of computers in English classes which also can be applied on the other classes if the situation is the same.

Another step in this study included an investigation of the students' attitudes towards CALL for specific language skill. The findings reveal that they generally have positive attitude towards CALL for all language skills, but CALL seems be favored especially for reading and Writing skills besides acquiring new vocabulary which are followed by the others skill. The majority of the students, 45% to 75%, agree that computers have a great role in the process of learning English as a foreign language and agreed on the benefits of various

programs provided by the computers which enable them to enhance their spelling, reading, writing and listening according to the responses to statements in part (C) from 3 to 7 in the students' questionnaire.

In response to statement "I enjoy doing things on computer" 85% agree that they like doing so, 85% believe that they can do all their studies using computer and 70% claim that they would study better if they use computers more often. These statistics of the current study enhance the answer to the 3rd research question and support the conclusion that students in this department owe positive attitudes towards CALL. This point was discussed in previous studies mainly by Robertson et al. (1995) their claim is that the concept of 'the computer' is becoming so much a part of culture since the majority of young people expect to be able to understand them and enjoy using them. This is valid for computing fields where the use of computers is undeniable. Thus, it is likely that the students are 'forced' to develop positive attitudes toward using computers in computing field for practical purposes. This idea was supported by our findings on students' attitude toward computers and has been supported by other research done to identify student attitude toward the integration of CALL into the curriculum. For example, Ayres (2002) found that:

"Learners appreciate and value the learning that they do using the computers". Ayres (2002: 247)

Klassen and Milton (1999) found that students who studied with visual aids or information do better when compared to the traditional way. Visual information enhancement can be via computers.

The availability of material at home will help the students to practice and do their researches any time they need to do so.95% of students who have computer at home is a motivating result that shows that it is an important tool for them and will help them to use it more efficiently and will be more familiar with it if they use it apart from the school, this also supports the claim that working with the computer frequently will enhance self confidence to take risk and not to be afraid from mistakes in learning. The computer ownership can be linked to the positive attitudes they have towards in English.

Another outcome of the study is that students' attitudes towards CALL are not affected by their proficiency levels in English. In other words, there is no correlation between the students' level of English and their attitudes towards computer's use in English class. In due course to the observation that took place during the process of data collection, students are likely to show an apparent low proficiency in English, yet they still hold positive attitudes towards CALL, wishing that via the integration of computers in the courses of English they

will undergo a certain improvement in the level of English especially English for computing purposes. Students' positive attitude towards CALL will motivate them to improve their learning strategies exploited via CALL and help them to get more in the exams, which is an intended purpose for the student who aims at passing to the following year. In other words, students' good attitudes towards CALL enable them to benefit more from technology in learning the English language skills; Smith (2000).

The results of this study draw attention to several aspects of students' attitudes toward the use of computers in English classes. It correlates with their attitude towards computers in general.

Another finding from the results of the questionnaire, in accordance to the last open ended questionnaire, is that students never experienced the integration of technology in English classes. One of the students mentions that he never enjoyed the courses of English since he started studying it, i.e. since the middle school, he considered the language as boring and just a list of rules and irregular verbs to be retained for the final exams and tests. However, he adds that when he entered the university and experienced the different options that the net offers, he finds that it is very important and starts studying it seriously and with pleasure. That was the experience of only one student, he, like his peers, realizes the importance of the English language and also the importance of the implementation of the technology in class. Technology offers the students with opportunities for learning English or any other foreign language never before experienced. The International Society for Technology in Education (ISTE) (2000) defines curriculum integration with the use of technology as follows:

"Curriculum integration with the use of technology involves the infusion of technology as a tool to enhance the learning in a content area or multidisciplinary setting. Technology enables students to learn in ways not previously possible. Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions—as accessible as all other classroom tools." ISTE (2000: 6)

Around 42,5% prefer working alone without sharing with the other students, while 57% prefer sharing rather than working alone. Therefore, the teacher should be aware of the different learning styles that exist in class and facilitate learning English through varied activities. The results also reveal that   %of them use computer more than 10 hours per day,

which means that the students are accustomed to the frequent use of computers in due course to their field of study.

