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THEME

Integrating New ICT Tools to Improve ESP Courses in the Algerian Universities:

Testing Skype for Distance Online Learning

Thesis Submitted to the Department of English Language in Candidacy for the Degree of "Doctorat Es- Sciences'' in ESP

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DEDICATION

To my parents without whom this thesis might not have been achieved, and to whom I am greatly indebted.

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ABSTRACT

In quest of a better teaching and learning of English especially in specific disciplines in the Algerian Universities, the present study claims the benefit of ICTs' integration as a pedagogical tool that may solve several language teaching problems such as lack of motivation and understanding.

The research is a case study that attempts to examine the application of such tools in teaching English with some Algerian university students. The study is composed of two major parts: part one is a quantitative study (use of questionnaires) that aims at examining the attitudes and perceptions of 63 Algerian ESP students and 20 ESP teachers (from different parts in Algeria) towards the use of ICTs in learning and teaching ESP. The results of the investigation reveal the existence of a gap between the Algerian students' and teachers' readiness concerning the adoption of a technology-based teaching/learning.

The second part of the research is an experimental study that aims at testing the efficiency of online distance learning through Skype in improving four English for Academic Purposes (EAP) students' English oral communication skills. The experimental study is based on four major instruments: the pre-experiment interview, the observation grid, Competency Accuracy Fluency (CAF) evaluation and the post-experiment questionnaire. The findings of the experimentation have shown positive results in regard to the participants' oral skills competency improvement (CAF improvement), and in their motivation and attitude toward online learning.

As a result of the findings, some changes such as the use of Skype in online distance learning are proposed to be implemented in the teaching/learning of ESP.

LIST OF ACRONYMS

CAF	Complexity Accuracy Fluency
CALL	Computer Assisted Language Learning
CMC	Computer Mediated Communication
EAP	English for Academic Purposes
EBP	English for Business Purposes
EEP	English for Educational Purposes
EFL	English as a Foreign Language
EGP	English for General Purposes
ELT	English Language Teaching
EOP	English for Occupational Purposes
ESP	English for Specific Purposes
GE	General English
ICT	Information and Communication Technology
LMD	Licence-Master-Doctorat
NA	Needs Analysis
NNS	Non Native Speaker
NS	Native Speaker
VE	Virtual Environment
VLE	Virtual Language Environment
VOIP	Voice over Internet Protocol

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General Introduction

GENERAL INTRODUCTION

Language teaching and learning methods constantly progress and change. But with the overwhelming expansion of new technologies in the last two decades, learning has out stepped the boundaries of the traditional space of education, the classroom, and is now virtual. Prensky (2001) questions old educational systems, as they are no longer suitable to the new generation of learners whom he refers to as 'digital natives'. This he believes is true since they 'have spent their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and all the other toys and tools of the digital age' (Prensky, p 1). It is because new learners have a profile of this nature that educators such as Oxford and Oxford (2009, p 1) emphasise on the urgent need for revisiting traditional pedagogical techniques by introducing new technologies that these learners understand.

Clark and Gibb (2006) state that 'new technologies have changed the educational landscape by creating a variety of digital learning environments and platforms; classrooms that may be physical, digital, or a combination of the two, and instruction that can be synchronous or asynchronous' (p 768). This variety of learning environments and diversity of instruction offer new options to different kinds of learners. With reference to foreign languages, for instance, learners may differ in terms of their purposes, needs, and conditions while learning a language – a generally complex situation that can be easily managed if an innovative technology-based pedagogy is adopted.

The adoption and the use of new technologies are also the concern of many policymakers who consider their integration in education as integral to their progress and modernisation (Hafkin & Taggart, 2001; Na, 1993; OECD, 2001; Pelgrum, 2001; Sooknanan, 2002). In the Arab countries for instance, 'numerous international initiatives,

such as the United Nations Development Program, have sought to help Arab countries embrace modernisation by bringing about reforms in their educational systems' (Abu Samak. 2006, p 13). In Algeria, the application of Information and Communication Technology (ICT) policies became significant right from the year 2002 through the Ministry's of education project that aimed at equipping all schools with computers and by introducing information and communication technology in educational programmes 'to facilitate the entry of Algeria into the information society' (World Telecommunications Development Report, 2006. ITU). However, and although the Algerian government has encouraged ICTs' introduction in education, and despite the wide emergence of the internet and of multimedia devices in Algeria in the last decade, technology is seldom made accessible for teachers and students inside schools and universities (Makhoukh, 2012). Nevertheless, the lack of technology accessibility is not the only factor that leads to a gap between today's information and communication society and the educational system in our country. One other major factor to be considered is that of the teachers' attitudes toward ICT, and their readiness for its right integration in education. As Abu Samak (2006) argues:

> … despite the presence of ICT in the classroom, the extent to which such technology resulted in actual improvements in teaching and learning cannot be assumed. One variable that has been linked to the effective use of ICT by American and European teachers is teachers' attitudes… In school settings in developing countries, where teachers who are expected to integrate ICT into their instruction effectively function as primary "change agents" (Chin & Hortin, 1994, p. 83), individual attitudes may play a significant role in the extent to which teachers carry out their responsibility. (Abu Samak. 2006, p 3)

Hence, language teachers –regardless of whether they are adept at utilising new technology or not –need to acknowledge the new rules imposed by the world of communication and information because in the context of innovations designed for educational systems, teachers are assumed to be major stakeholders in making such adoption decisions (Spiegel, 2001. qtd in Samak. 2006, p 3). Teachers also need to think about fostering new competencies that will allow them decide which technologies to use and how they could be best used.

One instance of an innovative pedagogy is online learning, which has become a widespread means of education that substitutes a classroom environment and facilitates the ongoing process of teaching/learning by offering a number of possibilities, such as distance learning. Hiltz and Turoff (1993) argue that 'there has been no means under the traditional system for a group of people to exchange information among themselves adequately in order to reach decisions; they had to meet frequently and talk over the matter or point face-to-face' (Hiltz and Turoff , 1993, qtd in Al-Ahda and Al-Hattami, 2014 p 112). Against those constraints, it is important to consider the advantages of using new technologies, originally made to meet and satisfy human needs, in developing methods of teaching.

The principle of online learning as an alternative to or as a complement for classroom teaching/learning can be convenient for English for specific purposes (ESP) learners, who generally devote their time to other studies or occupations. The specific needs of this particular type of learners and their motivation for learning English requires an adoption of modern teaching methods that will guarantee their effective achievement and language improvement. Indeed, 'distance learning affords educational opportunities to individuals unable to attend conventional classroom settings' (McNaughton, 2001 p 1). By

‘unable’ McNaughton pointes out disable individuals, those living in rural or remote areas, who often cannot commute to universities or college and individuals with other time restrictions.

Evans and Fan (2002) enhance this point further by exposing online learning offered opportunities comparing to conventional classroom learning, and suggest that three main advantages characterise online learning:

1) Learner-determined location for learning – whereby students are able to choose their own place of study;

2) Learner-determined time of learning – students are able to organise their own individual learning schedule, rather than having to study on a specific day at a specific time, and finally;

3) Learner-determined pace of study – students are able to set their own individual pace of study without being held up by slower students or vice-versa.

In addition to this amount of flexibility, online learning represents an undeniable source of knowledge as it happens through internet and within the web. Learners are no longer limited to the content provided by the teacher or by that available in their institutions’ libraries. They are more autonomous then ever in their pursuit of knowledge and in their choices that best meet their immediate or remote needs.

The present research study claims the importance and usefulness of online learning in teaching ESP students, and focuses the urgent need for adapting English specific courses to the technological changes and innovations, mainly multimedia and internet. This will contribute to the development of the students’ skills, and enables them to be active members and participants in professional learning. In other words, online learning allows

the future professionals to choose and build up their projects using a 'virtual experience', which tends to be closer to real life situations.

Since the late of 1960s and early 1970s language practitioners and researchers continue the discussion of needs assessment, discourse analysis, curriculum design, materials development, and delivery of instruction (St John and Dudley-Evans, 1991). With the rapid advance of technologies in information and communication, and the emergence of English as the prominent language in the global society, ESP practitioners are assuming a sense of urgency to think of new methods and techniques for teaching English. ESP teaching has been surrounded by numerous issues especially in countries where English is only taught as the second foreign language such as in Algeria, and where the dominant foreign language is French. Moreover, According to Spodark (2001) the role of foreign languages teachers has changed and continues to change from being an 'instructor' to becoming a 'constructor, facilitator, coach, and creator of learning environments'. Davis & Caruso-shade (1994) later proposed four vital roles for teachers: (1) Instructor: he guides and encourages students for using technology, (2) Coach: he facilitates the learning process, (2) Model**:** uses the computer technology as the learners are encouraged to, (3) Critic: he helps learners select the appropriate software (Davis & Caruso-shade, 1994, qtd in Corbel, 2007: 1117). These new methods of teaching encourage learners' autonomy and creativity, because in e-learning environments, learners are characterized by a certain maturity that demonstrates their independence (Holmberg 1995). This independence in setting the learning objectives and in choosing courses content is one of the main characteristics that shape the profile of an ESP learner, as he is considered as a collaborator in the learning process.

ICT use in general and internet in particular provide useful authentic materials to both ESP learners who can be exposed to the real language that meet their needs, and to ESP practitioners '…as courses can now be downloaded from all over the world. For the teacher as provider of the material, the concern will largely be with evaluating, and using rather than preparing materials' (Dudley-Evans & St John 1998. p 185).

Statement of the Problem

During years of personal experience in teaching ESP in public and private schools, two major constraints that hinder those ESP learners from ongoing English classroom courses were observed: (i) the English classroom course time table is hard to manage along with their working or studies schedules. (ii) Learners' frustrations related to teaching materials lead to a lack of motivation, and very often, renouncement to the course for many learners.

At the university things are a bit different. The English course is a mandatory subject included within the students' curriculum, and class absences are penalised. Yet, a general lack of interest and of motivation is observed in the majority of ESP classes (outside the department of English), especially as the English matter coefficient is low (1). The question to rise here is the following: how can an ESP teacher increase his students' interest for English in a specific context?

It is a fact that the key elements to an ESP course success are mainly based on needs analysis, course design, materials, assessment and evaluation, however, the present work focuses its study on the importance of materials development in ESP teaching especially in terms of information and communication technology, and claims its crucial role in facilitating teaching (that is, course design, assessment and evaluation) and learning process of a field-specific content. The study will then tackle the following issues:

- ICT's emergence among students
- ICT's emergence among teachers
- Students and electronic research competency
- ICT's development in ESP courses (e-learning)

Observations of the emergence of the new technologies among the new generation of students and teachers led to raise the following questions:

1- What are the Algerian students' and teachers' attitudes toward ICT with regard to:
   - Computer competence?
   - The use of ICTs in ESP teaching/learning?
2- What is the Algerian ESP teachers' and students' cultural perceptions of online distance teaching/learning
3- Which ICT tool that can best serve ESP students in online distance learning in Algeria? And is it possible to provide it in all Algerian universities?

To answer these questions, the following hypotheses could be formulated:

1- The importance of ICTs use in higher education has been the concern of many pedagogical meetings, articles, workshops and conferences during the last few years among Algerian University community. Most of that works claim the usefulness of ICTs in various ways:

- Using ICTs as pedagogical tools offers more authenticity (it creates real life situations)
- It could be a solution to the problem of the lack of students' motivation (as they are familiar with the use of 'the multimedia').
- It leads to the updating of the English teaching to the new innovations.

- This education is of a great benefit for the LMD system (which tends to be intensive) students as it allow them to save time in doing their researches or simply in learning their courses.

However, many Algerian English teachers are still using traditional tools and methodologies in teaching ESP students. Meanwhile, one may notice the influence of the rapid expansion of the new technologies among students who don't hesitate to use, adapt and modify their learning strategies according to the latest available technology.

2- Using online learning as pedagogical tools in teaching ESP is to be a part of the latest technological innovations in education all over the world. Yet, introducing such method to the classical ones may be faced with reluctance mainly from teachers, as this particular method requires from them to have individual (most of the time) online conversations with students who could be from the two genders and of different ages.

3- Providing sophisticated technologies in all Algerian universities could be a real challenge, as they need great budgets and qualified engineers who could set up laboratories, train the teachers and maintain the functioning of the equipments. Yet, simple platforms like 'Skype' could be a very interesting tool to be integrated in ESP teaching for its accessibility and easiness of use for everyone.

ESP adult learners are most of the time busy professionals, who attempt to progress in their careers by improving their English language skills. However, and since most of English courses require regular attendance to a classroom within a fixed time table, they find difficulties to include the course in their schedules. Most of them tend to show enthusiasm and a good will at the beginning of their training, but very soon the number of students' attendance in the classroom begins to decrease.

Hence, the present work also tries to show online learning as a practical alternative to face-to-face classroom course as Marsh states:

> Online learning/teaching environments can provide for different ways of learning and the construction of a potentially richer learning environment that provides fresh approaches to learning, thereby allowing for different learning styles, as well as greater diversification in and greater access to learning (Marsh 2012, p 5).

Significance of the Study

A significant aspect of this study concerns the lack of use of ICT by teachers in the Algerian universities in general, and among ESP teachers in particular.

At the time when ICTs use and English learning both have become national directives because of their major contribution to the country's development, additional supports are required for the promotion of ICT use among ESP university teachers and students in Algeria. In a major part of the present work the researcher attempts to contribute to the diffusion of a larger knowledge base in this regard, and to provide insights specific to ESP university teachers and students because so little research have studied ICT use among ESP population in our universities or in private schools.

In addition, this research aims at providing empirical data that may be of value to researchers in other English language teaching contexts where ICT tools can bring new innovative teaching/learning methods. The findings of this study may also help in other conducted researches at different educational levels in the country to compare and contrast with university settings. In this logic, the study has theoretical significance as 'the findings can be beneficial to educators and scholars in the field of English as a Foreign Language (EFL) as well as in the field of Computer-Assisted Language Learning (CALL)' (Abu Samak. 2006, p 11).

On a more applied level, the research attempts to shed light upon new methods for the improvement of English learning in our universities and on barriers to the actual adoption

of ICT use by Algerian teachers and students as it provides information about their attitudes, perceptions, competences and access to ICT. The present study has applied significance also because

> …professional development designers, among others, can benefit from empirically derived information about teacher attitudes, incorporating such information as they design and implement efficient and effective in-service training programs…researchers would find it useful to know the amount, types, and methods of computer use by [Algerian] university students and teachers, so that funding for technology and staff development can be optimally directed. (Abu Samak. 2006, p 11)

Furthermore, the experimental study in this research that investigates the use of Skype in teaching ESP learners may inspire and motivate other teachers to foresee the future of teaching methods inside or outside the Algerian universities.

To accomplish this research study, the work was divided into five chapters: chapter one will be a literature review of the main approaches to ESP teaching/learning in relation with electronic and distance learning. It will also devote a few pages to motivation and learners' autonomy as being two major elements in ESP teaching/learning. Motivation and learners' autonomy are then related to the use of new technologies as an innovative methodology for their encouragement.

Chapter two will begin by giving a review about the use of Information and Communication Technologies (ICTs) in education in general, then by talking about the first experiences of their introduction in foreign language teaching (FLT) with the birth of Computer Assisted Language Learning (CALL) in the 1960s. Next, the chapter will particularly deal with the use of ICTs in ESP as it is the main concern of the present

research. This part will then include the advantages of using new technologies in an ESP context and the kind of technologies to be used with a special focus on 'online learning' as an alternative to classroom learning. Finally, the chapter will give an overview about the educational profile in Algeria and the policies that came for the integration of new technologies in its educational system.

Chapter three attempts to give a detailed explanation of the different methods adopted for data collection, research procedure and analysis. The first research methodology is an action research that aims at identifying some university students' and teachers' attitudes towards the use of new ICT materials in their process of learning/teaching. This action research is a quantitative study mainly based on the use of questionnaires with a target population scattered in seven Algerian universities (Sidi Bel Abbes, Saida, Ain Témouchent, Oran, Tlemcen, Laghouat and Setif). The second research methodology is a set of experimental technology-based courses taking place in an online context and which aim at testing the efficiency of an ICT tool (Skype) in teaching some ESP students. This experiment is preceded by a qualitative study (an interview) to identify the participants' profile and followed by a quantitative one (a questionnaire) to know their opinion about the online course. Moreover, the online course efficiency is evaluated through a regular study of the participants' Complexity Accuracy Fluency (CAF) improvement during six weeks period of time.

Chapter four will expose the results found in both studies, i.e. the action research and the online course experiment, which will be followed by an analysis of these results, and then a discussion is made at the end of each analysis.

Chapter five will first tackle the limitations of the study and the difficulties the researcher has gone through. Then, the pedagogical implications of the findings will be explained. And finally, suggestions and directions for future research will be proposed.

Chapter One

CHAPTER ONE

Approaches to ESP Teaching and Learning

1.1 Introduction

This chapter reviews the works that were carried out in English for Specific Purposes (ESP) by gathering definitions, analysis and comments of major linguists and scholars who brought a great change to the English Language Teaching (ELT). The literature review will mainly focus on works that developed approaches with regard to ESP teaching and learning, first, in classical face to face education, then it will briefly introduce (as this will be tackled in the second chapter) ESP teaching in electronic and distance learning. In addition, the chapter devotes few pages to two seemingly important topics in ESP teaching/learning namely learners' motivation and autonomy, where it is claimed that these can be strengthened by the use of new technologies.

1.2 Historical Survey on ESP

The origin of ESP is mainly related to the urgent need of a change and to the enormous demand of specific language that happened in the 'city of ELT' (Kerkeb 2011, qtd in Hutchinson and Waters 1984. p 6). Yet, and because of 'the development of its own methodologies' and of its 'openness to other disciplines' (Hutchinson and Waters, 1984. p 6), ESP is seen to be a separate activity within ELT.

Strevens (1977) reports that the origin of ESP traces back to the year 1576 that represents the date of the first phase book for foreign tourists and sailors 'Guide to Language of Europe' (Strevens,1977, qtd in Robinson 1989. p 399).

Hutchinson and Waters (1984. p 6) suggest that three main factors have led to the development of ESP:

(i) *Political-economical development*: the end of the Second World War in 1945 and the shift from German to English as a global language because of the leading role The United States started to play in the world reveals English as the key of international currencies, technology and commerce. Therefore, English became 'subject to the wishes, needs and demands' of new generation of learners of science, technology and commerce. Learning English was no longer restricted to well-rounded education, but became an excellent 'survival tool'. The learners' consciousness of the fact that English was becoming the language of international communication (Lingua Franca), led to their awareness about the reasons they wanted to learn English for. Thus, they started to have different goals and needs behind learning English (Dudley-Evans and St John, 2002).

(ii) *A revolution in linguistics* marked by the fact that linguists shifted attention away from the traditional aims of linguistics of describing rules of English usage, to its usage in real communication (Widdowson, 1978). Linguistics recognized the difference between the spoken and the written language and its variation from one context to another. It was thus possible to 'determine the features of specific situations and then make these features the basis of learners' course.' (Hutchinson and Waters, 1987. p 7). Linguists started to give much credit to students needs in their research. And, as Hutchinson and Waters (1987) state, the logo of this era can be phrased as that tail English programme based on what the learners want to learn English for.

(iii) *The Focus on the Learner:* The third major factor that helped give life to ESP was the focus on learners. The idea is to consider the interest and the needs of each learner that influence their motivation and then their good learning. The stronger the significance between the students' needs and the texts they use when

studying English, the more they do better and demonstrate more interest in learning it. This led many educators to design different courses for different learners based on the learners' interests (Hutchinson and Waters, 1987; Strevens, 1988; Widdowson, 1983). This change helped educators conclude that it is more efficient for learners to learn English via structures and vocabulary they might see at their workplace or environment (Bloor, 1986).

However, it is considered that the real emergence of ESP started in the early 1960s and since then ESP "has become a vital and innovative activity within the teaching of English as a foreign or second language" (Howatt, 1984, in Dudley-Evans and St John 1998. p 2).

1.2.1 ESP Definition

Giving an exact meaning to what ESP is and to the difference between ESP and GE (General English) has always been debated in discussions such as IATEFL-TESOL's, and the definition of ESP has not only changed over time but different definitions have existed side by side (Smoak, 2003). Some researchers (Hutchinson and Waters, 1987) defined ESP on the basis that it is designed to meet the students' needs; other educators (e.g., Strevens, 1988; Dudley-Evans and St John, 1998) defined ESP on the basis of the absolute and variable characteristics that ESP might have. Other recent educators (Orr, 2002), defined ESP as an approach toward teaching, as they talked about 'class management', 'a teacher's role', and 'learning affective factors' when tackling ESP.

Nevertheless, it seems that previously mentioned linguists have a common understanding of what is meant by the term ESP that is, its concern with needs analysis, texts analysis and preparing learners to communicate effectively in their work situation (Dudley-Evans and St John, 1998).

The purpose behind giving an exact definition to ESP is only to turn clear of confusion about teaching ESP to the English teachers, who very often think that is about teaching

specific vocabulary. However, in various situations in ESP courses, the learners know and master that vocabulary much better than the teacher him/herself, because it is related to terms they use in their fields. In ESP the teacher is rather concerned with teaching his/her learners how to use and to understand their specific vocabulary in correct English sentences (either spoken or written). This implies teaching them the same features as in General English (GE) (i.e. grammar, syntax, pronunciation…etc), but in a specific context, using authentic materials related to the learners' specific field because it is ESP.

Yet, there are many linguists who tried to give a definition to ESP and the most important and famous are related and complementary of each other. For instance, Hutchinson and Waters (1987) famous statement 'Tell me what you need English for and I will tell you the English that you need' (Hutchinson & Waters 1987. p 6) summarizes the principles of ESP. For both linguists, the learner's needs determine the language to be taught, because needs reveal the reasons for which the learner wants to study English. Hutchinson and Waters have established then the primacy of needs in ESP.

Robinson (1990) joins the primacy of needs analysis principles in defining ESP as he states:

> An ESP course is purposeful and is aimed at satisfying the specific need of the students with the ultimate goal of the learners" successful performance of the occupational and educational role of a specific register of English language usage. Consequently, the ESP language refers to the use of English language as a specialized language of the register it is used in. (Robinson, 1990, in Dehrab 2002. p 9).

Robinson (1991) also focuses on the principles that govern in ESP: 'ESP is a major activity around the world today. It is an enterprise involving education, training and

practice, and drawing upon three major realms of knowledge: language, pedagogy, and the students' participants' specialist areas of interest.' (Robinson 1991. p 1)

Strevens (1988) definition of ESP distinguishes between four absolute characteristics and between two variable ones. According to him, the English language teaching is:

- Designed to meet specified needs of the learner;
- Related in content (i.e. themes and topics) to particular disciplines, occupations and activities;
- Centred on the language appropriate for those activities in syntax, lexis, discourse and semantics;
- In contrast with General English.

The variable characteristics are that ESP:

- May be restricted to the language skills to be learned (for example reading only);
- Use of no teaching methodology.

(Robinson, 1988, in Dudley-Evans and St John 1998. p 3)

However, in their criticism of Strevens' (1988) work Dudley-Evans and St John found some confusion, and correct it, suggesting that 'all ESP teaching should reflect the methodology of the discipline and profession it serves' (Dudley-Evans and St John 1998. pp 4-5). Their definition then, gathers and clarifies all the previous definitions' principles, giving an extended definition of ESP in terms of 'absolute' and 'variable' characteristics:

Absolute characteristics

- ESP is designed to meet specific needs of the learners;
- ESP makes use of underlying methodology and activities of the disciplines it serves;
- ESP is centred on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities.

Variable characteristics

- ESP may be related to or designed for specific disciplines;
- ESP may use, in specific teaching situation, a different methodology from that of general English.
- ESP is likely to be designed for adults' learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level;
- ESP is generally designed for intermediate or advanced students. Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners.

1.2.2 Classification of ESP

To answer the question of what ESP is, Hutchinson and Waters (1987) establish a context in form of a tree in which they call 'the exact status of ESP and its satellite settlements in relation to the world of ELT' (Hutchinson and Waters, 1987. 16). The figure below illustrates clearly the characteristics of ESP that serve the learners' needs through its main branches: English for academic study (EAP: English for Academic Purposes) or for work (EOP/EVP/VESL: English for Occupational purposes/ English for Vocational purposes/ Vocational English as a Second Language).

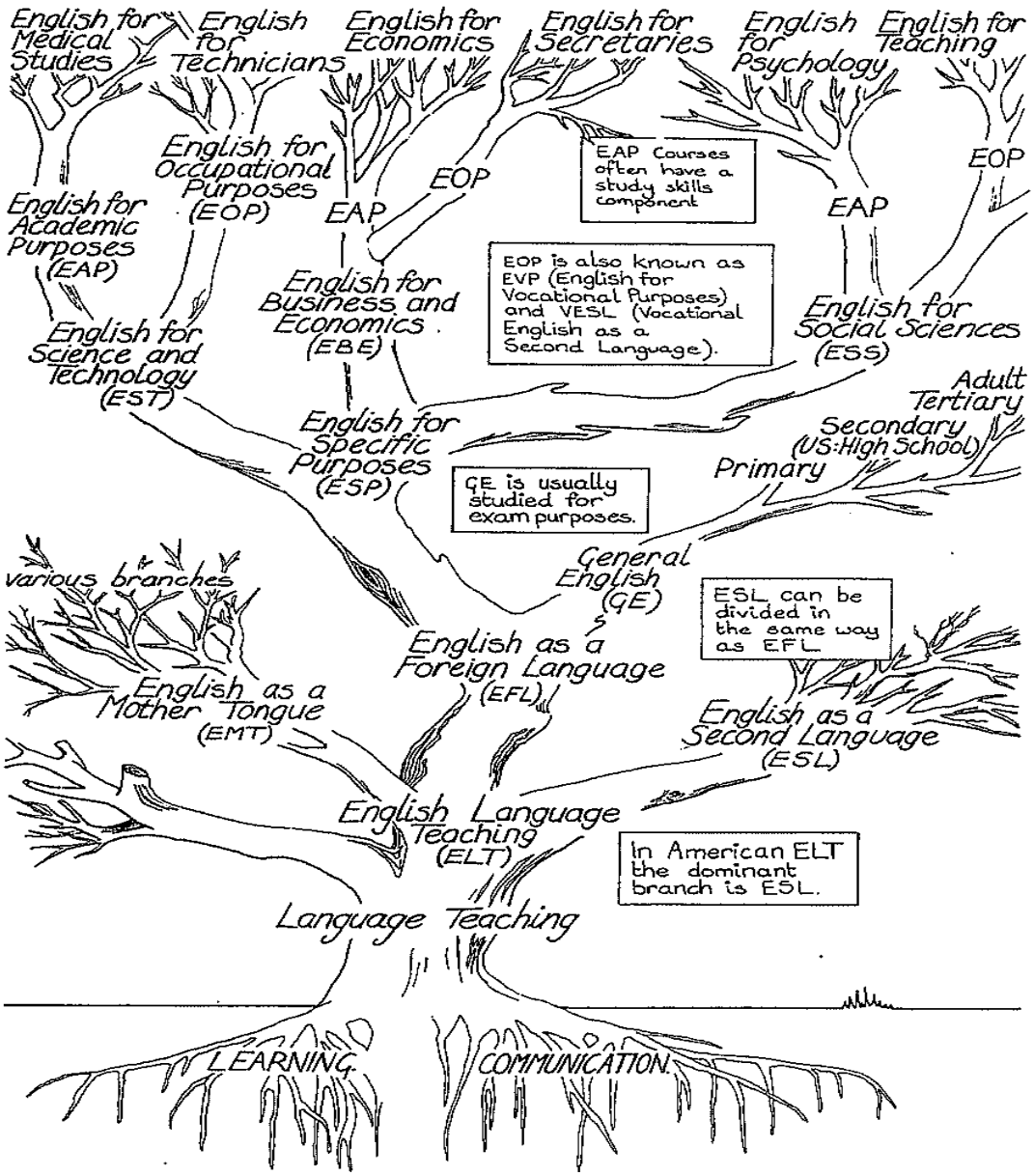


Figure 1.1 The Tree of ELT (Hutchinson and Waters 1987. p 17)

Dudley-Evans and St John say that 'ESP has traditionally been divided into two main areas: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP)'. The following diagram illustrates clearly this classification.

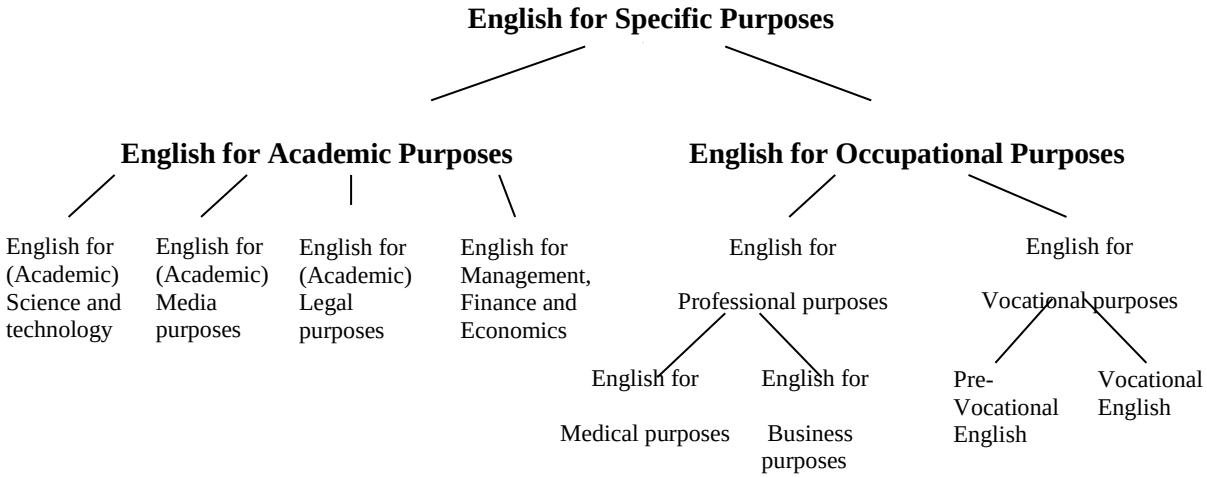


Figure 1.2 ESP Classifications by Professional Area.
(Dudley-Evans and St John 1998. pp 5-6).

Robinson (1991) focuses on the learner's experience in his divisions of EAP and EOP to distinguish the degree of specificity in an ESP course. See the diagram below

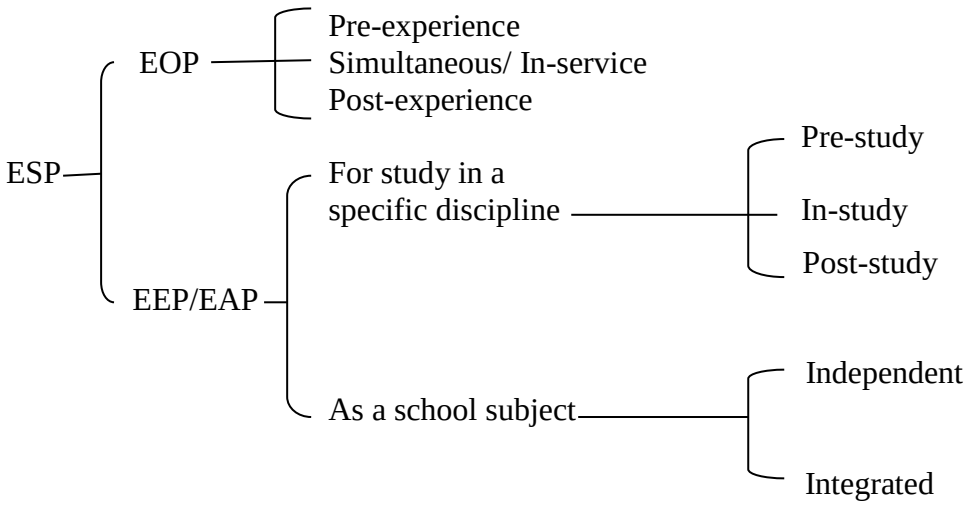


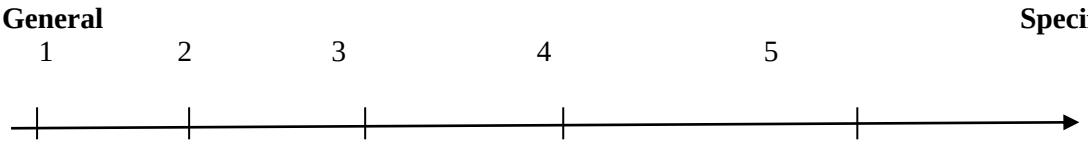
Figure. 1.3 ESP Classification by Experience (Robinson, 1991: 3-4, in Dudley-Evans and St John 1998. p 6)

Though the classification of ESP seems to be clear in the three previous diagrams, yet that kind of classification trees tend to cause confusion in understanding the different types

of ESP teaching, and to make a distinction between what is to be considered as specific and what is to be general. In line with this, Dudley-Evans and St John argue that:

> The use of classification trees creates a number of problems by failing to capture the essentially fluid nature of the various types of ESP teaching and the degree of overlap between 'common-core' EAP or EBP and General English. The 'common-core' English and 'semi-technical' vocabulary taught in many English for General Academic Purposes courses could well be extremely valuable in the teaching of what might be referred to General English as 'factual description'…. Business English can also be seen as a 'mediating language between the technicalities of particular businesses… and the language of the General public [Picket, 1989], which puts it in a position between General English and specific English. (Dudley-Evans and St John 1998. p 8)

Whether a clear and distinct classification of ESP matters or not, it is undoubtedly important to have a clear vision on the whole English teaching, from GE courses to the very specific. In this context, Dudley-Evans and St John prose what they call 'a continuum of ELT course type' (ibid) which, according to them 'decides whether a given course is classified as ESP or not' and the use of that continuum 'also classifies the nature of more ESP work' (ibid). The figure below illustrates the classification principal of Dudley-Evans and St John's continuum in ESP courses:



Position 1	Position 2	Position 3	Position 4	Position 5
English for Beginners	Intermediate to advanced EGP courses with a focus on particular skills	EGAP/AGBP courses based on common-core language and skills not related to specific disciplines or professions	Courses for broad disciplinary or professional areas, for example Report Writing for Scientists and Engineers, Medical English, Legal English, Negotiation/Meeting Skills for Business People	I) an 'academic support' course related to a particular academic course. 2) One-to-one work with business people

Figure 1.4 Continuum of ELT Course Type (Dudley-Evans and St John 1998. p 9)

According to Dudley-Evans & St John, 'it is only in position five that the course becomes really specific' (Dudley-Evans and St John 1998. p 9) and where authentic materials can be extensively used to reach the target situation and personal interest.

1.3 General English vs. ESP

The discussion above inevitably leads to speak more about the specificity of ESP courses comparing to general English (GE) courses, and in relation to learners' needs and motivation. Strevens (1988) differentiates between ESP and GE, and claims four major advantages to ESP courses:

- Being focused on the learner's need, it wastes no time;
- It is relevant to the learner;
- It is successful in imparting learning;
- It is more cost-effective than 'General English'.

Strevens (1988) who proposes the term 'English for Educational Purposes' (EEP) as a reference to GE, distinguishes by his four ESP advantages between the learning/teaching

objectives in both branches, that is while ESP is concerned with individual needs, syllabus design and materials, EEP according to him is rather considered as a *broad foundation* that accounts for a school-based learning of English as a subject constituent within the general school curriculum.

Widdowson (1983) also distinguishes some features between ESP and GE to clarify the proportion and the connection between them, in terms that the features do not imply complete separation, but they show the 'true nature' of each one. The following table illustrates Widdowson's most distinctive features:

Table 1.1 Widdowson's EGP/ESP Distinctive Features (Widdowson, 1983, in Popescu 2010. p 51)

EGP	ESP
• The focus is often on education • As the future English needs of the student are impossible to decide, course content is more difficult to select. • Due to the above points, it is important for the content in the syllabus to have a high surrender value[1]	• The focus is on training • As the English is intended to be used in specific vocational contexts, selection of appropriate content is easier. • Therefore, an EVP syllabus need only to have a high surrender value linguistic content in terms of the English foreseen to be most relevant to the vocational content. The aim may only be to create a restricted English competence.

Dudley-Evans and St John (2002) present another difference between ESP and EGP that concerns the pedagogical practices promoted by each approach. ESP teachers generally use different methodologies comparing to that used in EGP. In other words,

[1] Surrender value stands for the overall utility (value) of the English taught by a specific course, the higher the surrender value, the greater the utility of the English taught. These distinctive features reveal the true nature of EGP and ESP (Popescu, 2010 : 51).

interaction between teachers and learners leans in ESP tend more toward student-centered than teacher-centered teaching. Dudley-Evans and St John (2002) state that:

> ... much ESP teaching, especially where it is specifically linked to a particular profession or discipline, makes use of a methodology that differs from that used in General Purpose English teaching. By methodology here we are referring to the nature of the interaction between the ESP teacher and the learners. The teacher sometimes becomes more like a language consultant, enjoying equal status with the learners who have their own expertise in the subject matter. (Dudley-Evans and St John 2002. p 15).

Dudley-Evans and St John (2002) carry on focusing this crucial difference, saying that the usually used methods in any discipline or profession should be reflected in the teaching methods, and the interaction between the teachers and the learners should be different from that of the EGP.

Other differences between ESP and EGP are found in the advantages the former might have over the later. Strevens (1988) identifies some of these advantages: one of the main things that ESP has, which EGP does not have is that ESP focuses on the learners' needs and it wastes no time. This goes in line with Basturkmen's (2006) claim that ESP is considered to be a useful endeavor because it advocates learners on going from one level to another in the most time efficient ways. Jose (2002) includes to this two more advantages: first, ESP is successful in imparting learning; second, ESP is more cost-effective than General English is.

1.4 Teaching English for Business Purposes

The purpose here is not to find a precise definition to English for Business Purposes in linguistic terms, but to understand the function of English language when used for communicating in a business context. Dudley-Evans and St John (1993) argue that '…

EBP is mainly concerned with adult learners, working or preparing to work in business context, and deals with Business English in an occupational, not academic context.' (Dudley-Evans and St John 1998. p 7).

Pickett (1986) argues that Business Communication has more than one face because it is closer to the language of public 'a lot nearer the everyday spoken by the general public than many other segments of ESP' (Pickett 1986. p 16), and distinguishes two aspects to Business Communication: communication within public and communication within a company or between companies. See the figure below

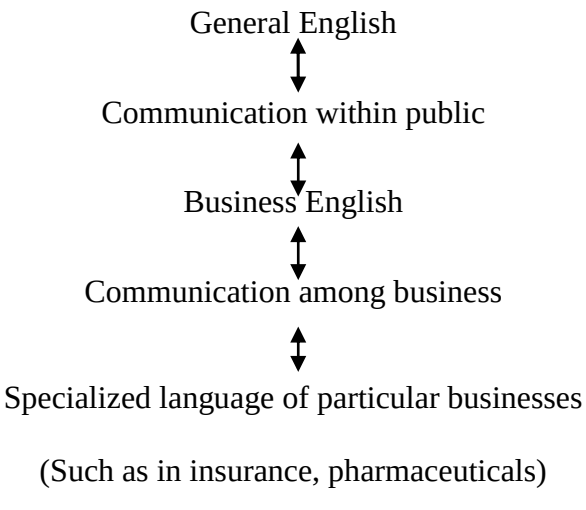


Figure 1.5 Pickett's Distinctive Aspects to Business Communication (Dudley-Evans and St John 1998. p 55).

At first reading, Pickett's distinction seems to be clear, yet it is not enough for real situations (business activities). Asking about Business English is asking about many other important questions, such as who are going to use English, native speakers (NSs) or non-native speakers (NNSs), or (NSs) Vs (NNSs). Then, asking for what purpose the users need to speak English, is it for their pre-experience learning, or for using it at workplace.

According to St John and Dudley-Evans (1991), Business English is seen as a branch of ESP that 'requires the careful research and design of pedagogical materials and activities for an identifiable group of adult learners within a specific learning context' (Dudley-Evans and St John 1996. p 1) that is adult learners either working or preparing to work in a business context. But, these courses 'may also include academic Business English required by students following, for example, an MBA course or a course in Finance, Accounting or Banking' (ibid) that is post graduate learners studying business studies.

1.4.1 English for General Business Purposes (EGBP)

English for general business purposes (EGBP) courses are generally designed for pre-experienced learners or for those at a very early stage of their career. Courses are based at this stage of learning on traditional four skills activities with specific grammar and particular attention given to verbs-tenses, conditionals and modals. Also with teaching specific vocabulary related to typical business topics such as presentation, making arrangements, meeting people, advertisement, etc.

The focus here is on accuracy and has correct answers, 'such courses teach a board range of English through business settings rather than English for specific business purposes' (Dudley-Evans and St John 1998. p 56).

1.4.2 English for Specific Business Purposes (ESBP)

'English for specific business purposes (ESBP) courses are run for job-experienced learners who bring business knowledge and skills to the language learning situation' (ibid). These courses are carefully chosen and prepared according to the learners' specific language work's need (specific business communicative events), and unlike (EGBP), (ESBP) courses do not teach all the four skills, but the focus is only on one or two skills. Materials include activities from specific published books and even from the learners' own

business context. ‘Courses are intensive, groups are small, senior stuff may opt for one-to-one tuition’ (ibid). The focus is also on accuracy and fluency language activities.

This distinction between (EGBP) and (ESBP) is useful in courses’ design and in deciding on syllabus for NNSs’ (such as Algerian learners in Economics and Management Universities) courses of English and then in their job-experienced courses.

Cultural aspects are crucial aspects in the field of Business Communication too, because they make all the difference between a NS and NNS which is the main cause of misunderstandings that unintentionally happen from an inappropriate use of English.

1.4.3 The Role of Cross Cultural Communication

An American Business English teacher (Kenneth, ESL Guide since 1997) in his year of teaching Business English courses to employees of multinationals, talks about his observation made after a surprising failure of his students after ‘attaining a certain degree of fluency they invariably run into the same problem: communicating with a native speaker!’. He added that the NNSs used a ‘bookish’ English grammar, and tended to ‘communicate their idea with few cultural references’ while the NSs used their ‘idiomatic’ language expecting that they are automatically understood. Culture is then, ‘complex and comprises different aspects such as national, professional, organizational and personal culture. ‘Language reflects culture and culture can shape language’ (Dudley-Evans and St John 1998. p 66).

1.4.4 Cross Cultural Issues and EBP

In Business Communication, it is necessary to be conscious of the difference between cultures and to consider it as a major condition to success while deciding on the kind of the language to be used in ‘purpose of meetings, the structuring of information or the use of politeness strategies in letters or meetings’ (Dudley-Evans and St John 1998. p 66).

There are many available books that teach expressions used in business situations. However, not just verbal language is important to be aware of, also body language that differs between cultures. This means that sometimes to be aware of the language use is not enough, it is then necessary to know in which way the words of this language are to be used. 'A spoken message comprises the words themselves and the way in which they are spoken; a face to face spoken message also contains body language. The impact of each of these components depends on the context' (ibid 71). Therefore, cross-cultural communication needs an awareness of both the culture of the other and the communication skills training to communicate with this other.

1.4.5 The Communicative Functioning of English in Business Context

In their study of the communicative functioning of English in business context, Dudley-Evans and St John distinguish four categories moving from the Macro-Level of discourse to the Micro-Level. In the following diagram, the researcher attempts to summarize this distinction as explained in Dudley-Evans and St John (1998). See the figure below.

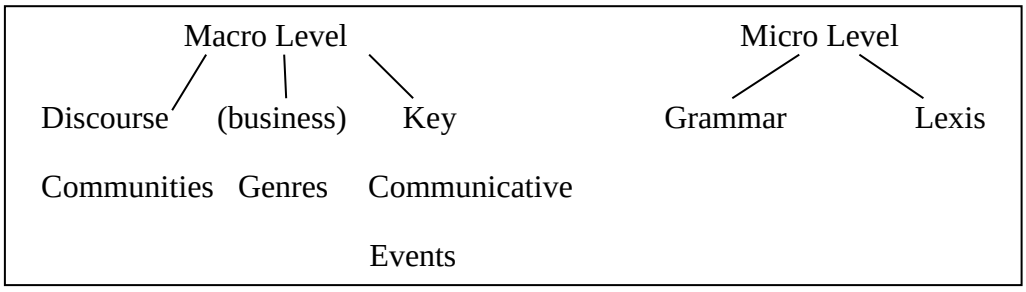


Figure 1.6 The Macro-level and the Micro-level of Discourse (personal draft)

ESP and EBP teaching does not focus on grammar itself and 'there is not yet an established common-core of business language in the way there is in EAP' (ibid 94). However, according to Dudley-Evans and St John (1998), some learners' grammatical

weaknesses are taken into consideration on the priority needs to be given, i.e. whether importance is given to grammatical accuracy or to fluency in using the language. In Business English Grammar Books, the whole importance is given to the verbs form (tense and voice), modals and sometimes nominalization is useful too, in more formal business writings such as reports, contract and formal letters (ibid). In this field, Halliday's (1985) notion of lexical density which is 'the number of lexical items as a proportion of the number of running words" (Halliday 1985. p 64) is used to analyse spoken and written forms of languages. In this regard, he argues that 'Written language displays a much higher ratio of lexical items to total running words than spoken language' (Halliday 1985. p 61).

On the other hand, other linguists do not share the same arguments claimed by Hallidays. Widdowson (1978) in pages 55-56 for instance, maintains that this type of quantitative linguistic analysis cannot reveal the communicative character of what was written.

Other statistical works on the frequency of verbs form, voice and modals in common-core scientific English were done such as Huddleston's (1971) who restricted his analysis to the sentence level too. This approach is criticized by Mackey and Mountford (1978) who argue:

> We do not only percentage counts of how frequently this or that item occurs, and we do not want simply structural description of patterns which occur more frequently than other. We want a description in terms of communicative value of the language being used by scientist or technologist at any particular point. (Mackey and Mountford 1978. p 37)

All in all, the task of an ESP teaching has a tendency to be frustrating if the teacher does not consider simultaneously the previously mentioned characteristics that specify the

ESP teacher's role, the specificity of the ESP branch he/she is teaching and the cross cultural issues.

Nevertheless, and due to the perpetual growth of technologies in the current digital world, teaching, either in ESP or in EBP, has become much more supported by a variety of interesting facilities.

1.5 Stages of ESP

This section will shed light on the major stages in the literature of ESP. Generally, five stages are found in most researchers: (i) Register Analysis, (ii) Rhetorical Analysis, (iii) Target Situation Analysis, (iv) Skills and Strategies, and (v) The Learning-Centered Approach.

1.5.1 Register Analysis

Register Analysis was the initial school of ESP. It began around the late 1960s and early 1970s with the works of Halliday, et.al., (1964); Ewer and Lattore (1969); and Swales (1971). The common basic theory behind this school of ESP is that each field or each discipline constitutes a specific register, thus, the English used must be different from one field to another. The major objective of this concept is to recognize the linguistic features, the structure and lexicon of each discipline. Next, the teaching materials are designed on the bases of these linguistic features. This stage then, aims at emphasizing, in any educational material, the most frequent linguistic features in the discipline, which the learners are likely to meet in their field of specialty.

1.5.2 Rhetorical or Discourse Analysis

The principle of Register analysis has proven its ineffectiveness when analyzing any genre to design curricula because it only looked at the surface level of language (i.e. lexicon and sentence level). Criticism of register analysis, and the rapid growth of researches in linguistics, paved the way for ESP to shift from register analysis to the

rhetorical level, in other words, from the lexicon and surface structure level, towards the discourse level. Widdowson, Tribmle, Washington School of Larry Selinker, and Lackstrom are some of those promoters of this stage of ESP.

However, amongst all those works one has particularly differentiates itself in explaining the basic concept of this phase. It is the work of Allen and Widdowson (1974), two of the godfathers of this stage. They said,

> We take the view that the difficulties which the students encounter arise not so much from a defective knowledge of the system of English, but from an unfamiliarity with English use, and that consequently their needs cannot be met by a course which simply provides further practice in the composition of sentences, but only by ones which develop a knowledge of how sentences are used in the performance of different communicative act. (Allen and Widdowson, 1974, in Hutchinson and Waters 1987. p 10)

While Register Analysis emphasised on the sentence level (i.e. the grammar and the structure of the language), Rhetorical Analysis was mainly concerned with the way or the manner these structures are combined in communicative settings. *The English in Focus Series* by Allen and Widdowson (1974) is an excellent example on this stage.

1.5.3 Target Situation Analysis

This stage did not bring any criticism to the previous stages. The major concern of this stage was to provide ESP with more scientific justifications that allow an appropriate course designed that properly meet the learners' needs. This stage as hence known as the Need Analysis Approach because of its seeks to the optimal way to identify the real needs of the learners, and how to construct the learning materials that best meet those needs.

Munby (1978) presents a good work to explain this stage. In his model, Munby provides very meticulous details about the learners' needs in relation to their

communicative goals and purposes. Munby also demonstrates how to rightly meet these goals and needs in communicative settings, by giving the means of communication, the skills and the functions the learners need to use, and then he put all these things together in his syllabus.

1.5.4 Skills and Strategies

While the previous stages (register and discourse analyses) confine ESP to sentences structures and their discourse, Skills and Strategies stage is more concerned with the cognitive and the psychological levels of ESP. Focus in this approach is not on the language itself, but rather, on the 'thinking process' underlying it. Examples of this approach are found in the works of Nuttall (1982), Anderson and Urquhart (1984) and Grellet (1998).

Advocates of this approach claim that interest in ESP does not reside in the content to be learnt but in the skills and strategies that enable students to learn. Thus, there is no need in ESP to focus the structural forms and grammar. For instance in reading, Chitravelu (1980) states 'it was argued that reading skills are not language-specific but universal and that there is a core of language (for example, certain structures of argument and forms of presentation) which can be identified as academic and which is not subject-specific' (Chitravelu, 1980, in Hutchinson and Waters 1987. p 13). In other words, learning is effective only when the reading strategies and the learner's ability to read are acquired.

1.5.5 A Learning-Centered Approach

This stage makes for Hutchinson and Waters (1987) all the distinction between language *use* and language *learning* and formed the subject of their whole book about ESP. Hutchinson and Waters (1987) argue that:

> We cannot simply assume that describing and exemplifying what people do with language will enable someone to learn it. If that were so, we would to do no more than read grammar and a dictionary in order to learn a language. A truly valid approach to ESP must be based on an understanding of the processes of language learning. (Hutchinson and Waters 1987. p 14)

It is vital then, to take into account in any ESP programme all the factors surrounding the learning process and to know how the learning process happens. In this regard, Hutchinson's and Waters' (1987) book brought useful ideas and examples about this stage.

1.6 Key Stages in ESP Seen by Dudley Evans and St John (1998)

According to Dudley Evans and St John (1998) five 'interdependent' stages are key elements in ESP. these are 'needs analysis, course (and syllabus) design, materials selection (and production), teaching and learning, and evaluation' (Dudley Evans and St John, 1998: 121). The two figures below (ibid) clarify the interrelation between the five elements in theory and in practice.

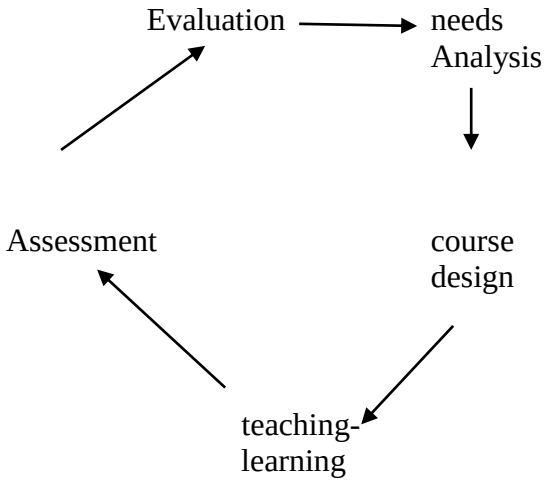


Figure 1.7 Stages in ESP process: theory

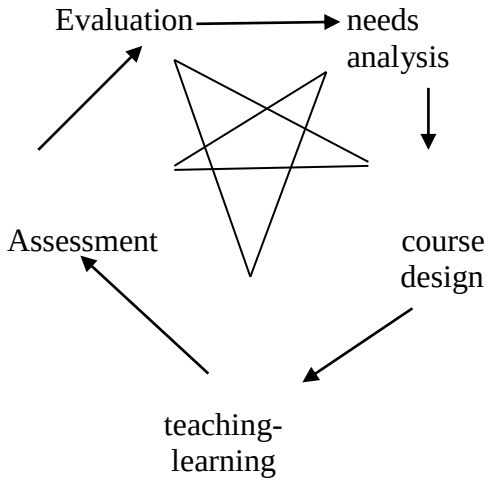


Figure1.8 Stages in ESP process: reality

Though the present research study is mainly concerned with using a new material in ESP courses (Skype), it is outlined based on the participants' needs, evaluation and course design, because the main concern of ESP has always been with 'needs analysis, text analysis, and preparing learners to communicate effectively in the tasks prescribed by their study or work situation' (Dudley Evans and St John 1998. p I).

1.6.1 Needs Analysis and Evaluation

According to Dudley-Evans and St John (1998) 'needs analysis is the process of establishing the 'what' and 'how' of a course; evaluation is the process of establishing the effectiveness'. Though NA and evaluation differ in their aims and perspectives, as the first is related to 'initial pre-course' and the later to the 'final end or post-course', yet they have things in common. Robinson (1991. p 16) argues that 'repeated needs analysis can be built into the formative evaluation' procedure.

1.6.1.1 Needs Analysis (NA)

In the 1960s and early 1970s English teachers didn't know much of the 'what' and 'how' of the language course they had to prepare to science and technology students that fits with their subject studies. Their needs analysis was mainly concerned with linguistic and register analysis and recognised as 'discrete language items of grammar and vocabulary' (Dudley-Evans and St John 1998. p 122). Lately, and after Munby had published his "Communicative Syllabus Design" in the year 1978 where the term NA first appeared, researches in English language teaching started to shift attention to the learners needs and to 'recognise that function and situation were also fundamental' (ibid).

Since then, many researchers have contributed to the growth of needs analysis concept (Munby, 1978; Richterich and Chancerel, 1987; Hutchinson and Waters, 1987; Berwick, 1989; Brindley, 1989; Tarone and Yule, 1989; Robinson, 1991; Johns, 1991; West, 1994; Allison et al. (1994); Seedhouse, 1995; Jordan, 1997; Dudley-Evans and St. John, 1998; Iwai et al. 1999; Hamp-Lyons, 2001; Finney, 2002).

According to Dudley-Evans and St John (1998) a number of the above researchers have introduced significant terms where needs are described such as: *objective* and *subjective* (Brindley 1989. p 65), *perceived* and *felt* (Berwick 1989. p 55), *target situation/ goal oriented* and *learning, process oriented* and *product-oriented* (Brindley 1989. p 63), moreover, there are *necessity, wants and lacks* (Hutchinson and Waters 1987. p 55). They argue that the terms have 'helped the concept of needs to grow' and that 'each of these terms represents a different philosophy or educational value, and merits careful thought' (Dudley-Evans and St John 1998. p 123). Drawing on the pairs of terms above Dudley-Evans and St John (1998) summarize:

> Thus, to be able to follow instructions accurately is an objective/perceived need. To feel confident is a subjective/felt need.

> Similarly, product-oriented needs derive from the goal or target situation and process-oriented needs derive from the learning situation… a third piece of the jigsaw is what learners already know, a present situation analysis from which we can deduce their lacks. (Dudley-Evans and St John 1998. pp 123-124)

Holliday's and Cooke's (1982) principle of 'means analysis' has also inspired the two researchers who explain that this is related to 'the environment in which a course will be run' (Dudley-Evans and St John, 1998: 124) and focus in this on two 'key factors' which are 'the classroom culture and the management infrastructure and culture' (ibid).

Dudley-Evans and St John (1998) also see that the current concept of needs analysis 'including aspects of all these approaches, and their overall model about needs analysis in ESP is made up of the following eight elements:

A. Profession information about the learners: the tasks and activities learners are/will be using English for – *target situation analysis* and *objective needs.*
B. Personal information about the learners: factors which may affect the way the learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitudes to English – *wants, means, subjective needs.*
C. English language information about the learners: what their current skills and language use are – *present situation analysis* – which allows us to assess (D).
D. The learners' lacks: the gap between (C) and (A) – lacks
E. Language learning information: effective ways of learning the skills and language in (D) – *learning needs*
F. Professional communication information about (A): knowledge about how language and skills are used in the target situation – *linguistic analysis, discourse analysis and genre analysis.*

G. What is wanted from the course

H. Information about the environment in which the course will be run - *means analysis.*

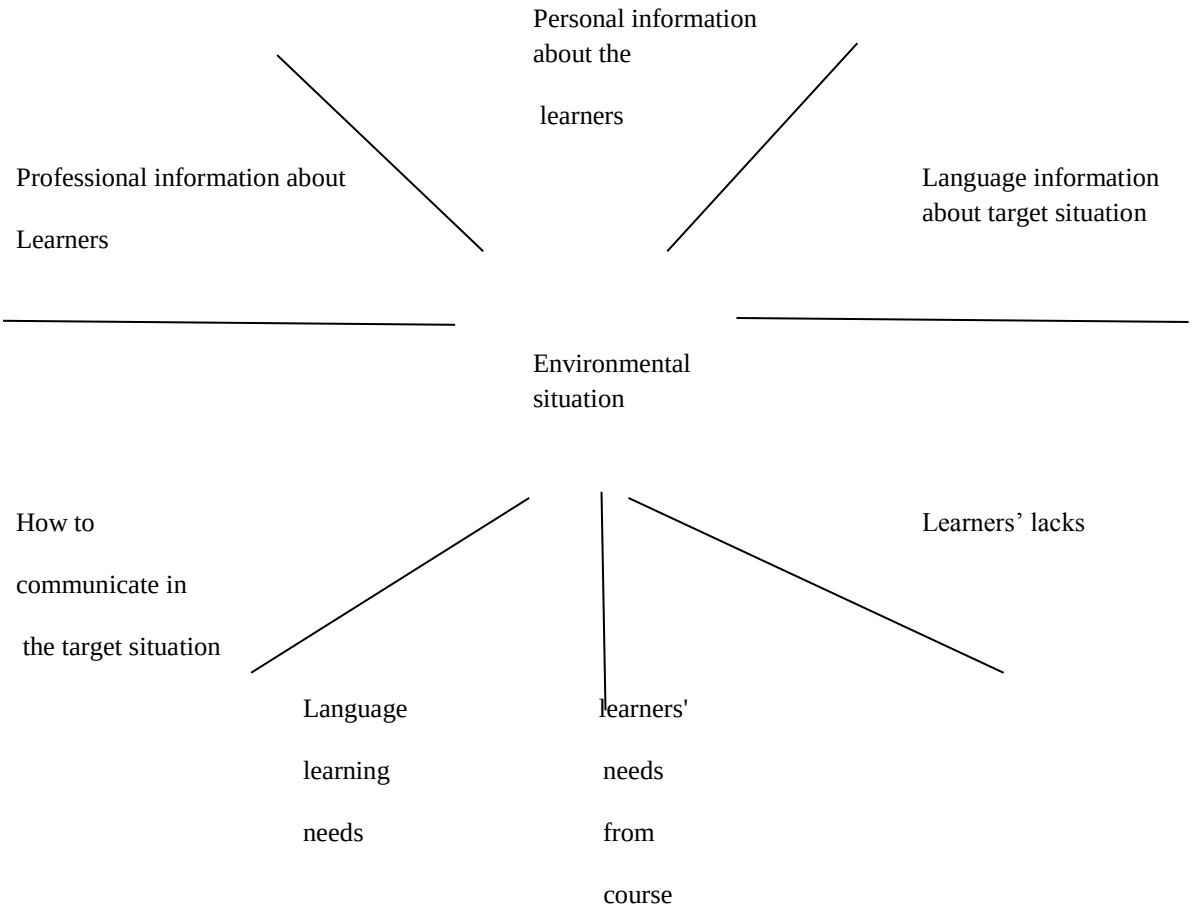


Figure 1.9 What Needs Analysis Establishes

(Dudley-Evans and St John 1998. p 125)

The objective of doing a NA is 'to know learners as people, as language users and as language learners' (Dudley-Evans and St John 1998. p 126), hence, to know what language skills should be 'maximised' for each group or in the present study for each participant, but not only, it can be personalized according to the learning situation because 'the way in

which needs analysis is actually approached and conducted will differ according to each situation' (ibid).

1.6.1.2 Evaluation

There are many definitions of the term evaluation. According to Patton (1987) evaluation is 'a process that critically examines a program. It involves collecting and analysing information about a program's activities, characteristics, and outcomes. Its purpose is to make judgments about a program, to improve its effectiveness, and/or to inform programming decisions'. For Dudley-Evans and St John (1998), it is a 'whole process which begins with determining what information to gather and ends with bringing about change in current activities or influencing future ones' (Dudley-Evans and St John 1998. p 128).

Evaluation falls into one of two categories: formative and summative. Formative evaluation is conducted during the development of an activity and its implementation; it is practical for best improving that activity and achieving its goals. Summative evaluation is completed once the activity is well established (takes place at the end of the activity) and does not influence its content. Its purpose is 'to assess impact and to provide information that can be useful into repeat versions or related activities… it is therefore valuable for durable courses' (ibid)

Evaluation can also be both qualitative and quantitative. A quantitative evaluation is using objective tools such as tests and 'objective-questions questionnaires' to get exact answers (numbers and percentages). Unlikely, qualitative evaluation is rather subjective as it uses methods such as interviews questionnaires that cover 'wider picture' about individuals.

Evaluation is about setting criteria that will allow the teacher to make a judgment. The criteria 'depend on which aspect of work is being evaluated and why, and are likely to

relate to the course and objectives' (Dudley-Evans and St John. 1998 pp 128-129)**.** Hence, setting up clear objectives for a specific task or a material is crucial for measuring its success or failure.

In ESP, practitioners focus on formative evaluation because they are more concerned with 'the effectiveness and efficiency of learning'. According to Dudley-Evans and St John (1998) evaluation in ESP should address issues like 'has learning been maximised?' and 'have resources been optimally used?' and argue that is 'unrealistic' to try to evaluate everything, but rather to 'focus on the materials used, methodologies, the role of assessment, that is any aspect of the teaching-learning situation' (ibid 129). They also propose a set of significant questions to ask before an evaluation:

Audience and purpose

- Who are the stakeholders?
- What do you want to evaluate?
- What do you want to change?

Criteria for evaluation

- What are the objectives you are evaluating against? In some situations these are not clearly set out to be defined before planning an evaluation.

Criteria for analysis of results

- What will you do with answers? What can you change? What requires the authority of the others? And what will convince them?

Source of information

- Who can provide useful information?
- When would it be appropriate?

ESP practitioners can ask these questions for many purposes during their teaching. They may be asked for changing or modifying a teaching/learning situation, for improving the quality of a course or to simply facilitate the learning process.

1.6.2 Course Design

One of the main concerns of the present work is to provide English courses proper on the one hand to the suggested learning situation (learning/teaching via Skype), and on the other hand to the specific needs of the participants.

According to Dudley Evans and St John (1998), there are 'a number of parameters that need to be investigated in making decisions about course design' Dudley Evans and St John 1998. p 145), these are:

- Should the course be *intensive* or *extensive?*
- Should the learners' performance be *assessed* or *non-assessed?*
- Should the course deal with *immediate* needs or with *delayed* needs?
- Should the role of the teacher be that of the *provider* of the knowledge and activities, or should it be as a *facilitator* of activities arising from learners' expressed wants?
- Should the course have a *broad* or a *narrowed* focus?
- Should the course be *pre-study* or *pre-experienced* or *run parallel with that study or experience?*
- Should the material be *common-core* or *specific* to learners' study or work?
- Should the group taking the course be *homogeneous* or should it be *heterogeneous?*
- Should the course design be *worked out by the language teacher* after consultation with the learners and institution, or should it be *subject to process of negotiation* with the learners?

Dudley Evans and St John (1998) explained then these parameters[1] and exposed their advantages and disadvantages when applied in the context of ESP teaching.

Nevertheless, in chapter three, the researcher will consider all those parameters and explain the choice of their use according to the case studied in the present research work.

1.6.3 The Role of Materials in ESP Teaching

Materials have always been used in all teaching, from the very first kind of pen and paper to the latest device proposed by technology. But why do we use materials in teaching? The reasons are in fact narrowly related to the teaching matter itself. Dudley-Evans and St John (1998. pp 170-171) list four reasons for using materials in ESP teaching context:

- As a source of language
- As a learning support
- For motivation and stimulation
- For reference

- **Source of language**

  In the Algerian situation, English is a foreign language and the classroom is likely to be the only source of that language. Materials then 'play a crucial role in exposing learners to the language, which implies that the materials need to present real language, as it is used, and the full range that learners require' (Dudley-Evans and St John 1998. p 171). Thus, newspapers and magazines can be for instance a good source of 'journalistic' style of English, just like a video record of some British people can be a source of 'everyday' English.

[1] For further reading about those parameters, see Dudley Evans and St John (1998, pages: 146-147-148-149-150-151-152-153- 154-155)

- **Learning support**

  A material should support learning and not being a constraint to the learner: 'to enhance learning, materials must involve learners in thinking about and using the language. The activities need to stimulate cognitive not mechanical process' Dudley-Evans and St John 1998. p 171). In other words, the materials provider needs to vary his/her teaching material (not fixed format) in the way that they support learners' 'progression' and involvement.

- **Stimulation and motivation**

  A material that stimulates and motivates learning needs 'to be challenging yet achievable; to offer new ideas and information whilst being grounded in the learners' experience and knowledge; to encourage fun and creativity.' Dudley-Evans and St John 1998. p 172). Thus, teachers must include recognizable knowledge and concepts to their input, which is to much the language with its use in real situations.

- **Reference**

  ESP learners generally don't have time for 'class contact' where the language is the main source, so to improve their English they may refer to 'self-study' and 'reference material' and for that 'materials need to be complete, well laid out and self-explanatory…the materials will need to take account of different learning styles…this implies that an important feature is to overt organisation of the material- through informative contents pages and index' (Dudley-Evans and St John 1998. p 171).

In addition to the above, Dudley-Evans and St John (1998) demonstrate how is the ESP teacher considered as a material provider rather than a material writer. His role is then to select the material from what is available, adapting it to the learners needs and tries to make that material as authentic as possible. They also show how in ESP the learner can be the provider of the material (learner-generated material), as most of

English courses are related to his carrier content and activities. This does not mean that the learners provide the language input or the carrier content, but rather they set the 'framework, within which the learners fit their own carrier content and their existing language competence' (Dudley-Evans and St John 1998. p 180).

1.6.4 ESP Teaching

Because 'ESP work extends beyond teaching' (Dudley-Evans and St John 1998. p 13), it is important to point out the major characteristics of an ESP teacher, and to emphasise his exact role in ESP learning process.

According to Dudley-Evans & St John, the fact that an ESP teacher's work involves much more than teaching, he is then seen as a 'practitioner' rather than a simple teacher. They also attribute five key roles to that practitioner in ESP teaching: teacher, course designer and material provider, collaborator, researcher and evaluator.

1.6.4.1 ESP practitioner as teacher

In specific teaching methodologies are affected and the teacher needs to have a minimum knowledge of the content, for example, if he is teaching Medical English he will need reasonable understanding of the content before dealing with the task. Same thing if he teaches Business Communication, his relationship with his student needs to be much more 'one of partnership': 'in the role of ESP teacher goes beyond that of the classroom teacher and extends to giving one-to-one advice to students… ESP teachers also need to have a great deal of flexibility, be willing to listen, and to take an interest in the disciplines or professional activities the students are involved in' (Dudley-Evans & St John 1998. p 14). Indeed, flexibility is essential in ESP teaching as the teacher is not the '*primary knower'* of the '*career content'* which means he may consult students and involve them in his course design.

1.6.4.2 ESP practitioner as a course designer and material provider:

Planning a course and providing an adequate material to teach it tends to be the hardest step in the teaching process either in general or in specific teaching. However, in ESP teaching, this task is recognized to be more difficult for the practitioners, since it is not always obvious to find 'published materials for certain needs' to refer to. *I (*Dudley-Evans and St John 1998. p 15). Moreover, finding a suitable and an adequate teaching material is not the final task of the course designer, because the material's effectiveness needs to be assessed for a better result.

1.6.4.3 The ESP teacher as collaborator

The word collaborator here refers to the teacher's collaboration with 'subject specialists' either teachers of the students discipline or professionals form the workplace such as a business trainer in EOP courses. Through this collaboration, the ESP practitioner 'finds out about the subject syllabus in an academic context the students have to carry out in a work' (Dudley-Evans and St John 1998. p 16), or another possibility is that the specialists in each discipline help ESP teachers in course preparation by checking the content and making comments.

1.6.4.4 ESP practitioner as researcher

According to Dudley-Evans and St John (1998) an ESP teacher 'needs to be aware of and in touch with' researchers related to genre analysis and discourse analysis (Swales, 1990; Bhatia, 1993), for example, in EOP he needs to make researches in the field of 'the language and skills involved in business communication' to understand the texts his students use: 'an ESP practitioner has to go beyond the first stage of Needs Analysis-Target Situation Analysis (TSA) which identifies key target events, skills and texts – to observe as far as possible the situations in which students use the identified skills, and analyse samples of the identified texts' (Dudley-Evans and St John 1998. p 15). The

teacher is then called to investigate the ‘genres’, the ‘language’ and the ‘skills’ related to the discipline he is involved in.

1.6.4.5 ESP teacher as evaluator

Evaluation in ESP teaching is concerned with students’ testing as well as the evaluation of the ‘courses and teaching materials’. Hence, ‘tests are conducted to assess whether students have the requisite language and skills to undertake a particular academic course or career…, and the level of their achievement’ (Dudley-Evans and St John 1998. p 16). Concerning the course design and the material used, the ESP teacher needs to do a constant evaluation all along the course, and if necessary, to discuss some of the gaps or misunderstandings with the students at the end of the course ‘in many situations the evaluation forms the basis of ‘negotiation’ with students about their feelings about the course, their needs and priorities, which are then fed into the next stage of the courses. These steps are all parts of ‘formative’ evaluation.’ (Dudley-Evans and St John 1998. p 17)

The parameters above represent a basis upon which the researcher works to design the present study’s courses; yet, not all of them are taken into account because these are mainly concerned with teaching groups of students in a classroom context. However, courses in this case study occur individually in a virtual context.

1.6.5 Virtual Course: Definition and Characteristics

Thanks to technology, learning is not restricted to the physical or the face to face classroom anymore, as a virtual learning environment integrating a ‘set of tools supporting functions like: information, communication, collaboration, learning and management’ (Peray, Piguet, and Joye, 1999, in Sasa Mladenovic, Haidi Kuvac and Maja Sula 2012. p 01) is now widely used by teachers and learners of all disciplines all over the world. As Clark and Gibb (2006) affirm ‘new technologies have changed the educational landscape by creating a variety of digital learning environments and platforms; classrooms that may

be physical, digital, or a combination of the two, and instruction that can be synchronous or asynchronous' (Clark and Gibb 2006. p 768). The word 'virtual' means a simulation of the real thing. A virtual course is just like a face to face course but simulated through Internet, and which enables learners and teachers communicate synchronously using audio, video, texts, application sharing, instant 'polling'… etc.

Arbaugh (2000) argues that the features of the virtual classroom encourage interactivity, synchrony, usefulness and ease of use, and sense of community:

1.6.5.1 Interactivity

Learning in a virtual environment enables students interact with each other, with teachers, and online resources. All participants of this environment can 'act as facilitators and provide support, feedback, and guidance during live interaction' (Khan, 2000). Yet, the fact that learners are more (or less) interactive in a virtual or blended course is still debated.

1.6.5.2 Synchrony

Gillmore and Warren (2007) explain synchronous technologies, as ones that 'connect users at the same time, with each participant needing to be 'logged in' to the software to exchange electronic messages with one another as if they were exchanging words in a face-to-face setting' (Gillmore and Warren 2007. p 585)

Learners in virtual courses are already accustomed to asynchronous technologies (for example, e-mail, websites, and discussion boards), which means more independence. Unlikely, an online course requires time synchronization, in other words, activities are set according to a specific schedule. Bernard et al. (2004) emphasize that knowing the influence of patterns, such as synchronous and asynchronous communication, can guide instructional design when instructors have choice. Hence, it is important to consider learners' perceptions of synchrony in the virtual courses.

1.6.5.3 Usefulness and Ease of use

Usefulness is the functionality of the technology, whereas ease of use is how simple it is to become skillful in using the technology (Parker & Martin, 2010). The technology in the present study is Skype, and the target is to become skillful in English by using it. Khan (2000) points out that in a well-designed virtual course 'interfaces can anticipate learner's needs and satisfy the learner's natural curiosity to explore the unknown. This capability can greatly reduce students' frustration levels and facilitate a user-friendly learning environment' (Khan 2000. p 30). One of the main problems that Khan recognized are related to servers like connection refusal. Therefore, learners may perceive the utility and ease of use of the virtual classroom differently.

1.6.5.4 Advantages vs. Disadvantages

As any learning approach and method a number of advantages could be identified, so for a virtual course one may say that:

1. Since the virtual course is an online learning, geographical barriers problems are excluded, so learners and instructors can save their time, their energy and their money.

2. It can take place at anytime, from anywhere in the world and according to the convenient sitting of both.

3. The course can be recorded so that learners can visualise it at any time for better understanding, and instructors for improvement in future courses.

5. unlike face to face class where the learners have to raise their hands then wait their turn to ask a question, the online course through its chat properties facilitates and simplifies to the learner the task of asking questions and getting answers more rapidly.

One of the reasons why distant learning becomes so accepted in educational systems is also accredited with providing a better learning environment, better than even face-to-face. Draves (2002) lists advantages to distance education:

1. Opportunity for the student to learn during his/her own individual “best” time.

2. Pace for learning is set by the student.

3. Learning occurs faster.

4. Personal interaction with both the teacher and other students can occur with greater frequency.

5. While working online, there are more topics and subjects to access readily.

6. Classroom participants may experience greater diversity by interacting with students that could be residents of anywhere in the world.

7. Online opportunities give the students access to the foremost authorities and experts.

8. Distance learning has been found to be less expensive and more accessible.

9. Online resources of information abound.

10. Online classes create virtual communities.

Draves (2002) also proposes common guidelines for appropriate online communication, for instance, avoid self-centered comments, do not get emotional, use positive language, disagree politely, avoid negativity, take time to write grammatically correctly, show respect to classmates and the instructor.

Yet, any learning method has some drawbacks and the virtual course does not make the exception:

1. Accustomedness with Technology: Both teachers and learners need to have basic knowledge of the technology they use, either for conducting or for attending a virtual course otherwise; the course is not for them.

2. A virtual course includes many features like audio input, video input, chat session, PowerPoint documents etc, it might be destabilizing for a teacher to conduct the class and to focus on the target matter.

3. One of the crucial conditions for carrying out a virtual course is internet connection: to take part in a virtual course one needs to have access to the net, that is why risks of disconnection is one of the main drawbacks of online learning.

4. The incompatibility of software versions like Flash Player, Internet browsers, applications, etc. on both teachers' and learners' computers, then it might create problems before or during the course.

5. As in any technology, there is no risk 'zero': the participants of the virtual course might face some technical issues like electricity failure, echo of audio input, speed of internet connection, etc.

Moreover, developing e-learning courses is not a simple task; it needs too much time for research, design, development and learner support (MacDonald et al, 2009). As said by MacDonald and Thompson (2005), 'the most important incentives for online courses creation are the professor's determination, his aptitude and capacity to organize and mobilize the necessary resources as well as his willingness to take risks' (MacDonald and Thompson, 2005 in, MacDonald et al, 2009).

Bates (2005) distinguishes three key areas of interest in e-learning: quality standards, teacher and student work load and costs. On the other hand, Diltz and Delzier (2000) argue that 'one essential ingredient in course design is the provision of four kinds of support for learning: guidance, coaching/training, teaching and mentoring (Diltz and Delzier, 2000, cited in Kenning, 2007).

According to Holmberg (1995), e-learning as any 'educational activity' seeks to smooth the progress of teaching and learning along with supporting the aims of education through efficient means that meets the 'digital' students. However, achieving this aim is not a simple task as Schuemer (1993) argues:

> …many distance education courses are characterized by a high level of structuring and by the fact that the knowledge to be learned is presented as a ready-made system; for such a teaching method weingartz (1981) coined the term 'systemoriented' teaching method , which she contrasted with the term 'problem-oriented' teaching method. (Schuemer 1993. pp 3-4, qtd in Holmberg, 1995)

Nevertheless, Schuemer was anxious about the risk that these extremely structured 'learning packages' may affect the learners' independence, which is a key feature of distance education.

1.7 Roles of Teachers and Learners in E-Learning Environments

The integration of ICTs in foreign languages teaching is contributing to the change of the whole structure of educational systems. Likewise, the emerging e-learning environments lead to a radical change of teachers' and students' roles in the process of learning along which is growingly noticing a shift toward learner-centred paradigm:

Table 1.2 Comparison of Old and New Paradigms of Teaching (Johnson, D.W., Johnson, R. T. and Smith K.A. (1991).

	Old Paradigm	**New Paradigm**
Knowledge	Transferred from Faculty to Students	Jointly constructed by Students and Faculty
Students	Passive vessel to be filled by Faculty knowledge	Active constructor, discoverer, transformer of own knowledge
Faculty Purpose	Classify and sort Students	Develop Students' competencies and talents
Relationships	Impersonal relationships among Students and between Faculty and Students	Personal transaction among students and between faculty and students
Context	Competitive and individualistic	Cooperative learning in classroom and cooperative teams among faculty
Assumption	Any expert can teach	Teaching is complex and requires considerable training

1.7.1 Teachers' Roles

According to Spodark (2001) the role of foreign languages teachers has changed and continues to change from being an 'instructor' to becoming a 'constructor, facilitator, coach, and creator of learning environments'. Berge (1990) has suggested earlier that there is a set of roles for teachers working online: 'pedagogical (facilitator), social (creating an appropriate learning, managerial and technical' (Berge, 1990, in Corbel 2007. p 1117). Davis and Caruso-shade (1994) later proposed four vital roles for teachers: (1) Instructor: he guides and encourages students for using technology, (2) Coach: he facilitates the learning process, (2) Model**:** uses the computer technology as the learners are encouraged to, (3) Critic: he helps learners select the appropriate software. (Davis and Caruso-shade, 1994, qtd in Corbel 2007. p 1117). In addition, Jeong So & al (2009) state that:

> Online instructor must create situations where students are building knowledge and sharing it with experts and peers who in turn, offer authentic evaluation and timely feedback. Online instructor, therefore, must fit into an education and learning paradigm that is increasingly learner-centric. (Jeong So et al 2009. p 1346).

The list below is a selection of some major roles of teachers in an electronic environment seen by a number of scholars as mentioned in Nedjah (2010. pp 74-76):

a. **Teacher as a Tutor**: amongst the different roles at the bottom of the learning process, the tutoring role is one commonly recognised. The tutor's role is not just the 'subject matter' professional that facilitates learning tasks, solves problems, and updates the contents, but it also engages lots of other roles such as:
b. **Facilitator:** Johns et al (1995) argue that 'As facilitators, teachers provide rich learning environments, experiences and activities; create opportunities for students to work collaboratively, to solve problems, do authentic tasks and share knowledge

and responsibility' (jones et al 1995, in Corbel 2007. p 1114). Hence, the facilitator role designates a shift from 'transmission approaches with the teacher as a knowledge authority to constructivist approaches with the teacher as learning facilitators' (Corbel 2007. p 1114).

c. **Modeler**: means someone who stimulates the learner by producing materials and situations for active learning.

d. **Teacher as developer:** The teacher develops teaching materials mostly in electronic format, or provides input to expert developers.

e. **Teacher as collaborator**: there are several ICT-based activities wherein project-based learning can be adopted as a pedagogical strategy. In such activities, teachers are predisposed to contribute as peers together with the learners as argued by Jones and Valdez (1995): 'teachers are often co-learners and co-investigators right alongside students' (Jones and Valdez 1995, corbel 2007).

1.7.2 Students' Roles

Electronic learning represents an educational helpful experience for learners unable to be present at traditional face to face mode of instructions. In e-learning environments, learners are characterised by a certain maturity that demonstrates their independence (Holmberg 1995). In other words, learners are 'responsible for managing their learning process (time and place to learn, number of courses undertaken, rest time, frequency of revision and practice sessions…) (ibid). Moreover, in e-learning, students are independent in setting the learning objectives and the choosing courses content. In addition of getting concentrated computer literacy and skills in ICT use, learners in such environment have the opportunity to team up with other learners and perform group works with the help of the teacher who has to create encouraging and motivating class environments (Huot et al, 2006, in Nedjah, 2010. p 76)

The teacher' roles being then tutor, facilitator, modeler, etc., learners can become 'self-reliant' and active searchers for pertinent information. The task of a self-reliance is the outcome to a less directed task of the teacher. This leads to the increase of student's level of responsibility in learning and confidence in his abilities: 'The roles of students appear to depend on: a) the pedagogical approach used in classroom, b) the roles played by the teacher, and c) the classroom peers (Pallof and Pratt, 2007, in Nedjah. p 77).

However, those new roles attributed to teachers and learners tend to be limited to learning circumstances which utilise ICT-based source applications, such as interactive educational programmes and use of Internet as a source of information.

1.8 Technology and Materials' Authenticity

Nunan and Miller (1995) define authentic materials as those which 'were not created or edited expressly for language learners. Authentic materials illustrate how English is used naturally by native speakers'. This means that an ESP teacher can consider most of everyday objects in the target language as authentic materials to be used in his course. And finding authentic materials is only a question of doing some research and being creative:

- Everyday concrete objects (for example: pictures, catalogues, receipts, reports, letters/emails, currency, directions, application forms, CVs models, registration forms, brochures, instructions, newspapers, magazines, journals, etc.)
- Visual/audio material (for example: TV and radio broadcast, films, documentaries, podcasts advertisements, songs, clips, etc.)
- Websites related to the field (for example: 'authentic specialist publications' (like BBC learning English, the British Council, learning world, Universities' sites… etc.).

Providing materials that stimulate the learners' motivation and capture their interest remains the most challenging task for ESP teachers. Fortunately, ICTs mainly internet, are to a greater extent facilitating this task: 'the internet bringing further changes as courses

can now be downloaded from all over the world. For the teacher as provider of the material, the concern will largely be with evaluating, and using rather than preparing materials' (Dudley-Evans and St John 1998. p 185). Likewise, ICTs can help learners to find pertinent authentic 'task-based' materials, mainly when they are the providers of the material 'Extracting information from a real text in a new/different language can be extremely motivating, therefore increasing students' motivation for learning by exposing them to 'real language' (Guariento and Morley, 2001).

Currently, both teachers and learners refer to the internet to search for authentic resources to develop most of skills like reading 'Whereas newspapers and any other printed materials, e.g. textbooks date very quickly, the internet is continuously updated, more visually stimulating and being interactive, therefore promoting a more active approach to reading rather than a passive one' (Berardo, 2006, qtd in Vaičiūnienė and Užpalienė, 2010: 02), but not only. All the other skills (listening, reading, writing, and speaking) can successfully be improved through internet, namely via online interaction: 'It can also promote other skills such as skimming/scanning, extensive/ intensive reading, summary, essay, email writing, outlining, mapping, sorting, adding information and may result in oral performance, such as newscasts, conversations, interviews, presentations, lectures, reports, etc' (Vaičiūnienė and Užpalienė, 2010: 02). Mark Warschauer (1996) believes that 'hypermedia' constructs 'authentic learning environment' and permits 'to combine reading, writing, speaking and listening in a single activity' (Mark Warschauer, 1996, in Vaičiūnienė and Užpalienė, 2010: 02).