The findings show that the students perform a wide range of activities like writing emails, surfing the net and do their researches, playing games, listening to music and watching videos. Hence, the teacher can integrate various types of activities and tasks to promote and facilitate the learning of English, particularly English for computing. Results from this study are encouraging because they highlight that many students do use these electronic resources and are confident in doing so, so using different activities, in classes, help learners love the language. CALL provides activities with infinite variety to teach language skills making language learning more exciting and attractive. The activities include using the computer programs to stimulate discussions, writing or critical thinking and using the word processors, spelling and grammar checkers. If the access to the net is available, authentic materials are provided to be familiar with the target language. The power of multimedia to ensure a combination of texts, graphics, cartoons, animated graphics, and sounds helps the teacher facilitate language learning environment in CALL class.

The students are self reliant because the findings reveal that 70% do their own search if they did not understand their teachers. Self-reliant students help creating a student-centered class and enable the students to take responsibility to decide upon the materials that they need. The major aim of self-reliance at the university level is to increase the students' determination to get rid of the traditional way of teaching, which largely depends on the flow of information only from teacher to student and rarely from student back to the teacher. It goes beyond the slavish imitation of the teacher's interpretations and personal opinions. Recently, university teachers and even all educationists reject the traditional method of teacher-centered classroom discussions and the passivity of students who merely listen to their teacher while he/she gives instruction. Duckworth (1987) reviews this new trend:

"Meaning is not given to us in our encounters, but it is given by us, constructed by us, each in our own way, according to how our understanding is currently organized". Duckworth (1987: 10)

The system of education in our universities still applies the traditional mode of learning, unfortunately, which views education as, basically, a matter of storing information for

retention and later recall in exams. This trend is based on the theory that important pieces of information are identified and delivered by teachers and required from students.

Recently, researchers are interested in developing learner autonomy and its effects on foreign language teaching and learning. Benson (2001), basic conclusions on autonomy are:

> ➤ The Learner autonomy is the fact that the learner takes an active role, independent attitude towards learning and works independently which means it is beneficial to learning.

> ➤ The notion of "learner autonomy" is supported by the view that language learners have a natural inclination to control their learning.

> ➤ Learner autonomy is a systematic capacity to control different levels of the learning process. This personal involvement of the learner leads to more effective learning.

Evidently, the learner autonomy has many advantages for the learner of English himself, and of other languages, however, it is a hard task for teachers to foster autonomy amongst learners in practice due to the nature of the traditional structure of the teaching and learning process. Benson summarizes the awkward nature of fostering autonomy very aptly:

> *"One clear outcome of the research is that any attempt to transfer control over one aspect of learning is likely to have complex effects on the system of learning as a whole. Flexibility in the guidelines for the implementation of a curriculum often creates spaces in which individual teachers can allow learners a degree of control over aspects of their classroom learning. However, if the curriculum itself lacks flexibility, it is likely that the degree of autonomy developed by the learners will be correspondingly constrained."* Benson (2001: 16)

The results reveal also that the students have different learning styles that the teacher should discover them and help students by changing the way of teaching to fit them. For Mariani (1996), the main mission of the teacher is to help the students find out their own ways of learning because each student responds to a learning task in a different way from another.

According to the results, particularly those of the observation, the students are passive components in the process of teaching and learning English. In most of times they are silent and only the teacher who asks and responds. Research shows that passive involvement leads to limited retention of the acquired information by student as indicated by Dale, cited in Mckeachie (1995) who indicated that after two weeks, we will be apt to remember 10% of what we read, 20% of what we hear, 30% of what we see, 50% of what we see and hear, 70%

of what we say, 90% of what we say and do, and 100% by hearing, seeing, doing and smelling, feeling and tasting.

Again, the findings show that the students are silent and unable to express themselves in English, even if the teacher insists on them to talk they refuse or they speak in Arabic or French in order to escape from the answer. This is called the fear of mistakes; it is the psychological aspect of language learning, it hinders the students learning the language. This implies that more than half or almost all of the learners are intimidated by the others, since having to perform, in front of their peers, causes a real problem for them. Those performance fears are quite often the profound roots in the previous failures of experience of language learning. Shy and unconfident learners pay attention more to the forms of language and correctness in producing it than to other aspects, because they know their limited capacities in respecting the well established norms of English. Psychologically, the fear of mistakes *"is a fear of losing face"* this typically characterizes mature adult learners, Rivers (1992). Adult learners give great importance to the others comments and the way they are judged by them. *"They are very cautious about making errors in what they say, for making errors would be a public display of ignorance"* , Shumin (1997: 5).

Research Question 4:

What are the teachers' views and attitudes towards implementing computer in English classes?

In order to answer this research question we decide to explore the finding of the teacher's questionnaire. The first finding in this respect is that the teacher of English in this class do not use computer related issues to teach English, this is seen mainly during the observation process. When the teacher was asked she replied that it was due to financial constraints, and then she added that they, the administration and the students, do not consider the module of English as an important module that needs computer devices. That was also the case for the students who confirmed that their teachers of English since the middle school did not utilize the computer related devices.

In addition to that, the current research results suggest that teachers' attitudes toward computer technologies are also related to teachers' computer competence. In their study of the correlation between teachers' attitude and acceptance of technology, Francis- Pelton and Pelton assume:

> *''Although many teachers believe computers are an important component of students' education, their lack of knowledge and experience lead to a lack of*

confidence to attempt to introduce them into their instruction'' . Pelton and Pelton (1996: 1)

The success of any initiatives to implement computers in education in general and in teaching foreign languages in particular depends strongly upon the views and attitudes of teachers involved. As a result of that, English teachers' attitudes towards computers are among the factors that affect the successful use of computers in the classroom.

Overall, the teacher shows positive attitudes towards the computer use in English class. The general positive level of computer attitudes could be because the computer is an available and an accessible tool for the teacher, especially at home, so the availability and accessibility of computers give the teacher of English that kind of attitudes. Positive teacher attitudes towards computing are critical if computers are to be effectively integrated into the course of English. The main reason for studying teacher of English attitude towards computer use is that it an important predictor for future computer use in the classroom, Myers & Halpin (2002). Teachers, who are "connected" to computers tend to concentrate on improving the way they teach English, through better preparation and student testing, rather than introducing the language.

The study reveals that the teacher's computing skills and ownership are crucial factors in order to successfully implement the computer. In summary, computer ownership has been consistently correlated to attitudes toward computers and positive effects for preparing teaching and learning materials. Teachers' computer knowledge and experience are especially important for effective usage of ICT in their classroom. A teacher with knowledge and experience can be expected to integrate ICT in the future in his classes. Using computers in classes does not mean using it as a tool to convey information and rehearsal but as a medium for learning, discovering, sharing and creating knowledge. Teachers should be in the center of attention since they are considered as the prime actors in implementing ICT in learning and teaching, they should be involved in all stages of the implementation and meanwhile be assured that this approach is advantageous over the previous one, compatible with their teaching practices and should be given any technical facilities and training. Peck and Domcott (1994) confirmed that view and summarized ten reasons that technologies should be used in education:

> ➢ Technology helps the teachers to individualize learning, the fact that allows students to learn and develop their capacities at their own pace in a "non-threatening environment".

- They suggested that the students should be proficient at accessing, evaluating and communicating, and information.
- Technology improves the students' capacities to think and their writing skills through the use of word processors.
- Technology assists the students to develop their critical thinking in a way that enables them to organize, analyze, interpret, develop, and evaluate their own work.
- Technology encourages the students' artistic expression.
- Technology helps students to access resources outside the school.
- Technology makes the learning experiences to students novel and enjoyable.
- Students need to feel comfortable using computer, because it will become an increasingly important part of students' world.
- Technology creates opportunities for students to do meaningful work.
- Schools need to increase their productivity and efficiency.

The teacher also states some reasons that affect the use of computers in English classes, the teacher's access to computer at home is an important fact that helps the teacher to use the machine any time she needs, also the training of teachers to use technology in how to use technology for teaching. Besides, she mentions the role that technology plays in motivating students to be more involved in distinct activities. We can interpret that, that the teacher is aware of the transformation of class from teacher-centered one to be more student-centered one. As a result, the teacher is expected to make good use of technology, precisely computers, in teaching English and develop effective teaching resources.

As a further step in this study, a list of consequences and benefits of integrating ICT in ESP classes is mentioned by the teacher as a change which is expected to occur in the way of teaching and learning as noted by Harris et al:

> *".. It is not necessarily the technology that has to be innovative, but the approach to teaching and learning must be"* Harris et al (2002:458)

From enhancing the teacher's professional development to making the classroom management easier, to promoting the development of communication skills like oral presentations, which was among the students, who were under study, tasks to decreasing the pressure on teachers, to accommodating the students' learning styles until the improvement of the learning of critical concepts and ideas, which characterize the world of computing in order to enable the students read the related literature.