Including ICTs in language teaching in general and in ESP teaching/learning in particular as an authentic material is to be the concern of this teaching/learning community as Prensky (2008) states that "future" content is to a large extent digital and technological… Technology also contributes to the authenticity of the learning process by

enabling the approximation of *real life* situations and exposure to authentic cultural artifacts' (Prensky, 2008, in Vaičiūnienė and Užpalienė 2010. p 02).

1.9 Motivation in Language Learning

Motivation is well recognised by most researchers as being crucial in students' learning. However, the concept of motivation, as will be shown below, shows complexity as it takes a decent number of particular disciplines to reach a logical understanding of its different facets: 'General, educational, social, and cognitive psychology, as well as general educational and social theories and sociolinguistic theories have something to contribute for understanding LLM (language learning motivation) within a formal school context' (Faris Keblawi, 2010). The concept of motivation also involves 'neurobiological and physiological explanations' and its complexity resides in its endeavours to explain individuals' actions and behaviour (Dörnyei, 2000 and 2001).

Regardless of the recognized position of motivation in learning foreign languages, there is, actually, no agreement on the exact definition of motivation (Oxford and Shearin, 1994). Dörnyei (1998) states, 'Although 'motivation' is a term frequently used in both educational and research contexts, it is rather surprising how little agreement there is in the literature with regard to the exact meaning of the concept' (Dörnyei, 1998. 117). Until now, researches do not have the same opinion on its components and the different roles that these components play—individual differences, situational differences, social and cultural factors, and cognition (Renchler, 1992; Belmechri and Hummel, 1998).

At the early beginnings of the concept, motivation was seen and understood within a 'behavioural framework' attempting to comprehend 'what moved a resting organism into a state of activity', with important reliance on notions such as 'instinct, drive, need, energisation, and homeostasis' (Weiner, 1990).

For the bihaviourists, learning and motivating individuals depended on ‘reward systems’. But such positivist approaches lost support when the cognitive revolution began in the sixties and by the seventies, which turned into inappropriate the ‘behavioural mechanical’ approaches to motivation because they simply did not work (Locke, 1996. 117). In the cognitive ‘developmental’ theory mainly laid down by Weiner and Piaget, motivation is perceived as ‘a built-in unconscious striving towards more complex and differentiated development of the individual’s mental structures’ (Oxford and Shearin, 1994. 23). With the move forward of the cognitive approaches educational psychologists find the field more appropriate to concentration on the individual’s role in his or her own behaviour (Weiner, 1994).

1.9.1 Language Learning Motivation (LLM)

According to Dörnyei (2003), the pioneering researches on motivation in language learning were done by social psychologists because of their consciousness of the social and cultural effects on L2 learning (Dörnyei, 2003). Those researches gave birth to a number of models that emphasised the affective aspect of language learning including Krashen’s (1981) Monitor Model and Schumann's (1986) Acculturation Model. Nevertheless, the most dominant model of LLM in the early sixties till the eighties was that developed by Gardner, next studies carried out by him and his acquaintances. Gardner’s model (1985) came to be known as the Socio-educational Model. It defined motivation as a ‘combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes towards learning the language’ (Gardner 1985. p 10). In his model, Gardner mentions two kinds of motivation, the ‘integrative’ and the ‘instrumental’, stressing to a great extent on the former. The ‘integrative motivation’ stands for the learners’ wish to at least interact or at most integrate (or even assimilate) with the members of the target language. The ‘instrumental motivation’ refers to more’ functional’ motives for learning the language

like' getting a better job, a higher salary or passing an examination' (Gardner, 1985). In the socio-educational model there are a set of constituents which are measured using different 'attitudinal' and 'motivational scales' in what Gardner calles the AMBT (Attitude / Motivation Test Battery). This is explained by Faris Keblawi (2010) as follows:

> Integractiveness is measured by three scales: attitudes towards the target language group, interest in foreign languages, and integrative orientation. Motivation is also measured by three scales: motivational intensity (the amount of effort invested in learning the language), attitudes toward learning the target language and the desire to learn the target language. Attitudes toward the learning situation which refer to the individual's reactions to anything associated with the immediate context in which learning takes place is measured by two scales: attitudes toward the teacher and attitudes toward the course. (Keblawi 2010. pp 26-27).

Faris Keblawi (2010) reports that there are three prominent theories on motivation which are relevant to LLM: self-determination theory; attribution theory, and goal theory:

1.9.1.1 Self Determination Theory

According to the theory developed by Deci and his associates, 'to be self-determining means to experience a sense of choice in initiating and regulating one's own actions' (Deci, Connell, and Ryan 1989. p 580). In other words, this quote refers to individuals' autonomy. The theory makes a distinction between two types of motivations: intrinsic and extrinsic. Intrinsic refers to an individual's motivation to behave in a way or to carry out a particular activity because of 'internal rewards' like pleasure, delight, satisfaction or curiosity. While in extrinsic motivation the individual looks forward to an external recompense such as appreciation or admire from others. In proportion to the notion of intrinsic motivation and autonomy, 'the self-determination theory offers a very

interesting look at motivation by setting a different agenda for language teachers' Faris Keblawi (2010. p 32). Keblawi argues that instead of focusing on how people (e.g. teachers in the classroom) can motivate others, the focus should be on 'how people can create the conditions within which others can motivate themselves' (Deci, Connell, and Ryan, 1989. 580, in Keblawi, 2010).

McIntosh & Kimberly (2004) studied the relationship between 'concepts from the self-determination theory' with the need for 'cognition and language learning strategies'. Their findings show, an important and positive connection between 'need for cognition' and 'self-determination' in L2 learning. They brought to a close that 'people who enjoy effortful thinking for its own sake also take an L2 for self-determined reasons (i.e., out of choice and pleasure)'.

On the other hand, in an experimental study on college students Vohs et. al. (2008) found out that presenting too many choices to individuals may direct to negative effects on 'self-regulation'. It shows for instance, that this might lead to 'less self regulation', 'less willingness to engage in an activity' and 'less persistence on performance'.

1.9.1.2 Goal theories

Goals are essential to the study of motivation but the definition of goal does not exclude complexity. At first, the concept of goal was an alternative to needs which were introduced by Maslow's hierarchy of needs (Dörnyei, 2001). Goal theories focus on the reasons or purposes that students perceive for achieving (Anderman and Midgley, 1998, in Keblawi, 2010). There are four mechanisms by which goals affect individuals' performance:

• Goals serve a directive function as they direct attention and effort toward goal-relevant activities and away from irrelevant activities

• Goals have an energising function and they help individuals regulate their effort to the difficulty of the task.

• Goals positively affect persistence.

• Goals affect action indirectly by leading to the arousal, discovery, and/or use of task-relevant knowledge and strategies. (Locke and Latham 2002. pp 706-7)

In relation to the theory, people must have goals in order to act since human action is caused by purpose and for action to take place, goals have to be set and pursued by choice (Dörnyei, 1988, in Keblawi 2010. p 36). In addition, research based on the goal setting- theory shows that there are particular relations among these different characteristics that can enhance individuals' motivation (ibid):

• The more difficult the goal, the greater the achievement (easy tasks do not give a sense of achievement)

• The more specific or explicit the goal, the more precisely performance is regulated (general goals like 'do your best' do not really cause individuals to do their best).

• The highest performance is yielded when the goals are both specific and difficult.

• Commitment to goals is most critical when they are specific and difficult (commitment to general or vague goals is easy since general goals do not require much commitment and vague ones can be 'manipulated' to accommodate low performance).

• High commitment to goals is attained when the individual is convinced that (a) the goal is important and (b) attainable. (Locke 1996. pp 118-119, emphasis added; see also Locke & Latham, 2002).

1.9.1.3 Attribution Theory

The attribution theory of learner motivation was largely influential in the 1980s (Dörnyei, 2003). The distinctiveness of the theory stalks from its aptitude to connect 'individuals' achievements' to 'past experiences' through the establishment of causal

attributions as the mediating link (ibid). The theory does not look at the experiences that people undergo but at how they are perceived by people themselves (Williams and Burden 1997. p 104).

The importance of the type of attribution in a classroom environment is of particular significance. If, for instance, learners attribute their failure to ‘a lack of ability (internal cause over which they have no control), then their motivation to learning the language is likely to decrease or even vanish completely. If, on the other hand, they believe that their failure is the result of their laziness or lack of effort (internal cause over which they have control), then they have good chances to increase their motivation if they double their efforts (Keblawi 2010. p 39)

Although their recognized importance, aspects of the attribution theory have been limitedin their implementation in research, partly as, Dörnyei (2003) points out, because it does not easily render itself to quantitative research. Dörnyei recapitulates the results of some qualitative studies that were conducted by Ushioda (1996b, 1998) and by Williams and Burden (1999). The former showed that upholding a positive ‘self concept’ and faith in ‘personal potential’ in spite of bad experiences depended on two ‘attributional’ reasons: ‘success attributed to personal ability or other internal factors (e.g. enough effort) and failure to temporarily shortcomings that can be overcome (e.g. lack of effort or time to spend)’ (Keblawi 2010. p 40) . The second showed ‘differences between ages: 10-12 years old attributed success mainly to listening and concentration, older learners mentioned a variety of reasons including ability, level of work, circumstances and the influence of others.’ (ibid)

1.9.2 Motivation Dynamicity and Contextuality

The last point concerns the dynamicity of motivation. A lot of learners consider that the way in which they see their learning context influences their moods; hence, it influences their motivation so it is not the same all the time.

Keblawi (2006) speaks about two types of contexts that might influence learners' motivation: the general learning context and the more specific one. The first stands for the 'sociolinguistic', 'socio-cultural' and 'socio-political' status of the language and its speakers as well as the needs for learning it. The diverse cultural and social contexts in which learning an L2 takes place might significantly affect how motivation is understood, how it operates and how language learning occurs (e.g. Clément and Kruidenier, 1983; Noels & Clément, 1989; Watkins, 2002). 'One of the most contextual differences that has often been highlighted is that between learning an L2 as a foreign language, and learning it as a second language' (Keblawi 2010. p 45).

Nevertheless, 'one of the most important developments in the study of L2 learning was the increasing awareness of the effects of the immediate learning context' (ibid). This tendency was a straight result of the cognitive revolution in the perception of LLM. 'Here teachers' role, in particular, the general school climate, the learning materials and the relationships among language learners are seen as crucial elements that affect language learning' (ibid).

1.9.3 Motivation in ESP learning Context

The previously mentioned studies in particular and ELT literature in general show that a generalised teaching strategy vis-à-vis the EFL and ESP learning situation is hard to be outlined since research has demonstrated that individual experiences are important.

Rubin (1975) has mentioned motivation amongst three factors that play a major role in language learning: aptitude, motivation, and opportunity. Actually, many researchers argue

that good English teaching calls for an understanding of the individual differences among learners such as age, gender, aptitude, motivation, anxiety, and culture (Dornyei and Skehan, 2003; Ehrman and Oxford, 1990, 1995; Oxford, 1992; and Scarcella and Oxford, 1992). After the introduction of Gardner's Socio-Education Model previously mentioned, lots of researchers began to believe that motivation is one of the major aspects in second language learning accomplishment, and students with higher motivation usually reach a higher level of proficiency and better grades. (Oxford, 1996; and Oxford and Shearin, 1994).

Strevens (1988), an ESP specialist, presents four implications for higher motivation in ESP courses:

- Being focused on the learners' needs, they waste no time
- They are relevant to learners
- They are successful in imparting learning
- They are more cost-effective than *General English* courses

Chen, P. C. (2005) proposes that a task-based syllabus (CTBS) for Business English teaching in an EFL classroom is helpful since this syllabus encourages learners to transform the acquired language skills in class to realistic business situations. This research has shown the importance of the implementation of the learners' creativity and cooperation in each activity.

Chen, Y. (2006) investigated the application of 'common core' and 'specific language skills' in the progress of an ESP curriculum. His investigation shows that, learners' needs, wants and lacks are vital in the successful achievement of an ESP course design.

Hawkey (2006) has examined whether learner's perceptions of the importance of classroom tasks are parallel to those initiated by the teachers. Hawkey gathered data from interviews from teachers, student questionnaires, parents, school heads and video-recorded

class lessons. Hawkey's study emphasized on the 'washback[1]' components of an impact study showing therefore that divergence of learners and teachers perceptions of learning tasks is a critical element in the course of 'quality improvement' in teaching.

Kaur (2007) highlights the importance of promoting learner-centred approach in ESP teaching. He argues that when learners are encouraged to participate in the course design and to negotiate its aspects, the course content will have more significance for the learners' feelings thus they will be more motivated to participate in class.

The aforementioned researches show that individual considerations are valuable and that it is complicated to get to a conclusion unless those considerations are all gathered. Hence, and as it is suggested by Liuoliene and Metiuniene (2006), the preliminary step in ESP syllabus design should be learners' needs analysis and their attitudes to learning.

1.10 Learners' Autonomy in ESP

Learners' autonomy is a significant matter to be tackled in the present study as the later claims for the positive role of ICTs in improving and facilitating learning. Indeed, thanks to the available technologies mainly internet, learners are more autonomous in their quest for knowledge.

According to Holec (1981), Learners' autonomy refers to 'the ability to take charge of one's learning … to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning' and the particular decisions he listed were:

- determining the objectives
- defining the contents and progressions
- selecting methods and techniques to be used
- monitoring the procedure of acquisition

[1] Hawkins said that Hamp-Lyons (2000:586) suggests the 'limitation of the term "washback" to influences on teaching, teachers, and learning (including curriculum and materials)' and the inclusion of 'discussion of wider influences of tests' under the term 'impact'.

- evaluating what has been acquired.

Benson and Voller (1997), have also adopted Holec's (1981) definition of autonomy previously mentioned, and indicated that in language education the term is used in at least five different ways:

1. for situations in which learners study entirely on their own

2. for a set of skills which can be learned and applied in self-directed learning

3. for an inborn capacity which is suppressed by institutional education

4. for the exercise of learners' responsibility for their own learning 194 Symposium 2003

5. for the right of learners to determine the direction of their own learning.

(Benson and Voller 1997. pp 1-2)

Omaggio (1978) attributes seven characteristics to the autonomous language learner:

a) have insights into their learning styles and strategies
b) take an active approach to the learning task at hand
c) are willing to take risks
d) are good guessers
e) attend to form as well as to content, that is, place importance on accuracy as well as appropriacy
f) develop the target language into a separate reference system and are willing to revise and reject hypotheses and rules that do not apply
g) have a tolerant and outgoing approach to the target language

(Omaggio, 1978, cited in Wenden 1998. pp 41-42)

In one of his recent publications about the feasibility of developing autonomy in classrooms, Benson (2003) states that:

> Autonomy is perhaps best described as a capacity … because various kinds of abilities can be involved in control over learning. Researchers generally agree that the most important abilities are those that allow learners to plan their own learning activities, monitor their progress and evaluate their outcomes. (Benson 2003. p 290)

One approach has been recognized in the field of language learning as promoting learners' autonomy is called 'self-access'. This approach encourages according to Gardner and Miller (1999) learners to move from being teacher-dependent to autonomous, and it is possible to incorporate it into language courses.

Still in 1999, Tsang adds that 'language courses which incorporate a self-access language learning (SALL) element seem to be a starting point… if moving toward a SALL-oriented approach to language learning is not a realistic short-term goal' (Tsang 1999. p 36). In ESP and EAP, many attempts have been made to incorporate self-access in their courses (e.g., Nunan 1996, Toogood and Pemberton 2002, Fisher; Hafner and Young 2007; Gardner 2007).

For instance, in an EAP programme where learners were offered opportunities to be in charge of their learning, Nunan (1996) asserts that such shift from the teacher to the learners can augment the 'awareness' of, and 'sensitivity' to, the learning process over time. Later on, Nunan (1999) focuses the importance of 'goal-setting' and 'learner's choice' in promoting learner's independence.

Toogood and Pemberton (2002) report that their three attempts to incorporate 'self-directed learning' into the curriculum were rationally thriving in meeting students' needs for both 'free choice' and 'support'.

Gardner's (2007) also reports the success of his attempt to raise 'individualization' of students as represented by their 'positive attitudes' toward SALL and the concept of

'choice' in SALL, the multiplicity of 'learning goals' deposited and 'content' implemented in SALL, and learners' contentment of the accomplishment of their learning goals.

Nevertheless, other critiques (Little, 1990; Voller, 1997) have argued that the transfer of control from the teacher to the learner in the kind of curriculum-based self-access should not mean total independence. As earlier stated by Boud (1988) about independence that requires 'an unavoidable dependence at one level on authorities for information and guidance' (Boud, 1988. 29), Little (1990) indicates that 'as social beings our independence is always balanced by dependence; total detachment is a principal determining feature not of autonomy but of autism' (Little, 1990. 7). In line with those same views, Voller (1997) argues that teachers who try to integrate SALL into their curriculum have an crucial role to play in developing learners' autonomy and 'in launching learners into self-access and in lending them a regular helping hand to 'stay afloat' (Sheerin 1997, p. 63). Furthermore, Voller (1997) says that teachers have three major roles in 'autonomy-supportive' classrooms: 1) facilitator, 2) counselor, and 3) resource. Sheerin (1997), on the other hand, warns the teachers of the risk of over-advising and under-advising if they are 'ill-prepared' and 'ill-equipped' for such roles.

1.10.1 Fostering learners' autonomy

According to Benson (2001) there are six ways to support autonomy:

- Resource-based: independent use of learning materials
- Technology-based: independent interaction with educational technologies
- Classroom-based: learner control over the planning and evaluation of classroom learning (power to make decisions
- Curriculum-based: learner control over curriculum as a whole
- Teacher-based: emphasizes role of the teacher and teacher education in practice of fostering autonomy among learners

- Learner-based: development of autonomous learning skills

(Benson 2001, in Erin Lowry, 2008. 13)

These six ways were explained by Erin Lowry (2008) as the followings:

1. Resource-based: the independent use of learning materials can be suppored by ;

- Self-access areas such as libraries (books, dictionaries, workbooks and grammar reference) and computer. (internet, CDs and DVDs)
- Use of authentic texts
- Self-instruction and distance learning

2. Technology-based: software, internet and computer mediated communication
3. Classroom-based:

- Learners are asked to set their own goals and plan activities within the classroom.
- Self-assessment

4. Curriculum-based:

- Process syllabus
- Inquiry-based learning
- Project-based learning
- Task-based learning

5. Teachers- based:

- Teacher roles (according to Voller's (1997): facilitator, counsellor and resource)
- Teacher autonomy

6. Learner-based: Learner development activities (she gave examples of Language learning strategies and techniques (p.149) and 'Good language learner')

Nunan (1997) sets out a scheme suggesting five levels for promoting learner's autonomy in relation to use of learning materials. See the following table

Table 1.3 Levels of Autonomous Learning (Nunan 1997. p 195)

Level	Learner action	Content	Process
1	Awareness	Learners are made aware of pedagogical goals and content of the materials they are using	Learners identify strategy implications of pedagogical tasks and identify their own preferred styles/strategies
2	Involvement	Learners are involved in selecting their own goals from a range of alternatives	Learners make choices among a range of options
3	Intervention	Learners are involved in modifying and adapting the goals and content of the learning program	Learners modify and adapt tasks
4	Creation	Learners create their own goals and objectives	Learners create their own learning tasks
5	Transcendence	Learners go beyond the classroom and make links between the content of classroom learning and the world beyond the classroom	Learners become teachers and researchers

The table above illustrates the degree of involvement of the learner in the process of learning: from his awareness of the learning content to the upper stage of becoming a 'decision maker' of the kind of the learning content.

1.10.2 Learners' autonomy and motivation

Besides, research on autonomy and motivation, has been focusing mostly on their relation to specific skills of language learning such as writing, vocabulary, knowledge about the language system, examination preparation and strategy use (Conttia, 2007), and in addition of being crucial features in determining the learner's success or failure, Conttia (2007) notes that:

> Learner motivation and learner autonomy are intertwined in a web of cognitive, psychological and social practices which are dynamic and socially-constructed. To untangle these complex interrelationships, no single method would suffice…. Studies in learner motivation and autonomy

> require both research traditions to work in collaboration to find out the patterns which govern learner motivation and autonomy. (Conttia 2007. p 90)

The main conclusion here, and drawing on the implication of the previous claims, is that learner's autonomy and motivation are crucial factors in achieving success in ESP, because in ESP the teacher as a practitioner is only a guide and the learner as the career content professional is a 'decision maker' of the leaning content.

1.11 Conclusion

This chapter dealt with a general literature review of ESP, definitions and classifications with an emphasis on major approaches that constitute ESP teaching (teacher's roles as practitioner) either in traditional face to face education or in distant virtual learning. The chapter has also shed light upon the importance of motivation in an ESP learning context by mentioning the main factors that lead to learners' motivation or lack of it. Finally, the researcher has ended up with emphasising learners' autonomy for being a significant topic in ESP teaching and learning.

Chapter Two

CHAPTER TWO

ICTs Use in Teaching Languages

2.1 Introduction

This chapter reviews the literature about ICTs use in foreign language teaching (FLT) in general and in teaching English for specific purposes (ESP) in particular. ICTs will be considered in terms of their history and evolution. The chapter will also deal with electronic learning, educational technology and will tackle their contribution to the development of EFL teaching. In addition, light will be shed on the significant roles of teachers, learners and learning strategies that progress within distant education and e-learning.

2.2 ICT Definition and Use in Education

ICT stands for Information and Communication Technology, generally used to refer to 'computing devices such as desktop computers, laptops, software or internet for instructional purposes' (Hew & Brush, 2007. 225). But ICT also surrounds other technologies such as radio, television and telephone technology. In other words, technologies that are used to 'transmit, store, create, share or exchange information'. Tinio Victoria (2002) gave another broad definition of ICTs as 'technologies as radio, television, DVD, telephone (both fixed and mobile), satellite system, computer and net work, hardware and software, as well as the equipment and services associated with these technologies such as videoconferencing and electronic mail' (Tinion, Victoria L, 2002).

ICT according to Ian and Lowther refers more specifically to the 'use of technology by teachers for instructional preparation, instructional delivery, and technology as learning tool for students' (Ian & Lowther, 2010).

In FL teaching for example, ICT has developed from the earliest stages of audio tapes, word processing and CD ROM (Becker et al. 1999, Evelyn & Oliver, 1987), to the use of internet, MP3s, IPod, smart phones, power point presentation, video teleconferencing, online interaction, e-mails and social net working. The use of internet has made it possible to combine many of the previous multimedia services as tools for creating a Virtual Learning Environment (VLE) that offers a better content management, innovates teaching and increases the active role of the student.

One example of such innovative tools is Moodle, which 'enables the management of online learning, provides a delivery mechanism, student tracking, assessment and access to resources' (Jisc, 2008). This tool encourages the learner-centred approach and interaction among students and teachers. Moreover, this kind of platform is seen as a good provider of authentic materials in learning such as allowing the combination of the four skills in a single task in FL teaching.

The use of ICT throughout the world is noticing considerable influence on the future of education, because to produce successful members of the global marketplace, they need to be highly qualified in the field of information and communication technology. Roblyer and Edwards (2000) proposed five reasons for teachers to use technology in education: (1) motivation, (2) distinctive instructional abilities, (3) higher productivity of teachers, (4) essential skills for the Information Age, and (5) support for new teaching techniques. Pelgrum (2001) has recognized that ICT is 'not only the backbone of the Information Age, but also an important catalyst and tool for inducing educational reforms that change our students into productive knowledge workers' (Pelgrum,2001: 2). In his international survey of 26 countries (Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Hong Kong, Hungary, Iceland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, New Zealand, Norway, Russian Federation, Singapore, Slovenia, Slovak Republic, South

Africa, Taiwan and Thailand) he examined the application of ICT in elementary and secondary schools, mainly the major barriers related to the use of ICT in classrooms. The study results reported by Pelgrum pointed out three top obstacles to the integration of ICT:

- Insufficient number of computers
- Teachers' lack of knowledge/skills, and
- Difficulty in integrating ICT in instruction.

Pelgrum has also noticed in his worldwide survey that some changes happened in the role of the educational community (teachers, students and parents) after the introduction of ICT in society. The following table illustrates Pelgrum's comparison between education in the industrial society and education in the information society:

Table 2.1 Comparison of Educational Roles in the Industrial Society and the Information society (Pelgrum, 2001, p. 2)

Actor	Education in the Industrial Society	Education in the Information Society
School	• Isolated from society • Most information on school functioning is confidential	• Integrated in society • Information openly Available
Teacher	• Initiator of instruction • Whole class teaching • Evaluate students • Places low emphasis on communication skills	• Helps students find appropriate instructional path • Guides students' independent learning • Helps students evaluate their progress • Places high emphasis on communication skills

Student	• Mostly passive • Learns mostly at school • Hardly any teamwork • Takes questions from books or teachers • Learns answers to questions • Low interest in learning	• More active • Learns at school and outside school • Much teamwork • Asks questions • Finds answers to questions • High interest in learning
Parent	• Hardly active in the learning process • No steering of instruction • No life-long learning model	• Very active in the learning process • Co-steering • Parents provide a model

2.3 Using Technology To Support Learning And Teaching Languages

The use of technological devices in teaching languages has witnessed several changes throughout history, and to understand this learning model, it is useful to mention some lines about the history of Computer Assisted Language Learning (CALL).

Since its beginning in the 1960's when the main objective of language learning was accuracy, it started on main frame computers within a 'Skinner behaviour framework' where 'learning a language meant memorizing a body of well choreographed responses that included frequent vocabulary items, clichés, and phrases used at appropriate moments' (Blake, 2008. P 49).

Since the 1980's, computer technology has changed and gave way to more flexibility that encouraged the teachers and learners to emphasise on communicative activities that aimed at developing fluency. Finally, with the amazing development of the internet and web 2.0 periods, the learner's role has completely changed and became rather integrative.

Indeed, thanks to the social networking, wikis and blogs, s/he has become a 'full actor' and 'co-creator' of his/her own learning. The web and multimedia tools have developed the learner's interaction and the Computer Mediated Communication (CMC). Moreover, this learning model has developed the learner's autonomy which has become the new educational goal in CALL activities and 'Agency' a new word was introduced by researches to describe it. The following table illustrates the evolution of CALL through three stages:

Table. 2.2 CALL Evaluation Stages (Blake, 2008, p. 54)

Stage	**1970's – 1980's Structural CALL**	**1980's – 1990's Communicative CALL**	**21st century Integrative CALL**
Technology	Mainframe	PCs	Multimedia and Internet
Teaching paradigm	Grammar translation and audio- lingual	Communicative language teaching	Content-based instruction
Views of language	Structural (a formal structural system)	Cognitive (a mentally constructed system)	Sociocognitive (developed in social interaction)
Principal use of computers	Drill and practice	Communicative exercises	Authentic discourse
Principal objective	Accuracy	Fluency	Agency

Agency is then the current goal of CALL, nevertheless, there is no clear definition of it. Some researches (Luck and d'Ivrno, 1998) argue that there is a difference between agency and autonomy as 'autonomy is achieved by motivating agency' (Luck and d'Ivno, 1998. 254). For simple explanation, Patricia Mertin (2012) argues that 'agency could be define as

the learner's ability to develop his own learning strategies and be autonomous' (Patricia Mertin, 2012: 110).

Computer Assisted Language learning is then an issue of debate in contemporary education. Boud and Alexander (2001) argue that e-learning is only a means of diffusing content and facilitating communication among the learning environment. However, Hase and Ellis (2001) estimate that online learning gives 'wonderful opportunity to provide learning experiences that not only develop competency but also aspects of capability such as independent learning skills, self-efficacy, creativity, working in teams' (Hase, Cairns and Malloch, 1998, Stephenson and Weil, 1992, in Hase and Ellis, 2001: 31).

2.3.1 ICT Use in ESP

Before dealing with the application of ICT in ESP teaching/learning and the problems that surrounds it, it is worth highlighting the specificity that characterizes teaching in ESP. this specificity resides mainly in the learners' needs: an ESP teacher is often asked this kind of question during his first contact with the learners: how can I learn an appropriate English in short period? Indeed, ESP learners want to master the language for other purposes than that of learning the language itself. Learning period is then as important as the teaching/learning quality. ESP learners, mainly NNS need to be exposed to the language through real situations such as listening to the native speakers, but also they need to use this language in writing and in face-to-face interactions. In addition, time issue is an important aspect to be considered in ESP teaching/learning.

The use of ICTs in EFL in general, and in ESP for NNS in particular has become crucial, mainly with today's students who are seen as 'digital natives' and have already adopted the virtual world in their everyday tasks, and who have recognized ICTs as a learning facilitator that helps in reaching the so far mentioned needs. ESP teachers need

then to bridge the gap by updating their teaching methods and tools according to the perpetual growth of ICTs.

2.3.2 Benefits of Technology Use in ESP

The specificity of ESP teaching mentioned above represents a challenge in itself, in the way that the teacher has to teach both the language i.e. he has to find authentic contexts in which the student is exposed to the language, and to teach a 'field-specific content' that might be completely alien to him. Teaching professionals requires then, the use of authentic tasks, tools and context (Bremner, 2010, Evans, 2012).

Butler-Pascoe (2009) argues that 'at least three primary models exist for delivering ESP instruction:

1. ESP taught by English teachers using field-specific content.
2. Field-specific courses taught by teachers in the disciplines using English as the language of instruction.
3. A collaborative model in which both English and field-specific teachers have joint input into the development and/or teaching of the course

Butler-Pascoe (2009) relates the previously mentioned models with the 'innovative uses of today's technology', as he emphasizes the importance of its use by students in ESP learning as well as its use by ESP teachers in helping them preparing their courses and communicating between each other and their students.

Butler-Pascoe (2009: 2-3) also gives 14 advantages to the use of technology in ESP teaching:

1. Provides interaction and communicative activities representative of specific professional or academic environments.
2. Fosters understanding of the socio-cultural aspects of the language as practised in various fields and professions.

3. Provides comprehensible field-specific input and facilitates student production.
4. Provides sheltering strategies for language development and content-specific understanding (modelling, bridging to students' background experiences, contextualising, metacognitive activities, etc.).
5. Uses task-based and inquiry-based strategies reflective of tasks in discipline specific settings and situations.
6. Uses authentic materials from specific disciplines and occupations.
7. Supplies authentic audiences, including outside experts in specific fields.
8. Supports cognitive abilities and critical thinking skills required in the disciplines.
9. Uses collaborative learning.
10. Facilitates focused practice for the development of reading, writing, listening, and speaking skills across the curriculum and disciplines.
11. Is student-centred and addresses specific needs of students.
12. Uses multiple modalities to support different learning styles.
13. Meets affective needs of students: motivation, self-esteem, and autonomy.
14. Provides appropriate feedback and assessment of content knowledge and English skills.

2.3.3 Technologies for ESP

In the current digital world, new technologies are successfully used in ESP courses all over the world. In addition to the traditional tape recorder (though it tends to disappear) or CD player, ESP classrooms are witnessing the introduction of interactive white board, internet, smart phones and other ICTs. In the following section, the researcher aims at examining some (it is impossible to cite them all) extensively used technologies by ESP teachers/learners around the world.

2.3.3.1 The internet

Internet, with its profusion of information on different topics, tools to communicate and share knowledge and authentic materials (texts, audio, videos…etc.), is especially essential in ESP teaching.

The revolutionary growth in ICT has brought various alternatives to the ways a foreign language is learned. Learners are no more constrained to settle in the country where the target language is spoken (Warschauer, 2006) and where h/she may not find adequate opportunities to please his/her language needs. With the worldwide use of ICT and internet, ESP learners in particular are more autonomous in monitoring their language learning, as they can find different language materials, tools and can communicate directly with professionals in their fields. Many ESP teachers as well use the internet to prepare and to find authentic materials for their courses, or to communicate with their students. Internet for other teachers is a way to improve their skills and share ideas by connecting with colleagues in a 'virtal staffroom':

> This extended staffroom is particularly important for ESP teachers, whose multiple roles, for example, as teacher, materials designer, collaborator, assessor, and researcher have expanded and evolved through IT, allowing collaborations with field-specific experts and other colleagues around the world, and giving them more easy access to an abundance of multimedia materials for even the most specialized of fields in order to design materials and courses that meet their learners' needs (Arno-Macia 2012. p 90). Today, technology makes it further possible for teachers to create more sophisticated and professional looking (multimedia) materials and online or blended courses' (Kern Nargiz 2013. 99).

All things considered, the internet represents for ESP teachers a source for authentic materials, tools provider and a way to bring up to date their teaching methods and techniques. It also allows the learners to be more autonomous and help them to meet their self-study purposes

2.3.3.2 Skype/online conferencing tools

Skype is one of the widely used (because it provides good quality, through highly efficient compression, and is free) online voice-over internet protocol (VOIP) service. Created in 2003 by Janus Friis and Niklas Zennstrom, this VOIP service allows users to make telephone or video calls, but also, file transfer and videoconferencing. Thanks to the new version, users are as well able to do screen sharing i.e. teachers or students can show their computer documents (word, PowerPoint…etc), website pages or anything displayed on their screens to explain to the participants they are online with.

For a conference call, it is possible to link up to five participants through Skype, for that one participant of the group acts as the convener, enters the Skype IDs of the other members and makes the call. However, the sound quality of Skype with such multiple participants in the same conversation tends to degrade a bit. Skype calls or conferences can be recorded (using a dedicated programme such as Hot Recorder or other audio software), hence, users can record interviews or conference calls with Skype, save the files as MP3s and then post them to their blogs (Skype Casting).

Skype is now used in several ways, for individual or for group online courses, and for formal or informal teaching of languages. Skype is also used as self-study material by learners and teachers, for instance, in a social media language course called ‘English Out There’[1] as it integrates Skype in the online communication.

[1] Access to ‘English Out There’ course is possible on: http://englishoutthere.com

The easiness and the simplicity of Skype have made it possible for teachers to include it as an authentic material:

> Given the low cost, conferencing capabilities, and recording option, there are many numbers of possibilities for using Skype in language learning. The most obvious is to connect users in distant locations for free conversational practice. A group of ESL instructors has been using Skype in class-to-class exchanges and there are several sites (such as The Mixxer) for integrating Skype and Moodle, the popular freeware learning management system. Because Skype requires a reasonably fast Internet connection, not all users or schools will be able to use it, but for those who can, it offers a low-cost alternative for real-time communication. Skype has recently added video conferencing (through a third-party add-on, Video4Skype), which offers even more possibilities. (Godwin-Johnes 2005. pp 9-10)

Skype has also broken down distance barriers and made it possible for teachers to invite speakers to their classrooms for a videoconferencing. The guests can be native speakers of English teachers, or professionals from the students' specific field. Thus, the students are directly exposed to the language or to the real life situation. Kern (2013) gave five conveniences to the use of Skype in teaching/learning languages:

- The comfort of learning from a location where one happens to be.
- Having access to teachers and native speakers around the world.
- The mostly free service.
- Availability for major computer platforms (windows, Mac, Linux, etc.).
- The reliability of the service and its ease of use
- The relatively good quality of audio and video if used with a broadband connection.

- Learners are already familiar with the tool from their professional work and use it to communicate with colleagues or business partners.

Nevertheless, Kern (2013) adds that:

> Its [technology] particular affordance that lend themselves for language learning need to be considered and appropriate tasks need to be devised, in order to be able to make effective use of it (Levy, 2009). Skype, like any other technology, is just a tool, and it needs to be used in a pedagogically sound way to have a 'value for language learning' (Levy 2009. p 775, qtd in Kern Nargiz 2013. p 95)

By the above quote, Kern (2013) notes that the worldwide use of a technology does not imply automatically enhance language learning.

2.3.3.3 Mobile learning

The specificity of needs in ESP learning has a crucial correlation with the use of mobile technologies. An ESP learner might need the language at the same time h/she is working, or while traveling and for that they can use their smart phones or tablet PCs to check a vocabulary or grammatical rule, to reply to an e-mail or to listen to a learning podcast. 'the more interesting uses of mobile technology (for ESP student) will be … 1) for simulations of real work situations and 2) for accessing learning material, podcasts, and internet resources, wherever students happen to be and whenever they want' (Kern 2013. p 109). In classrooms, mobile technologies can cause disturbance if they are not integrated properly into the course, so students need to understand the purpose to their use in a course and see their value.

2.3.3.4 Social media

Bryer and Zavatarro (2011) observed that: 'Social media are technologies that facilitate social interaction, make possible collaboration, and enable deliberation across

stakeholders[1]. These technologies include blogs, wikis, media (audio, photo, video, text) sharing tools, networking platforms (including Facebook), and virtual worlds.' (Bryer and Zavatarro 2011, qtd in Madhu Gupta and Kiran Rani 2013. p 171).

One of the latest definitions of social media is given by Jones (2017) as being 'a category of online media where people are talking, participating, sharing, networking, and bookmarking online. Most social media services encourage discussion, feedback, voting, comments, and sharing of information from all interested parties'. To explain the principle of social media, Jones (2017) breaks it down into different groups:

- Social news: Sites like *Digg, Sphinn, Newsvine,* and *BallHype* let you read about news topics and then vote and/or comment on the articles. Articles with more votes get promoted to a more prominent position.
- Social sharing: Sites like *Flickr, Snapfish, YouTube,* and *Jumpcut* let you create, upload, and share videos or photos with others.
- Social networks: Sites like *Facebook, LinkedIn, MySpace,* and *Twitter* allow you to find and link to other people. Once linked or connected, you can keep up to date with that person's contact info, interests, posts, etc. Many people are connecting to friends and business associates with whom they had fallen out of touch. It's bringing the world together like nothing else has.
- Socialbookmarking: Siteslike Delicious, *Faves, StumbleUpon, BlogMarks and Dii go* allow you to find and bookmark sites and information of interest. You can save your bookmarks online and access them from anywhere or share them with others.

In ESP learning, Social media can be beneficial since it is an open space for exchange 'Social media has been hailed as delivering the promise of new, socially engaged

[1] People or small groups with the power to respond, to negotiate with, and change the strategic future of the organization (Eden and Ackermann 1998: 117)

educational experiences for students in undergraduate, self-directed, and other educational sectors' (Madhu Gupta and Kiran Rani 2013. p 174). ESP learners can, for example, find as many native speakers as they want and learn with them English in any specific context they want. Nevertheless, just like social media can be utilised as a serious pedagogical tool, it may also represent an obstacle to learning by acting as a source of diversion and distraction. In this regard, a study has tackled the relationship between 'social media usage and academic performance' (Kirschner and Karpinski, 2010, qtd in Madhu Gupta and Kiran Rani 2013. p 175). The researchers in that study questioned 219 university students and came across the result that, Facebook users had considerably lower marks in comparison to non-users. In addition to distraction, information posted on the social media are not always reliable because everybody is free to publish and post any kind of content. Authenticity of the data is not always guaranteed then.

Yet, some positive aspects to the social media can be found. According to Madhu Gupta and Kiran Rani (2013 p. 178), the advantages below are distinguished:

- Use of social media improves the ability to assess, analyse, retain and share information of the users.
- It provides an effective platform for developing the power of reasoning and expression by engaging them in conversations, discussions and heated debates done on discussion forums, or as comments posted under a nugget of learning content such as Youtube video or Slideshare presentation.
- It facilitates teachers and students to take initiative and explore co-creation and collaborative learning opportunities across geographies, as the overhead cost of online collaboration is so low.

- Social media offers the possibility of better forms of assessment or deep understanding which facilitates application of knowledge in novel contexts and finding creative and innovative solutions to the challenges posed by life.
- It helps move a learner from being extrinsically motivated to intrinsically motivated by offering all the three pillars of self-motivation –autonomy (learners can independently take initiative, mastery (through multiple representations and multiple presentations of understanding) and purpose (learners can apply their knowledge and skills to a cause that appeal them) and also, depending upon the performance, their reputation is always on stake in social media.
- Even social media based games have the potential for positive influence, provided they don't become an addiction.
- It has the possible scalability and low cost structure to address the 'Education for All' challenge that high population countries like India face.

2.4 Electronic Learning Definition and Criteria

Various definitions to the term 'e-learning' could be found, which can cause confusion to those at the early stages of exploring e-learning. Nevertheless, one definition utilized by JISC (2008) seems to be quite accurate:

> E-Learning can be defined as 'learning facilitated and supported through the use of information and communications technology. It can cover a spectrum of activities from the use of technology to support learning as part of a 'blended' approach (a combination of traditional and e-learning approaches), to learning that is delivered entirely online. Whatever the technology, however, learning is the vital element.

The term 'e-learning' then fundamentally covers the use of computers and technology as a vehicle for knowledge exchange within teaching and learning. According to

Rosenberg (2001), e-learning refers to 'the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance.' (Rosenberg 2001. pp 28-29). It is based on three primary criteria:

1. E-Learning is networked, which makes it capable of instant updating, storage/retrieval, distribution and sharing of instruction or information

2. It is delivered to the end-user via a computer using standard Internet technology

3. It focuses on the broadest view of learning solutions that go beyond the traditional paradigms of training. (ibid)

Today, a great variety of distant learning forms have emerged including: 'fully online courses, hybrid or blended courses that consist of face to face sessions along with online delivery, and technology-enhanced courses consisting of integrating technology components into face to face traditional courses' (Palloff & Pratt 2007. pp 74)

MacDonald et al (2009) define e-learning as a kind of 'learning that takes place via the internet' (MacDonald et al 2009. p 39). Bates (2005) considers the internet, as a computer-based multimedia to be the primary technology for e-learning. Bates (2005) mentions three major ways to make use of electronic learning by education institutions:

1- technology-enhanced classroom where the web and the Internet are integrated into traditional classroom teaching like other technologies through Web pages, PowerPoint presentations, electronically available course material, etc.