In addition to the abovementioned benefits, other researches confirm the current research' findings, Lee (2000) opts that, when appropriately implemented, it can contribute significantly to experiential learning, he says:

> *"...they can learn by doing things themselves. They become the creators not just the receivers of knowledge. As the way information is presented is not linear, users develop thinking skills and choose what to explore".* Lee (2000:72)

In addition to that, Lee continues, the use of CALL motivates students because computers are popular among students either because they are associated with fun or because they are considered to be fashionable and more importantly it is a part of the students' field of study, i.e. computing in this study. The student's motivation is increased, "especially whenever a variety of activities are offered, which make them feel more independent". It also enhances the students' achievement because it helps learners to strengthen their linguistic skills and encourages their self-confidence. Computer when being used in English class, or in any foreign language class, provides authentic materials for study, ensures a great deal of interaction among the students and individualizes the process of learning since it will be student-centered collaborative learning especially for shy students. It ensures also independence from a single source of information, he avers:

> *"Although students can still use their books, they are given the chance to escape from canned knowledge and discover thousands of information sources. As a result, their education fulfils the need for interdisciplinary learning in a multicultural world".* Lee (2000:72)

The study also reveals what the use of computers in English classes requires; first and foremost, it requires the capacities of the teacher to deal with computer issues, demands that the technical staff regularly maintains computer and requires software skills training to a given extent.

The quantitative results for this question definitively indicated that the majority of the teachers have a positive attitude towards the use of ICT in teaching and learning process. Teachers are ready to incorporate ICT in their classroom if they see its significance to their lessons and if they are sure that the software is compatible with educational goals and the individual learning needs of students (Williams, Boone & Kinsley, 2004).Teachers role in the implementation of ICT into schools and their attitudes still the prominent significant predictors of technology use in other words, teachers' attitude towards the use of ICT for

educational purposes is a key factor for the success of the ICT in educational contexts in the future. Researchers from different parts of the world believe that the use of ICT tools for educational purposes depends upon the attitudes of teachers toward the technology (Albirini, 2004; Teo, 2008; Huang & Liaw, 2005). Teachers' attitudes toward ICTs can determine the extent to which technologies are used in the process of teaching and learning. The attitude towards computer use is a result of the user's main viewpoint about the results of constant use and his estimation of those results. According to Summers (1990), the teachers' existing attitudes, skills, and working habits have great impacts on their acceptance, style of implementation, and outcome of using computers for teaching.

Morgan (1997) asserts that the use of computers in class engages the students in many learning processes like gathering information; face-to-face communication teacher as facilitator; participation in experiential learning; expanded creativity, and testing of new knowledge.

In order to properly use the computer, it is important to train teachers in how to effectively integrate technology into the curriculum, Robertson et al. (1995) and Smith (1986). These researchers emphasize the reasons of the negative attitudes that teachers owe towards computers. Smith (1986) suggests that older instructors are in most of times incompetent because they have not 'grown up' with computers. Robertson et al. (1995) mention three possible explanations for the negative attitudes of instructors towards computers. One of them is the conservatism, and the other is the anxiety of the teachers because they found themselves obliged to introduce more innovative ways to their teaching. The third possibility is that the staff or the administrations in our departments, and students may have different perceptions about computers. The students may see them as high-tech tools to be used and the teachers may perceive them in context, for example as potential pedagogical tools that they are not fully prepared to use.

Gunn and Brussino (1997) draw our attention to other reasons that prevent teachers from using ICT and affirm "teachers with full workloads and satisfactory outcomes from existing methods of course delivery are not necessarily motivated to venture into the uncharted water of technology-based developments which are sometimes hard to access, often unreliable and always costly"

To sum up, we can say that teachers are "change agents" in educational environments, be them schools or universities. They play an essential role in the implementation of all forms of technology in the classrooms. It is important for them to possess positive computer attitudes since attitudes have been found to have a direct effect on future use and variables that

determine successful technology integration in education. In other words, computer attitudes, whether positive or negative, affect how teachers respond to technology in an instructional setting or learning environment. This in turn affects the way students react to computers in English classes. Overall, these findings may imply that the teacher of English is generally positive concerning computer technology use in English instruction and is willing to integrate computer technology resources into their teaching process. She, the teacher, states that she considers computers as necessary pedagogical tools and reports positive attitudes towards the use of computer technology resources in language teaching.

Research Question 5:

Will the students prefer the traditional way of learning (only teacher based) or the new way (only computer based) or both (teacher and computer based)?