2- Distance learning to ensure further access to education opportunities for disadvantaged learners, and

3- Distributed learning describing "a mix of deliberately reduced face-to-face teaching and on-line learning

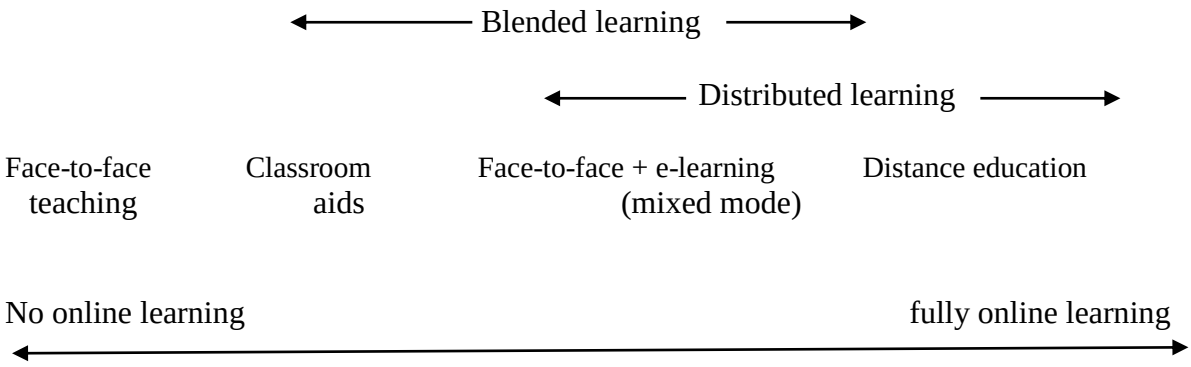


Figure2.1 Continuum of Technology-based Learning (Bates 2005. p 9).

2.4.1 Types of E-Learning

The Center for Tele-Information at Technical University of Denmark has proposed four types of e-learning: 1) e-learning without presence and without communication, e-learning where the teacher and the students never meet physically, and where no dialogue between students or students and the teacher takes place; 2) e-learning without presence and with communication, e-learning where the teacher and the students never meet physically, but where the dialogue between the participants is supported by use of IT based communication services. 3) e-learning combined with occasional presence, e-learning where parts of the learning takes place in a class room and parts of the learning is done elsewhere, where the students work on a computer on their own – e.g. at home or at their place of work. and 4) e-learning used as a tool in class-room teaching, e-learning where all teaching is done in aclassroom, and where computers are used as a learning tool (Falch, 2004, in Marlene V. Wilcox, 2007. 178).

Negash and Wilcox (2008) have extended the classification to six:

- E-learning with presence[1] and without e-communication[1] (face to face)

[1] Presence is defined as real-time presence where both instructor and learner are present at the time of content delivery; it includes physical and virtual presence. (Negash and Wilcox, 2008. 4)

- E-learning without presence and without e-communication
- E-learning without presence and with e-communication: asynchronous
- E-learning with virtual presence and with e-communication: synchronous
- E-learning with occasional presence and with e-communication: 'blended/hybrid asynchronous'
- E-learning with presence and with e-communication: 'blended/hybrid synchronous'

The educational society all around the world is shifting from full time traditional training to more unconventional forms of education, and e-learning is considered as a means that responds to that educational society's needs.

2.5 Distant Learning

The present study is particularly interested in the use of e-learning in teaching English to ESP students, the tools used in this type of teaching is then narrowly linked to synchronous and asynchronous types of activities achieved in a distant learning environment. Before embarking on explaining the terms synchronous and asynchronous, it is worth defining what distant learning is.

Although definitions of the term has multiplied amongst specialist, one common point exists between them, is that distant learning is a way of learning remotely without being in face-to-face contact with a teacher in the classroom.

The earlier form of distant learning known in Europe and then in all over the world, was done through correspondence. This form continued to be the principal means of distance learning until the middle of the previous century when instructional radio and television became more popular (Imel, 1996).

[1] E-communication refers to whether the content delivery includes electronic communication or no. (Negash and Wilcox, 2008. 4)

Moore (1972) defines distance education as 'the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours ... so that communication between the learner and the teacher must be facilitated by print, electronic, mechanical, or other devices' (Moore 1972. p 76 qtd in Moore1991). Later on, In 1996 and during his collaboration with Kearseley's, Moore introduces another definition: 'Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by Electronic and other technology, as well as special organizational and administrative arrangements' (White 2003. p 11)

Greenberg (1998) defines contemporary distance learning as 'a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning' (Greenberg 1998. p 36). Teaster and Blieszner (1999) argue that 'the term distance learning has been applied to many instructional methods: however, its primary distinction is that the teacher and the learner are separate in space and possibly time' (Teaster and Blieszner 1999. p 741). Keegan (1995) brings the most systematic definition. He explains that distance education and training come from the physical separation of the teacher and the learner that 'frees' the learner from the need of moving to 'a fixed place, at a fixed time, to meet a fixed person, in order to be trained' (Keegan 1995. p 7).

Besides that physical separation between the teacher and the learner, Keegan adds four characteristics of distance learning; institutional influence on materials design, availability of resources, monitoring and feedback facilities; reliance on technology of any type, and finally learner and teacher interaction of some sort and group interaction.(qtd In Bertin. C.J, Gravé.P and Combes N. P. J. 2010. p 40).

Keegan (1995), proposed a definition of distance education with the following basic characteristics:

- The quasi separation of the teachers and learner throughout the length of the learning process;
- The influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services;
- The use of technical media-print, audio, video or computer-to unite teacher and learner and carry the content of the course;
- The provision of two-way communication so that the student may benefit from an even initiate dialogue; and

The quasi permanent absence of the learning group throughout the length of the learning process so that people are usually taught as individuals rather than in groups, with the possibility of occasional meetings, either face to face or by electronic means, for both didactic ad socialization purposes (Keegan 1995. p7)

However, it seems that some of the classes above are now considered as archaic. For example, the perception of students as individuals (rather than groups) is no longer a characteristic aspect for distinguishing distant from face to face learning, as most current technologies can easily accommodate group works: 'The quasi permanent absence of learning groups … need no longer apply. Groups of learners can cooperate although being geographically separated' (Holmberg 2003).

Holmberg (1995) speaks about the concept of distance education in terms of communication between students and educational institutions, he argues that distance education refers to a: 'consistent non-contiguous communication between the supporting organization and its students' (Holmberg 1995. p 2). According to him, this communication can be of two types: one way traffic and two way traffic:

One way traffic refers to the teaching exposition. It is described as a simulated communication through which course materials are sent from the supporting organization and involving students in interaction with texts, recorded words and technological devices now; (ibid).

Two ways traffic refers to the real communication. It is described as the actual/real communication between students and the supporting organizations through telephone interactions, e-mails and technological tools. This enables students' access to personal tutoring and counseling. (ibid)

Hence, and considering the communication above, Holmberg (2005) proposes the following definition: 'distance education is seen as a form of teaching and learning which is not under the supervision of teachers present with their students in lecture rooms or on the same premises but which, nevertheless, benefit from the planning, guidance and teaching of a supporting organisation' (Holmberg 2005. p 166)

Holmberg (2005) also identifies three basic constituents of distance education:

1. The mediated presentation of learning materials
2. Interaction between students and tutors
3. Peer-group interaction in online learning (ibid)

Garrison and Archer (2000) define distance education in terms of 'on-contiguous communication' between teachers and learners: 'Distance education must involve two-way communication between teachers and students for the purpose of facilitating and supporting the educational process. Distance education uses technology to mediate the necessary two-way communication.' (Garrison and Archer 2000, qtd in White 2003. p 11).

2.5.1 Theories of Distant Learning

Several researchers have proposed different theories to identify the fundamental characteristics of distant education: Wedemeyer's liberal, individualising independent

study (1981); Sewart's support model, called 'continuity of concern' (1981); Baath's two-ways communication (1982); Peters' industrialised form of teaching and learning (1983); Holmberg's theory of guided didactic conversation (1983) and his normative teaching theory of distance education (1985); Manfred Delling's process model; Moore's theory of transactional distance with its concept of dialogue, structure and the characteristic of each learner (1990, 1991).

Keegan (1995) classifies theories of distant education into three categories: theories of independence and autonomy, theories of industrialisation of teaching, and theories of interaction and communication. Each of these theories is defined in the following:

2.5.1.1 Theories of Independence and Autonomy

Theories of independence and autonomy cover two versions: an American version led by Wedemeyer and a European one led by Moore.

a) Wedemeyer's Theory (1981)

Saba (2004) states that for Wedemeyer (1981) students' independence is 'the essence of distance education'. He sees that students acquire their independence through different means like the possibility to learn anytime and anyplace as well as the opportunity to rule and organise their own learning (ibid).

Wedemeyr's (1981) classification of distant learning encompasses ten characteristics that focus the approach of learners' independence which adoption and integration is supported by technology. Wedemeyr's instructional system should:

- Be capable of operating any place where there are students-even only one student whether or not there are teachers at the same place, at the same time;
- Place greater responsibility for learning on the student;
- Free faculty members from custodial-type duties so that more time can be given to truly educational tasks;

- Offer students and adults wider choices (more opportunities) in courses, formats, and methodologies;
- Use, as appropriate, all the teaching media and methods proven effective;
- Mix and combine media and methods so that each subject or unit within a subject is taught in the best way known;
- Cause the redesign and development of courses to fit into an articulated media program;
- Preserve and enhance opportunities for adaptation to individual differences;
- Evaluate student achievement simply, not by raising barriers regarding the place, rate, method, or sequence of student study; and
- Permit students to start, stop, and learn at their own pace.

(Wedemeyr 1981, qtd in Holmberg 1995. p 8)

b) Moore's Theory (1991):

The theory of independent learning and autonomy seen by to Moore (1991) comprises two dimensions:

- *Transactional Distance*

Moore (1991) describes transactional distance as follows:

> 'The transaction that we call distance education occurs between individuals who are teachers and learners, in an environment that has the special characteristic of separation of one from another, and a consequent set of special teaching and learning behaviours. It is the physical separation that leads to a psychological and communications gap, a space of potential misunderstanding between inputs of instructor and those of the learner, and this is the transactional distance' (Moore 1991, qtd in Amundsen 1993. p 56)

According to Moor (1993), 'the extent of structure in a programme is determined largely by the nature of the communications media being employed, but also by the philosophy and emotional characteristics of teachers, the personalities and other characteristics of learners, and the constraints imposed by educational institutions.' (Moore 1993. pp 23-24)

To sum up, Moore's transactional distance emphasises the following set of variables:

1- The instructional dialogue

2- The communications media

3- The program structure

4- The selection and integration of the communications media

5- The autonomy of the learner

According to Moore 'Successful distance teaching depends on the institution and the individual instructor providing the appropriate opportunities for dialogue between teacher and learner, as well as on appropriately structured learning materials.' (ibid)

Structure and dialogue represent a combination of two pedagogical traditions: a humanistic tradition lying in the importance of interactions and dialogues in the educational setting, and a behaviourist tradition emphasized on designing courses on the basis of behavioural objectives. (ibid)

- *Learner Autonomy*

The other element of Moore's theory is Learner autonomy which is associated with 'transactional distance' as Moore argues: 'the greater the transactional distance, the more autonomy the learner has to exercise' (Moore 1993, qtd in Amundsen 1993. p 7). According to Moore, the degree of learners' autonomy is put into effect throughout the selection of 'learning objectives', the selection of 'study methods' and use of 'learning materials' as well as the 'decision about the methods of evaluation'. Nevertheless, some

features of Moore's theory of learner's autonomy 'have attracted a widespread criticism as being too general to describe and justify the differences in learners' motivations, ability and learning approach' (Amundsen 1993. p 7)

2.5.1.2 Theory of Industrialisation of Teaching

An analysis done by Peters (1998) shows that the organisation and the construction of distance education are based on the same rules and laws implicated in the 'industrialisation of the working process in the production of goods'. Peters (1998) argues that distance education organized the production of their products (education) around key concepts of industrialization, such as *mass production*, *division of labor*, and *standardization* (Peters 1998. pp 109-111).

The findings of Peters' comparison of distance education with the industrial production (division of labour, mechanization, mass production, standardization and centralization) can be summarized as follows:

- The development of distance study courses is just as important as the preparatory work that takes place prior to the production process.
- The effectiveness of the teaching process is particularly dependent on planning and organization.
- Courses must be formalized and expectations from students standardized.
- The teaching process is largely objectified.
- The function of academics teaching at a distance has changed considerably vis-a-vis university teachers in conventional teaching.
- Distance study can only be economical with a concentration of the available resources and a centralized administration. (Peters 2003. p 36)

The results above validate the industrial characteristics of distance education that separate it clearly from traditional face to face education. Hence, a careful consideration

should be taken into account when decisions about the process of teaching and learning are to be made.

2.5.1.3 Theories of Interaction and Communication

Unlike Moore (1981) and Peter (1991) who put emphasis on the analysis of distance education in regard to structure and design, Holmberg (1995) stresses rather the 'interpersonalization of the teaching process'. His theory is placed on the concept of 'guided didactic conversation' which gives a 'pervasive characteristic of distance education' (Holmberg 1995. p 47):

> Guided didactic conversation…refers to both real and simulated conversations, although the reliance is upon simulated conversation. As such the emphasis is very much on the content and conversational character of written pre produced course package' (Garrison 2000. p 7)

Holmberg (1995) clarifies his concept of guided didactic conversation by explaining:

1. That feelings of personal relation between the teaching and learning parties promote study pleasure and motivation.
2. That such feelings can be fostered by well-developed self-instructional material and two way communication at a distance.
3. That intellectual pleasure and study motivation are favourable to the attainment of study goals and the use of proper study processes and methods.
4. That the atmosphere, language and conventions of friendly conversation favour feelings of personal relation according to postulate 1.
5. That messages given and received in conversational forms are comparatively easily understood and remembered.

6. That the conversation concept can be successfully translated, for use by the media available, to distance education.
7. That planning and guiding the work, whether provided by the teaching organization or the student, are necessary for organized study, which is characterized by explicit or implicit goal conceptions.

(Holmberg 1995. p 47)

Holmberg considers learner autonomy as the ideal and just like Moor, he perceives real learning as '*an individual activity accomplished through a process of internalization of the teaching process at a distance'* (Saba 2004). Nevertheless, the theory of guided didactic was ruthlessly criticised and Holmberg (2003) himself came to regret his adoption of the term 'guided didactic conversation':

> Further, I used a somewhat unfortunate terminology. I referred to the conversational character of distance education as 'didactic,' an adjective in many cases taken to indicate an authoritarian approach (the opposite of what was meant). Instead of *guided didactic conversation*, I now prefer the term *teaching-learning conversion* (Holmberg 2003. p 79).

The three theories (industrialisation, learner autonomy and interaction) symbolise a sampling of theoretical foundations upon which planning, decision-making, and research were then based.

2.5.2 Distant Learning through Time

Distant learning includes of a number of generations changing according to the technological advances. Garisson uses the term 'generation' to build upon previous capabilities: 'new media can be combined with older media to provide a greater range of choice for the design of effective distance education delivery systems' (Garrison 1985. p

236). Garrison (1985) categorised distance education technological innovations into three generations: correspondence, telecommunication and computers.

Later on after Garrison, Kauffman and Nipper (1989) have recognised three generations of distance education:

1. Print-based correspondence education (single technology)

2. Multiple-media 'print + broadcasting' (industrial)

3. Two ways communication media (internet + videoconferencing).

(Kauffman and Nipper, 1989, cited in Bates, 2005)

In 2003 Peters distinguishes three generations of distance education and their associated teaching and learning behaviours: the initial is founded on books as the main 'medium of instruction', the second also includes books as well as radio and television whereas the third incorporated multimedia technologies and PCs (personal computers): 'The PC serves at the same time as a carrier, distribution, display, instruction, and interactive medium. In addition, it provides pedagogically useful services that traditional media are completely unable to do' (Peters 2003. pp 88-89)

However, Taylor's (2001) model of distant learning generations which is referred to as the 'flexible learning model' was the most detailed one. In describing the implementation of fourth generation technologies at the University of Southern Queensland, Taylor indicates that:

> …The essential features of a fourth generation e-Learning environment support a learning process that is interactive, non-linear and collaborative. These features include the use of an interactive study chart as a basic navigational tool, which sets the broad parameters of the subject matter content to be investigated, and lists a number of exemplary references. References are electronic and hot linked via specific URLs. Additionally,

> the students are free to surf the Net for supplementary teaching-learning resources that meet their specific needs. They are also able to upload and download assignments, with those of sufficient quality being added to the teaching-learning resources database for reference by future students. The interaction with courseware materials is, however, only one element of the interactivity built into the USQ pedagogical approach. Interaction with other students, teaching staff and other experts, who act as mentors, is achieved through the use of Computer Mediated Communication (CMC), primarily through the deployment of asynchronous discussion groups. Students are encouraged, and in many cases required, to communicate through various electronic discussion groups, established for specific content areas as well as for informal social interaction'. (Taylor 2001: 6)

Taylor (2001) shows five generations of distance education models and 'associated delivery technologies'. First, the Correspondence Model founded on print technologies; second, the Multimedia Model based on print, audio and video technologies; third, the Telelearning Model, founded on applications of telecommunication technologies to provide opportunities for synchronous communication; fourth, the Flexible Learning Model based on online delivery via the internet, and fifth, the Intelligent Flexible Learning Model which is derived from the forth and exploits further new technologies (Taylor, 2001). The table below illustrates the five generations presented by Taylor (2001):

Table 2.3 Models of Distance Education: A conceptual framework (Taylor 2001. p 6)

Models of Distance Education and Associated Delivery Technologies	Characteristics of Delivery Technologies					
	Flexibility			Highly Refined Materials	Advanced Interactive Delivery	Institutional Variable Costs Approaching Zero
	Time	Place	Pace			
FIRST GENERATION - The Correspondence Model						
· Print	Yes	Yes	Yes	Yes	No	No
SECOND GENERATION - The Multi-media Model						
· Print	Yes	Yes	Yes	Yes	No	No
· Audiotape	Yes	Yes	Yes	Yes	No	No
· Videotape	Yes	Yes	Yes	Yes	No	No
· Computer-based learning (eg CML/CAL/IMM)	Yes	Yes	Yes	Yes	Yes	No
· Interactive video (disk and tape)	Yes	Yes	Yes	Yes	Yes	No
THIRD GENERATION - The Telelearning Model						
· Audioteleconferencing	No	No	No	No	Yes	No
· Videoconferencing	No	No	No	No	Yes	No
· Audiographic Communication	No	No	No	Yes	Yes	No
· Broadcast TV/Radio and Audioteleconferencing	No	No	No	Yes	Yes	No
FOURTH GENERATION - The Flexible Learning Model						
· Interactive multimedia (IMM) online	Yes	Yes	Yes	Yes	Yes	Yes
·Internet-based access to WWW resources	Yes	Yes	Yes	Yes	Yes	Yes
·Computer mediated communication	Yes	Yes	Yes	Yes	Yes	**No**

FIFTH GENERATION - **The Intelligent Flexible Learning Model**						
· Interactive multimedia (IMM) online	Yes	Yes	Yes	Yes	Yes	Yes
· Internet-based access to WWW resources	Yes	Yes	Yes	Yes	Yes	Yes
· Computer mediated communication, using automated response systems	Yes	Yes	Yes	Yes	Yes	Yes
· Campus portal access to institutional processes and resources	Yes	Yes	Yes	Yes	Yes	Yes

The most significant element in distance learning is accessibility which itself pivots upon three key elements; agents, hardware, and software i.e. internet, broadband connection, teacher and learners, computer, head phones, a microphone, and a course. These elements may have a strong influence on the presentation of the course (White, 2003:103). Accessibility was proved by Temperton to be crucial for the success of students. He argues that the students who succeeded in their studies were the ones who had accessibility .i.e. they had networks in place to back up their study where the net works derive from family or friends, work colleagues, other students or their tutors (Simpson, 2003: 22)

2.5.3 Advantages of Distant Learning

Many specialists have claimed the benefits of distant learning to be adopted in the educational systems. One can summarize those benefits as follows: because interactivity is the core element of educational technology, it increases communication and interaction between teachers and learners anytime and anywhere, that is, dialogue between the teacher and the learner and even among learners is the core of learning environment (Cullingford

C. and Haq.N, 2009). It facilitates the task for the teacher to transfer knowledge immediately to the learners and helps in 'collaborative' and 'self directed learning' (Kats.Y, 2010: 83). It also gives the chance to shy learners to express their point of views and participate without anxiety and embarrassment (Judith. L. Johnson, 2003: 2). Because of anonymity and distance, Anxiety disappears and large opportunities for collaboration are offered to the learners (Lamy.N.M and Hampel.R**,** 2007: 77). Moreover, in distant learning, the number of all participants can be controlled and known in advance by the instructor, as a result their level is tested rapidly (Ortega.M and Bravo.J**,** 2002: 94).

2.5.4 Asynchronous/ synchronous Learning

Asynchronous learning refers to online courses taken on the learner's own schedule. Hence, Asynchronous learning benefits for those who are coping with work and studies or work and family or all of these at the same time. This is possible because the learners in Asynchronous courses are provided with materials, lectures, homeworks and tests that can be assessed at any time during a timeframe (at least once or twice a week connection).

Synchronous classes are just the opposite because they need learners and instructors to be online at the same time. Courses, discussions, and presentations take place at a specific hour, during which the learners must be connected in order to participate.

As any learning designs, Asynchronous/ synchronous Learning have benefits and drawbacks. Some students prefer synchronous courses because real-time class experience and involvement is very important to them. They feel satisfied with instant feedback when asking a question or making a comment. For learners who like synchronous courses, real-time communication permits for more productive discussions.

For others, asynchronous classes offer a better approach to learn. This means that more time is required for these learners to build their thoughts or to solve a problem before

giving an answer. They might also feel uncomfortable by faster typists and spontaneous thinkers in synchronous course.

Whatever the preferences are educational websites, virtual universities and colleges and many types of online teaching are offering courses of both formats for all types of learners.

2.5.4.1 Synchronous class elements

- ***Chat (text only):*** Synchronous chat rooms permit multiple users to log in and interact. This is a very good way to ask questions and to share experiences and insights. However, the instructor should organize the discussions in order to learners' participation at the same time. The session can be saved (archived), and reviewed later as a .txt or .rtf file.
- ***Video conferencing***: Video conferences, in theory, need all the participants to have their webcams running. The conference administrator posts then everyone's head shot in the screen. On the one hand a video conference can provide a live feed from a classroom or elsewhere. On the other hand, the conference can transmit a presentation of 'slides' and 'graphics', with questions and answers at the end. However, having everyone's web cam turned on and transmitting pictures or videos requires a very fast connection and a lot of bandwidth which is not usually the case.
- ***Web conferencing*:** a web conferencing differs from a video conferencing in the fact that does not rely on videos as a principal instructional content. Instead, it allows access to a wider range of media elements. Web conferences give a chance to participants to be more interactive, as they are asked to respond to questions (survey, sample, and questionnaire). Web conferences often include chat and they usually have a question and answer session at the end.

- ***Internet radio/podcasts***: When the bandwidth is not sufficient to broadcast live a video, instructors might stream the audio over the Internet. The audio file can be archived for students to access and review it later.

2.5.4.2 Asynchronous class elements

- ***Virtual Libraries/Repositories of Documents, Presentations, Graphics, Audio Files, and Video****:* the online course provides the learners with instructional materials. These could consist of articles (often in pdf format) to be downloaded from a virtual library. Other materials such as presentations, slides, and illustrative graphics could be downloaded. Moreover, the learner may have instructional materials that consist of video snippets, audio files, and even full-length movies such as documentaries.
- ***E-Mail****:* E-mail is a 'foundational' item in all online classes. It's a great tool for posting questions and receiving assessments, keeping in touch, and even receiving materials, updates and reminders. Some online courses use e-mails as the major way to interact with instructors and peers.
- ***Social Networking:*** the majority of online courses now add in social networking in order to increase teamwork and learners' interaction. Social networking programs that are often included incorporate blogs, wikis, Facebook, Orkut, Bebo, Twitter, Flickr, Youtube, Youstream, and more.
- ***Wikis and Collaborative Documents***: A "wiki" is a place where people are allowed to put a definition, texts, graphics or a series of explanations – for example the way that wikipedia works. Collaborative documents permit students to proofread each other's work and to collaborate.
- ***E-Portfolios***: there are online courses that use special software to facilitate to the students the creation of an online portfolio. They could then demonstrate their skills

and their knowledge in these E-Portfolios. They are usually allocated as a 'capstone project' in which students join texts, pictures, presentations, video, audio…etc

A. ***CD-ROM /DVD***: Some courses provide textbooks bundled with CDs or DVDs for media content and videos. The advantages of such tools are that the student can view the learning materials offline and save his time and money when internet connectivity is slow, limited, or expensive.

2.6 Language Learning Strategies

Researches into language strategies started in the 1960s, and developed in the 1970's and 1980s on account to scholars like (Wenden and Rubin 1975; Bialystok (1979); O'Malley et al. 1985; Oxford 1990; Stern 1992; Ellis 1994, etc.).

After the shift from behaviour theory to cognitive theory in the 1950s-1960s in education, learning became knowledge acquisition, and when cognitive theory has grown during the 1970s and 1980s, the main focus became learning as 'knowledge construction'. Weinstein (1988) argues that '…with the rise in interest in the role of organisational processes and information transformations that take place within the learner…, many of these earlier studies represented attempts to demonstrate the roles that learners could or did play in facilitating their own learning and recall' (Weinstein 1988. p 292)

Mayer (1992) points out that: '…as a result, the view of the learner changed from that of a recipient of knowledge to that of a constructor of knowledge, an autonomous learner with metacognitive skills for controlling his or her cognitive processes during learning' (Mayer 992. p 407)

In spite of what Skehan (1989) called 'explosion of activity' in language learning strategy research, language learning strategies' field has been characterised by 'no consensus' (O'Malley et al, 1985. p 22) and the concept of language learning strategies itself remains *fuzzy* (Ellis, 1994. 529). O'Malley *et al* (1985) argue that:

> There is no consensus on what constitutes a learning strategy in second language learning or how these differ from other types of learner activities. Learning, teaching and communication strategies are often interlaced in discussions of language learning and are often applied to the same behaviour. Further, even within the group of activities most often referred to as learning strategies; there is considerable confusion about definitions of specific strategies and about the hierarchic relationship among strategies. (O'Malley et al 1985. p 22)

2.6.1 Defining Language Learning Strategies

Several researchers and works have made efforts to bring a definition to 'learning strategy'. For instance, Wenden and Rubin (1987) define learning strategies as 'any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval, and use of information' (Wenden and Rubin, 1987, in Nedjah, 2010. p 79). The two scholars (1987: 7-8) distinguish six characterisitics of language strategies:

- Strategies refer to specific actions or techniques….they are not characteristics that describe a learner's general approach,
- Some of these actions will be observable…. And others will not be observable….,
- Strategies are problem oriented. Learners utilize them….'to facilitate the acquisition, storage, retrieval or use of information.'
- strategies will be used to refer to language learning behaviors that contribute directly to learning,
- Sometimes strategies may be consciously deployed. For certain learning problems, strategies can become automated and remain below conscious or potentially conscious,
- Strategies are behaviors that are amenable to change.

Other taxonomies of strategies use in language learning have later on emerged among which two outstanding works: the first refers to O'Malley and Chamot's (1990) division of strategies into:

1. Metacognitive (self-management, self-monitoring, functional planning, selfevaluation, delayed production…),
2. Cognitive (repetition, deduction, inference, translation…) and
3. Socio-affective(cooperation and question for clarification) strategies

The second refers to Oxford's (1990) Strategy Inventory for Language learning (SILL) embracing:

1. Direct strategies(memory, cognitive and compensation strategies) and
2. Indirectstrategies (meatcognition, affective and social strategies).

O'malley and Chamot (1990) say that learning strategies are 'the special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information' O'malley and Chamot (1990. p 1).

In foreign languages learning, the term 'strategy' designates the language learner use of specific actions or behaviours to improve the language performance (Oxford, 1990). The strategy 'is a moment-by-moment technique that the learner employs to solve problems caused by second language input or output.' (Brown 2000. p 122).

The term strategy seen by White (2008) 'Characterises the relationship between intention and action, it is based on a view of learners as responsible agents who are aware of their needs, preferences, goals and responsibilities' (White 2008. p 9)

2.6.2 Language Learning Strategies in E-learning Environment

Since classroom settings' learning environment changes from that of the virtual ones; foreign languages learners may adopt new learning strategies. Nedjah (2010) has summarised in her work some variables that could affect learners' language strategies in online environments:

2.6.2.1 Metacognition and Language Learning

Chan (2006) sees metacognition as 'the mechanism in one's cognition that enables the conscious reflection and regulation of one's cognitive process, including language comprehension and production, and language learning.'(Chan 2006. p 212)

In a study where he investigated the correlation between learners' metacognition and their interactions with a web-based CALL grammar exercise, he showed that some interactive aids offered imperative hold up for learners' strategy use: instantaneous feedback with hints, (re) analysing, (re) applying rules for self-correction and the correction function as a quick monitoring tool in combination with guessing to complete the task (Chan 2006. p 212).

Chapelle and Mizuro (1989) came across the idea that 'students in ICT based learning environments tend to use metacognitive strategies, especially self management, self monitoring and self evaluation strategies' (Chapelle and Mizuro 1989, qtd in Chan 2006) much more than classroom students do. These investigations divulgate the way the metacognitive strategy uses self-management strategies that permit learners to manage learning in such an independent learning environment.

By using the 'Internet, word processors, multimedia, hypermedia, drill and practice programs', the learner will be able to slot in 'individualized instruction' designed to meet his specific needs and take part in mutual projects that promote communication with peers: 'The role of technology as a resource for instruction of foreign language learners is

increasing as educators recognise its ability to create both independent and collaborative learning environments in which students can acquire and practice a new language (Butler-Pascoe, 1997). ICTs and the Internet are then powerful instruments for supporting this approach to language teaching.

2.6.2.2 Emotional and Social Variables in E-learning

Teaching or learning in electronic environments is founded on many learning theories that are significant in educational and social psychologies such as constructivism, humanism or even behaviourism. Jones and Issraff (2005) lay emphasis on the importance of emotional and social aspects when integrating technology in learning. Similarly, Hurd (2005) stresses the meaning of the affective variables on learners' achievement in independent learning environments such as the e-learning one: 'For the distance language learner, it is perhaps affective variables- beliefs, motivations and anxiety- that are of greater relevance, because their effect on learning maybe intensified in an independent context and because of their capacity for modification and change' (Hurd 2005. p 7)

Hauk & Hample (2004) carried out an investigation on 'online language learners' strategies', based on the taxonomy of 'affective and social strategies' developed by Oxford (1990). They also supported their work with examples from Ellis' (1994) conventional learning strategies examples that are applied to face to face classroom learners in the traditional mode of instruction.

The analysis of the strategy used with the learners' online experience revealed the existence of affective and social strategies examples mostly proposed by Oxford (1990). The most arresting emotional strategies (mood, emotion, attitude and values), were those used to fight back with 'language anxiety' which is accountable for deficiency in listening comprehension and reduced word production and oral participation.

Surprisingly, The findings of Hauk and Hample (2004) show a contradictory result comparing to many researches (example: Debski, 2003; Palloff and Prat, 2007) that claim that 'shy students tend to participate more in computer-mediated interactions and the voice of the teacher becomes less overwhelming' (Debski 2003. p 132), and 'the introverted student who may not feel comfortable speaking out or asking help in a face to face setting may flourish in the online setting' (Palloff and Prat 2007. p 233)

Hence, Hauk and Hample (2004) bring to a conclusion that the 'strategic changing actions' prove that affective and social variables in traditional face to face classrooms cannot be simply applied in an online environment but instead, call for a kind of modifications to fit with this new context: 'online environments require different ways of making contact and maintaining contact, finding out about common interests and developing an identity as a group' (Hauk and Hample 2004. p 293).

2.7 ICT Policy in Education in Algeria

Before reviewing the policies that came to integrate and develop the use of ICTs in the educational Algerian system, it is worth presenting an overview about the country's geographical, social and economical profile as well as its system of education.

2.7.1 Country's Profile

Bordering the Mediterranean Sea, Algeria is a doorway between Africa and Europe, sharing borders with other strategic countries like Morocco, Tunisia and Libia in the north and Mauritania, Mali, Western Sahara and Niger in the south (see figure 1 below).

Figure 2.2 Regional Map of Algeria

(http://www.cia.gov/cia/publications/factbook/geos/jo.html)

The Algerian population reached 38,813,722 (July 2014 est.) mainly young (0-14 years: 28.4% (male 5,641,148/female 5,378,207), 15-24 years: 17.4% (male 3,451,069/female 3,291,166), 25-54 years: 42.8% (male 8,398,770/female 8,209,634) (July 2014 estimations, Central Intelligence Agency, 2014). Hydrocarbons have always been the backbone of the Algerian economy, accounting for roughly 60% of budget revenues, 30% of GDP, and over 95% of export earnings (Central Intelligence Agency, 2014). The strong revenues from hydrocarbon exports have relatively brought to Algeria a macroeconomic stability but, the government's efforts have done little to reduce high youth unemployment rates or to address housing shortages (ibid).

2.7.2 The Educational System in Algeria

Though a post-primary education has become a step the majority of Algerian children from the age three to five pass by, education becomes compulsory only at the age of six in Primary schools. Primary education consists of five-year cycle of study that ends by 'l'examen de sixième' which leads to a higher level that is 'Middle School'. This later encompasses four-year cycle which is particularly specified by the introduction of the

English language right from the first year. In addition, education in Middle Schools remains generalized at this level and it is until the secondary school that it becomes specialized.

Secondary education is mandatory too, and it consists of a three-year cycle of study provided in secondary schools. There are four streams of specialties in secondary education: scientific stream, mathematics and technology, foreign languages and letters and philosophy. Students in secondary education study for three years and sit for the Baccalaureate examination.

The Baccalaureate gives access to higher education that prepares students for active life and industry (technicians and qualified workers). It is provided by universities, specialized institutes, national institutes of higher education, and teacher training institutes, which fall under the responsibility of the Ministry of Higher Education and Scientific Research, as well as by institutes run by other ministries. According to the law of August 2008 (n° 08-06 of executive decree n° 08-265) higher education system is organized according to three cycles: *Licence*, *Master* and *Doctorat* (LMD). The LMD reform has been rigorously applied since the years 2004-2005. The Master studies were launched on September 2007.

2.7.3 ICT Integration in Algeria

According to a survey ICT use in education in Africa (infodev, vol.2, 2007), the Algerian government has 'initiated collaboration with a number of international agencies to entrance the ICT status in the country', which paved the road for 'an ICT framework along with an implementation strategy'.

The application of ICT policies by the Algerian government became palpable right from the year 2002, when an 'independent regulatory authority' of posts and telecommunication was created and the World Bank also co-operated with the Algerian

Ministry of Post and IT to 'develop and implement projects for the creation of the enabling environment and improving access to ICT while making it affordable for all' (ibid)

Since then, internet access and mobile telephones technology has witnessed a rapid growth and emergence among the Algerian society.

The Algerian government has also encouraged ICTs introduction in education, and 'to facilitate the entry of Algeria into the information society, the following ICT initiatives have been designed (according to World Telecommunications Development Report. 2006. ITU):

• The project of the Ministry of Education to equip all schools with computers by 2005

• The distance education project

• The virtual university project

• The research network to be put in place by the Ministry of Higher Education and Scientific Research

• The health network developed and maintained by the National Health Development Agency (ANDS)

• The Djaweb Internet platform

In education, ICTs' formal introduction was 'in June 2002, with an allocation of three billion dinar (ibid: 5) and was emphasized by the educational system reform, as the Ministry of education started to equip middle and secondary schools with computer labs (15 computers: 10 for students and 5 for teachers) with internet connection. ICT was later on adopted as a part of the educational programme. ICT inclusion policy in the primary schools was, however, limited to 'the administrative process and teacher training' (ibid) and no ICT subject has been included in the educational programme.

The integration if ICTs becomes much more significant in the educational system in Algeria until university level. Indeed, either in old or in new university structures,

computer labs with internet access were provided for administrations, teachers and students. Some new faculties and universities have even benefited of the new technology of multimedia laboratory (example: in Ain Témouchent University Centre) and the majority of students and teachers are today using digital libraries to check their books. The table below 'lists the core factors and provides a summary of the current stage of development in Algeria in terms of enabling or constraining ICT applications in the education system' (infodev, vol.2, 2007. p 7).

Table 2.4 Factors Influencing ICT Adoption

Factors	Enabling Features	Constraining Features
Policy framework	A national ICT policy for educational development was set forth in 2002. The government has adopted ICT in all domains, particularly the education sector, as an integral part of the development process.	The policy for ICT exists, but to be successfully implemented it needs strong infrastructure and resources. Vast areas of Algeria are still lagging behind in basic needs.
Infrastructure and access	----------	Algeria faces problems of poor infrastructure and connectivity issues.

Availability of appropriate learning materials	The development and provision of tools and learning material are at the heart of the policy of ICT for educational development.	There are not enough appropriate learning materials.
Rural/urban divisions	A major concern of the national ICT policy is provision of access and connectivity to all areas of the country.	Few schools and even fewer universities and higher institutions are available in rural communities.
Gender equity	A number of development projects, especially non-formal education programmes, are directed towards females being part of the underserved population.	In general, the level of illiteracy is higher among females and this is reflected in their access to ICT as well as training and skills.

Human resource development		The multilingual base in Algeria poses a major hurdle to unifying or implementing programmes at a large scale. Professional development programmes and teacher training is still limited to basic ICT training with no connection or relevance to integration into the educational process. Professional development and ICT programmes lack connection with content and curriculum development in a manner that allows for proper implementation of reform. The disconnection among the different development programmes impedes proper impact and progress.

Sustainability	The political arena has stabilized somewhat in Algeria, thus setting the grounds for proper implementation of the development programmes and allowing for a more sustained reform effort. The political stability leading into economic reform allows for attracting investment and support locally and internationally.	Several projects and initiatives have been underway, but due to the obstacles posed by the political unrest, many of them have been discontinued.

Nonetheless, the ICTs' diffusion among the university community depends on the policy of each university 'to accelerate the educational process and offer better learning opportunities in virtual universities and with distance and open learning' (infodev, vol.2, 2007:5).

Despite this wide emergence of internet in Algeria, and the spread of multimedia devices in the last decade, university teachers and students claim that there is still a great pace to do to bridge the Algerian university with the current information society. According to Makhoukh (2012) 'technology is seldom made accessible for teachers and students despite the new educational reforms which emphasized the integration of technology… [and which are] exemplified in the LMD system … [that] aimed to keep the Algerian university abreast of new trends in higher education'.

Guemide and Benchaiba (2012) a university teachers in Jijel also argue in their article on e-learning and ICTs that 'the distance educational system remains confined to its traditional scope (printed lessons sent to participants by regular e-mails) … this proves that the ambition to achieve a practical step in the field of e-learning remains unreachable' (Guemide and Benchaiba, 2012).

2.7.4 Language Instruction and ICT

The contribution of Information and communication technology (ICT) in the development of language teaching has lead many teachers to include this tool in their teaching methods. However, and unlike the traditional television and the tape recorder, ICT use necessitate teachers' specific training to master successfully this tool to its 'fullest potential'.

2.7.4.1 ICT and teachers' training

In Algeria the ICT training programme for teachers was limited to basic information, and 100% of secondary and middle school teachers are offered 30-60 hours training (Hamdy 2007). Yet, this training seems not to be efficient for a good quality of knowledge delivery. That major training components in the secondary and middle schools according to a survey held by Hamdy (2007) are concerned with:

- Basic ICT training: basic operations, Windows-based software, e-mail, and Internet
- Intermediate training: classroom applications, Internet for teaching, and e-mail as a medium for communication and collaboration
- Advanced training: development and creation of educational of interactive Web sites, production of multimedia presentations, producing creating work.

In the emerging countries, a research released by the accounting firm KPMG estimates conservatively that 'the real rate of investments in the education and research functions of universities yields 15% or more for university training and 20%-40% for public university

research' (UNESCO World Conference 2009. p 20). This result, according to the conference speakers should give those countries confidence to increase investments of introducing ICT in higher education. And because the University is narrowly concerned with the socio-economical field, 'it is imperative that higher education institutions afford their graduates the literacy and competencies that their work environments are likely to demand of them' (ibid).

Most of the teachers in the Algerian Universities have taken the use of computer in teaching, generally used together with the data show, or in their lessons' preparation. But above all, the need for using the computer in particular and ICTs in general comes from 'their power to manipulate words and symbols- which is at the heart of the academic endeavour' (ibid: 19).

Yet, the point is not to acquire some computer competencies but what is more useful is to be up to date with computer technology changes,

> To be ready for a transformation of 'traditional competencies' and for the acquisition and development of those competencies that result from radical changes in roles and practice. These changes are being simultaneously driven by the evolution of society and by the previously unimagined opportunities offered by technology. Societal demands for improved accessibility, inclusion and learner-centred pedagogy are being facilitated by innovative techniques and tools for teachers and trainers (European Institute for E-learning 2012. p 5).

Some of the principal trends proposed by the European Institute for E-learning[1] (2012) to transform and develop technological competencies are the followings:

[1] European Institute for E-learning (2012), The E-Learning Competency Framework for Teachers and Trainers. Produced by eTTNet TWG 2 based on ElfEL standards.

- An increased emphasis on learner-centred and personalised learning – from 'push' to 'pull'
- An accompanying responsibility on the part of learners for their own personal development and lifelong learning
- Flexibility on the part of trainers– being ready to respond to evolving situations rather than arrive with a ready-made solution.
- A change of role from 'expert' to facilitator, guide, coach – and, where appropriate, manager of the learning environment
- A recognition that the learner may play the role of teacher: content comes from the interaction of the participants as well as the educators
- Collegiality and collaboration: the onus is on teachers and trainers as well as learners to create communities of practice among peers and with those who have very different skills and backgrounds
- Responsibility of teachers/trainers for knowledge management and contribution to organisational learning
- Knowledge and learning seen as organic and connected to work and to other activities
- An explicit responsibility on the part of teachers/trainers to promote equal opportunities, inclusiveness and the valuing of diversity
- An Increasing demand to encourage, recognize and validate non formal learning
- Access to learning resources and expertise throughout the world: a global 'marketplace'.

Teachers' training can take different forms depending on the teaching purposes and needs. Language teachers may follow intensive courses or attend conferences to be always aware of the new technological tools in the field of language teaching. Online training is

also playing an important role in providing regular updates, and tends to work best when there is large ‘peer group’ and ‘tutor support’.

However, this could only be possible if there is a real commitment first of all by the teacher him/herself, and then, by national and higher education policy makers as ICT adoption requires a great financial investment in infrastructures and training. This issue will be fully tackled in chapter five.

2.7.4.2 Students as digital natives

Though ESP courses may include students of different ages and generations, who can be university students or professionals from the socio-economical field, they represent in the great majority a population which is already familiar with the electronic tool. This ICTs literacy may give to the learners a kind of autonomy especially in revision and in doing extra researches.

However, without the guidance of a teacher, many students especially those with limited language ability can feel lost or overwhelmed by the great amount of materials available and websites designed for ESP or EFL.

Being exposed to the technology in everyday life at work or for entertainment does not mean being able to use this same technology in learning. The students may ask their teachers which language teaching websites to choose ‘technology itself does not bring about autonomy but with appropriate support, guidance, training, and scaffolding, it can help learners to gradually become autonomous’ (Luzon-Marco, 2002; Arno-Macia, 2012, qtd in Kern Nargiz 2013. p 102). Moreover, the learners need some training, because being autonomous means knowing how to search the web, where to get information, and how to use this information appropriately with the targeted learning skill ‘ Students need training in how to approach online texts with hyperlinks, for example. They need training in

developing critical literacy skills (Vie, 2008 qtd in Arnó-Macià 2012. p 99) and evaluating websites, and help in appreciating different genres of writing' (ibid).

2.8 Conclusion

This chapter aimed at describing the use of information and communication technologies (ICTs) use in teaching foreign languages in general and in teaching ESP in particular. The researcher attempted to gather a recent literature, and works of prominent universities recognition were chosen. Hence, a general overview of the main topics that related education and foreign language teaching/learning to the new technologies was presented according to the subject matters that serve the present study. Then, and based on the present study's aim, an overview of ICT use in education worldwide and in Algeria has been given, with a focus on its crucial use in language teaching in general and in ESP in particular.

Chapter Three

CHAPTER THREE

The Study Design and Procedure

3.1 Introduction

This chapter describes the methodology and the procedures used in the present work. The study includes in its first part a survey that aims at studying some Algerian universities students' and teachers' attitudes towards and their use of ICTs in ESP learning/teaching. The research is mainly based on quantitative study.

The second part of the study is an experimentation that aims at testing the use of an ICT material (Skype) with a restricted number of ESP learners. Hence, descriptions of the participants' profile, of the research instrument, and of the course designed for this simulation are provided.

3.2 The Research Design

Addressing questions and formulating hypotheses about the use of ICTs in ESP teaching/ learning in our universities require two kinds of investigations: first, identifying university ESP students' and teachers' attitudes towards the integration of new ICT materials in their process of learning/teaching. Hence, an action research based on a quantitative study was conducted with the target population.

Second, identifying the advantages and the drawbacks of ICTs integration in ESP teaching/ learning seems to be crucial to respond to the research questions. Therefore, one ICT material was chosen to be tested in an ESP context.

3.3 The Action Research

As mentioned above, the research questions raised in the present study required a field investigation to identify our ESP students' and teachers' perception about the use of ICTs in teaching/learning and to determine the nature of that use, as Kessler (2014) states:

> Action-Research (AR) is a research methodology, which leads first to the understanding of the causes of a certain situation and then to producing change in it. Its focus is in solving a problem that has been identified by one individual, or a group of practitioners such as a school, an institution, or an organization. AR has developed as a way to broaden people's knowledge and understanding of their own practice and of issues that affect the productivity and/or the quality of the work they do. The findings of AR are used as additional research data or as a way of developing some kind of action—intervention—in the environment being studied. (Kessler. p 225)

Accordingly, the AR is conducted in this study to understand and identify the kind of ICT users our teachers and learners are. For that intention, two questionnaires were designed to measure their attitudes towards and the use of ICTs in ESP learning/teaching. The target population is concerned with ESP teachers and students from some universities in Algeria, particularly the University Centre of Ain Témouchent, the University of Sidi Bel Abbés, the University of Saida, University of Setif, the University of Laghouat and the University of Tlemcen.

3.4 Attitudes and Behaviours

The debate about attitude-behaviour link raged among psychologists during the 1970s and the 1980s between those who argue that attitude and behavior had little relationship to each other (Wicker's, 1969, Simonson's, 1977) and between those who claimed their strong correlation (Fishbein and Ajzen, 1975, Eagly and Chaiken, 1993). One of the significant studies that lead psychologists to reexamine the relationship between attitudes and behaviours is that of Fishbein's and Ajzen's (1975) who report that attitudes either positive or negative are predictors of behaviours either positive or negative, and their efforts in this area produced a model called *reasoned action,* which is considered by psychologists as a good reference to explain observed connections between attitudes and behaviours. According to this model of reasoned action, the most important cause of an individual's action is *intention,* which was explained to be the individual's motivation to perform effort to carry out a behaviour. The theory of reasoned action is summarised by Simonson and Maushak (2001. p 993) as follows:

- Behaviour is determined by the intention to engage in the behaviour.
- Intention is determined by attitude toward the behaviour and the subjective norm to which the attitude is related.
- Attitude is determined by behavioural beliefs and evaluation of the likely outcomes of a behaviour.
- Subjective norms are determined by the normative beliefs of the person and the motivation to comply with the relevant actions.

Ajzen and Fishbein (1980) also point out that attitudes consist of three main elements that are necessary to attitude measurement: 'a complete description of attitude requires that all three components be assessed by obtaining measures of all the three response classes' (Ajzen and Fishbein 1980. p 20). These elements according to Ajzen and Fishbein

are: affect, cognition, and behaviour. The affective is related to the person's feelings and emotions toward an object or a person. The cognitive element is related to the individual's knowledge about a person or an object. The behavioural is concerned with the individual's open behaviour vis-à-vis a person or an object.

In line with Fishbein's and Ajzen's (1975) work, Eagly and Chaiken (1993) also propose a comprehensive model that illustrates that:

> Behaviour is likely to be partially determined by attitudes, but that the relation between attitudes and behaviours is best understood by placing attitudes in the context of other factors that also help to determine behaviours, such as habits, intentions, and perceived utilitarian outcomes' (Eagly and Chaiken 1993, qtd in Simonson and Maushak 2001. p 993)

So for instance, if a teacher or a student has a positive attitude toward ICTs, he/she is likely to become a user of those ICTs in his/her process of teaching or learning. Hence, a positive attitude led to a positive behaviour.

Woodrow (1992) affirms that a teacher's positive attitude toward the use of technology in teaching is a 'necessary condition for the effective use of computers in the classroom' (Woodrow, 1992: 200). In this regard, questionnaires in the present study were administered to both university teachers and students to measure their attitudes toward the use of the new technologies in learning/teaching, because researches are increasingly emphasizing the crucial role that those two actors play in the development or not of information and communication technologies in education.

This research has allowed two types of data: written data consisting of the respondents' questionnaires answers, and spoken data (video and audio) recorded during

online Skype courses. In both types, data collection procedure takes into account some ethical considerations such as anonymity.

3.5 Teachers' and Students' Questionnaires

The questionnaires aim at identifying ESP teachers' and students' perception about the use of ICTs in the process of learning/teaching; is it a positive or a negative aspect. It also tries to identify broadly their attitudes towards ICTs use in teaching/learning in contrast to traditional classroom methods.

Both teachers' and students' questionnaires enclose a mixture of questions' type that permit a certain kind of balance in measuring the respondents' behaviours and attitudes, as Ian Brace (2008) states:

> A questionnaire that measures behaviours is likely to consist mostly of closed questions whereas one exploring attitudes is likely to have a higher proportion of open questions. From the point of view of maintaining the involvement of the respondent, the interview should consist of a mixture of both type of question. (Brace. p 47)

In addition, a variety of research methods was used in asking questions and for data collection such as, open questions, closed questions as Wilson and McLean (1994) argue 'In general closed questions (dichotomous, multiple choice, constant sum, and rating scales) are quick to complete and straightforward to code (e.g. for computer analysis), and do not discriminate unduly on the basis of how articulate respondents are' (Wilson and McLean 1994, qtd in Tavakoli 2013. p 65). But also, check lists, rating scales, etc. as Oppenhiem (1992) argues:

> We should think of the questionnaire as an important instrument of research, a tool for data collection…the questionnaire has a job to do: its function is measurement… questionnaire is

> sometimes used to distinguish a set of questions, including perhaps some open-ended ones, it may also contain check lists, attitude scales, projective techniques, rating scales and variety of other research methods. (Oppenhiem 1992)

The content of the questions in both questionnaires undertakes common topics but differs in the context: teaching for the teachers and learning context for the students.

3.6 The Research Procedure

A pilot survey was firstly conducted with a smaller sample of respondents to test the questionnaires' efficiency. Particular issues related to the questions organisation, the appropriateness of questions and the correctness of the indicated directions were hence corrected and a large-scale survey was executed.

Subsequently, a printed copies of the questionnaires were administered to the respondents the researcher could have a face to face contact with (respondents from the University of Sidi Bel Abbés and from the University Centre of Ain Témouchent), however, for remote respondents like those from the University of Saida, the University of Setif and the University of Laghouat, only electronic copies of the questionnaires were sent to them. Sample examples of the final questionnaires are found in appendices (A) and (B).

3.6.1 General Description of the Questionnaires

The primary purpose of the questionnaire is to find answers to the addressed research questions:

1. What are the attitudes towards ICT among Algerian ESP teachers and ESP students in regard to:
    - Computer competence?
    - The use of ICTs in ESP teaching/learning?

2. What is the Algerian ESP teachers' and ESP students' Cultural perceptions of online distance teaching/learning
3. What ICT tools that can best serve ESP students in online distance learning in Algeria? And is it possible to provide them in all Algerian universities?

Though the answer to the last question needed more investigation, i.e. conducting a real experiment, some questions about the use of Skype in online learning in ESP were included in the last part of the questionnaire mainly in order to find participants for that experiment. The questionnaire is adapted from the work of Abu Samak (2006) from Florida State University, who explored attitudes towards information and communication technology (ICT) among teachers of English as a foreign language (EFL) in Jordan. The present study differs from that of Tawfi Abu Samak in two points: first, the study does not consider the teachers of English only, but it also includes ESP students. Second, the present study is not concerned with EFL teaching/learning which is a rather broad context and is restricted to ESP context. Nevertheless, just like Tawfik Abu Samak's (2006) questionnaire, the study aims at determining 'the extent of relationship between the attitudes towards ICT' by Algerian teachers/students 'and a number of related variables, including the teachers' perceptions of the attributes of ICT, culture-related perceptions of ICT, competence in using ICT, and level of access to ICT' (Tawfik Abu Samak's 2006. p 56), as well as identifying the concerned population's attitude toward the use of an open source platform like Skype for an online ESP learning.

3.6.2 The Study Population

The target population of the present study is mainly and above all concerned with the teaching/learning of ESP in a university context.

One part of the questioned population is a group of English teachers teaching in other departments than that of English. What matters most, is that those teachers are practicing

ESP teaching or have experienced that kind of teaching once in their career. Therefore, their academic degrees and their research area are not taken into account. A total number of 40 samples were distributed to ESP teachers from different universities (University of Sidi Bel Abbés, University Centre of Ain Témouchent, University of Tlemcen, University of Saida, University of Setif and University of Laghouat). However, only 20 were returned, that is 50% of the total number. The other part of the research population is university students of different disciplines, mainly those in LMD advanced levels (3rd year Licence, Master 1 and 2) who take English as a compulsory module within the methodology unit or the methodology and general culture unit. A total number of 150 questionnaires were distributed to ESP students from the same universities previously mentioned, however, only 80 were returned, 17 of which were erroneous. Hence, the researcher could have a total number of 63 proper questionnaires. The following tables show the questionnaires' distribution and collection per universities and disciplines:

Table 3.1. Questionnaires' Distribution and Collection

UNIVERSITIES	**STUDENTS' NUMBER**	**DISCIPLINES**
University of Sidi Bel Abbés	16	International trade – Marketing
University Centre of Ain Témouchent	12	Management – Finance
University of Saida	18	Law – English studies
University of Setif	17	Optics – medicine– architecture - law - psychology - pharmacy.
TOTAL	**63**	
UNIVERSIIES	**ENGLISH TEACHERS' NUMBER**	**DISCIPLINES**
University of Sidi Bel Abbés	05	Finance – Marketing – Dental surgery
University Centre of Ain Témouchent	04	Management – Finance – ST (science and technology)
University of Saida	01	Law – English studies
University of Setif	07	Optics – medicine– architecture - law - psychology - pharmacy.
University of Oran	01	Commerce
University of laghouat	01	Commerce
University of Tlemcen	01	English studies
TOTAL	**20**	

3.6.3 The Questionnaires Data Collection

To facilitate the processing of the respondent's answers, the researcher opted for Sphinx Plus 2, a survey software package made for capturing and analyzing data. The advantage of the software is its notion of following the four steps of a survey, i.e. the achievement of the questionnaire, the quantitative processing, the qualitative data analysis and the drafting of the survey's report. In addition, Sphinx offers advanced statistical methods for multidimensional analysis, factorial analysis, classification, typology, analysis of variables, etc.

3.6.4 The Respondents' Characteristics

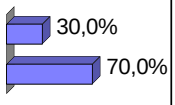
The last parts of both teachers' and students' questionnaires include a series of personal information by which the profile of the study population could be identified:

3.6.4.1 Teachers' characteristics

Teachers' responses to personal information show the following results:

your gender

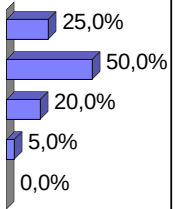
	Nb	% cit.
male	**6**	**30,0%**
female	**14**	**70,0%**
Total	**20**	**100,0%**



As illustrated in the graph, the researcher could gather the corpus from a majority mainly composed of female teachers from different universities.

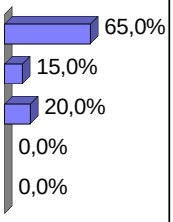
your age

	Nb	% cit.
20-29	**5**	**25,0%**
30-39	**10**	**50,0%**
40-49	**4**	**20,0%**
50-59	**1**	**5,0%**
60 and over	**0**	**0,0%**
Total	**20**	**100,0%**



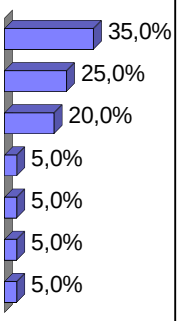
The graph shows that the average age of the questioned teachers varies between 30 and 39 years old, yet a considerable percentage of young teachers appears (25%), while percentage of teachers from an elder age is minor (5%) for a margin age between 50 and 59, and (0%) for the age of 60.

how long have you been teaching ESP		
	Nb	% cit.
1-5	**13**	**65,0%**
6-10	**3**	**15,0%**
11-15	**4**	**20,0%**
16-20	**0**	**0,0%**
over 20 years	**0**	**0,0%**
Total	**20**	**100,0%**



The great majority of teachers' responses to this question were situated between 1 and 5 years of experience. Yet, it appears that 20% of teachers have taught ESP for 11 to 15 years.

University		
	Nb	% cit.
Setif	**7**	**35,0%**
SBA	**5**	**25,0%**
CUAT	**4**	**20,0%**
Oran	**1**	**5,0%**
saida	**1**	**5,0%**
Tlemcen	**1**	**5,0%**
University of Laghouat	**1**	**5,0%**
Total	**20**	**100,0%**



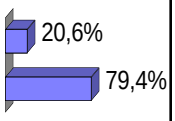
The researcher tried to gather responses from ESP teachers of Algerian universities in different regions. One particular group of teachers from university of Setif has shown great collaboration as 100% of the questioned teachers sent back responses. Teachers from University Centre of Ain Temouchent as well showed collaboration as out of five teachers, four have sent back answers. However, that same collaboration was not found in all universities, as in the researchers' same university SBA (Sidi Bél Abbes) out of 10 teachers, only five teachers have sent back their responses. Similarly, isolated responses (one only) could be received from universities of Saida, Oran and Laghouat and Tlemcen.

3.6.4.2 Students' characteristics

Students' responses to personal information show the results below:

your gender

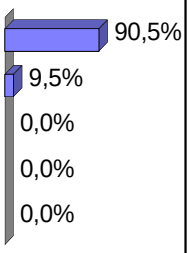
	Nb	% cit.
male	13	20,6%
female	50	79,4%
Total	**63**	**100,0%**



Here again, the calculus of the students' gender average shows that the research's major population is female as out of the 63 respondents , 50 were female.

your age

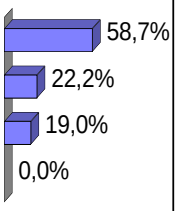
	Nb	% cit.
20 - 29	57	90,5%
30 - 39	6	9,5%
40 - 49	0	0,0%
50 - 59	0	0,0%
60 and over	0	0,0%
Total	**63**	**100,0%**



The students respondents are apparently young as the age of the vast majority varies around 20 and 29.

Studies level

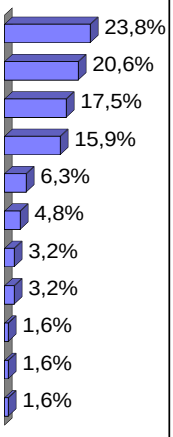
	Nb	% cit.
3 rd year Licence	37	58,7%
Master 1	14	22,2%
Master 2	12	19,0%
Doctorat	0	0,0%
Total	**63**	**100,0%**



The research's target population of learners being advanced, percentages vary around third year Licence (58,7%), Master 1 (22,2%) and Master 2 (19%).

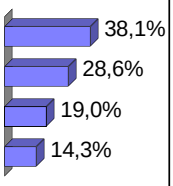
Your subject matter (specialty)

	Nb	% cit.
English for Academic purposes	15	23,8%
marketing	13	20,6%
Finance	11	17,5%
international trade	10	15,9%
law	4	6,3%
pharmacy	3	4,8%
biology	2	3,2%
medecine	2	3,2%
architecture	1	1,6%
Optics	1	1,6%
psychology	1	1,6%
Total	**63**	**100,0%**



The researcher tried to investigate as much disciplines as possible in different universities. The graph shows responses of students from 11 specialties where English is taught as ESP.

your University		
	Nb	% cit.
sidi bel abbés	**24**	**38,1%**
saida	**18**	**28,6%**
CUAT	**12**	**19,0%**
SETIF	**9**	**14,3%**
Total	**63**	**100,0%**



Most of the questioned students were from the researchers' university of study and living town (Sidi bel abbes) as they were easy to touch.

3.7 Experimenting Online Teaching Through Skype

The objective of the experiment is to respond to the last raised research question: What ICT tool that can best serve ESP students in online distance learning in Algeria? and is it possible to provide it in all Algerian universities?

Here again, an experimental study was needed to explore this innovative method of teaching, and examine its impact on the participants learning by detecting its advantages and drawbacks.

In order not to ask too broad questions and not to have too many objectives for one study, researchers (such as the following) propose to place boundaries on the case to insure the study remains rational. Boundaries can be: (a) by time and place (Creswell 2003); (b) by time and activity (Stake); and (c) by definition and context (Miles and Huberman, 1994). Hence, the present study is bounded by a specific context, which is giving a virtual course via Skype, then it is limited in time according to a planned time table (two months) and finally activities for one specific skill (oral communication) are proposed. Considering this literature, the participants were chosen and the case study course was designed.

3.7.1 Definition of Skype and its Functioning

Skype is a software application based on a technology called voice-over-internet-protocol (VOIP). This technology enables users to make voice, video, or conference calls over the Internet as well as communicate via group video chat or instant messaging. It can be used on phones, computers or even TVs that have Skype. Skype is free to download and use, but if users want to do call or send text messages to phones they need to pay.

First released in August 2003, Skype was created by the Dane, Janus Friis and the Swede, Niklas Zennström in cooperation with Estonians Ahti Heinla, Priit Kasesalu, and Jaan Tallinn, who developed the backend which was also used in music-sharing application Kazaa. Skype was later acquired by Microsoft in May 2011 for $8.5 billion. Microsoft's Skype division headquarters are in Luxembourg, but most of the development team and 44% of the overall employees of the division are still situated in Tallinn and Tartu, Estonia (wikipedia.org). The table below illustrates the main features offered by Skype:

Table 3.2 Skype's Functionalities

CALLING
Skype to Skype calls Call anyone else on Skype for free, anywhere in the world.
Calls to mobiles and landlines Call mobiles and landlines worldwide at low rates.
Group calls Get a group of people together on one call – you can add up to 25 people.
Skype Number Your friends call a number and you pick up on Skype wherever you are in the world.
Forward calls Not on Skype or can't pick up? Simply get your Skype calls forwarded to any phone.
Caller ID Don't be an unknown number… Let people know it's you calling them.

Skype To Go

Call international numbers from any phone at low calling rates.

Skype Click to Call

Switch between browsing the internet and making calls with just one click.

VIDEO

One-to-one video calls

Get closer with a face to face catch up.

Group video calls

Get a group of friends together at the same time on a video call.

Messaging

Video messaging

Send a message you can see, hear and feel.

Instant messaging

Talk with your fingers - gossip away, plan a trip, work on a project – all in an instant.

Send texts (SMS)

Text message friends from the comfort of your keyboard.

Voice messages

Too busy to talk? Allow Skype to take a message for you.

GroupMe

Share messages, photos and your location on your mobile.

SHARING

Send files

Send files, photos and videos of any size over Skype. Simply drop or add the file into your Skype chat.

Screen sharing

Share your computer screen with the person you're talking to.

Group screen sharing

Get everyone on the same page on a group video call.

Send contacts

Share a contact, number and Skype Name easily.

Other features

Skype to Facebook

Instant message your Facebook friends and check out your news feed directly from Skype.

Skype WiFi

Get online at over two million public hotspots worldwide.

Skype Manager

One tool to create accounts, allocate credit and assign features.

Skype Connect

Make Skype calls through your existing SIP-enabled PBX..

Skype for Outlook.com

Go from chat to video in just one click, right from your inbox.

Skype buttons

Add them to your website or blog and with one click anyone can call or IM you.

3.7.2 Skype Instead of Other E-learning Platforms

Before dealing with this question, it is worth mentioning a brief explanation of what an e-leaning platform is.

In English there are different appellations to designate a platform for distance education: Virtual Learning Environment (VLE), Learning Management System (LMS), Courseware Management Systems (CMS) or Integrated Electronic Learning Environment (IELE).

According to Piotrowski (2010) there is no common defining term to e-learning but varied 'synonymous' which remain 'vague' because according to him, e-learning is 'still a relatively young field of research'. However, Piotrowski (2010) to answer the question *what is an E-learning platform?* in his article for a journal called *Learning Management System Technologies and Software Solutions for Online Teaching: Tools and Application*s, he gives the following definition:

> The functionality of e-learning platforms typically includes access to learning content and tests, communication and collaboration tools for students, and course management and assessment facilities for instructors. E-learning platforms may also include administrative functionality or interfaces to administrative systems (often called "campus management systems") for managing student admissions and enrollment (sometimes termed "student life cycle management"), for resource planning, accounting, etc. Numerous e-learning platforms are available today. Some of today's most popular platforms are the commercial systems Blackboard, Clix, and Desire2Learn, and the open-source platforms ILIAS, Moodle, OLAT, and Sakai. (Piotrowski 2010. p 21)

For Ecoutin and Even (2001), an e-learning platform is a software which assists the control of a distance learning. This kind of software gathers the necessary tools for the

principal users of a device which has for ends the distant consultation of pedagogical contents, individualization of training and remote coaching:

> Une plate-forme est un logiciel qui assiste la conduite des enseignements à distance. Ce type de logiciel regroupe les outils nécessaires aux principaux utilisateurs d'un dispositif qui a pour finalités la consultation à distance de contenus pédagogiques, l'individualisation de l'apprentissage et le télétutorat[1]. (Ecoutin and Even 2001. p 2, in Sarré 2010. p189). A platform is a software which assists the conduct of distance teaching. This type of software groups tools necessary for the main users of a device which has for purposes the remote consultation of educational contents, the individualization of the learning and the télétutorat. (Ecoutin and Even 2001. P 2, in Sarré on 2010. P189)

This definition according to Sarré (2010) identifies three principal actors in this process: the teacher, the learner and the administrator, and drawing on Paquette's (2002) works, Sarré (2010) also summarises the role of each actor that an e-learning platform can permit him/her to play (see the table in the next page).

[1] A platform is a software which assists the conduct of distance teaching. This type of software groups tools necessary for the main users of a device which has for purposes the remote consultation of educational contents, the individualization of the learning and the télétutorat. (Ecoutin and Even 2001. P 2, in Sarré on 2010. P189)

Table 3.3 The actors and their roles in an e-learning platform of a remote training[1] (Sarré, 2010 : 191)

Acteur	Rôles à jouer
L'administrateur	Installation du système, maintenance du système, gestion des accès, interopérabilité du système avec d'autres systèmes en place
L'enseignant concepteur	Création de parcours d'apprentissage (conception d'activités d'apprentissage, sélection et mise à disposition de ressources multimédias), mise en place d'outils de suivi
L'enseignant-tuteur	Suivi pédagogique (médiations, rétroactions, remédiations)
L'apprenant (mode individuel)	Consultation en ligne de contenus, téléchargement de contenus, accomplissement des activités proposées, autoévaluation, dépôt de travaux
L'apprenant (mode groupe)	Télécollaboration (partage de fichiers, communication avec ses pairs, création de thèmes de discussions, de wikis, etc.)

The above classification of positions and distribution of roles has been recognized within a context of an educational institution (university Orléans, department of languages, faculty of science) and could be the case of any other similar context (schools, universities, colleges, etc.). However, and regarding the specific context of the present research which depends on no educational institution, the actors engaged in the experiment and their roles seem to be similar to the ones proposed by Sarré (2010) but are not identical. In other words, instead of four actors, only two actors are recognized in this case study, namely the teacher and the learner.

1

Actor	Roles to play
The administrator	Installation of the system, the maintenance of the system, the management of the accesses, the interoperability of the system with other systems ready(in position)
The teacher designer	Creation of courses of apprenticeship (conception of activities of apprenticeship, selection and put at the disposal of multimedia resources), organised by tools of follow-up
The tutor teacher	Educational follow-up (mediations, feedback, remediation)
The learners (individual mode)	Online consultation of contents, download of contents, fulfillment of proposed activities, self-assessment, deposit of works
The learner (group mode)	telecollaboration (file sharing, communication with his(her) peers, creation of themes of discussions, wikis, etc.)

Moreover, and because the experimental research in human sciences and didactics of foreign languages is complex and tend to be affected by external factors as Grosbois (2007) states:

> Des facteurs extérieurs peuvent interférer lors de l'expérimentation ; un nombre important de variables sont en interaction dans une simple situation d'enseignement-apprentissage qui servirait d'expérimentation ; certaines variables ne sont pas observables directement (mais souvent déduites à partir de traces spécifiques) ; il est impossible de reproduire à l'identique une situation d'enseignement-apprentissage donnée, l'objectif de reproductibilité de l'expérimentation étant ainsi mis à mal[1]. (Grosbois 2007. pp 70-71; qtd in Sarré, 2010. p 157)

The researcher has opted for a context which is not ruled by an institution and thus reducing the number of actors. Actors such as the administrator who could complicate the progress of the experiment and affect its results are then excluded:

> Ainsi, on choisira de ne considérer qu'un nombre limité de variables et de recueillir des données aussi explicites que possible. On constituera des groups quasi équivalents pour faire subir à l'un d'eux l'action expérimentale et comparer ensuite les résultats obtenus avec le maximum d'objectivité[2]. (Grosbois 2007. p 7, qtd in Sarré, 2010. p 1571)

[1] External factors can interfere during the experiment; a significant number of variables are in interaction in a simple teaching-learning situation which would serve as experiment; certain variables are not observable directly (but often deducted from specific tracks); it is impossible to reproduce as before a given situation of teaching- learning, the objective of reproducibility of the experiment being so damaged. (Grosbois 2007. pp 70-71, qtd in Sarré 2010. p 157)

[2] So, we shall choose to consider only a limited number of variables and to collect data as explicit as possible. We shall constitute almost equivalent groups to make undergo to one of them the experimental action and

Starting from the ending idea above, restriction of variables is one of the main reasons for choosing Skype. Either in an institutional context or not, Skype simplifies the control of distance learning. And though Skype is not considered as a pedagogical platform, yet, the researcher chose it as a tool to transmit the course because of the following main reasons: (1) the simple functioning of the platform allows the participants to get familiar with its use rapidly, (2) the use of Skype instead of a pedagogical platform increases the learners' motivation as they feel like the course is happening as any ordinary online conversation. (3) ESP students are generally busy professionals concerned with their work or theirs studies who seek to learn or improve their English through the most practical and efficient means that saves time and efforts. However, asking them to integrate a specific e-learning platform (example, Moodle, Claroline, Granesha…see appendix C for more platforms) will need some training to initiate them to that platform first before starting the learning. Moreover, and according to A'Herran (2000), an open source platform is the concern of four different actors who determine its efficacy: the platform administrator, the designer-tutor- teacher and the learner. In addition, Sarré (2010) argues that the choice of a platform in a distance learning depends on the type of the target training:

> …il serait vain d'essayer de mettre en place une formation spécifique à partir d'une plate-forme qui nous serait imposée, les choix didactiques devant déterminer le choix de l'outil technologique. Par conséquent, nous pensons que l'adoption d'une plateforme particulière à l'échelle d'un établissement n'est pas une solution viable, et qu'il est préférable de choisir une plate-forme adaptée à la formation que l'on souhaite proposer[1]. (Sarré, p. 202)

compare then the obtained results with the maximum of objectivity. (Grosbois 2007. p 7, qtd in Sarré 2010. p 1571)

[1] It would be vain to try to set up a specific training from a platform which would be imposed on us, the didactic choices must determine the choice of the technological tool. Consequently, we think that the

Therefore, easiness and simplicity comparing to e-learning platforms is one of the major reasons (in addition to fees-free) why the researcher has chosen Skype as a tool for distance learning.

3.7.3 The Choice of the Participants

Respondents who approved to participate in this study and their number were chosen according to the targeted profile that facilitates the flow of the study. Thus, the participants' profile required to fulfill the following conditions:

3.7.3.1 The participants' number

The online course in the present work is only an experiment to test its feasibility with our students. The number of the respondents is then restricted, and attempts to follow the concepts of 'saturation' as Charmaz (2006) argues 'a small study with 'modest claims' might achieve saturation quicker than a study that is aiming to describe a process that spans disciplines' (Charmaz, 2006: 114, qtd in Mason, 2010). Mason also justifies the resort to the principle of saturation 'when the collection of new data does not shed any further light on the issue under investigation' (Mason, 2010).

adoption of a particular platform on the scale of an establishment is not a viable solution, and that it's better to choose a platform adapted to the training which we wish to propose. (adapted translation from www.reverso.net)

Ritchie et al. (2003) list seven factors that might affect the potential size of a sample:

> The heterogeneity of the population; the number of selection criteria; the extent to which 'nesting' of criteria is needed; groups of special interest that require intensive study; multiple samples within one study; types of data collection methods use; and the budget and resources available (Ritchie et al 2003. p 84).

Morse (2000) adds, 'the scope of the study, the nature of the topic, the quality of the data, the study design and the use of showed data' determine the number and nature of participants. (Morse 2000. p 4)

Jette, Grover and Keck (2003) propose that 'expertise in the chosen topic can reduce the number of participants needed in a study—while Lee, Woo and Mackenzie (2002) suggest that studies that use more than one method require fewer participants' (qtd in Mason 2010. p 02)

In addition, and concerning the choice of the participants number, MORSE (2000) says that 'the number of participants required in a study is one area in which it is clear that too many factors are involved and conditions of each study vary too greatly to produce tight recommendation's' (MORSE 2000. p 5).

Drawing on the quotes above and since 'qualitative samples are drawn to reflect the purpose and aims of the study' (Mason 2010. p 12), the factors that go in line with the objectives of the present study were identified:

- **The population is homogenous:** the participants are university students of an English level that varies around upper intermediate to advance.
- **The participants criteria:** adults, committed to the research experience, not beginner learners, have access to internet, are familiar with Skype.

- **A group of one special interest that requires intensive study**: all the participants are EAP learners with one common need (speaking English fluently).
- **The nature of the topic:** teaching learners via Skype requires an organization of schedules according to the availability of each side (either the participants or the researcher).

Therefore, and after a careful consideration of all the factors that can affect the achievement of the study, the total number of the participants that was chosen is four.

3.7.3.2 The participants' criteria:

- **Adults:** The researcher seeks to experiment the use of an ICT tool with ESP learners who want to speak fluent English for occupational or future professional purposes. Hence, the participants are all adults ranging in age from 22 to 23.
- **Enthusiastic:** the participants need to be keen to learn English and have clear idea about their objectives and needs for learning that foreign language.
- **Committed to the research experiment:** right from the beginning, the researcher exposes the experiment's procedure, goals and limits to the participants, and explains to them that being a sample in a research study requires a certain seriousness and devotion to the experiment, such as doing activities in the fixed delays, respecting the agreed schedule of the online courses, and accepting to be recorded (audio or video records) for presentation purposes.
- **Upper intermediate to Advance:** the purpose of the English course in this study is the same for all the participants (oral communication)**,** the researcher attempts to set out a kind of balance between their English levels, in other words, English beginners profiles are excluded from the selection. Therefore, the participants' English level needs to be around upper intermediate to advance. The stability of the

English level helps the researcher in the selection of activities in the way that common instructions can be given to the participants.

- **Having access to internet:** one of the crucial conditions required from a participant in the present study is having a good internet connection. And because the greatest part of the experiment is online video conversations via Skype, a participant must have at least one Giga octet.
- **Familiar with Skype:** the participants need to have basic knowledge of the technology they use, namely Skype. Therefore, in addition to the basics, the researcher introduces the new functionalities that the participants need to know to attend the virtual course.

3.7.4 The Pedagogical Support

Drawing on Dudley Evans' and St John's (1998) parameters of making decisions about course design already mentioned in chapter one (p. 22), and also according to the data collection, the researcher has opted for the parameters below to design a course for the present case study:

- The course is intensive

The online course in this study is only an experiment which is limited by a short period of time (two months) and which focuses on specific skills in oral communication. Hence, the course is considered to be intensive as Dudley Evans and St John (1998) argue 'ESP courses, both EOP and EAP, are frequently intensive' with an exclusive concentration on the skills and the language that will enhance their performance in their activities that require English.

- Non-assessed course

The researcher in this work is not concerned with testing the participants' level of English but rather testing the efficiency of the material being used (Skype) to improve that level.

- The course is in parallel with experience

By 'parallel with experience' Dudley Evans and St John suggest that 'the English course runs concurrently with the study or professional activity' (Dudley Evans and St John 1998. p 151), and as the respondents are all active learners in their fields, this parameter fits well with their profile.

- Immediate needs

Though courses in this study are only meant for the purpose of the experiment (focus on oral presentation skills), this will serve immediate needs as they happen in parallel with the participants' experience.ie, their English studies (where presenting orally in English occurs frequently).

- The teacher is both provider of input and facilitator:

It is true that in this case study it is the teacher who provides the participants with the course materials and activities, yet, the participants being a 'sophisticated learners who have clear and specific set of purposes' (Dudley Evans and St John 1998. p 150) with knowledge of their subject content and a pre-knowledge about making oral presentations in L1 and L2, the teacher has also to play the role of a facilitator or consultant.

- The course has a Narrowed focus

First, the course is only an experiment limited by a short timetable, then the participants' needs are concentrated on one skill only which is that of oral communication and according to Dudley Evans and St John (1998) 'a narrow focus is appropriate where the needs are limited and the learners are convinced of the importance of concentrating just on those needs' (Dudley Evans and St John 1998. p 150).

- Common-core material is used

By this Dudley Evans and St John mean that is a material that 'uses carrier content which is either of a general academic nature or of a general professional nature' (Dudley Evans and St John 1998. p 152). In this case study, it is a material that uses rather a general academic nature since the respondents have the same carrier content and share one common purpose which is making a presentation in English.

- The course is taken by homogenous participants:

As mentioned previously, the participants in this case study are from one same subject matter (English studies) and have almost the same level of English (intermediate to advanced). In addition, the course in this experiment does not happen in a group (individually), so problems of motivation[1] or of lack of homogeneity in language levels are unlikely to occur.

- It is a flexible negotiated course design

Though the course is mainly based on a textbook laid down in advance, the participants can suggest topics in line with their carrier contents. As Numan (1988) states 'a flexible and negotiated course design allows room for change based on feedback from learners' (Numan 1988, qtd in Dudley Evans and St John 1998. p 153), the participants can hence contribute to the adaptation and the modification of the activities proposed in the utilised textbook.

3.7.5 Specifications

It is worth mentioning at the level of this chapter the specifications concerning the target population, the context of the experiment and the provided materials used to achieve its success.

[1] According to Dudley Evans and St John (1998. p 153), in ESP teaching it is better to form homogeneous groups to facilitate the teacher's choice about the course content and the course material that will satisfy the learners' needs and thus motivate them to follow the course.

3.7.5.1 The learners

In this particular experimentation, there are four students aged 22 to 23 (most of them have responded to the research questionnaire and have accepted to be a part of the experience), all enrolled in English language studies and wish to acquire some English communication proficiency, namely oral presentation as they are regularly exposed during their studies to this kind of communicative situations; but also they need to improve their English speaking for future communicative professional events.

The participants' level of English was fixed earlier around intermediate to advance for the purpose of the research, and to ensure they are all at these levels, the participants were asked to pass DIALANG[1] test at the beginning of the experiment for the purpose of identifying the learner's pre-acquired knowledge (Qotb 2009. p 189. Qtd in Sarré 2010. p 18).

3.7.5.2 The context

The course is a component of online synchronous activities, and of offline asynchronous tasks delivered through Skype. The researcher, as the teacher conducts the course from home using personal lap-top computer. The participants were using their computers or mobile phones from home or from elsewhere. Data is collected before, during, and after the course with each participant.

3.7.5.3 Materials and the technology used

All of the audio, video, written texts and activities are authentic materials from textbooks designed for oral communication or from reliable English learning web sites (example, BBC Learning English):

- Presentations in English by Erica J. WILLIAMS, edited by MACMILLAN publishers on 2012. The choice of the researcher fell on this textbook because it is

[1] DIALANG is a test (available online), which is a free language diagnosis system developed by the European Commission as a CERCL application which allows the evaluation of learners in fourteenth languages (Sarré 2010. p 18) and used by many European Universities (Lancaster, Angers, Toulouse 1…etc).

particularly designed for non native speakers of English (printed and bound in Philippine), it is designed for learners of an intermediate to advanced level of English who need to improve their English in oral communication mainly, in oral presentations, and finally because numerous copies of the textbook are available in the participants' university's library s and thus one book could be provided for each participant. The book also includes a DVD with presentations given by four real presenters who are not native speakers of English but could help the participants in the preparation of their oral presentation.

- Moreover, and as mentioned previously, the case study is a computer-based course supported by the use of internet, hence the researcher can invite the participant to use any of hundreds of e-tools available on the web to support understanding (example, BBC learning English, YouTube, e-dictionaries, etc.).

In addition to the teaching materials, two software for audio and video recording called CALLNOTE[1] and SUPERTINTIN[2] were installed on the researchers' personal computer to be used simultaneously with Skype. These software can record audio and video conversations and save them in a file on the computer immediately as soon as it has finished recording. The recorded conversations can enable the researcher make a comparison between the participants' first conversations and the last ones to check their progress.

3.7.5.4 The course content and its relevance for the learners

The learners, having already a good level of English (intermediate to upper intermediate), it is important for the teacher to design activities that help them improve, first, their communicative skills in English, then and mostly, to learn how to use those

[1] CALLNOTE is a FREE Windows and Mac app from Kanda Software that allows you to easily record Skype audio and video conversations and save the recordings in your computers or other accounts (kandasoft.com).

[2] SuperTintin is an easy way to record online conversations. It is a Skype Recorder for online interviews, conferences, lessons, podcasts, or family VoIP calls (supertintin.com).

skills in common communicative events such as an oral presentation, meetings and conversations (in an international meeting for example). In addition, and because learners' motivation is crucial in ESP courses, the content is relevant to their specialty, and to 'enjoy the experience and to get positive outcomes', each learner can chose the topic of that content.

3.8 Course and Technology Evaluation

As mentioned previously (on page 153) , courses in this experiment are non-assessed since the rational of the study is not to test the participants' English level, but to test the efficiency of Skype use in the improvement of the participants' oral communication.

To achieve that, three major instruments that converge in 'triangulating fashion' are used before during and after the experiment. First, a structured interview is held with each participant before starting the experiment for a qualitative data collection. See figure 1 below

Pre-course interview

- Do you speak English mainly in classroom, externally or both?
- In classroom, do you sometimes feel hesitant/ embarrassed to speak? Why?
- Do you use English to chat online?

  If yes, is it with NS speakers or NNS?

  If yes, does online chatting help you improve your English oral communication?

Figure 3.1 Pre-course Interview for Online Experiment

Subsequently, the students are provided with a simplified observation grid to evaluate the use of Skype technically. The grid encompasses two columns: one for the advantages and the other for the disadvantages of using Skype as a tool for online learning. The

researcher uses the same grid simultaneously with the students who are asked to use the grid in each conversation all along the experiment even if their observations are not regular. See the table below:

Table 3.4 Technical Evaluation Grid

The Use of Skype in online learning	
Advantages	**Disadvantages**

Furthermore, data for the course evaluation is also collected from the participants' conversations recorded all along the experiment. These will allow the identification of the participants' linguistic mistakes, mainly in grammar, syntax and pronunciation (only mistakes that affect meaning).

In order to achieve that, the researcher referred to works where linguistic spoken productions were measured in terms of complexity, accuracy and fluency (Wolfe-Quintero et al. 1998, Ellis 2003, Skehan 2010). CAF (complexity, accuracy and fluency) components were respectively defined as follows: complexity is seen as 'the extent to which the language produced in performing a task is elaborate and varied' (Ellis 2003. p 340), accuracy is on the other hand characterized as 'the ability to produce an error-free speech' (Housen and Kuiken 2009. p 461) while fluency is defined as 'the extent to which the language produced in performing a task manifests pausing, hesitation or reformulation' (Ellis 2003. p 342).