The answer to this question is taken from the last statements in part "B", the statements are as follows:

B-19: I prefer studying English guided only by computer.

B-20: I prefer the guidance of computer and teacher.

The results reveal that 40% prefer working guided by computers only, however, 60% prefer being guided by both the teacher and the computer. This can be explained by the fact that the role of the teacher can not be replaced by any kind of interaction, the human interaction seems valid whatever the environment is, computer based or traditional class. The teacher interference remains crucial and the computer does not replace the teacher but only best assist him. The teacher has to look for ways that make their lessons enjoyable and engaging. The role of teachers should fit the results of the current study to not just hand down and pass knowledge to students and be the center of class and of students' attention, they guide the students as they are enhanced in various tasks and help them as they complete the given tasks. In other words, the teacher interacts with students to mitigate the difficulties that face them in using the target language (grammar, vocabulary, etc.) that arise when interacting with the computer and/or with other students.

> *"Elimination of a strong teacher presence has been shown to lead to larger quantity and better quality of communication such as more fluidity, more use of complex sentences and more sharing of students' personal selves"* Chitra (2010: 74).

In a student centered class authority is decentralized in the classroom in order to make room for everyone's participation. Both teachers and students in the classroom are learners:

students' experience is valued and they learn from the teacher and one another; the teacher even learns from students. The presence of the teacher is still very essential to promote learning and to reinforce what was already learned. Students discuss all that they receive and acquire new information via interaction and cooperation with the teacher or the classmates rather than the Teacher stands at the front and dispenses wisdom and the students passively absorb it, they learn to interpret new information and teacher needs to be closer to his students and attempt to design courses that fit the different needs and attitudes toward CALL properly. Jones (2007) summarizes the main roles of students and teachers in class:

> *"A student-centered classroom isn't a place where the students decide what they want to learn and what they want to do. It's a place where we consider the needs of the students, as a group and as individuals, and encourage them to participate in the learning process all the time. The teacher's role is more that of a facilitator than instructor; the students are active participants in the learning process. The teachers (and the textbook) help to guide the students, manage their activities, and direct their learning. Being a teacher means helping people to learn – and, in a student-centered class, the teacher is a member of the class as a participant in the learning process."*
> Jones (2007: 2)

In the process of implementing technology in language class, what really matters is that the systematic use of computers and not using them as a goal.

4-3: Recommendations and Suggestions:

In this study that aims to determine attitudes of students towards computer assisted English classes, it can be said that the participants owe very positive attitudes. Computer attitudes of students do not change according to gender. As a result; it is found that students' attitudes toward computer are at "highly positive" level. In this situation, it can be said that since the students' attitudes are positive, it can affect computer assisted activities in a positive way and it led us to predict the students' success in the tasks assisted by computer. Again, this led us also to expect that the students will achieve good marks in the exams; the latter is among the students priorities

The recommendations that are developed under the light of this research are below:

> ➢ Since a number of students owe an average attitude toward computer assisted classes, studies should be held in this field in order to make them develop positive attitudes. For instance, giving much more computer assisted education and teach the English module with computer simulations.
> ➢ Similar research can be done in various institutions, at various education levels, and with various age groups.

- Testing is very important way of proving the efficiency of CALL in this department, after analyzing the students' attitudes. With regard to the way of testing we recommend that we select a population from the students in this department, divide it into a control group and an experimental one, the control group will receive the same courses with the experimental group, however, the control group will receive the courses in the traditional way i.e. the teacher explaining and the students taking notes. The experimental group will receive the courses in CALL atmosphere i.e. sitting in front of a computer and enhanced in a variety of activities with minimal interference from the teacher. The period of time can be adjusted according to distinct constraints. After that the researcher will compare the results of both groups.
- Creating a flexible, enjoyable, convenient and comfortable classroom environment. To this end, the teacher should encourage active learning, cooperative learning and self-learning, thus diversifying ways of improving students' language skills.
- In order to improve the way of teaching English for computing it is recommended that teachers of English should be trained in computer assisted language learning methodology and computer literacy should be a compulsory requirement for English teachers.
- The way of teaching English in this department should be updated to include courses assisted by computer in order to meet the expectations of the students who are very positive towards English and CALL.
- Administrators in the department of computing should update the technology related materials, especially computers, and enable the students to access to the internet and use the computers any time they need, particularly in the module of English.
- After conducting this study, it is concluded that both students and teachers have positive attitudes towards CALL, thus, it is an urgent need to encourage the teachers of English to use CALL in their classrooms.
- If the ministry is looking for hundreds of ways to develop the way of teaching foreign languages in universities, providing a high quality teaching materials is one way.

- CALL should be integrated into the traditional English classrooms where the instructor is also available for further assistance and questions so that students are not deprived of human contact.
- Learner autonomy can be maximized through the integration of computers because 'fast' and 'slow' learners are given equal chances to study and review the materials according to their own pace.
- Teachers should help students practice reading passages or articles on a computer and some activities should be provided in order that students become familiar with reading and accessing to reading materials online.
- Listening skill is improved through computer activities because students are given the opportunity to repeat as many times as they want and according to their own pace, which is not the case in a traditional language classroom. In traditional classrooms listening skill is generally ignored or given little importance, even the teacher does not read the passage before it allows individual reading. Self-access materials should be set up so that students may enjoy improving their listening skill through computers.
- CALL can assist ESP lessons because it enables learners to develop the four skills in addition to developing the communicative skills and get immediate feedback, which is the basic feature of CALL in almost all situations.
- The current way of teaching English in the department appears to be inefficient, according to the results of class observation. Therefore, we recommend changing the way of teaching to another up to date method to fit the different learner's needs and interests, which is CALL.

4-4: Pedagogical Implications:

This study aimed to investigate the computer science students' attitudes towards learning the English language assisted by computer in the department of computing in the University of Chlef. Besides that, the study aimed also to identify the reasons that motivate the students to study English and the attitudes of the teacher of English in the department towards the computer use in English for computing purposes. For the students' motivation, the results showed that instrumental motivation was the primary source of the computing students' motivation toward learning the English language. Personal reasons were also regarded as important motives to the students. Yet, concerning the integrative reasons, the results provided evidence that learning English to understand the culture of its people had the least impact on the students' English language motivation.

In reference to the attitudes, the findings reveal that the students have positive attitudes towards the learning of English in the department of computing, the use of computer in English courses and the English language as a whole. Findings indicate also that the teacher of English who constitutes the whole population of teachers in the department owes positive attitudes towards CALL.

The study findings can be used as the starting point for providing some pedagogical implications that should be taken into consideration by both English instructors and syllabus designers. The implications are as follow:

➢ The study reveals that computer science students are instrumentally motivated. Consequently, the English module should be designed to fulfill this purpose. In other words, computing students should take English courses that help them to function effectively at both their academic and occupational settings.

➢ The students show a great desire to learn the English language for both utilitarian and intellectual academic reasons; therefore, a careful choice of materials should take place in order to meet those needs.

➢ The time allocated to the module of English does not satisfy the needs of students who have such a high percentage of liking English, as the allocated time for the current English language course is only one hour and half per week, it might not be enough to help the students be proficient in the language, in general, and English for computing purposes, in particular. As such, the duration and number of the courses should be increased so that English is an essential module at the department.

➢ Some students show their frustration towards CALL. As a result, a component in the students' English class should be tailored to meet these prerequisites, such as keeping some of the characteristics of the traditional class.

➢ In light of the findings, the Ministry of Education in Algeria and syllabus designers should direct their attention to the students' and teachers views to change the current teaching and learning process in the Algerian universities. At least English should be given a more time per week and more emphasis on the language use rather than just studying it for the exams and by teachers of English non-trained in ESP, to enable the students to function successfully in university education.

➢ CALL should be integrated into the traditional classrooms where the teacher is also available for further assistance so that students still have the main

component of the traditional class which is the teacher who symbolizes the human contact.

➢ Heavy emphasis should be on pronunciation and communication because students seem have difficulties in that.

➢ Learner autonomy is maximized through computers because 'fast' and 'slow' learners are given the opportunity to study and review the materials according to needs, interests and styles.

4-5: Assumptions of the Study:

In this study, it is assumed that the answers of the participants to the items of the questionnaires reflect their real opinions and attitudes. It is also assumed that the participants showed natural behaviors when they were observed in class during their courses. It is also assumed that the attitudes of the population chosen randomly reflect the attitudes and the opinions of the whole population. It is assumed that the term "computer" means the machine and the software, the CD-ROM or the internet.