Although spoken language in oral communication cannot be measured without being transcribed in a written language (Blanche-Benveniste 2000 : 24. In Sarré 2010), which facilitates its analysis, it is impossible and unnecessary to note everything (Traverso 2007:22. Sarré 2010) during a transcription which should stick to the research objective

(Sarré 2010: 244). However, Measurement of the participants' oral communication competency is used in this part of the research only to identify the evolution of that oral competency with respect to the period of time the online course takes place. In other words, this measurement is used to answer one research question only, and is not the main research. Thus, risk of including too many studies in one research is to be avoided.

According to Sarré (2010) CAF characteristics are useful in evaluating oral production in a continued speech (for example, oral presentation), but cannot be specific to oral production in interaction (Sarré, 2010: 227). Sarré (2010) argues that evaluating competence in oral interaction needs to consider a pragmatic criterion that he calls *prise en compte de l'autre*, '*qui se manifeste à travers la gestion des tours de parole, la coopération (coconstruction du discours) et la demande de clarifcations/d'aide'*[1] (Sarré 2010. p 227, according to the European Council of 2001. pp 70-71). The table below summarises the criteria and the concrete elements that Sarré used in the study of his participants' oral interaction competency (pre-test):

Table 3.5 The Evaluation of Oral Interaction[2] (Sarré, 2010, p. 228)

What to measure?	How to measure?
Fluency	Number of silences, length of the breaks, the number of words per minute, counts of repetitions, false starts, of reformulations and replacements.
Accuracy	Number of proposals containing no grammatical, lexical and phonological error.
Complexity	Number of subordinate proposals used
Considering the other	Co-construction of the speech, the negotiations of the meaning, the management of speaking slots, the management of the interaction.

[1] Or, considering the other [is a term that] manifests itself through the management of speaking turns, cooperation (speech construction) and the request for clarification/help (personal translation).
[2] Translated to English version

Drawing on Sarré's (2010) table of oral interaction evaluation, the researcher adapted another table where only some elements were used and through which each participant's mistakes are regularly checked (at the end of each conversation) and classified according to the previously mentioned linguistic features. See the table below

Table 3.6 Sample Example of the Participants' Mistakes' Table

Participant 1								
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
Fluency	**Comments**							
Number of repetitions								
Number of wrong start								
Number of hesitation and reformulations								
Accuracy	**Comments**							
Grammar								
Syntax								
Phonetics								
Errors free clause								
Complexity	**Comments**							
Number of subordinate clauses used								
Considering the other	**Comments**							
Number of asking for help or clarification								

This identification of mistakes enables the researcher to direct the participants' attention toward their linguistic weaknesses and discuss about possible ways to correct them, for example, by making a reminder (video lessons available on BBC learning English web site) of grammatical or of phonological rules at the beginning of each course.

Therefore, evaluation of the online course is also made through the comparison of the participants' very first conversations with the last ones to measure the degree of their progress.

Finally, a post-experiment questionnaire (based on Dudley Evans and St John (1998) post course questionnaire) is delivered to the students at the end of the experiment to identify their perceptions and attitudes toward the experience in regard to the use of Skype in improving their oral interaction. See appendix (D)

3.9 Planning and course Organisation

This study proposed in an online context endeavors to be achieved in a period of eight weeks, once a week for each participant during one hour (or more, according to the tackled topics and tasks). The tasks are mostly organised according to the units available in WILLIAMS' Presentations in English book (previously mentioned): each unit is divided into four parts all related to one topic (oral presentation) and organised as follows: (1) introducing the technical skill to be learnt. (2) related grammar and vocabulary (3) Structuring (4) Full presentation. In addition, courses and activities available on BBC English learning web site are used according to each course topic and linguistic features. The 'screen sharing' function available on Skype also allows the share of any course related document on the teacher's computer or on the web.

Each course topic and activities are set in advance during the week so that the participants get prepared. So for example if they have a written work to do, they have to

send it in advance to the researcher's Skype (asynchronously) then it is discussed online (synchronously) over Skype in one-hour lesson.

As mentioned before, the online course conversations are recorded using CALLNOTE or SUPERTINTIN software to measure the participant progress. Hence, at the end of each conversation, which is simultaneously stored on the PC's directory, the researcher visualises (if it is a video) or listens (if it is audio) to its different parts, next she gives it a name according to each participant, and then she transfers the conversation to the file created for that participant. Later on, sub files are also created in each participant file to organise the records by weeks. That is by the end of the experiment; each participant's file will include eight sub files, one for each week which recapitulates two months of experimentation.

Sarré's (2010) table in a chapter he called '*le dispositif*' and which represent the six phases of the learning scenario he has worked on has inspired the researcher to summarise the overall plan of the online course experiment. See the table below:

Table 3.7 The Six Phases of a Learning Scenario (Sarré, 2010)

Phases	Objectifs	Tâches	Modalités
1. Background & Objectives	Présenter le contexte, la mission à accomplir et les tâches intermédiaires	Lecture des consignes	Individuel
2. Getting Started	Entrer dans la thématique du scénario : se familiariser avec le lexique de base lié à la thématique	Cyber enquête, discussion débat, remue-méninges, etc.	Collaboratif
3. Reading Time	Comprendre un input écrit et repérer/sélectionner les éléments nécessaires à la réalisation de la macro-tâche	Tâches de compréhension de l'écrit (repérage du lexique et questions de compréhension) + micro-tâches (sur des faits de langue)	Individuel
4. Listening Time	Comprendre un input oral et repérer/sélectionner les éléments nécessaires à la réalisation de la macro-tâche	Tâches de compréhension de l'oral (repérage du lexique et questions de compréhension)	Individuel

5. Sharing Time	Échanger à partir des éléments repérés dans l'input écrit et oral en préparation à la phase finale	Tâche d'écart d'opinion ou de résolution de problème	Collaboratif
6. Writing Time	Faire aboutir la mission par un produit langagier écrit	Macro-tâche de production écrite	Individuel

Nevertheless, the present study differs from Sarré's (2010) in the context of learning, i.e. his experiment worked on groups of students inside classrooms, whereas this study focuses on individual online courses happening outside classrooms. Thus, the adaptation of Sarré's table of the six phases of a learning scenario shown above required a number of modifications in line with the context of the present study. Moreover, unlike Sarré's work which includes writing skills in his participants' tasks, this study does emphasise only on one single skill, that is to say, speaking. See the table below:

Table 3.8 The Five Phases of the Online Course

Phases	Objectives	Tasks	Materials
1.Background & Objectives	To represent the context, the mission to be accomplished and intermediate tasks	Reading instructions	The book for oral presentation
2.Getting Started	Get into the topic : to familiarize with the Basic lexicon related to the theme	brainstorming, discussion, debate, etc. (this can also include a discussion about the participants' previous course mistakes)	CAF evaluation tables (of each participant)
3.Listening Time	Understand an oral input and find a way/select elements necessary for the realization of the macro-task	Oral comprehension tasks (location of the lexicon and questions of oral comprehension)	CD-ROM of the book
4.Sharing Time	Exchange from elements spotted in the written and oral input in preparation for the final phase	Task of consolidation or of resolution of problems	Instructive web sites: mainly http://www.bbc.co.uk/learningenglish/
5.Speaking Time	Make the mission succeed by a spoken linguistic product (oral presentation)	Macro-tasks of an oral product (oral presentation)	Up to the participant

Comparing to Sarré's table, modifications mainly concerned his '*modalités'* column which is replaced here by a more significant element in the study, that is the 'material' column that gathers all the materials used during the online course. In addition, the sixth phase in Sarré's table (writing time) was omitted for the simple reason that the final product required from this study's participant is speaking (making an oral presentation) and not writing.

3.10 Usability and Constraints of the Technology

One of the main reasons behind choosing Skype as a tool to be tested in teaching ESP was its accessibility for anyone, and because most of online tools and services either ask for a fee per user per month, or for some educational platforms like Moodle that need the user to be aware of and take time to understand their complex functioning. The participants in this course are relatively adept at using the technology because they use Skype as a means of communication and chatting with people in everyday life.

However, and because Skype is not an educational platform, it lacks of the e-learning applications' tools like management tools, evaluation and assessment tools, monitoring tools, etc.

Moreover, and as any technology, risks of technical problems that can affect the course of the experiment are unavoidable. Examples of such issues can be summarised as follows:

- Sudden Power cuts: though all PCs are provided with a battery (which performance is constrained by a limited period of time) that can substitute home electric power, yet other devices such as the modem which is responsible for the emission of internet flow will probably stop working.
- Internet connection failure or connection cut: internet connection is an uncontrolled system. This external issue is unfortunately unpredictable, and internet connection

may suddenly break down for few minutes, or for hours for unknown reasons, or its delivery may be momentarily suspended by 'Algerie Telecom' for maintenance.

- Technical issues caused by a dysfunction in the researcher's or in one of the participants' computer may occur.
- One of Skype's interesting options is the screen sharing. This option enables the users share their screens, so that one can show exactly what h/she sees to the other. However, problems of audio sharing may occur, when the interlocutors can simultaneously watch a video but are unable to hear the sound.

3.11 Conclusion

This chapter has brought a detailed explanation of the methodology followed for the achievement of this research. The first part of it outlines the methodology for the study that aims at responding to the first two research questions related to the attitudes of the Algerian students and teachers towards ICT in an ESP context. Thus, data collection methods, the target population along with the means for obtaining the samples were explained. Also, the procedure as well as the statistical material to be used in analysing the data was described.

The second part of the chapter, which aims at responding the last research question was related to the experimentation that studies the usability of Skype in teaching ESP within a virtual context. Full explanation of the overall plan was then provided. The later included details about the participants' profile, the materials and technologies used and a clarification about the methodology used for Skype's evaluation.

Finally, a brief summary on the constraints and risks that surround the experiment was exposed.

Chapter Four

CHAPTER FOUR

Results, Analysis and Discussions

4.1 Introduction

This chapter will provide detailed results and analysis of the collected data for the present research. The findings are provided according to the research questions and are then divided into two sections. The first section is concerned with describing and analysing data that has been collected to bring answers to the first and the second research questions:

1. What are the Algerian teachers' and students' attitudes in regard to computer competency and to the use of ICTs in ESP teaching/ learning?
2. What is the Algerian ESP teachers' and ESP students' Cultural perceptions of online distance teaching/learning?

Hence, this section represents descriptive statistics of the respondents' attitudes toward ICT, opinions about their own computer competencies and their frequency of computer and internet use and finally statistics of their cultural relevance of online learning method.

The second section of this chapter is related to the third research question:

3) What ICT tools that can best serve ESP students in online distance learning in Algeria? And is it possible to provide it in all Algerian universities?

This section also aims at confirming or disconfirming its hypothesis in which Skype was suggested to be a practical open source platform for an online learning. Therefore, results and data analysis in this section are based on an experimental study which main purpose is to test the efficiency of Skype in an online learning. The study is divided into three sections as well: the pre-experiment interview which aims at identifying the participants' profile, the experiment where English online courses occur for a period of eight weeks, and

the pre-experiment questionnaire which aims at identifying the participants' attitudes toward the experiment.

Finally, discussions of the overall results and findings are to be discussed at the end of each section in this chapter.

4.2 Answers to Research Question number one (the students' and the teachers' attitudes toward computer competency and the use of ICTs in ESP teaching/learning)

Before exposing the results, it is worth repeating here what has been mentioned in chapter three (page 135) to explain how were the questionnaires designed to answer the research question above. Both questionnaires are divided into four sections:

1) Performance at ICTs: includes two parts with nine cognitive items related to computer and six behavioural ones related to internet use.

2) Attitudes toward the use of ICTs in ESP: contains three parts including opinion statements where the respondents answered according to five points Likert-type scale in which they ranged from *strongly disagree,* to *disagree,* to *neutral,* to *agree,* to *strongly agree,* according to Abu Samak's (2006):

> The responses were reduced to a mean score that demonstrates how positive or negative each respondent's attitude towards ICT was. Since respondents rated their attitudes on each item from strongly disagree (1) to strongly agree (5), the range of possible mean scores was between 1 and 5, with higher scores indicating positive attitudes. (Albirini 2004. p 62, qtd in Tawfik Abu Samak's 2006. pp 62-63)

In this study, this same summative method was used to compare between students' and teachers' scores for this section.

3) The participants' attitudes toward online teaching/learning

4) The participants' personal information (which was presented in chapter three (see pages, 8-9-10-11) in order to give a general view about their profile. For this reason, this part of the questionnaires is not to be repeated in this chapter.

4.2.1 Performances at ICTs

Part one: the tables below are the student's and the teachers' results respectively.

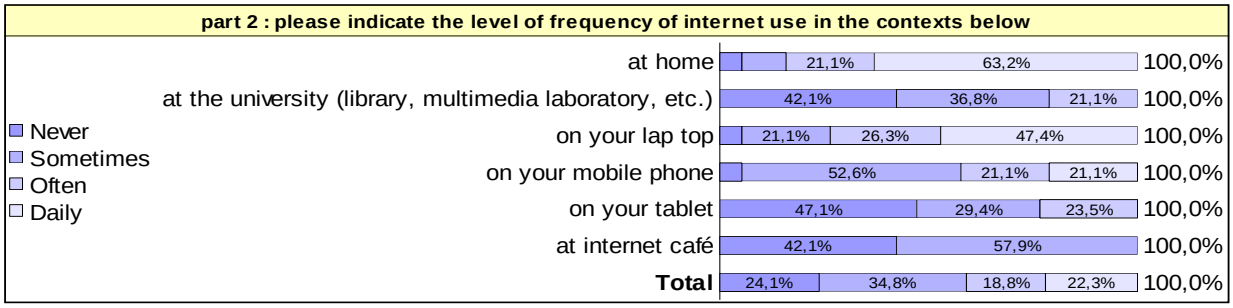
indicate your current competence level					
	No competence	little competence	moderate competence	much competence	**Total**
set up softw are on a computer	**9**	**22**	**17**	**10**	**58**
manipulate a computer keyboard	**3**	**6**	**21**	**31**	**61**
create files and folders and organize th	**2**	**7**	**12**	**40**	**61**
manage a w ord processing programme (Word	**2**	**6**	**26**	**26**	**60**
manage a presentation programme (Pow ePoi	**8**	**12**	**14**	**27**	**61**
Operate a spreadsheet programme (Excel)	**10**	**24**	**12**	**11**	**57**
Use internet for communication (e-mails,	**1**	**5**	**15**	**39**	**60**
Use internet in research studies (brow s	**1**	**10**	**12**	**37**	**60**
Use of an antivirus programme	**7**	**12**	**22**	**21**	**62**
Total	**43**	**104**	**151**	**242**	**540**

indicate yoiur current competene level					
	no competence	little competence	moderate competence	much competence	**Total**
comptce 1	**1**	**4**	**10**	**5**	**20**
comptce 2	**1**	**0**	**9**	**10**	**20**
comptce 3	**1**	**2**	**6**	**11**	**20**
comptce 4	**1**	**2**	**8**	**9**	**20**
comptce 5	**3**	**2**	**11**	**4**	**20**
comptce 6	**7**	**7**	**4**	**2**	**20**
comptce 7	**1**	**2**	**8**	**9**	**20**
comptce 8	**1**	**2**	**11**	**6**	**20**
comptce 9	**3**	**5**	**7**	**5**	**20**
Total	**19**	**26**	**74**	**61**	**180**

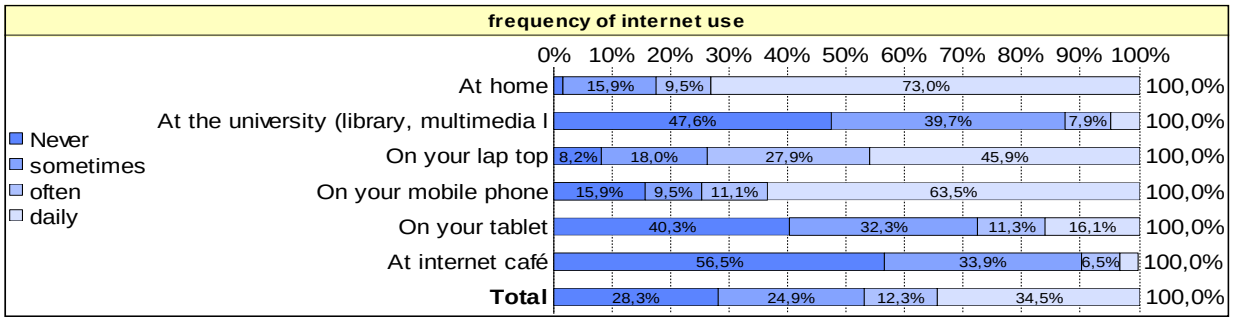
Comparison of both tables shows controversy in two variables: moderate competence and much competence, as higher score (242) came in the students results for much competence against (151) for moderate competence, whereas teachers' highest score was attributed to moderate competence (74), against (61) for much competence. These results indicate students positive attitude about their performance at ICT use comparing to teachers.

Part two: the question in this part measures the participants' behaviour in regard to internet use in different contexts:

Teachers' results



Students' results



Comparison between participants results show a wide use of internet at home by both teachers and students (63,2% and 73% respectively) as well as the frequency of its use on their lap tops (47,4% and 45,9% respectively). Nevertheless, the respondents differ in their behaviours toward the use of internet on mobile phones, as the students are at 63,5% daily mobile users, only 21,1 % of teachers said they daily use their mobiles to connect and 52,6% said sometimes. This dissimilarity between students and teachers may be due to differences of needs and purposes of each ones for using internet on mobile phones, and allusion can be made here to the use of social networks and free applications by both sides (which could be investigated in further research).

4.2.2 Attitudes toward the Use of ICTs in ESP

Part one: the respondents' attitudes toward ICTs use in ESP teaching/learning:

Students' results

identify your attitude						
	Strongly disagree	disagree	neutral	agree	strongly agree	**Total**
ICT will improve ESP learning	**0**	**0**	**8**	**38**	**16**	**62**
Teaching with ICT presents real advantages over traditional one	**2**	**8**	**12**	**25**	**15**	**62**
ICT cannot develop students' ESP learning	**24**	**26**	**7**	**4**	**1**	**62**
Any language skill would be easier and more interesting with ICT use in classrooms	**1**	**6**	**14**	**25**	**16**	**62**
ICT is not useful for learning ESP	**20**	**24**	**8**	**6**	**2**	**60**
It would be difficult for me to use ICT in learning ESP	**20**	**27**	**6**	**8**	**2**	**63**
I have no difficulty to understand a computer based course	**4**	**6**	**8**	**30**	**13**	**61**
ICT wastes time and complicates the task to students in the classroom	**19**	**22**	**12**	**7**	**1**	**61**
ICT should be used by all our teachers	**3**	**7**	**18**	**20**	**14**	**62**
Students should use ICT in their self-help studies	**2**	**5**	**4**	**36**	**16**	**63**
Total	**95**	**131**	**97**	**199**	**96**	**618**

Teachers' results

identify your attitudes						
	strongly disagree	disagree	neutral	agree	strongly agree	**Total**
ICT will improve ESP teaching	**1**	**1**	**3**	**8**	**7**	**20**
Teaching with ICTs puts forward real advantages over traditional one	**0**	**1**	**5**	**11**	**3**	**20**
ICTs cannot develop students' learning	**5**	**13**	**2**	**0**	**0**	**20**
ESP would be easier an more interesting for students with ICT use	**1**	**1**	**3**	**11**	**4**	**20**
ICT is not useful for teaching ESP	**7**	**10**	**0**	**2**	**0**	**19**
it would be difficult for me to teach ESP using ICTs	**0**	**13**	**5**	**2**	**0**	**20**
I have no difficulty to design a computer based course	**1**	**8**	**2**	**8**	**1**	**20**
ICT wastes time and complicates the task to me in the classroom	**1**	**10**	**5**	**4**	**0**	**20**
ICT should be used by all teachers	**0**	**3**	**7**	**6**	**4**	**20**
teachers should use ICT in their courses preparation and students assessment/evaluation	**0**	**3**	**3**	**11**	**3**	**20**
Total	**16**	**63**	**35**	**63**	**22**	**199**

The horizontal analysis of the scores in both students' and teachers' results show that higher scores were attributed to 'agree' and 'strongly agree' for items representing positive opinions toward ICT use, and higher scores as well to 'disagree' and 'strongly disagree' for items against the use of ICTs. These results indicate then, a positive attitude toward ICTs use in ESP teaching/learning from both students and teachers.

Part two: indication of general perception about e-tools in classroom

Students' results

indicate your general perception						
	Strongly disagree	disagree	neutral	Agree	Strongly Agree	**Total**
ESP Lessons are interesting if teachers use e-Tools	**4**	**6**	**6**	**31**	**14**	**61**
Technology makes me feel I learn through latest learning techniques	**2**	**6**	**10**	**27**	**17**	**62**
I prefer to learn from teachers who use e-Tools	**3**	**5**	**14**	**26**	**14**	**62**
Using computer saves me from embarrassment if I make mistakes	**3**	**6**	**10**	**29**	**14**	**62**
I am more motivated to learn ESP with ICTs	**4**	**5**	**12**	**26**	**16**	**63**
Total	**16**	**28**	**52**	**139**	**75**	**310**

Teachers' results

indicate your general perception						
	strongly disagree	disagree	neutral	agree	strongly agree	**Total**
lessons will be interesting if teachers use e-tools	**0**	**1**	**2**	**13**	**3**	**19**
technology makes me feel I teach through the latest teaching techniques	**0**	**0**	**7**	**9**	**4**	**20**
students prefer to learn from teachers who use e-tools	**0**	**2**	**7**	**10**	**1**	**20**
I am more motivated to teach with ICTs	**0**	**1**	**6**	**12**	**1**	**20**
Total	**0**	**4**	**22**	**44**	**9**	**79**

One may notice that only positive opinions about e-tools in classrooms were proposed in this part of the questionnaires. Analysis of both tables above indicates the respondents' positive attitude toward the use of e-tools inside classrooms, as higher scores were given to 'agree' and 'strongly agree' for students and 'agree' for teachers. Nevertheless, some teachers have also shown a reserve in regard to some questions as they responded by 'neutral' 22 times.

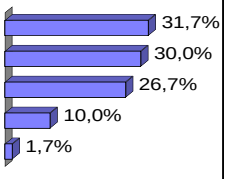
Sub-question 1:

Students' results

How do you estimate the use of ICTs in your university (classrooms, labs, libraries, etc)?

Moyenne = **2,20** 'below average'

	Nb	% cit.
bad	**19**	**31,7%**
below average	**18**	**30,0%**
average	**16**	**26,7%**
good	**6**	**10,0%**
outstanding	**1**	**1,7%**
Total	**60**	**100,0%**



Students' estimation of ICTs use in their universities is balanced between 'bad' (31,7%) and 'average' (30%). only one student (from Saida University) has

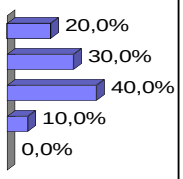
answered 'outstanding'.

Teachers' results

How do you estimate the use of ICTs in your University (classrooms, labs, libraries, etc.)?

Moyenne = **2,40** 'below average'

	Nb	% cit.
bad	**4**	**20,0%**
below average	**6**	**30,0%**
average	**8**	**40,0%**
good	**2**	**10,0%**
outstanding	**0**	**0,0%**
Total	**20**	**100,0%**



40% of the questioned teachers estimate that the use of ICTs in their universities as 'average', 'bad' and 'below average' got close percentages (20% and 30% respectively), only 10% see it as good, whereas 0% find it as 'outstanding).

Analysis of both tables shows a closer average (2,40% and 2,20%) around the answer 'below average' in both teachers' and students' results. Furthermore, one can notice that low scores were attributed to 'good' and 'outstanding' answers, which indicates a negative attitude toward the availability of ICTs in both students' and teachers universities.

Sub-question 2:

Comparing to modern countries, and in addition to the existing materials in your university, what other ICT tools you think students and teachers should use inside and outside classrooms?				
Teachers' suggestions	**number of occurrence[1]**	**Students' suggestions**	**number of occurrence[2]**	**Common responses**
All that available technology that can help in learning	4	Electronic display	1	- Computers/ lap tops - Internet - Data show - Multimedia labs - Wi-Fi - Smart phone - E-library - Printer
Computers/ lap tops	4	Computers/ lap tops	15	
internet	6	internet	19	
Data show	2	Data show	7	
Multimedia labs	1	Multimedia labs	3	
Interactive board	3	Interactive board	2	
TV	2	Cyber café	1	
Smart phones	1	Smart phones	3	
Wi-Fi	5	Wi-Fi	20	
e-library	2	e-library	2	
Printer	2	Printer	1	
Scanner	1	e-learning platforms	1	
Radio	1	Videoconference	2	

[1] One respondent may give more than one suggestion.
[2] One respondent may give more than one suggestion.

A range of suggestions was proposed in this question by both students and teachers each one according to his/her needs and expectations. Common responses have appeared in both students' and teachers' responses mainly concerning internet and computer use (see the previous page), though with different scores. So for example 15 of 63 students have proposed the use of lap tops or computers against only 04 of 20 teachers. Also, 19 of 63 against 06 of 20 have proposed internet, and 20 of 63 students against 5of 20 teachers said Wi-Fi. Students' responses show a clear interest and enthusiasm for the use of ICTs mainly internet and devices connected to it, while teachers seem not to be very keen about integrating ICTs in teaching.

4.3 Answers to Research Question Number Two (What is the Algerian ESP teachers' and ESP students' cultural perceptions of online distance teaching/learning?)

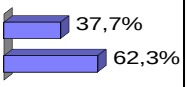
4.3.1 Answers to Questions 1

Students' results

Have you ever experienced learning English through an online course?

Moyenne = **1,62** 'No'

	Nb	% cit.
Yes	**23**	**37,7%**
No	**38**	**62,3%**
Total	**61**	**100,0%**



This question includes both synchronous and asynchronous courses put online because the purpose was to identify the students' interest for the use of virtual world in learning English as an alternative to classroom context.

If yes, what sites/ platforms have you used?

	Nb	% cit.
youtube	**7**	**50,0%**
diffrents forums	**1**	**7,1%**
English for new students	**1**	**7,1%**
google	**1**	**7,1%**
language guide, polyglot club	**1**	**7,1%**
Memrise, Duolingo	**1**	**7,1%**
rosetta stome	**1**	**7,1%**
Udemy.com, schooldz.info	**1**	**7,1%**
Total	**14**	**100,0%**

23 of the students who have answered 'yes' as having experienced online learning, only 14 have given examples to the site or platforms they used. According to the second table on the left, and after a verification of the existence of the mentioned sites (except

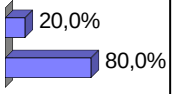
the famous ones), it seems that these students have generally chosen sites that propose tutorials for learning English with real teachers (mostly natives) from all over the world.

Teachers' results

have you ever experienced to give an online ESP course?

Moyenne = **1,80** 'no'

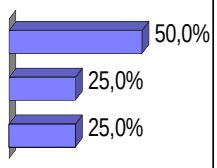
	Nb	% cit.
yes	**4**	**20,0%**
no	**16**	**80,0%**
Total	**20**	**100,0%**



Analysis of the teachers' responses to this question reveals that online teaching is not a widely used method and is still unexplored by the great majority (80%) of teachers.

If yes, what site/platform have you used for your course?

	Nb	% cit.
Skype	**2**	**50,0%**
ESL Online Teaching	**1**	**25,0%**
moodle- Skype	**1**	**25,0%**
Total	**4**	**100,0%**



Nevertheless, three (one is not counted in the table) of the four teachers who have already taught online said they have used Skype for that, one has used ESL Online Teaching and one has used Moodle.

All things considered, comparison between both categories reveals that though online learning is still an unfamiliar method either in learning or in teaching (as low percentages were given to 'yes' by both sides), it appears that students show much more enthusiasm about online learning than teachers.

4.3.2 Answers to Questions 2

Students' results

indicate your attitudes

	Strongly disagree	disagree	neutral	agree	strongly agree	Total
The English online course could help me understand better	**2**	**4**	**12**	**37**	**6**	**61**
learning ESP online is efficient to understand the use of English in real work situations	**1**	**6**	**11**	**35**	**7**	**60**
Online learning improves my pronunciation as I am exposed to native speakers and professionals	**1**	**9**	**8**	**25**	**18**	**61**
Online learning gives me authentic examples of what we learn in theory	**1**	**3**	**17**	**30**	**10**	**61**
I have difficulty to follow the speakers online	**3**	**17**	**21**	**18**	**2**	**61**
I prefer traditional English lectures	**7**	**24**	**10**	**13**	**7**	**61**
I prefer online English activities as I get instant feedback	**1**	**8**	**8**	**40**	**4**	**61**
Total	**16**	**71**	**87**	**198**	**54**	**426**

Teachers' results

identify your attitude						
	strongly disagree	disagree	neutral	agree	strongly agree	**Total**
online teaching is efficient to explain the use of English in real life situations	**0**	**2**	**5**	**10**	**3**	**20**
online teaching improves students' pronunciation as they are exposed to native speakers or professionals	**0**	**1**	**3**	**9**	**7**	**20**
online teaching gives students authentic examples of what is taught in theory	**0**	**0**	**3**	**13**	**3**	**19**
students will have difficulty to follow the speakers online	**0**	**4**	**8**	**7**	**1**	**20**
Iprefer traditional teaching methods	**2**	**9**	**4**	**5**	**0**	**20**
Iprefer online activities as I can have instant feedback	**0**	**3**	**7**	**8**	**2**	**20**
Total	**2**	**19**	**30**	**52**	**16**	**119**

The vertical analysis of both students' and teachers' results show that higher scores (198 in students' and 52 in teachers' results) were attributed to 'agree' for items representing positive opinions about online use in teaching/learning, though considerable scores were attributed to 'neutral' for some items in both teachers' and students' tables. One may conclude from those results a positive attitude toward the use of online learning in ESP teaching/learning from both categories.

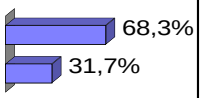
4.3.3 Answers to Questions 3

Students' results

Do you think online learning could be an efficient tool to learn ESP?

Moyenne = **1,32** 'Yes'

	Nb	% cit.
Yes	**43**	**68,3%**
No	**20**	**31,7%**
Total	**63**	**100,0%**

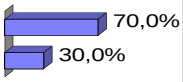


Teachers' results

Do you think online learning could be an efficient tool for teaching ESP "busy" learners who cannot attend an English classroom course?

Moyenne = **1,30** 'Yes'

	Nb	% cit.
Yes	**14**	**70,0%**
No	**6**	**30,0%**
Total	**20**	**100,0%**



In this question, both categories showed a positive attitude toward the efficiency of online learning in ESP, though a higher percentage was given by teachers 70% against 68,3% by students. This result may be due to teachers' awareness about the field of didactics; they could therefore forecast and expect new perspectives for ESP teaching.

For that reason, an additional question was included in teachers' questionnaire to know about their expectations about the advantages that online learning can bring to ESP. 11 of the overall teachers who answered YES, gave the following answers:

If yes, what benefits could online learning bring to ESP teaching?		
	Nb	% cit.
Choice of time and place of learning	**1**	**9,1%**
Does not need high speed internet connection - can connect with native speakers easily	**1**	**9,1%**
easy contact with the teacher from any part in the world	**1**	**9,1%**
good interaction - motivation - covering various learning/teaching strategies - iteresting - posituve attitude	**1**	**9,1%**
It can help ESP students improve their English level better than old methods	**1**	**9,1%**
It's interesting -less efforts	**1**	**9,1%**
learn from anywhere - saves time - be exposed to real situations	**1**	**9,1%**
learner is more motivated, performs pronunciation better	**1**	**9,1%**
save time - satisfy instant and remote learners' needs	**1**	**9,1%**
saves time and money - study at any time wherever you are	**1**	**9,1%**
useful for extra learning (students)- keep in touch with lge context	**1**	**9,1%**
Total	**11**	**100,0%**

Responses show a common agreement around opinions like online learning is: motivating, interesting, comfortable (anytime anywhere) and improves students' pronunciation and interaction. However, there were also negative attitudes and doubtful opinions from some teachers (six) about using the virtual world to deliver knowledge:

If no, what drawbacks may online learning arise if integrated in ESP teaching/learning?		
	Nb	% cit.
bad internet connection	**1**	**16,7%**
It is useful with distant learners only	**1**	**16,7%**
lack of students' interest - technical issues	**1**	**16,7%**
provides lazy learners	**1**	**16,7%**
sending documents takes lots of time	**1**	**16,7%**
the availability of internet is implicated as a handicap to the use of online learning	**1**	**16,7%**
Total	**6**	**100,0%**

The results show a general negative attitude toward the internet flow and technical issues (03/06). However, no one has referred his opposition to online learning to unawareness of the field or lack of experience or training.

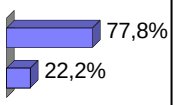
4.3.4 Answers to Questions 4

Students' results

Would you accept to be a part of an online learning experience through Skype?

Moyenne = **1,22** 'Yes'

	Nb	% cit.
Yes	**49**	**77,8%**
No	**14**	**22,2%**
Total	**63**	**100,0%**

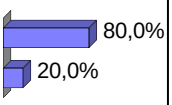


Teachers' results

would you accept being a part of an online teaching experience through Skype?

Moyenne = **1,20** 'Yes'

	Nb	% cit.
Yes	**16**	**80,0%**
No	**4**	**20,0%**
Total	**20**	**100,0%**



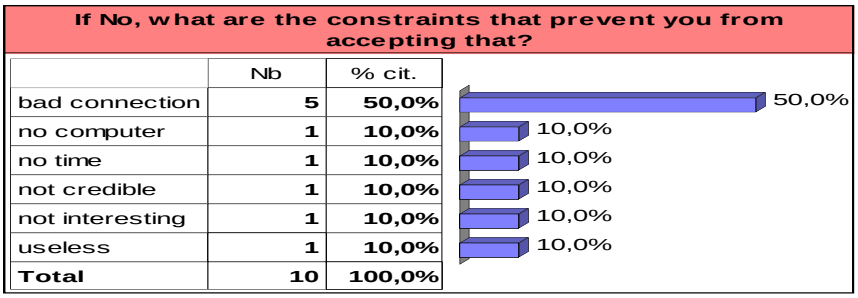
Both students and teachers have expressed a positive answer about their readiness of participating in an online experience (77,8% and 80% respectively). These high percentages reflect the respondents' curiosity about exploring new methods of teaching and learning English.

Teachers were in addition solicited to give advantages that Skype could bring to ESP:

Responses	Number of occurrence
Rapid and easy communication	4
Communication with people of other countries, languages and cultures	8
Ask questions and have instant feedback	2
Develop learning and language capacities	5
Be up to date with latest technologies	2
Exchange information	3
Learn the language form the natives	2
improve English level (pronunciation, vocabulary and speaking skills)	5
Interactivity	1
Help us understand better	1
Save time	2

Nevertheless, for this question too, some respondents from both categories showed reticence for the participation in an online learning experience:

Students' results

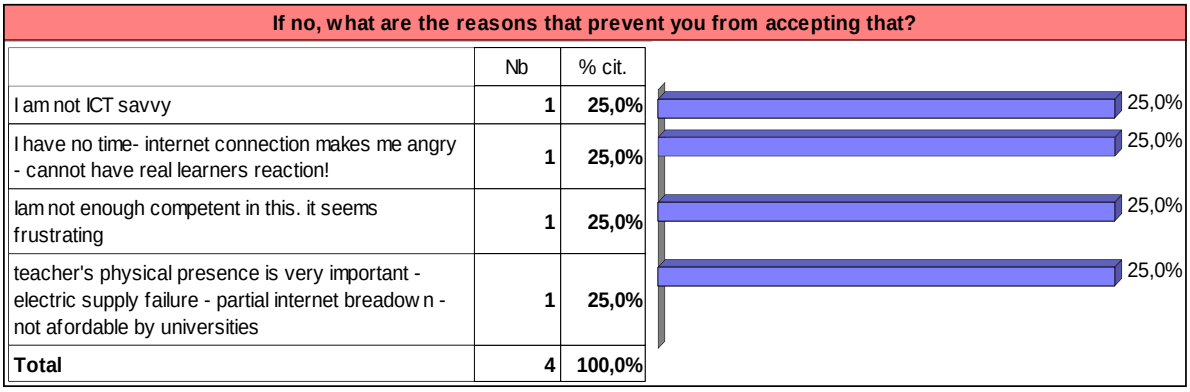


If No, what are the constraints that prevent you from accepting that?

	Nb	% cit.
bad connection	5	50,0%
no computer	1	10,0%
no time	1	10,0%
not credible	1	10,0%
not interesting	1	10,0%
useless	1	10,0%
Total	10	100,0%

Students who have justify their opposition to the experience (10 of 14 students) have mainly argued by the bad quality of internet they usually get (50%), but also some have referred their reticence to the lack of a computer, of time, of usefulness or even a lack of credibility. One has responded that online learning is not an interesting method.

Teachers' results



If no, what are the reasons that prevent you from accepting that?

	Nb	% cit.
I am not ICT savvy	1	25,0%
I have no time- internet connection makes me angry - cannot have real learners reaction!	1	25,0%
Iam not enough competent in this. it seems frustrating	1	25,0%
teacher's physical presence is very important - electric supply failure - partial internet breadow n - not afordable by universities	1	25,0%
Total	4	100,0%

For teachers, though their negative attitudes about the experience were expressed differently, yet common reasons could be noticed, such as internet breakdown and importance of teacher/learner physical contact.

4.4 Summary

Recapitulation of students' and teachers' results as well as their comparisons reveals considerable information about their respective readiness for the integration of ICTs in general and of online learning in particular in their process of leaning/teaching.

On the one hand, students' higher scores attributed to questions related to computer, internet and ICT competency compared to that of teachers indicate students' positive attitude (much competence) about their performance at ICT use compared to teachers who considered having only a moderate competence. The students' results also reflected an immediate readiness (present and near future) to adopt new technology-based methods in their everyday learning. On the other hand, teachers' lower scores (compared to the students') related to that same competency represents a gap with regard to their readiness for an immediate adoption of new technology-based methods. Therefore, the first research hypothesis which has supposed the students' recourse to the use of ICTs in learning more often than their teachers was confirmed.

Furthermore, the analysis of the second and third parts of the questionnaires related to the respondents' attitudes toward integrating ICTs in ESP as well as online learning has shown a general positive attitude from both teachers and students. Results of these two parts have also confirmed that the students' readiness for new technology-based methods will lead them to rapidly adopt the use of new ICTs and online learning if integrated in their universities in the near future. However, and though those positive attitudes, it seems that the teachers' competency gap will lead to a delay in adopting that new technology/online-based teaching. Hence, one may say that this confirms the second research hypothesis which has supposed that teachers would be reluctant or would hesitate in adopting such a new technology in teaching, as they need to acquire some competency.

4.5 Answers to Research Question Number Three (what appropriate ICT tool that can best serve the Algerian ESP students in online distance learning?)

To answer the above last research question, the researcher has chosen –among many e-learning platforms– to use Skype, a free open source platform which has not actually been conceived for educational purposes, but its simplicity and accessibility has made it possible

for the researcher to think about considering it as such. The researcher's hypothesis for this last research question claims then, that Skype could be an appropriate tool to be considered in order to encourage the use of online learning among ESP population. And to confirm or disconfirm that, Skype use as a pedagogical material needed to be made into practice.

To this end, the researcher set up a plan (see pages 162-165 in chapter three) which enables her well organise and manage her work during the experiment. Hence, the experiment's results, analysis and discussion are exposed in the following pages according to the set plan.

4.5.1 Post-course Interview Results

As explained in the previous chapter, a post-course survey (interview) was carried out with the participants to gather some qualitative data related to their opinions about their English level and behaviours toward the language. The following results represent the responses given by the four participants:

Participant 1: Oum Kelthoum

Question 1: Do you speak English mainly in classroom, externally or both?

I speak English sometimes in classroom, and sometimes externally with my friends.

Question 2: In classroom, do you sometimes feel hesitant/ embarrassed to speak? Why?

In classroom I feel very hesitant and embarrassed to speak because I am afraid if I do mistakes …that's why

Question 3: Do you use English to chat online?

If yes, is it with NS speakers or NNS?

Yes, I use English to chat online …it's rarely with native speakers and sometimes with non natives.

If yes, does online chatting help you improve your English oral communication?

Yes, online chatting helps me a lot to improve my English communication… it is interesting because each time I know new words and new vocabulary.

Participant 2: Fatima

Question 1: Do you speak English mainly in classroom, externally or both?

Mainly in classroom

Question 2: In classroom, do you sometimes feel hesitant/ embarrassed to speak? Why?

In classroom I feel hesitant sometimes, like when I am not sure about my information or my answer

Question 3: Do you use English to chat online? *If yes, is it with NS speakers or NNS?*

Yes, I use English to chat online with native speakers, for example I have a friend a native from Canada and another one from the USA

If yes, does online chatting help you improve your English oral communication?

Yes, of course online chatting helps me a lot to improve my English communication… I make mistakes when I use English sometimes but I am working on that and online chatting is really helping me.

Participant 3: Bouchra

Question 1: Do you speak English mainly in classroom, externally or both?

I do speak English in classroom and sometimes out classroom too with friends.

Question 2: In classroom, do you sometimes feel hesitant/ embarrassed to speak? Why?

Yes sometimes I feel embarrassed to speak, even though I have the right answer all the time, but I hesitate, because I feel like I would lose the words once I speak and make incorrect sentences.

Question 3: Do you use English to chat online? *If yes, is it with NS speakers or NNS?*

Yes, I do use English to chat online most of the time with non-native speakers, but sometimes with natives.

If yes, does online chatting help you improve your English oral communication?

Well, online chatting helped me a lot to improve my English writing skills, but I didn't improve my English level in oral communication so far, because I rarely communicate with oral chatting, it is often in written format.

Participant 4: Asma

Question 1: Do you speak English mainly in classroom, externally or both?

I speak English in both classroom and outside for example with friends on face book, but I mainly used it much inside the classroom.

Question 2: In classroom, do you sometimes feel hesitant/ embarrassed to speak? Why?

In the classroom, I feel free to speak and answer, but I sometimes feel lost and I can't find the right words to respond on a specific topic or questions.

Question 3: Do you use English to chat online? *If yes, is it with NS speakers or NNS?*

Yes, I do use English to chat online, with native speakers and non-native speakers mainly my friends.