4-6: Limitations of the Study:

The first limitation is that this study is not generalizable. The study was conducted with students in only one department and the sample do not necessarily reflect the whole population. The results of the study reveal the attitudes of students in this department which would not be appropriate to generalize this situation to all the students who may face very different conditions from the participants of this study, like the availability of materials which is not the case in all the other departments. Moreover, the skills of the students in this department are taken for granted, bearing in mind that those students self-selected to study computer science. However, other studies related to the integration of CALL in the curriculum should start from assessing the students' skills and mastery of the computer. This study is limited with (2011-2012) academic years at the University of Chlef and the results of this study may be confined to the second year computing students only. Results can not be generalized because in other contexts, personal reasons can be as the first source of motivation like in others the integrative reasons can be the first impelling ones.

4-8: Conclusion:

In this chapter we have discussed the results of this study referring to the research questions; we find that the students have positive results towards computer assisted English classes. They believe that they will like learning English if they can use computer in class because according to them the learning of English will be easier and the computer will help them in doing their tasks in a short period of time. We find also that the teacher of English owes positive attitudes towards the integration of technology in English classes. The results of the study also reveal that the students have positive attitudes towards English and the high percentage of liking it   indicates that. Besides, the instrumental motivation comes as the first source of motivation for the students which indicates that they realize the importance of the language in the field of computing. Finally, the students mention that the teacher's role can not be dismissed in the class; hence, they prefer studying with the computer assistance and the teacher's guidance. Next, it will be the general conclusion in which we will summarize the findings of the study and the whole process.

General Conclusion:

The purpose of this study was to investigate teachers' and students' attitude towards the use of computer in an ESL classroom. This study was conducted in the department of computing in the University of Chlef. 40 second year LMD students (WEB) and (IA) and 1 teacher were involved in the study. The results prove that both students and teachers have positive attitudes towards learning English assisted by computers in classrooms. They believe that the use of computer in an ESP classroom makes the lesson interesting, enjoyable, exciting and effective. Moreover, the students appear to be highly motivated to learn English especially when computers are used to teach English for computing due to the features of the computer programs. Both teachers and students feel that using computers made their English lesson interesting and at the same time students could improve their language skills. It is assumed that the students are skillful in computing issues owing to their specialty as computing students, yet, it can be concluded that the teacher has basic knowledge on computer skills. Although teachers and students have a positive attitude towards the use of computer in an ESL classroom, computers could not be used effectively due to the limited computer access and equipments in the department wishing that in the next year will be an improvement. Aside from that, the teacher agrees that limited access to computer discourages the frequent use of computers in an ESP class. Engaging in Computer-assisted Language Learning is a continuing challenge to the current way of teaching that requires time and commitment; the use of technology is not a goal in itself. What really matters is the systematic use of technology in class. The role of computers will never substitute the teachers in class but they offer new opportunities to assist language practice. The process of language learning and teaching will be significantly richer after the implementation of computer in language class. Whatever kind of motivation is, we conclude that the students are highly motivated to study English whatever the reasons are.

This research aims at answering these research questions:

Question 1: What are the students' reasons for learning English?

Question 2: What are the attitudes of students towards English language?

Question 3: What are the students' attitudes towards using the computer in class when they are studying English?

Question 4: What are the teachers' views and attitudes towards implementing computer in English classes?

Question 5: Will the students prefer the traditional way of learning (only teacher based) or the new way (only computer based) or both (teacher and computer based)?

This research consists of four chapters. In the first chapter, we have presented the learning and the teaching situation in the department of computing, we have found that the system applied is the LMD system; we have got also information about the library, access to the net and the misconceptions of the students about English.

In the second chapter, we have reviewed the related literature of Computer Assisted Language Learning, of the importance of attitudes in CALL environment, of motivation and its relationship with attitudes, learner autonomy and of the cultural perceptions and the integration of computer in the process of teaching and learning English.

In the third chapter, we have introduced the population of interest, the research tools, data collection procedures, the results and analyses of the results.

In the fourth chapter, we have discussed the results of the study referring to the research questions previously mentioned; we have stated recommendations and suggestions, limitation of the study and assumptions.