If yes, does online chatting help you improve your English oral communication?

It really helps me improving my communication and oral skills, I do my best to write or talk in a correct English, for example , with native speaker, I talk, listen and write which really develop my skills and make me confident to express myself and the same thing with my non-native friends .

4.5.2 Analysis and Discussion

The participants' answers above lead to the following analysis and discussion:

Question 1: in this question most of the participants said they speak English in both contexts, that is, inside and outside the classroom, but they have stated that this use mainly occurs in the context of classrooms. Hence, their English speaking is mostly based on classroom interaction or on tasks that aim at developing that language skill such as listening and speaking activities, making comments or participating to a debate, making

oral presentations...etc. However, large group classrooms and the allocated time for this subject tend to make it hard for classroom interaction and speaking tasks to be satisfactory in achieving learners' fluency.

Question 2: three of the four participants said they feel hesitant when it comes to responding to questions (even though they have the right answers) or to express themselves in English inside the classroom. This they explained it happens mainly because of the fear of making mistakes or of not having enough vocabulary to express their ideas freely. Another participant stated that hesitation in her case is not related to the fear of making mistakes but it is rather related to situations where specific vocabulary is needed. All in all, there is a shared feeling among all participants that at this level of their English studies (third year) language usage is no more limited to responding the teacher's questions as it used to be in the previous lower levels (middle and secondary schools), and that a more complex speech is required.

Question 3: in the first part of this question i.e. do you chat online in English? all of the participants gave affirmative answer. Yet, only one participant has affirmed that very often this chatting could be with NS of English whereas all the others have said that chatting with NS could sometimes or rarely happen, and that this is most of the time with NNS of English (mainly their friends).

In the second part of the question where they had to say whether chatting in English online helped them improve their English or not, the total number of the participant gave affirmative response, as they stated that this is helping them improve their English, mainly in oral communication as each time they learn new vocabulary. In addition, two of the four participants have declared that chatting online in English helps them acquire new abilities and develop self-confidence.

Once again, awareness of learning the language from the source, that is, from the natives, is a shared idea among the participants who are more or less referring to in order to improve their English. Moreover, it seems that online chatting is a practice that has contributed to this improvement and has facilitated contact with the natives.

To sum up, the pre-course interview has allowed the researcher to form a general idea about the participants' attitude toward their English speaking and identify the issues that affect that speaking. In addition, responses related to questions of the English use in online settings have revealed that all the participants have already experienced or are practicing English speaking in a virtual online context.

4.5.3 The Experiment Planning

The organisation of work for experimenting Skype in online teaching has started by the establishment of a preliminary schedule with columns for week days in which the participants' names were included according to their availability. See the table below:

4.1 The Timetable for Work Organisation

Monday	Tuesday	Wednesday	Thursday
Fatima	Bouchra	Asma	Oum Kelthoum

Nevertheless, and because of hindrances and unforeseen events of everyday life this timetable could be modified as the participants could replace their planned day course (if missed) for another day. Another instance for timetable modification is when a participant has missed one or two sessions; this delay was caught by devoting two sessions per week instead of one session a week.

4.5.3.1 The experiment tasks

It has been explained in chapter three (p. 156) that the online course in this experiment was supported by a textbook for presentations in English written by Erica J Williams.

Hence, the topics tackled all over the eight weeks were all converging to tasks that build oral skills and explain whole range of techniques for an effective presentation in English. To this end, the textbook proposes seven steps to follow, with sample videos of four participants' (Dan, Zhan, Svitlana and Cesar) presentations that illustrate the use of the proposed tips and techniques in practice:

- Step 1: lay solid foundations
- Step 2: connect with your audience
- Step 3: use visuals to connect
- Step 4: top up your techniques
- Step 5: be positive and dramatic
- Step 6: love your audience ... not everyone is like you!
- Step 7: questions are a big opportunity, aren't they?

Nevertheless, one session a week for a period of eight weeks was not sufficient to follow the entire proposed steps one after the other and only most important steps were selected, that is the first four ones. Yet, some interesting tips from the remaining steps (5, 6, 7) were undertaken, such as taking into account some psychological features (being positive, love the audience, etc).

Each step includes an introduction to the topic, a part for practicing the language and skills, presentation analysis, feedback and target setting. The participants are then encouraged to speak by examining, analysing, taking risks, having fun and accepting or rejecting ideas. Finally, the participants had to practice at the end of each session the learnt features in a final task called in the textbook '*find your voice'*, that is, making a speech of about two or three minutes about the tackled topic in each step.

4.5.3.2 Skype's functionalities used during the experiment

To make the course happen in an online context, an open source platform was used: Skype. In chapter three (p. 143-144), all Skype's functionalities were mentioned and illustrated in a table. However, in this experiment only the functionalities that could serve

for monitoring the course, controlling and delivering information were used. See figures below

Figure 4.1 Skype Tool Bar

Figure 4.2 Skype Screen Sharing Option

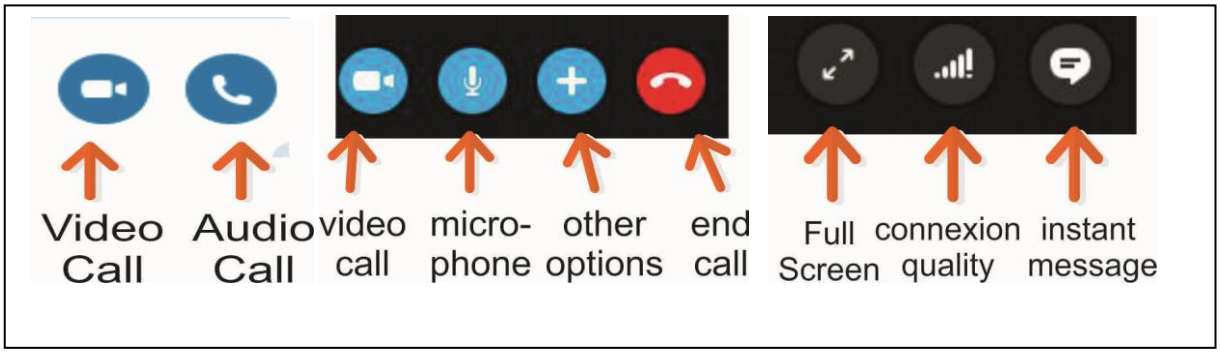


Figure 4.2 Other Skype Used Functionalities

4.5.4 The Experiment's Evaluation

In chapter three (p. 158-159), it has been explained that three major instruments were used for course and technology evaluation in regard to technical as well as pedagogical aspects. The followings are results of that evaluations:

4.5.4.1 Technical Evaluation

Using Skype instead of various e-learning platforms to achieve this experiment was a choice mainly based on its easiness of access and simplicity of its manipulation for everyone, however, no technology is drawbacks free. The table below gathers the overall drawbacks and advantages with explanatory comments the researcher could make a note of all along the eight weeks of experiment:

Table 4.2 The Researcher's Technical Evaluation Grid

Advantages	Comments
- Easy access	- Since Skype is a free platform, anyone can have access to it within few minutes of installation on any device (computer, mobile phone or tablet). The user will only need an internet connection to enter the application and chat with his/her contacts.
-Simple manipulation	- Unlike e-learning platforms which consist of a great number of tools and functionalities, Skype (as it was not conceived for learning) has a very simple preface that consists of little functionality.
-E-documents share	- What is practical about learning through Skype (as any e-learning platform) is the possibility of sharing, sending and consulting as many documents simultaneously and without the need of printing them or carrying them as in classrooms context.
-Screen share option	- One may compare this option to a data show that enables the teacher expose whatever he wants on a screen to explain his lesson inside classrooms. Similarly, this option allows the teacher to show any material (text, picture, video, charts, figures...etc) to his learner(s) while explaining online and simultaneously.

Drawbacks	Comments
-Connection failure	- This issue is considered as the main drawback of an online learning either through Skype or though any other platform mainly when using an ADSL connection. Yet, of all the times when connection failed it was noted that the average time of cut was around 1 to 2 minutes only (during a connection between 7 pm and 9 pm). Hence, though connection cut caused course interruption, this later was not sufficiently important to break the course mood and this could carry on normally.
-Computer dysfunction (system)	- During this experiment, some computer dysfunctions were registered. These were mainly related to the researchers' own computer Windows version (Vista Premium) which did not fit with any Skype call recorder software. Another Windows was then installed (Windows 7). In addition, some computer's system issues happened from time to time which affected the functioning of Skype such as the lost of a file system like (api-ms-win-crt-runtime-l1-1-0.dll) which required another update of Windows 7 (pack 1).
-Screen share problems (audio)	- Though this option is very useful, one issue has been noticed while using it: if the two interlocutors have different Windows versions on their computers, the sound of a video cannot be shared (they can watch a same video but not hear).
- Electricity break	- Finally, though electricity has broken only once during the whole eight weeks and with one participant only, it is worth to mention because unlike internet connection, an electric cut could take much more than 2 minutes (30 minutes in this experiment) which can roughly affect the ongoing of the online course.

In addition, and as the participants were provided with the same observation grid to evaluate the use of Skype technically, the following table summarises the overall remarks the participants have mentioned:

Table 4.3 The Participants' Technical Evaluation Grid

The Use of Skype in online learning		Number of occurrence
Advantages	- Making audio and video calls	02
	- Exchange instant messages	01
	- Screen share	04
	- Sending and receiving files of any size	03
	- The ability to a access from any device (computer, tablet mobile)	01
	work in groups thanks to conference call option	03
	- Free service	02
	- Video or audio Recording	01
Disadvantages	- Bad/slow connection	04
	- Sound problem in screen share	01
	- Sudden connection cuts	02
	- Problem with the speakers	03
	- Problems with the webcam	01

4.5.4.2 Pedagogical evaluation

Skype use evaluation in regard to pedagogical implications was achieved through two measurement instruments: first, CAF components where linguistic spoken productions were measured in terms of complexity, accuracy and fluency. Second, a post course questionnaire was sent to the participants via Skype to be filled out in order to measure their perceptions and attitudes toward the experience in regard to the use of Skype in improving their oral interaction.

a) CAF Results for each Participant

As mentioned previously (chapter three, p. 163), conversations in this experiment were recorded through two software (CALLNOTE and SUPERTINTIN), with focus on the

participants' turn of talk. Then, records of each session were gathered in each participant's file for CAF analysis needed for the evaluation of the participants' progress (see appendix E).

The analysis of the participants' conversations results shows a clear improvement in CAF competence of three of the participants within an eight weeks period of time. However, the fourth participant's CAF analysis has revealed that that same period of time was not sufficient and that she needed a longer period to improve. And though the use of the software DIALANG at the beginning of the experiment to select a homogenous English level group of participants (upper intermediate to advance), one of the four participants was identified as being a rather slow learner compared to the three others, and had difficulties to put into practice her good linguistic knowledge of English (mainly grammatical).

Nevertheless, a general improvement concerning the use of some common mistakes by all of the participants was noticed. These are mainly related to subject/verb agreement, use of prepositions, repetition and hesitation. The following tables are extracts from the eight weeks CAF mistakes to compare between the first two conversations and the last two ones of each participant and evaluate their progress:

Asma				
	Week 1	**Week 2**	**Week 7**	**Week 8**
Fluency	**Comments**			
Number of repetitions	6 (and..)	4 (talking)	1 (those places)	0
Number of wrong start	1 (so…)	1 (in the first...)	0	0
Number of hesitation and reformulations	6 (ammm) (…a good relationships…euh…relationship)	4 (ammm)	1 (I = I'll repeat)	2 (there is …euuh there are two) (she encourage = encourages)

Accuracy	**Comments**			
GRAMMAR	-Subject/verb agreement: (…he show his sympathy) (…he know…) -use of wrong tense: they should took…) -Use of wrong/omission of prepositions: (I was attracted to this writer) (in the last moment -Inappropriate Use of the definite article (the both)	-Subject/verb agreement: (that bring their attention…it go…) (there is two cases) -Use of wrong/omission of prepositions: (presenting yourself for them) (…wondering X something…) (what the reason he is doing the presentation X? -simultaneous use of subjects and their personal pronouns: (my mother she told me)	-Subject/verb agreement: (she use) (there is four teacher)	0
SYNTAX	-Use of incomplete sentences (segments of phrases) eg: I think the best solution, to put a plan	-Use of incomplete sentences (segments of phrases)	words choice: i was shocking (shocked) style problem: (fancy with English)(my high (higher) education)	Words choice: the accomplish of your work (accomplishment)
LEXIS	Words choice: (my topic would be about (instead of will) have a limit time…(instead of limited)	Words choice: (… that's mean…)	0	0
PHONETICS	Problems with /Ɵ/ sound: /tri:/ instead of /Ɵri:/	Problems with /Ɵ/ sound: /tri:/ instead of /Ɵri:/	0	0
Errors free clause	13	17	35	47
Complexity	**Comments**			
Number of subordinate clauses used	2 (…because…)	4 (…so that…) (…if…) (…whether…) (while…)	5 (rather…) (…because…) (…than…) (if…)	6 (…that…) (…because…) (if…)

Considering the other	**Comments**			
Number of asking for help or clarification	4 (I didn't hear you!) (how to say it? (a word in Arabic)	0	0	0

Bouchra				
	Week 1	**Week 2**	**Week 7**	**Week 8**
Fluency	**Comments**			
Number of repetitions	6 (and..)	4 (talking)	2 (I)	2 (and)
Number of wrong start	1 (so…)	1 (in the first...)	0	0
Number of hesitation and reformulations	6(ammm) (…a good relationships…euh… relationship)	4 (ammm)	1 (we… I don't know)	2 (euuhh..)
Accuracy	**Comments**			
GRAMMMAR	-Subject/verb agreement: (…he show his sympathy) (…he know…) -use of wrong tense: they should took…) -Use of wrong/omission of prepositions: (I was attracted to this writer) (in the last moment -Inappropriate Use of the definite article (the both)	-Subject/verb agreement: (that bring their attention…it go…) (there is two cases) -Use of wrong/omission of prepositions: (presenting yourself for them) (…wondering X something…) (what the reason he is doing the presentation X? -simultaneous use of subjects and their personal pronouns: (my mother she told me)	Miss Use of conditional: if I will prepare.., I will use…	Miss Use of conditional: if he didn't reject them he will gain…
SYNTAX	-Use of incomplete sentences (segments of phrases) eg: I think the best solution, to put a plan	-Use of incomplete sentences (segments of phrases)	0	

LEXIS	Words choice: (my topic would be about (instead of will) have a limit time…(instead of limited)	Words choice: (… that's mean…)	0	Words choice: it is very famous (common)
PHONETICS	Problems with /Ɵ/ sound: /tri:/ instead of /Ɵri:/	Problems with /Ɵ/ sound: /tri:/ instead of /Ɵri:/	Use of /t/ instead of /Ɵ/: in three	
Errors free clause	13	17	32	58
Complexity	**Comments**			
Number of subordinate clauses used	2 (…because…)	4 (…so that…) (…if…) (…whether…) (while…)	7 (since…) (if…) (that…) (because…) (whenever…) (when…)	5 (if…) (because…) (when…) (who…)
Considering the other	**Comments**			
Number of asking for help or clarification	4 (I didn't hear you!) (how to say it? (a word in Arabic)	0	0	0

FATIMA				
	Week 1	**Week 2**	**Week 7**	**Week 8**
Fluency	**Comments**			
Number of repetitions	37 (inappropriate use of the word "like")	20 (inappropriate use of the word "like")	0	0
Number of wrong start	3 (so…)	2 (so…)	0	0
Number of hesitation and reformulations	6 (ammm)	4 (I'll start again) – (… no...)(may..euh..might…) (Germany..euh..German courses)	0	0
Accuracy	**Comments**			
GRAMMMAR	-Subject/verb agreement: …when a person say…he try to -Use of wrong/ omission of prepositions: except X (for) linguistics	-Use of wrong tense: (wrong conditional form)	-Subject/verb agreement: There were a conference	-Wrong Comparative: More better
SYNTAX	-Use of incomplete sentences (segments of	-Use of incomplete sentences (segments of phrases)	Sentence structure: The world where he lives in	0

	phrases)			
LEXIS	Words choice: (when (as) time goes on…) – (…show that we are stressful (instead of stressed)	Words choice: (have a truth idea about him) (..then (instead of but or however) we don't have it)	Wrong noun: importanty (importance)	0
PHONETICS	0	/binifikəl/ instead of /binifiʃəl/	0	0
Errors free clause	6	8	42	53
Complexity	**Comments**			
Number of subordinate clauses used	2 (…because…)	3 (…because…) (…which…)	4(…because…) (…since…) (…which…) (if…)	5 (even…) (…because…)
Considering the other	**Comments**			
Number of asking for help or clarification	2 (first activity?) (A or B)	1(…is it correct?)	0	0

OUM KELTHOUM				
	Week 1	**Week 2**	**Week 7**	**Week 8**
Fluency	**Comments**			
Number of repetitions	7 (and)	4 (and)	1 (so…)	2 (Talk) (she)
Number of wrong start	3 (the use of "so" in each start).	1 (the use of "so" in a start).	0	0
Number of hesitation and reformulations	7 (euuuh…) (how can I say it)	4 (euuh…)	1(She speak..speaks…spoke about…)	1 (I talk…I mean…)
Accuracy	**Comments**			
GRAMMAR	-Use of wrong/ omission of prepositions: (I need to focus about the topic) (…share X their friends) -Omission of auxiliaries in questions: X you mean…? X write it on…? - Subject/verb agreement: someone post	-Wrong personal pronoun: …problems if you can solve it -Use of wrong/ omission of prepositions: I think X Sunday - Use of wrong tense: they posted …, you don't see it?	-Subject/verb agreement: she hold -Use of wrong/ omission of prepositions Should conclude with (by)	-Subject/verb agreement: he speak/ mention Omission of personal pronoun: X (I) enjoyed the experience

	pictures… -Use of wrong tense: (we X already spoke …)			
SYNTAX	Use of incomplete sentences: (segments of phrases) -Words' order: It is …?	Use of incomplete sentences (segments of phrases) -Words' order: tomorrow we will have …?	0	0
LEXIS	Words choice: (they do a post on face book)	Words choice: (things who are …) – (I speak (talk) to the headmaster) -use of wrong transitional word: and (instead of however, but or while)	Words choice: the slide took the summary	Words choice: She talks (says) (When audience are asking)
PHONETICS	0	0	0	0
Errors free clause	2	2	21	27
Complexity	**Comments**			
Number of subordinate clauses used	2 (…because…) (though…)	2 (…because..)	3 (…that..) (…because…)	3 (…that..) (…because…)
Considering the other	**Comments**			
Number of asking for help or clarification	4 (I didn't understand) (can you repeat please!)	1 (do you mean…?)	0	1 (So what is mantra?)

The results above show the participants' progress during eight weeks of online course, each one at her own pace and with different scopes:

In fluency, all the participants' progress could mainly be noticed in the number of repetitions and of wrong starts which have considerably decreased by the two last weeks. Indeed, thanks to many tasks related to sentence structure and speech structure, the participants started to pay more attention to the words they chose to make correct starts (beginning of a sentence), and learnt how to organise ideas in order to avoid repetitions.

In accuracy, the participants have shown a good will in getting rid of two main mistakes they repeated all along the experiment which are that of subject/verb agreement and the miss use of prepositions. Such mistakes have noticeably diminished by the end of the experiment, and a self correction was clearly noticed during the courses (though the fourth participant Oum Kelthoum has shown difficulties in using the correct preposition in her sentences). This self-correction could be pushed thanks to the screen sharing option, as the participants could have a look at their CAF table of mistakes before the beginning of each course and check their precedent course mistakes. The researcher could then discuss with each participant about her weaknesses and give pieces of advice and reminders to help her dealing with them. She could even prepare in advance relevant sources (web page links or books) the participants could refer to for a revision.

The pre-course errors discussion also helped the participants to formulate more coherent and errors free clauses as the number of these have remarkably increased through the weeks: Asma (week one = 13, week eight = 47), Fatima (week one = 6, week eight= 53), Oum Kelthou (week one = 2, week eight = 27), Bouchra (week one = 13, week eight = 58).

In complexity analysis which was mainly concerned by the use of subordinate clauses, it was noticed that the use of more subordinate clauses was related to the participants will to produce correct and complex sentences. In other words, at the beginning of the experiment, the participants tended to use rather incomplete sentences or segments of clauses with very little use of subordinate conjunctions (mainly, *because…*). Later on, the participants have understood that if they wanted to make more complex sentences, they needed to take more risks and employ additional conjunctions. The results in the previous tables show clearly the participants' improvement in using correct complex sentences

though the number of this use was not big (even if a conjunction was used, only correct sentences were counted).

In addition to the cited CAF mistakes in the participants' tables, improvement was also noticed in the following language features problems:

- The inappropriate use of discourse markers like, anyway, basically and actually.
- The inappropriate use of some colloquial English words and expressions for example; 'I was like...'
- The pronunciation of some wrong sounds, mainly /dʒ/ and /Ɵ/

b) Post-experiment Questionnaire results and analysis

At the end of the experiment and after eight sessions of online course, the participants were provided with a questionnaire (see appendix D) to give their point of view about the experience. The results below illustrate their answers:

Question 1: How useful was this experience for you?

Of a scale of 0 (not) to 5 (extremely), answers were equally divided between degree 4 and 5 as two answers were attributed to each degree. These results reveal the participants' good appreciation and very positive opinion about the online course experiment.

Question 2: How did you perceive the management of Skype during the experiment?

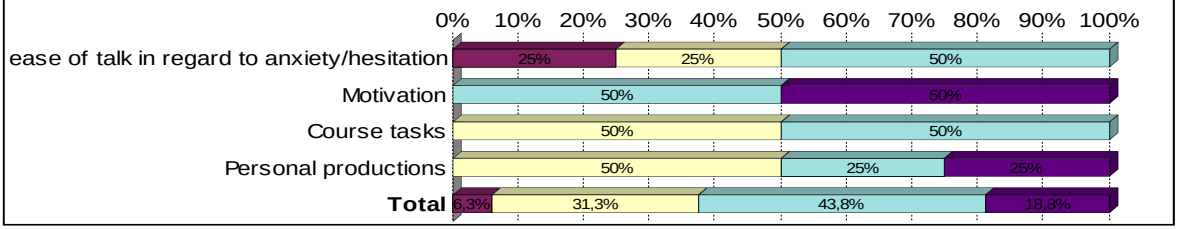
Three of the four participants have said that the use of Skype was easy, and only one said it required some concentration. This result may be linked to the fact that only Skype users have been chosen for the experiment, yet, their use was not meant for learning and some Skype options were discovered during the experiment (example, screen share) which might have required some focus.

Question 3: Please indicate your feelings about the following:

please indicate your feelings about the following

During Experience

	not satisfied	satisfied	fairly satisfied	very satisfied	**Total**
ease of talk in regard to anxiety/hesitation	**1**	**1**	**2**	**0**	**4**
Motivation	**0**	**0**	**2**	**2**	**4**
Course tasks	**0**	**2**	**2**	**0**	**4**
Personal productions	**0**	**2**	**1**	**1**	**4**
Total	**1**	**5**	**7**	**3**	**16**



The table above shows the participants' feelings about some features during the experience of learning online in regard to anxiety, motivation, course tasks and personal performances. Results in this question particularly, are narrowly linked to CAF results of each participant:

- For their feelings about anxiety and hesitation, results were distributed on 'fairly satisfied', 'satisfied' and 'not satisfied'. The participant who has answered 'not satisfied' is the same who was considered as a slower learner (Oum Kelthoum) comparing to the others and whose numerous grammatical mistakes led to very much hesitation and then anxiety. However, the participant Bouchra who has answered to be satisfied is a participant who felt very relaxed during the course (no place for anxiety) but tended to do many repetitions (see her CAF table, appendix E) Conversely, the remaining two participants (Asma and Fatima) have both said that they were fairly satisfied in regard to hesitation and anxiety which also matches with their low number of repetitions in CAF analysis and their ease of talk during the course.

- For motivation, the results show two positive answers 'fairly satisfied' and 'very satisfied' equally rated (50% for both). These results reflect the positive effect the online course had on the participants' enthusiasm and motivation to learn.
- Concerning the online course's tasks, results were equally departed on satisfied and fairly satisfied. The course being limited to tasks related to oral presentation skills and techniques, the participants have expressed positive attitude about the proposed topics and activities in *'presentation in English'* book.
- For personal productions, here again the participants' answers were closely related to CAF issues. In other words, the two participants who tended to hesitate more in their speaking (Bouchra and Oum Kelthoum) both have expressed an average satisfaction about their personal productions (satisfied), however, the two other participants who have shown a rather rapid progress (Asma and Fatima) have both expressed an above average satisfaction (fairly satisfied and very satisfied respectively).

Question 4: What do you suggest to improve the process (online course)?

Responses to this question have varied from one participant to another:

- Provide more learning resources (according to Fatima and Oum Kelthoum)
- Invite more learners (conference call) to increase interaction (according to Asma and Oum Kelthoum)
- Include the four language skills (according to Asma)
- Use a board like in classroom (according to Bouchra)
- Create an evaluation test after each course (Asma)
- Do more practical work (Oum Klthoum)

There were other responses in addition to the above which were excluded such as 'providing a speed connection' (by Fatima) because these issues are out of the instructor's control.

Question 5:

The total number of the participants has given an affirmative answer to this question (see the table on the right), with three answers for writing, three for listening and only one for reading.

Do you think other language skills could be improved through Skype?

	Nb	% cit.
Yes	**4**	**100,0%**
No	**0**	**0,0%**
Total	**4**	**100,0%**

It seems that the participants' positive attitude about online learning in improving their English speaking skills made them think that is totally possible to adopt this same method for learning other language skills like writing and listening.

Question 6: comparing to traditional methods[1] of teaching/learning, what advantages can you attribute to online learning?

The participants' responses to this question were as follow:

ASMA:

"Online course prepares you to perform well in a real situation and build your personal style and production:

**Good teacher /student communication*

**Active Learning*

**Collaboration and communication skills are developed*

** Improve student's motivation*

** Increase self Confidence: the student open up for the teacher and speak freely*

**Oral skill developed*

**Strengthen interaction between student-student and student- teacher*

** A comfortable atmosphere*

** Teacher corrects the student's mistakes and detects his/ her weaknesses*

** Develop speaking and listening skills*

[1] Traditional methods here refer to classroom teaching methods (mainly based on explanations on the board or through printed documents) and learning methods refer to learning through classroom context or through research and revision mainly based on hard copy documentation.

** The learner learns how to listen to himself and correct his mistakes by his own and pay attention to what he/she is saying.*

** Online course in a good experience for people who seek to develop their self for study or work in both cases a good tutor could lead you to your purpose".*

BOUCHRA:

"Online learning is more entertaining than traditional learning, it is easier as well and very helpful…in online learning we are obliged to get engaged with our teacher, but in a traditional way of teaching perhaps we cannot speak freely, we may feel shy and timid in front of our classmates".

FATIMA:

"Online learning provides more motivation, interaction, makes you active thinker and build up your critical thinking as well as your analyzing skill especially when you work on some tasks that requires using a certain web sites for example BBC sharing information , images , screenshots links and getting some help from the instructor to better understand the instructions who makes it more useful and easy at the same time. In addition to that you get to have the professor's full attention for us no destruction however the traditional way of teaching makes the students more dependent on the teacher and build up their passive thinking in addition to that the noisy overcrowded classrooms prevent you from focusing so as a result students fall into boredom and the feedback may be less than the expectations".

OUM KELTHOUM:

"Learning online is a useful way for students to learn and great alternative comparing to traditional way of teaching. Students can get much information from learning online, it would be able to replace classroom the coming days because it saves time, students can study anytime and anywhere they become more active, motivated, reflective learners and it

keeps them connected and in touch with teachers who provide them with knowledge and new lessons. In addition, online learning is cheaper than traditional method of teaching as long as these courses are free; students can save money. It is a powerful way to improve speaking skill".

The responses above all reflect a positive attitude toward online learning comparing to traditional methods that mainly include classroom environment of teaching and learning. All the participants have agreed on the fact that online learning has increased their motivation and enthusiasm to learn, but also they have all mentioned that unlike classroom environment, this kind of learning makes them much more active and involved in the process of leaning. In addition, the majority of the participants (3/4) has pointed out the closer student-teacher relationship as they said they felt more comfortable and free to interact and communicate with the instructor comparing to classroom. In line with this idea, one participant (Asma) has mentioned the benefit of online learning in increasing self-confidence; others (Bouchra and Fatima) have expressed this same concern by comparing the crowded classroom environment which prevents them from expressing themselves freely, with online learning which provides a good opportunity to interact and communicate easily. The student-teacher closer relationship was also expressed through the fact that the teacher has facilitated teaching thanks to the virtual environment possibilities, as immediate materials were provided for explanation (for example, grammar lessons found on the web with one click and explained to the learner thanks to Skype screen share option). Furthermore, all of the participants have recognised the usefulness of online learning in improving their language skills, mainly speaking and listening.

4.6 Summary

The analysis of the overall experiment's results reveals a general positive attitude from the total number of the participants in regard to the use of Skype in particular and to online learning in general.

The technical evaluation of both the researcher and the participants has revealed that while Skype's downsides could mainly be related to internet cut and flow, its advantages tend to be various and beneficial to the process of learning. One major advantage of online learning through Skype is the possibility of providing the same face-to-face classroom interaction but in distance setting and with more innovative and efficient materials, mainly the screen sharing option which itself represents an efficient tool in the service of explanation and of providing real life situations that help a lot in learning the language. Furthermore, the possibility of sending and receiving synchronous or asynchronous messages, videos, documents and files is a Skype option that has facilitated to a large extent the process of learning and teaching to both the researcher and the participants mainly in providing immediate feedback.

Besides technical evaluation, the participants' CAF analysis and their post-experiment questionnaires could bring significant information about their language skills improvement and about their attitudes toward the use of Skype in particular and online learning in general. Indeed, it was revealed that eight weeks online courses through Skype have been beneficial to most of the participants (except for Oum Kelthoum which was considered as a rather slow learner) as they showed good progress in the comparison made between their first two weeks CAF mistakes and mistakes in the last two weeks. Furthermore, the majority of the participants' post-course questionnaire answers were an evidence of a very positive attitude and of good appreciation toward online learning and Skype use for that purpose. The participants have even recommended the use of online learning for other

language skills like writing and some have argued (Oum Kelthoum and Asma) that this method of teaching and learning could replace classrooms settings in the near future.

4.7 Conclusion

This chapter has exposed and discussed the results from this study focusing on both the quantitative research (students' and teachers' questionnaires) and on the experimental online course. Hence results were divided into two parts and were presented according to the topics raised in the research questions, namely identification of the participants' computer competencies and their perceptions of online distance teaching/learning. Then, results of the experimental course and an evaluation of Skype use (affordance and constraints) in an online course were exposed and discussed in the second part of the chapter.

Chapter Five

CHAPTER FIVE

Limitations, Implications and Recommendations

5.1 Introduction

Many university studies in Algeria have investigated the attitudes of university teachers and students in regard to the use of technology-based instruction (Nedjah 2010; Meharet 2011; Bentayeb 2012; Guerza 2015; Boulmerka, 2016). Nevertheless, and even though those works have shown in their findings a general positive attitude amongst teachers and students, several concerns about integrating new technologies and successfully managing to implement them in their instruction were often raised. These are usually linked to external environmental barriers and internal barriers mainly related to teachers' personal mentality such as attitude, fear, belief, will, confidence and motivation (Nedjah 2010). Research in this study has investigated in its first part not only some Algerian teachers' attitudes toward ICTs in teaching, but even those of Algerian students, and which findings are in line with previous researches concerning enthusiasm and a common recognition of the usefulness of technology-base teaching and learning. Yet, the main concern of the present work was to promote that technology-based learning (mainly e-learning and distance online learning) of English, and find concrete but most importantly feasible solutions to overcome the difficulties that cause delays to the Algerian Universities for the adoption and implementation of ICTs in learning.

The following sections in this chapter will firstly expose the difficulties and the limitations of this study. Then, the implications drawn from the findings of data analyses of the present work will be presented and discussed. Finally, recommendations and suggestions for further research will be proposed.

5.2 Limitations of the Research Study

The findings of this study are limited by factors such as the low response rates for both surveys (questionnaires and Skype experiment), but it does provide interesting trends, and indications for further analysis and research.

The research topic engaged in this work has made it difficult to explore all the influential factors related to it. Indeed, the present study association between two recent approaches in Algeria: ESP and ICT in teaching and learning, themselves are still debated questions to be discussed and if agreed on, these are reticent experiences to few Algerian Universities.

One of the major limitations of this research is the questioned population. Though the great number of samples (150 students and 40 teachers) distributed over different Algerian universities (Sidi Bel Abbés, Saida, Ain Témouchent, Oran, Laghouat and Setif), only a small number of participants either students or teachers have turned back responses (many of which were erroneous and could not be considered). Thus, the collected data might not be totally representative if it is considered from the number of collected samples. Yet, and according to many statistical tests, collecting fewer samples but from different places tend to be more efficient than to collect large samples from the same place where participants tend to share common beliefs.

In addition to issues related to the questionnaires, the second part of the research that is related to the experimental study encloses a number of limitations that are summarised as follows:

- Proposing Skype as an ICT tool for e-learning instead of e-learning platforms would have necessitated a comparison with the existing e-learning platforms in different Algerian universities (though the case of Moodle in the University Centre of Ain Témouchent is mentioned). However, this would have needed a deeper investigation

because it is not simply about listing the name of those platforms and where they are used, but it is about identifying and comparing their efficiency in improving the teaching/learning process.

- Experimenting e-learning through Skype in the present work has focused on one language skill only that is oral communication (though some listening activities were used from time to time). The results in this study may not fit with the other skills (reading, writing and listening) and are limited to speaking.
- At the beginning of the research, the target population was supposed to be composed of participants from different fields like business studies medical studies and so on. However and after seeking out for a long period (10 months) in vain, no one of the solicited persons has shown readiness to participate in the experiment even though they have all expressed interest to its principle. Hence, and since ESP in not only studied for professional purposes but also for academic ones (EAP), the researcher has selected participants who are enrolled in English studies and who are studying English for academic and for professional purposes after all.
- Evaluation of Skype use in the experiment of the present work was based on the analysis of audio and video recordings. However, the task of making clear and good records was not always guaranteed. The records quality depended on the two software used for recording, namely CALLNOTE (which expiring date limit did not pass 14 days), and SUPERTINTIN (which maximum time recording was 4 minutes). So problems like sound interference and presence of echoes during conversations has sometimes made it difficult for the researcher to distinguish between words during the participants' conversations analysis.

5.3 Implications

The role that Information and Communication Technologies (ICTs) play in modernizing all society facets has become undeniably crucial. Implications of this study for the integration of innovative ICTs in teaching and learning ESP in particular and EFL in general are in line with considering technology-based environments inside and outside classroom settings.

5.3.1 Introducing New Teaching/Learning Environments

Regarding the advantages and the drawbacks of both traditional classroom face-to-face teaching and online teaching, it is worth thinking about an 'optimal' approach that gathers the practices that best succeed teaching/learning in both methods. In other words, a mixture of 'different environments' is to be used in the process of teaching/learning to obtain what we call blended learning.

5.3.1.1 Blended Learning

The concept of blended learning is not new. Teachers and learners of all disciplines have always used different approaches methods and strategies to achieve effective learning, as Marsh (2012) argues:

> Good teachers will always use more than one method or approach in their teaching, and good learners will always combine different strategies in their learning. Good programs of study combine lectures, seminars, group projects, placements, and so on to offer students a variety of different learning opportunities. "Traditional" distance learning courses have long provided blended learning through a combination of self-access content (print/video/TV/radio and face-to-face/telephone support) (Marsh, 2012: 3)

Marsh (2012) carries out by stating that what is new about mixing different approaches, methods and strategies in the process of teaching/learning is 'the range of different learning opportunities and environments made possible today through the use of technology to support learning and teaching. What is also new is the "expectation" of our learners to use technology in and out of the classroom as part of the learning process' (Marsh 2012: 3).

The term *blended learning* traces back to the year 2000 and was mostly linked to 'supplementing traditional classroom learning with self-study e-learning activities' (Marsh, 2012: 3). At that time, the introduction of new technologies offered new options to both teachers and learners to develop their skills, therefore, a combination of different environments became necessary: 'Blended learning gives learners and teachers a potential environment to learn and teach more effectively' (Marsh 2012. p 3).

Later on, the concept of blended learning has gained attention by becoming pedagogically valuable as it provided a 'much richer set of learning approaches and environments' (Marsh, 2012: 3).

Nowadays, the term blended learning is not restricted to the use of new technologies inside classrooms or in self-help study, but it 'can refer to any combination of different methods of learning, different learning environments, different learning styles... [ ] it is essentially all about making the most of the learning opportunities and tools available to achieve the "optimal" learning environment' (Marsh 2012.p 3).

In language teaching/learning, blended learning has continuously developed (mainly by the introduction of computers) through time with the adoption of new language teaching approaches. Ruthven-Stuart (2003) in an online survey of 300 CALL-related language teachers from 36 countries, he found that 98 percent agreed that one of the roles of a

computer was ‘a complement to classroom teaching’. He has then identified different strengths of blended language learning (qtd in Marsh 2012.p 4):

- provides a more individualized learning experience
- provides more personalized learning support
- supports and encourages independent and collaborative learning
- increases student engagement in learning
- accommodates a variety of learning styles provides a place to practice the target language beyond the classroom
- provides a less stressful practice environment for the target language
- provides flexible study, anytime or anywhere, to meet learners’ needs
- helps students develop valuable and necessary twenty-first century learning skills

Online teaching/learning is one kind of environments that can offer ‘fresh approaches’ to education in general and to language teaching in particular, as it provides different styles of learning and ‘the construction of a potentially richer learning environment … as well as greater diversification in and greater access to learning’ (Marsh 2012. p 4).

In blended learning, online learning environment comes to ‘supplement’ or ‘complement’ traditional classroom learning environments. And because of the new digital world demands, all teaching increasingly relies on ‘more or less digital- or net-based flexible solutions in the educational organization’ (Marsh 2012. p 4). Therefore, the question now is not to work on convincing teachers and learners about the integration of technology in learning/ teaching, but it is about asking ourselves ‘how should we blend?’ Future researches would be worth oriented alongside this question.

In ESP courses, blended learning was seen to be particularly suitable for Business English learners because it gives them flexibility in where and when they learn (Arnó-

Macià, 2012). Simultaneously, this concept of learning permits ESP teachers to create very specialised courses, which would be difficult to arrange in a face-to-face class due to the low number of students (Garrett, 2009). Examples to this situation are pre-study courses for students who want to prepare final viva or in pre-experience courses for learners who want to prepare real-time language that they are likely to meet in work place situations. Hence, in addition to classroom face-to-face courses, the ESP teacher can include an online synchronous learning (example, using Skype video conversation) to practice such very specific activities with his learners. He can also propose access to online materials such as virtual libraries and electronic dictionaries related to their needs. Blended learning has the benefit of making a course more flexible which is one of the key elements in ESP teaching, in a way that it allows the students to be more autonomous as Trinder (2012) states 'blended courses can help learners in developing autonomy, out-of-class learning, self-assessment, individualization' (Trinder 2006. p 192), and collaborators as interaction is strengthened by the narrow human contact.

Nevertheless, blended learning also has drawbacks related to technological gap among the learning population, as well as financial and technical issues. In BE for example, Kern (2013) says that English for advertising 'course shows how complex such a blend can sometimes be. It can be time-consuming to create such courses, and teachers need to have some technical knowledge and training, and have access to particular technologies' (Kern, 2013: 111). Hence, particular efforts need to be made by institutions and teachers to 'to consider these and other issues before setting up a technology-integrated blended course and to find ways to make it sustainable (Garrison and Kanuka, 2004; Littlejohn, 2004, qtd in Kern 2013. p 111). The kind of challenges that a pedagogical team can face according to Kern (2013) are:

- Issues of accessibility, availability and reliability of the technology

- The need for one-off and ongoing teacher and learner training
- Varying levels of tech-savviness of teachers and learners
- Time and resources needed to create technology-integrated courses
- The need for new ways of managing classes in which technology is used, including how to deal with technical problems during lessons
- Having to adapt to the changing roles of teachers as well as learners, particularly in online courses, etc.

Kern (2013) concludes her article by asserting that the difficulties and issues previously mentioned

> …need to be thought through carefully to enable a smooth and successful integration of technology and ensure that teachers as well as students will accept the use of the technology as a valuable addition to their ESP course, rather than a distraction from the real purpose, which is learning the target language (Kern 2013. p 111).

All in all, and as argued in Kerkeb (2015), today's 'digital learners' cannot be taught with the same centuries-old teaching methods any more. Being for or against the use and integration of new technologies into ESP courses cannot change the fact that hereafter the strategies and methods of learning of the new generations of students will always call for, in one way or another, the use of the latest and the best technology that serves and facilitates their learning. Hence, for the present and future generations of ESP teachers, their perceptions about the teaching methods need to evolve and develop according to the options and the alternatives offered in that era, where information and communication technologies increasingly represent the standards of our lifestyles.

5.3.1.2 Online Teaching for the Four Language Skills

It has been claimed and demonstrated in the present study that teaching online is an efficient method for developing students' English speaking competency as it reduces anxiety, increases motivation and offers a range of electronic tools that enrich teaching materials. However, is speaking the only language skill that could be learnt and taught online? Answering this question will of course require carrying out a whole investigation to test on the field the effectiveness or not of virtual environments in teaching and learning other language skills. Nevertheless, it is worth mentioning some works found in the literature related to that domain either those where online learning has been considered as effective to the four language learning skills, or in those where online environment has been claimed to be ineffective.

In many works (Beauvios, 1997, Chun and Plass, 2000, Pelletieri, 2000, Relan, and Gillani, 1997, Lee, et.al 2005, Sullivan and Pratt, 1996, Warschauer ,1996, Warschauer, 1999) it is asserted that web-based instruction (WBI) and computer-mediated communication (CMC), offer to learners 'an experience of increasing motivation, collaborative learning and social interaction which are meaningful to the learners in the language classroom' because of its varied and authentic language learning environment. The experimentation of online learning in the present study has confirmed those previous researchers' claims, as all the participants have shown enthusiasm and highly positive attitude about the method, but also they have shown clear improvement in their speaking skills like using more complex clauses, hesitating less, being more accurate and speaking with more fluency.