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Appendix A

You are kindly requested to complete this questionnaire. Thanks for your cooperation in advance:

Gender:

- ☐ Male
- ☐ Female

Age:

How many hours do you use the computer in a day?...............hours

- Choose the answer you prefer by putting(X):

A-	Yes	No
1- I learn English because I need it in my studies		
2- I learn it because it is a module in this department(only)		
3- I personally like English		
4- I learn it for personal development		
5- I prefer working alone without sharing with my friends		
6- I learn English to understand the European culture		
7- I have a computer at home		
8- I'm very confident when it comes to working with technology at home/at work/at university.		
9- I can learn more from books than from a computer		
10- Do you use the computer at home		
11- I enjoy lessons on the computer		
12- I prefer studying using pens and papers		

Put a cross (X) in the suitable answer for you:

1- I enjoy doing things on a computer	
2- I am tired of using a computer	

3- I concentrate on a computer when I use it.	
4- I prefer reading from books.	

5- I would work harder if I could use computers more often.	
6- I think that it takes a long time to finish when I use a computer.	

7- I know that computers give me chances to learn many new things.	
8- Studying with a computer makes me nervous and does not satisfy me.	

9- If I do not understand my teacher, I search my self.	

10- I depend on my teacher to give me everything.	

11- Studying English with a computer is enjoyable.	
12- I feel bad if I ll use the computer in studying English	

13- I believe that the more teachers use computers, the more I will enjoy English	
14- Using computers in an English class is not important at all.	

15- I believe that I can do all my studies with the help of computers.	
16- I believe that computers can not help me in my studies	
17- I believe that I can improve my language skills using the benefits of the computer.	
18- Using technology in learning languages is not necessary.	

19- I prefer studying English guided only by computer	
20- I prefer the guidance of computer and teacher	

	Agree	No idea	Disagree
1- Computer makes it possible to experiment with different options.			
2- Computer gives immediate correction			
3- Computer improves my spelling			
4- It helps me to learn more vocabulary.			
5- It develops my reading skills.			
6- It develops my listening skills.			
7- It develops my speaking skills			

- What do you like best interacting with your PC? You can mark more than one box.)

☐ chatting in chat rooms
☐ writing e-mails
☐ playing games
☐ surfing the Internet
☐ listening to music
☐ watching videos
☐ writing texts, learning(e.g. online courses, using dictionaries
☐ working with educational software
☐ doing research for university (looking for information, using search engines like GOOGLE)

-Have you used computer related technology in English courses(e.g.data show..)? If yes, explain how?(write even in Arabic):……

Appendix B

You are kindly requested to complete this questionnaire by putting **(X)** *in the box that suits you:*

The teacher's profile:

Gender:

- ☐ male
- ☐ female

Which degree do you have?

- ☐ A licence of English, BA.
- ☐ A magister of English, MA. (Indicate the specialism).
- ☐ Others (specify).

What is your status as teacher?

- ☐ Fully- fledged (permanent).
- ☐ Part -time (vacataire).

How long have you been a teacher of English?(explain)

....

A- **The use of computer technology in English classroom:**

	agree	disagree	No idea
9- Increases academic achievement			
10- Is effective because I believe I can implement it successfully.			
11- Is too costly in terms of resources, time and effort.			
12- Makes teachers feel more competent as educators			
13- Gives teachers the opportunity to be learning facilitators instead of information providers			
14- Could reduce the number of teachers employed in the future			
15- Will increase the amount of stress and anxiety for students			
16- Is only successful if computer technology is part of the students' home environment			

B- <u>The use of computer technology in English classroom:</u>

	Important	Not important
5- Teachers should have access to computer at home.		
6- the training of teachers in the uses of technology for learning		
7- Motivates students to get more involved in learning activities.		
8- Is effective if teachers participate in the selection of computer technologies to be integrated.		

C- <u>The use of computer technology in English classroom:</u>

	Always	Sometimes	Never
11- Enhances the teachers' professional development.			
12- Results in students neglecting important traditional learning resources (e.g., library books).			
13- Limits my choices of instructional materials			
14- Makes classroom management more difficult.			
15- difficult because some students know more about computers than many teachers do			
16- Promotes the development of communication skills (e.g., writing and presentation skills).			

D- <u>The use of computer technology in English classroom:</u>

	Yes	No
6- Is a valuable instructional tool.		
7- Is successful only if technical staff regularly maintains computers.		
8- Demands that too much time be spent on technical problems.		
9- Is an effective tool for students of all abilities.		
10- Eases the pressure on me as a teacher.		
11- Helps accommodate students' personal learning styles.		
12- Requires software-skills training that is too time consuming.		
13- Improves student learning of critical concepts and ideas.		
14- Effective if only the teacher is able to deal with computers.		

Have you integrated computer technology in one of your classes? If yes explain in what ways?..
....