Furthermore, Sullivan and Pratt (1996) have found 'a greater impact of CMC on student's writing proficiency than a face-to-face communication during a semester', and have pointed out that writing abilities of some learners who have tried online learning have

developed more than in traditional classes (Jabeen and Thomas, 2015). This online learning environment should however be based on principles that derive from situated learning theory: '(a) provision of authentic activities within contexts, (b) benchmarking experts' thinking and performance, (c) abundant information and multiple points of view, (d) opportunity for practical reflection, (e) cooperative construction of knowledge, (f) clarification of thinking, and (g) coaching' (ibid). Hence, online learning methodology relies on the same pedagogical supports and principles found in classroom environments but with more flexibility and with closer teacher-student relationship (as learning online usually happens with a limited number of learners or even individually).

Nevertheless, experimentations in teaching reading skills in an online environment have provided less effective results. So for example in Kim's (2002) study to test the efficiency of web-based English course reading she reported that 'the actual output-performance level achieved via CMC interaction was not quite commensurate with previous expectations, especially not in terms of collaborative learning' (Kim 2002, qtd in Jabeen and Thomas, 2015).

5.3.1.3 Ideas for ICTs Use in Practice

When asked if agreeing or disagreeing about students' preference to learn from teachers who use e-tools in classroom, half of the questioned teachers (11 of 20) in this study have agreed, seven showed neutral opinion and only two disagreed. So, it is clear that English teachers are conscious of the role that technology-based instruction plays in motivating students and in updating teaching materials for their students to maximize student-student and teacher-student interaction by reflecting on these factors like standard of language proficiency, literacy in the Internet, current needs for English learning, and learning task completion (Yang, 2001, in Constantine p, 161). English teachers' reticence for integrating new technologies in their teaching methods may be a matter of that

technology literacy lack, and their motivation, positive attitudes and willingness could be accommodated by reinforcing conducive institutional atmospheres and collegial support for promoting integrated Internet-based EFL instruction (AL-Mekhlafi 2004; Chen 2008, in Boulmerka 2016, pp 161-162). In this respect, the following ideas are proposed to illustrate with real examples the implementation of technology in different English language fields and for developing different language skills:

a) Enhancing Listening and Speaking

Though these are two separate language skills which may have different strategies and instruction, similar ICT tools can serve for the improvement of both if used with students. For example, a video script of a native speaker can serve for a listening comprehension task, and another video can be made by students themselves (a podcast for example) as a speaking final product activity. Likewise, audio scripts and audio records, online distance chatting and videoconferencing (via Skype for instance) are all available ICT tools that can be used inside or outside classrooms and that have proved their efficiency in improving listening and speaking skills in English. Moreover, ICT tools like Skype can contribute to a great extent to classroom interaction in real context situation as it enables students to ask questions, debate and discuss instantly different topics with remote teachers or with field experts mainly for ESP learners, or even with other students in other classrooms from different towns in the country or even more, from further places in the world.

b) Enhancing Reading

Though it was mentioned in the literature in the previous page that ICTs use for reading did not provide as effective results as for listening and speaking, one may think about some technology-based tasks that can make an English course of literature innovative and hence more motivating for the new generation of English students. One instance of that innovative task is the creation of a literary forum in the university website where students

and teachers can discuss, criticise and debate a novel or a part of it, poems, or any literary text. The advantage of a university website forum relies in its accessibility for all students of that university even for those who don't participate to the discussions; they can read all the comments and the follow up messages related to a course or to a topic that may interest them. Similarly, a Face Book page devoted to arts critiques can be created by teachers where as many texts can be posted and debated to consolidate classroom reading lessons and tasks. In addition, teachers can exchange individual synchronous written messages via Skype for instance, or asynchronous messages through electronic mails to read, correct, give instruction or just explain some English reading features to their students. Furthermore, video projections are not excluded from the scene of reading, so teachers can use that technique to visualise in sound and image (a film) a text or a story of a novel which tends to be a good method for enhancing comprehension, or can invite an art professional online via Skype to do an art critique instantly in front of students.

c) Enhancing Writing

It is commonly known that the process of any type of writing goes through several stages from brainstorming to final draft. Both teachers and students are occasionally overwhelmed by pieces of papers of drafts and assignments getting disordered on their desks, in their bags, at home and in classrooms increasing risks of lost and most importantly students in this mess are likely to miss much from their teachers' remarks and corrections (Boulmerka 2016). Those constraints likely to happen in writing on paper copies can nowadays be avoided thanks to electronic tools starting from the very simple e-mail to the very sophisticated e-learning platform:

> The age-old hassle of shuffling, filing, and retrieving these papers is almost eradicated. With the click of a mouse modern e-mail software permits groupings of messages by student name, by date received, or by

> project name. Writing assignments received can be arranged electronically by any one of these classifications. These types of groupings make it simpler for the teacher to actually observe the process which their students are applying when writing. This process can be monitored and examined much more successfully and logically by the teacher who can also consider and organize student or group work more effortlessly and methodically. The teacher can immediately retrieve student writing for future analyses and rating. (Boulmerka 2016. p 172)

Indeed, computer-based instruction as well as online learning offer to today's EFL teachers in general facilities of collecting their students' assignments, correcting them and sending them back all in much organised files with students' names, dates and topics. In the same way, students can have synchronous feedback if the exchange is online, or asynchronous if works are sent as simple emails.

As an instance to computer-based instruction for writing, Boulmerka's plain e-mail activities experienced with her third year writing class during a 45-minute session in the lab or over the course of the term. The following examples are the types of activities that Boulmerka (2016, pp. 174-180) has tested with her students:

- **Dialoging**: through e-mails, Boulmerka has used in her framework for writing different types of dialoging: **Student to teacher (**Journal writing, Asking and answering questions, Progress reports and updates). **Teacher to student (**Announcements, Assignments, Homework). **Student(s) to student(s) (**Class mailing lists, fun, etc., social events and announcements.
- **Real-Time Teacher-to-Student dialoging:** by creating a group in e-mail software (groups of 12 students) for e-mails instant messages exchange. The messages contain

tasks like questions and answers or comments on a given topic with focus on full sentences answers.

- **An Interactive Process Writing Assignment:** This is a process writing assignment which entails cooperating with a partner electronically over a plain research project (just 2 paragraphs). All the interaction with the team mate, from brainstorming for ideas to writing the final draft and everything in between, must be done electronically. Meanwhile the teacher is monitoring the writing process of the group by receiving copies (cc) of all the correspondence. The students are not simply marked on the final product, but also on the process of writing and how well they respect the instructions.
- **One Perfect Paragraph:** this is a simple e-mail exercice that assists students work out editing briefparagraphs looking for grammar, agreement, spelling, and structural mistakes. The teacher repares one practice paragraph or two with various mistakes and dispatches it to the group.

Example 1 of what to send to the group

This paragraph has about 9-10 mistakes. Discover and correct them. Drag and pick the paragraph with errors, after that copy from the Edit menu. Click on Reply. Then paste from the Edit menu into your reply. Find and fix the mistakes. Send back the corrected paragraph to the teacher. Continue this until the paragraph is faultless.

Lat months I spent two wonderful day with host family. They have 3 child and we played a lot together. We cook Japanese foods for them Saturday evening. They thought it dericious. On Sunday we wnt to the church. I enjoyed the music, but didn't understood the speech. I hope see them again in the future.

- **Teacher Tips**

1. Copy and paste an answer like “There are more mistakes”. Please rectify them and convey the improved paragraph back to the teacher ." into the reply of the e-mail message This will enable you to rapidly reply to a paragraph that still needs rectifying hence eeping up with all the messages students are sending to you.

2. Register your messages in your mailbox window by date/time received if software permits.

This will permit you to see which new messages on your list need replies.

- **Electronic Unknown Pals:**

This is a term-long pen-pal task in which students are assigned to other students from another writing class in the school (university). The students use pseudos (for this activity only) and are not allowed to know the identity of their secret pal. The activity closes with a "Meet Your Secret Pal" party at the completion of the term. The teacher gathers copies of allcorrespondence from the learners.

- **Chain Stories or Sentences**

This is a plain activity that helps students with elementary sentence level grammar consolidating such grammatical structures as countable/uncountable nouns, prepositional phrases, and so on. Before class mail an incomplete sentence to the group, such as *"It was a dark and stormy night and " or "I went to the store and bought some"*

Students then supplement the story or sentence and expedite it on to an assigned partner in the class. (Using copy and paste may be necessary for some e-mail programs. Other software programs append the original message to the reply.)The story is passed around to all participants in the class with each including their part. Have each student supplement something various each time. The result will be x number of stories or sentences where x equals the number of learners in the class.

- **An Odd Meeting**

A further more complex form of a chain story is what is called Strange Meeting assignment. Students are asked to form phrase by phrase the skeleton of a short story (8 partial sentences) about the encounter of two individuals (male and female). What is special about this task is that each person in the class is writing a sentence phrase to the

story and later dispatching it (using copy and paste) on to an allotted person who then annexes the next sentence phrase who in turn forwards it to another designated person and so on. The sentence phrases are moved on to eight different people and then the last person puts the 8 sentence phrases together into a coherent, yet generally odd , paragraph of eight complete sentences. All the while learners are conveying copies of all the messages sent to the teacher who is checking the process.

- **Story Puzzles**

Story puzzles are stories in which sentences are casually mixed and reorganized by the students in an accurate sequence. Students apply copy and paste to rearrange the randomly disordered sentences into a story and then send back the story to the teacher in the correct arrangement . (Teacher Hint : Write the story in most any word processor dividing sentences into paragraphs. Then choose all and sort. The word processor will classify the sentences alphabetically by first letter of the sentence. Next copy and paste the mixed sentences into your e-mail message and transmit the mixed sentences to the group.)

- **Cloze Exercises**

Learners complete sentences with every x word dropped, or every noun, or verb, and so on. The teacher then dispatches the message back to the teacher. The teacher verifies and sends back for further revision if required. This activity can be employed to foster the use of certain words such as adjectives, articles, nouns, etc.

- **Mailing Lists**

Students converse with a group on a given topic. One e-mail address of the group can be devised and a message on a special topic asking for a response. Others mail their responses to the group members. Most e-mail software programs have the potential to reply to either the initial sender or all the recipients of the original message. In this situation the choices would need to be set to the latter.

- **International Pen Pals (Internet access necessary.)**

With the gigantic progress of the Internet, there are several of possibilities to interact with students from other countries and cultures hence raising the global knowledge of students. International Pen Pals can be without trouble found on the World Wide Web using such search engines as Web Crawler or Yahoo.

- **How to Page**

Learners jot down (via e-mail) a step-by-step procedure of how to send e-mail, employ the word processor, use a CD ROM, and so on. Can be done in a group or allocated to individuals. Copies (cc) of all correspondence are forwarded to the teacher.

All these Boulmerka's (2016) writing activities via e-mails is a concrete example of how can an English language skill be developed through electronic tools and in different ways.

5.3.2 Teachers' Training

The teacher's role in integrating ICTs in learning is visibly crucial, and each educational reform in this field should take into account teachers' knowledge, skills, beliefs, and attitudes (Cuban, 2000). The teacher represents the human element upon which this work will focus. As Shahan (1976) points out, one important concept of school reform is the human element. Shahan (1976) referred to this phase as '*the human face'* which embraces the emotion, feelings, needs, and perceptions of teachers and leaders as well as their roles and beliefs and/or pedagogical assumptions. Likewise, Fullan's (1982, 1991, 2000) perception of school reform also focuses that the modification of mindsets, such as pedagogical assumptions, values, and beliefs, is a key factor to any educational change effort. Watt (1980) argues that beliefs and attitudes play an essential role in the way that teachers deal with ICTs in the teaching. That is to say, dealing successfully with ICTs depends not only on knowledge of the capability, limitations, applications, and

implications of ICT, but also to individuals' attitudes and perceptions regarding ICT tools. Similarly, Veen (1993) also argues that the efficient implementation of ICT in education relies on teachers' personal feelings, skills and having a positive attitude towards it. This means that teachers who have positive attitudes toward ICT and recognise it to be useful in promoting learning will evidently integrate ICT in their classroom more easily than others (Becker and Riel, 2000; Cox, Preston, and Cox, 1999; Pedretti, Smith-Mayer, and Woodow, 1999; Sandholtz, Ringstaff, and Dwyer, 1997).

It is a fact that using last ICTs inside the Algerian University is still a challenging matter because of all the previously mentioned issues. Yet, that same challenge seems to become a child's game outside universities for many students thanks to the wide expansion of the internet use and the vulgarization of multimedia means. Hence, and since the new generation of students has the forbearance and readiness to use new technologies for personal or self study use, it is constructive and practical to invest this ICT literacy in asynchronous and synchronous learning.

Teachers' preparation to the use of new technologies in teaching should be a part of their pre-service training parallel with didactic and psycho-pedagogical learning, and because technology is in a constant evolution and change, this should stay an ongoing task during in-service training. This can then happen through regular workshops between teachers to exchange ICTs knowledge or through seminars where ICT professionals and experts can expose to the teachers the latest technologies they can use to facilitate the process of teaching/learning.

Besides, hundreds of tutorial videos are available on the web that any teacher can consult to learn how to exploit any IC technology for h/her teaching purposes. One famous example of those web sites where tutorial videos are available is YouTube.

5.3.3 Online Teaching for Students' Tutoring and Supervising

One of the emerging technologies used in education in general and in FL in particular is online teaching through e-learning or open source platforms and other means. If the use of that technology still seems challenging inside our universities classrooms, teachers can use the virtual world (VW) for students' regular tutoring which is a pedagogical task that came within the LMD system teaching strategies. Thus, the use of online platforms (like Skype) can substitute the face to face conversations where the student and his teacher tutor usually find difficulties to fix their schedules for a tutoring meeting.

Furthermore, and in addition to asynchronous instruction through e-mails or through social networks, teachers can also use online platforms to supervise students' who prepare their dissertations or are about to give oral presentations such as presenting a classroom project or a viva.

However, handling a technology needs preparation and acquiring the necessary competency as mentioned in the works of Compton, 2009; Hampel and Stickler, 2005; Youngs, 2007:

> Teachers interested in teaching in virtual worlds should be aware of the similarities and differences between these 3D environments, the classroom, and other online environments. In-service teachers may need to keep their minds open, be willing to expand their views of pedagogy, and learn skills that are particular of the new teaching environment (Compton 2009; Hampel and Stickler 2005; Youngs 2007, as qtd in Da Silva 2012. p 161).

The analysis of the citation above infers that the teacher's use of the virtual world in teaching relies on two major criteria: (i) technical competencies, as the FL or ESP teacher is not ICT specialist or may not be ICT savvy. (ii) Psychological preparation, as a teaching environment based on new technologies is not devoid of constraints and difficulties.

Therefore, the integration and the adoption of that kind of technology in teaching/learning methods needs to be preceded by a targeted preparation to acquire the needed technological literacy as well as having a sufficient amount of enthusiasm.

5.3.4 New Perspectives for Distance Learning in the Algerian Universities

Information and communication technologies integration as part of the standards that direct our universities is an initiative which will serve to a large extent their development and lead to prosper. Aside from facilitating administrative tasks, ICTs use in the processes of learning and teaching, if well incorporated, will enable a rapid diffusion of knowledge, widening the scientific research and do the promotion of our universities at the international level.

At this level of the study, priority is to be given to the available possibilities and options that can be immediately put into practice inside our universities with minimum constraints (mainly financial).

One example of a technology that has shown its efficiency in delivering knowledge in the field of distance learning either in locally or internationally settings is the videoconference or teleconference.

The British Educational Communications and Technology Agency (BECTA) which main objective is to support 'schools and colleges in the use and development of ICT in education to raise standards, widen access, improve skills and encourage effective management', has published a series of papers where research evidence about video conferencing and its benefits in education were exposed.

In BECTA's (2003) papers, video conferencing is defined as being a method that 'allows people in different locations to see and talk to each other. It may also support the electronic exchange of files, sharing of computer applications and co-working.' In

addition, the papers bring evidence to video conferencing benefits by gathering summaries of main researches where these have been tackled and classified into categories:

a. General benefits

● It supports distance learning by linking up tutors and students, and also offers a means of reassurance and social contact for students (Hearnshaw 1997).

● Subject teaching can be enriched by input from experts or practitioners, as in mathematics and the Motivate project (Gage et al. 2002).

● Students can develop communication and social skills by collaborating with their peers in other institutions.

● Students who normally stay in the background participate more; they are motivated to take part in video conferencing.

b. Benefits for students

● Collaboration with schools where the pupils come from different cultures leads to the development of multicultural relationships and understanding, while enriching traditional activities (Cifuentes and Murphy 2000).

● It provides enhanced opportunities for language students to interact with native speakers (Kinginger 1998; Wright and Whitehead 1998).

● It offers an alternative outlet for expression by those normally hampered by poor literacy skills (Eales et al. 1999).

c. Benefits for teachers

● Academic aspirations are raised amongst those students communicating with more assured students, who become positive role models (Cifuentes and Murphy 2000).

● Strong relationships are fostered with peers when working with other schools on collaborative projects (Cifuentes and Murphy 2000).

● The audience for courses can be increased by teaching face to face with one group and simultaneously transmitting to a second centre elsewhere (Gilbert 1999; Carville and Mitchell 2000).

● Clips from sessions may be used as material for evaluating and modifying anti-social behaviour by students (Coverdale-Jones 1999).

d. Benefits in initial teacher training

● Students can observe teaching practice without being present in the classroom (Kinnear et al. 2002)

● Students may use video clips of their classroom experiences to share ideas and teaching resources (Sharpe 2000)

● Students on teaching practice feel 'a safety in distance' when using video conferencing to communicate with their supervisors, resulting in a more frank interaction (Sharpe 2000).

e. Benefits for students with special educational needs

● Support can be provided to children with complex physical and communication difficulties without professionals or families spending lots of time travelling (Donegan 2002).

● Students may overcome feelings of isolation and develop social skills by associating with peers who have similar needs (Thorpe 1998).

● The video conferencing context acts as a focus for some students, helping them to organise the way they think and act (Thorpe 1998).

● Students discover that if they shout out or talk over one another they cannot be understood, and alter their behaviour to take turns to talk (Thorpe 1998)

Nevertheless, introducing video conferencing inside our universities requires the installation of sophisticated technologies and systems such as '*desktop units'* (which involves each individual using a computer, with one on-screen window for each site), *'roll-*

abouts' (is a system that stores all the equipment required in a wheeled cabinet and '*room systems'* (includes the same equipment, but housed in a permanent installation) (BECTA 2003). These systems, when connected enable a session to take place through three ways: (1) over the internet, using either an analogue or digital telephone line (2) across a network within an institution (3) using dedicated cables, radio waves or microwaves (ibid).

One instance of the Algerian universities that is experiencing video conferencing as an innovative teaching method, one can mention the University of Tlemcen through its Global Virtual Classroom (GVC) programme which is functional since the year 2010. This programme has already benefited students of foreign languages from workshops with international universities like *East Carolina University (USA) and Universidad del Monterrey* (Mexico) through synchronous courses via Skype. Students are hence invited to the videoconference room to attend courses presented by different teachers around the world, where questions and answers are exchanged simultaneously with one unique obstacle, i.e. the screen. The students in those kinds of videoconferences do not only benefit from learning the language from its native speakers, but they are also being offered a quality of learning at the level of international standards.

In the same way, another institution that has bet on the new technologies to boost up learning and improve the quality of teaching is the University Centre of Ain Témouchent. The Centre was equipped just a few years after its opening with latest ICT installations such as multimedia laboratories for teaching foreign languages, internet space for students, the creation of an electronic library and the development of a videoconference room where national and international online conferences can occur. Unfortunately, the willingness shown by some enthusiastic people to press on has been faced with many obstacles, the most important of which was the teachers getting used to traditional methods of delivering courses and the wrong use of the offered material.

5.3.5 Bridging the Algerian Universities with the Socio-economic World

According to Boukezzata (2016), the director of MESRS, the adoption of the LMD system by the Algerian University implicates two major stakes:

(1) To adapt the Algerian educational system to the international standards:

- Responding effectively to society's expectations in terms of the quality of training
- Meet the concerns of graduate employability
- Establish institutional governance
- Establish a quality assurance system

(2) Create osmosis between the university and the socio economic environment

- Make it competitive on the job market, graduates at national and international level;
- Continuously adapt training to the requirements of the societal and economic environment;
- Encourage and diversify national and international cooperation

A closer consideration of all the above points leads to one common idea: the achievement of the above objectives seems to be much easier if associated with an expert use of the new technologies. Indeed, the huge amount of hardware and software systems, internet services and electronic devices open widely the door to great opportunities which were unexpected or hardly reached decades ago. Hence, and following the objectives that the Algerian University attempts to achieve, the integration of ICTs and electronic learning as a basic tool will:

(1) Adapt the Algerian educational system to the international standards by

- Improving the quality of teachers' and students' training
- Putting into practice theory and exposing the learners to real life/work situations during university training in order to be effective future employees.

- Making the role of university administrations more effective in serving teaching and learning.

(2) Create osmosis between the university and the socio economic environment by

- Bringing the companies to the Algerian University and vice-versa would be easier through distance e-learning as the exchange can happen without movement and spending;
- Hence, the university's community will continuously be in touch with the socio economic environment.
- Widening and vulgarising the use of online learning and videoconferencing will make it possible to shape national and international cooperation by oraganising workshops, study days, conferences and forums, which can later on lead to more students' and teachers' mobility and professional improvement.

To sum up, today's issues are to be resolved by today's means. In other words, in order to achieve the targeted objective of 'reaching international standards', the Algerian University needs to give itself the means that matches with the current era exigencies and these are today mainly about information and communication technologies.

5.4 Recommendations for Future Research

In view of the findings of the present work and the implications arising from them, the following recommendations for future research can be made:

- Comparative study: oral interaction in the present research was studied in an online environment through CAF principles. What would be interesting in future researches is to use that same CAF elements in measuring the oral interaction competency of a group of students in two different contexts i.e. classroom vs. online environments.

- The comparison above is not a restriction to oral interaction indeed; one can compare the efficiency of the two environments in teaching/learning the four language skills to a particular group of Algerian students.

For the reasons that has been explained in the previous page, this study is not concerned with the existing e-learning platforms in the Algerian Universities, however, what would be interesting is to gather all those platforms that were offered for a general e-learning (platforms conceived for all types of disciplines) and identify which one would fit better with teaching/learning ESP, EFL or foreign languages in general in Algeria.

5.5 Conclusion

The present dissertation could not be finished without having discussed what the findings of this work means in relation to the theoretical framework introduced in the literature review and what it means for professionals in the field of ESP.

To this end, the researcher has first of all outlined the limitations of the study by mentioning the main constraints and difficulties that she faced during her investigations.

Next, the pedagogical implications of the study were discussed and suggestions for mass communication education and innovative ideas for English language teaching were highlighted.

Finally, areas for future research were proposed to put into practice previous research objectives which main and common purpose was to find new and innovative methods and strategies to improve the teaching/learning of English language in the Algerian universities.

General Conclusion

GENERAL CONCLUSION

This study originated from the researcher's observations concerning university teachers' and students' behaviours toward the use of Information and Communication Technology materials in their process of teaching and learning. Those observations revealed a gap in technology use between teachers and students as it was noticed that, while students resort to the latest available electronic tools or devices to facilitate their learning, many teachers still prefer traditional methods of teaching.

Those observations led to the formulation of the present work research questions, which attempted first of all to investigate the reality about the use of ICTs among Algerian university students and teachers in English for Specific Purposes context. Hence, the first two questions were concerned with identifying the target population's competencies and attitudes about the use of ICTs in learning, as well as identifying their cultural perception about an innovative method, which is online learning. Then, the third research question was concerned by the use of that technology in practice, mainly the technology of online learning, as it asked about the easiest way to integrate it in the Algerian Universities.

Rational for the research

Studies in the field of educational research seek to describe, understand, and explain how learning takes place all over a person's life and how 'formal and informal contexts of education affect all forms of learning. Education research embraces the full spectrum of rigorous methods appropriate to the questions being asked and also drives the development of new tools and methods' (American Educational Research Association, 2017). The rational of this work was related to the spectrum that drives to developing new pedagogical tools in line with the use of ICT for the improvement of ESP teaching/learning in the Algerian universities. To do so, the researcher has addressed questions and formulated hypotheses to the problem of integrating new technologies in ESP teaching, and opted for

the use of other context than that classrooms, that is to say, virtual one. To this end, replication of previous works achieved in the same context was a principle that has been followed in the present work.

In their work entitled Scientific Research for Education, Shavelson and Towne (2003) have discussed in one part of it the nature of scientific inquiry in education, and listed six key principles of any scientific research, including educational research, among which is the imperative principle of replicate and generalisation across studies (p. 4). Since all studies rely on a limited set of observations, a key question is how individual findings generalize to broader populations and settings (Shavelson and Towne, 2003). Similarly, King (1995) has argued that the rarity of replication in education studies has produced disparate results that replication is one of the most efficient scientific method that ensures productive results:

> …the most common and scientifically productive method of building on existing research is to replicate an existing finding - to follow the *precise path* [italics added] taken by a previous researcher, and then improve on the data or the methodology in one way or another. (p. 445)

However, sometimes replication cannot be, such as the one used in this work, identical to the original. Hubbard and Armstong (1994) who make a distinction between *replication* and *replication with extension*, explain that a replication study may differ from the original to some extent in terms of population and setting:

A replication is defined as "a duplication of a previously published empirical study that is concerned with assessing whether similar findings can be obtained upon repeating the study." Likewise, a replication with extension is "a duplication of a previously published empirical research project that serves to investigate the ability to generalize

earlier research findings." Note that this latter goal of determining the range of conditions under which the findings do and do not hold up can also be addressed by studies in which the author(s) conduct(s) a series of experiments within the same article (Hubbard and Armstrong 1994, p. 236)

Hence, research methods adopted in this work, either those used in measuring the research population's attitudes toward the use of ICTs, or the ones used in testing the usability of an ICT tool, i.e. Skype, in teaching ESP were considered as a replication with extension and not an identical replication because of the following reasons:

- The replication of Abu Samak's questionnaire was to the extent of the present study's narrowed context of ESP and not to her general context of EFL.
- Unlike the mentioned works in this study (Sarré 2010, Kern 2013) which have attempted the use of Skype or other online platforms in classroom teaching and other contexts, this work has excluded classroom context.
- Replication of Sarré's (2010) analysis of audio and video records of the participants' oral interaction relied only on manual method of measuring CAF and did not include any computer-based tool.

Answers to the research questions

Question 1: What are the Algerian teachers' and students' attitudes in regard to computer competency and to the use of ICTs in ESP teaching/ learning?

To answer this research question, both students' and teachers' ICTs competency was investigated, and the findings of the study have indicated that both students and teachers have expressed a positive attitude toward the use of ICTs in the process of learning in general, however, the students have shown an immediate readiness (present and future) to adopt new technology-based methods in their everyday learning as they got higher scores in questions related to computer competency and to the use of internet comparing to

teachers. Hence, the hypothesis that was given for that first research question and which claimed that the Algerian students tend to be more technology reliant than their teachers was confirmed.

Question 2: What is the Algerian ESP teachers' and ESP students' Cultural perceptions of online distance teaching/learning?

Results from the quantitative study have confirmed the second research hypothesis which argued that students are much more enthusiastic about online learning than teachers, mainly because they think that these materials are interesting, motivating and undeniably meet the new learning environments needs.

Question 3: What ICT tools that can best serve ESP students in online distance learning in Algeria? And is it possible to provide them in all Algerian universities?

The formulated hypothesis for this question has claimed the use of the free, open source Skype platform which is not an e-learning platform on its own and yet could be very practical if integrated as a pedagogical tool in distance learning.

The verification of Skype's practicability needed the platform to be tested in real online distance courses with real ESP students. And to do so, four EAP (English for academic purposes) students were selected to be parts of the experimental online course which was designed to evaluate the use of Skype from both a technical and a pedagogical point of view. Hence, the technical evaluation attempted to identify through the use of a grid the technical advantages and drawbacks that surrounded the online course via Skype. The results have confirmed Skype's easiness and simplicity of access as well as the usefulness of some of its functionalities like 'screen sharing' have demonstrated its viability. Nevertheless, the technical evaluation has also identified some downsides of Skype's use amongst which internet failure represented the most common drawback.

Besides technical evaluation, Skype's efficiency needed to be evaluated from a pedagogical point of view as well. On the one hand, this was done in regard to the participants' language skills (mainly speaking) improvement; on the other hand, evaluation was done from the point of view of the participants themselves. To this end, the participants' CAF results and post-experiment questionnaires were analysed. This analysis has globally shown a clear progress in the participants' CAF features as well as their answers to the post-experiment questions have revealed positive attitudes toward the use of Skype for distance learning.

Significance of the study

The usefulness of ICTs integration in the Algerian Universities has been the concern of several researches, conferences and workshops all over the country during the last decade. Yet, most of those works were restricted to investigating teachers' and students attitudes and competencies in regard to computer and internet use, but so little research has tested the feasibility of a technology-based instruction in real EFL teaching and learning situations. The significance of the present study is in its contribution to the existing knowledge base, as it has not only investigated both teachers' and students' attitudes and computer competencies, but also it has provided empirical data about using new ICTs in a real ESP learning situation. Indeed, findings of the online experimental courses via Skype in the present study can have on the one hand theoretical significance for future research, and on the other hand they can be beneficial to EFL teachers in general as well as to English language curriculum designers and policy makers in the Algerian University.

Besides, the primary concern of this work is not to make promotion of new technologies for that the teaching/learning methods in the Algerian University keep up with the new era only, but most importantly, it is a matter of feasibility, availability and accessibility of the proposed technological tools in regard to the Algerian teacher and

student. Thus, the choice of Skype in testing online learning in this study rather than any other e-learning platform was above all based on the three previously mentioned factors (feasibility, availability and accessibility). Indeed, while e-learning platforms like Moodle (one of the available in Algeria) would have needed an authentic license, activation of the account by the administration and several hours of training to understand its functioning, Skype has required just a few minutes to be installed for free on the participants' PCs, and its principle of functioning was simple to everyone as it consisted only on commonly known functionalities like making a call (audio or video) sharing documents, sharing the screen, recording, etc.

The experimental study in this work has demonstrated that though Skype does not contain pedagogical functionalities such those in all e-learning platforms and which used for the distribution and collection of tasks, assessment, feedback and evaluation, it has demonstrated that is fully possible to carry on a real English course with as many pedagogical materials as in a classroom setting, if not better. Assessments could be done simultaneously during video call interaction, or delayed thanks to records (if the assignment is an oral activity) and e-messages (if the assignment is a written task). Furthermore, the screen sharing Skype's ingenious option represented a real alternative to physical presence of the learner with the instructor as the former could see all that the later has provided to illustrate and explain his lesson, just like on the board (or on data-show) in classroom.

As Rosenberg (2001) argues, e-learning is a practicable mode of instruction. Nevertheless, it should not be replications of stand-up education and structures should vary, because learning situations and the learners' needs vary. In his book *E-Learning: Strategies for Delivering Knowledge in the Digital Age*, Rosenberg (2001) sets clues to assess readiness for integrating a technology-based form of training, because not any

institution or corporation are ready for delivering knowledge by digital means. Hanson (2003) reviews Rosenberg's (2001) idea of readiness by adding that:

> Success depends on support in a variety of ways considering several factors: the readiness and openness of a culture to share information in a comprehensive manner, the readiness of management to invest resources in developing a robust infrastructure, and the readiness of trainers to design learner-centered curriculum along an ever-expanding continuum of employee needs. (Hanson 2003. pp 80-81)

Thus, readiness is a key element to efficiency and then to successful achievements. And because the process of teaching/learning is the concern of a whole community, readiness of changing the teaching/learning environments in our Universities through the integration of new technologies is the concern of all that community, starting from its decision makers who represent the top of the pyramid to its basis represented by the students.

The findings of this study are limited by factors such as the low response rates for both surveys (questionnaires and Skype experiment), but it does provide interesting trends, and indications for further analysis and research. Furthermore, the researcher looks forward that the findings and the conclusions of this study will persuade the Algerian teachers of English, either specific or general, to adopt and adapt their methods of teaching to the current digital era and encourage them reaching the required literacy for better integrating its sophisticated environment.

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GLOSSARY

(Definitions according to TechTarget.com experts, April 2017)

BLOG : A blog (short for *weblog*) is a personal online journal that is frequently updated and intended for general public consumption. Blogs are defined by their format: a series of entries posted to a single page in reverse-chronological order. Blogs generally represent the personality of the author or reflect the purpose of the Web site that hosts the blog

CD ROM: CD-ROM XA (Compact Disc - read-only-memory, extended architecture) is a modification of CD-ROM that defines two new types of sectors that enable it to read and display data, graphics, video, and audio at the same time. CD-ROM XA was developed jointly by Sony, Philips, and Microsoft, and its specifications were published in an extension to the Yellow Book.

DVD : (digital video disc) DVD is an optical disc technology with a 4.7 gigabyte storage capacity on a single-sided, one-layered disk, which is enough for a 133-minute movie. DVDs can be single- or double-sided, and can have two layers on each side; a double-sided, two-layered DVD will hold up to 17 gigabytes of video, audio, or other information. This compares to 650 megabytes (.65 gigabyte) of storage for a CD-ROM disk.

MP 3: MP3 (MPEG-1 Audio Layer-3) is a standard technology and format for compressing a sound sequence into a very small file (about one-twelfth the size of the original file) while preserving the original level of sound quality when it is played. MP3 files (identified with the file name suffix of ".mp3") are available for downloading from a number of Web sites.

OPEN SOURCE: In general, open source refers to any program whose source code is made available for use or modification as users or other developers see fit. Open source software is usually developed as a public collaboration and made freely available.

PC: personal computer or computing

PLATFORM: In IT (information and communication), a platform is any hardware or software used to host an application or service. An application platform, for example, consists of hardware, an operating system and coordinating programs that use the instruction set for a particular processor or microprocessor. In this case, the platform creates a foundation that ensures object code will execute successfully. When purchasing software, it's important to know what platform the software was written for.

PODCAST: Podcasting is the preparation and distribution of audio files using RSS to the computers of subscribed users. These files may then be uploaded to digital music or multimedia players like the iPod. A podcast can be easily created from a digital audio file. The podcaster first saves the file as an MP3 and then uploads it to the Web site of a service provider. The MP3 file gets its own URL, which is inserted into an RSS XML document as an enclosure within an XML tag

URL: A URL (Uniform Resource Locator), as the name suggests, provides a way to locate a resource on the web, the hypertext system that operates over the internet. The URL contains the name of the protocol to be used to access the resource and a resource name. The first part of a URL identifies what protocol to use. The second part identifies the IP address or domain name where the resource is located.

WIKI: A wiki (sometimes spelled "Wiki") is a server program that allows users to collaborate in forming the content of a Web site. The term comes from the word "wikiwiki," which means "fast" in the Hawaiian language. A wiki Web site operates on a

principle of collaborative trust. The simplest wiki programs allow users to create and edit content. More advanced wikis have a management component that allows a designated person to accept or reject changes. The best known example of a wiki Web site is Wikipedia.

About TechTarget:

TechTarget (NASDAQ: TTGT) is the online intersection of serious technology buyers, targeted technical content and technology providers worldwide. Our media, powered by TechTarget's Activity Intelligence™ platform, redefines how technology buyers are viewed and engaged based on their active projects, specific technical priorities and business needs. With more than 140 technology specific websites, we provide technology marketers innovative media that delivers unmatched reach via custom advertising, branding and lead generation solutions all built on our extensive network of online and social media. TechTarget has offices in Atlanta, Beijing, Boston, Cincinnati, London, Mumbai, San Francisco, Singapore and Sydney.

Some of the important social media sites

Facebook: It is an online social networking service founded by Mark Zuckerberg in February 2004 with his college roommates and fellow Harvard students. Its name stems from the colloquial name for the book given to the students at the start of the academic year by some university administrations to help students get to know each other.

Initially its membership was limited but now it allows any user who declares him/herself to be at least 13 years old to become registered users of the site. After which they may create a personal profile, add other users as friends, exchange messages, and receive automatic notifications when they update their profile. Additionally, users may join common-interest user groups, organised by workplace, school or college, or other

characteristics, and characterise their friends into lists such as "people from work" or "close friends". As of September 2012, Facebook has over one billion active users (of which 8.7%) are fake.

Twitter: Twitter was created by Jack Dorsey, Evan Williams, Biz stone and noah Glass in March 2006 and was launched in July 2006. It is an online social networking and microblogging system, which allows us to compose short messages of 140 characters that are SRJIS/BIMONTHLY/ Madhu Gupta & Kiran Rani (170-181) known as "tweets". Registered users can read and post tweets but unregistered users can only read them. Twitter uses hashtags in order to reach a larger audience.

LinkedIn: This is business and professional networking. Besides allowing you to publish your CV, LinkedIn allows users to join groups, use applications, post your business references, and search for any type of business contact. This social network helps many HR officers and head hunters search a large pool of potential employees.

YouTube: It is a video-sharing website, created by three former PayPal employees in February 2005, where one can view, share, upload, comment on, like or dislike videos. It uses Adobe Flash Video and HTML5 technology to display a wide variety of user-generated video- content, including movie clips, TV. clips, music videos, as well as amateur content such as video blogging, short original videos and educational videos.

Google+: Google+ is one of the newest social networks. The server presents itself as a service that can help you stay in touch with your friends and acquaintances and discover new and interesting people. Once registered on Google+, one can fill in his personal information, upload profile picture, add photo albums from Google Picasa web albums and connect his Google+ profile with Twitter profile and much more.

SlideShare: it is a web 2.0 based slide hosting service. Users can upload files privately or publicly in PowerPoint, PDF, Keynote, or Open Document Presentations formats. Slide decks can be viewed on the site itself. Launched on October 4, 2006, the website is considered similar to YouTube, but for slideshows.

Pinterst: It is very unique social network. On Pinterest, we have virtual pinboard, where we can create, manage and share image collections that are related to a particular topic- hobbies, interests, households, etc. the site was founded by Ben Silbermann, Paul Sciarra, and Evan Sharp and launched in March 2010. Pinterest is similar to earlier social image bookmarking systems. It allows users to save images and categorize them on different boards. They can follow other users' boards if they have similar tastes.

Udemy: It is an online learning platform (website) that allows instructors to host courses. It was launched by Eren Bali, Oktay Caglar, and Gagan Biyani in 2010. Udemy serves as an online platform that allows instructors to build online courses on the topics of their choice.

Using Udemy's content platform, they can upload video, powerpoint presentations, PDFs, SRJIS/BIMONTHLY/ Madhu Gupta & Kiran Rani (170-181) audio, zip files and live classes to create courses. Instructors are allowed to engage and interact with users via online discussion boards. It offers both paid and free courses in various categories such as; language, music, technology, health and fitness, business and entrepreneurship, academics and the arts.

APPENDICES

Appendix A. Teachers' Questionnaire

Teachers' Questionnaire

Introduction: we are conducting a research on the use of ICTs (information and Communication Technologies) in ESP (English for specific purposes) teaching/learning. We'd love to ask you few questions to know your attitudes towards and your opinion about this use. This will help us suggest new perspectives for the development and the improvement of ESP teaching.

SECTION 1 : Your performance at ICTs

part 1: please indicate in the table below your current computer competence level

	1	2	3	4
1. set up software on a computer	○	○	○	○
2. manipulate a computer keyboard	○	○	○	○
3. create file and folders and organize them on a computer	○	○	○	○
4. manage a word processing programme (Word)	○	○	○	○
5. manage a presentation programme (PowerPoint)	○	○	○	○
6. operate a spreadsheet programme (Excel)	○	○	○	○
7. use internet for communication (e-mails, social network, Skype)	○	○	○	○
8. use internet in research studies (browsers, virtual libraries, educational sites, podcasts, e-dictionaries)	○	○	○	○
9. use of an antivirus programme	○	○	○	○

no competence (1), little competence (2), moderate competence (3), much competence (4).

part 2 : please indicate the level of frequency of your internet use in the contexts below

	1	2	3	4
10. at home	○	○	○	○
11. at the university (library, multimedia laboratory, etc.)	○	○	○	○
12. on your lap top	○	○	○	○
13. on your mobile phone	○	○	○	○
14. on your tablet	○	○	○	○
15. at internet café	○	○	○	○

Never (1), Sometimes (2), Often (3), Daily (4).

Section 2: your attitude toward the use of ICTs in ESP teaching

Part 1: please identify your attitudes toward ICTs use as an ESP teacher

	1	2	3	4	5
16. ICT will improve ESP teaching	○	○	○	○	○
17. Teaching with ICTs puts forward real advantages over traditional one	○	○	○	○	○
18. ICTs cannot develop students' learning	○	○	○	○	○
19. ESP would be easier an more interesting for students with ICT use	○	○	○	○	○
20. ICT is not useful for teaching ESP	○	○	○	○	○
21. it would be difficult for me to teach ESP using ICTs	○	○	○	○	○
22. I have no difficulty to design a computer based course	○	○	○	○	○
23. ICT wastes time and complicates the task to me in the classroom	○	○	○	○	○
24. ICT should be used by all teachers	○	○	○	○	○
25. teachers should use ICT in their courses preparation and students assessment/evaluation	○	○	○	○	○

strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

Part 2: please indicate your general perception about e-tools in classrooms

	1	2	3	4	5
26. lessons will be interesting if teachers use e-tools	○	○	○	○	○
27. technology makes me feel I teach through the latest teaching techniques	○	○	○	○	○
28. students prefer to learn from teachers who use e-tools	○	○	○	○	○
29. I am more motivated to teach with ICTs	○	○	○	○	○

strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

30. How do you estimate the use of ICTs in your University (classrooms, labs, libraries, etc.)?

○ bad ○ below average ○ average ○ good ○ outstanding

31. Comparing to modern countries, and in addition to the existing materials your University, what other ICT tools you think students and teachers should use inside and outside of it?

32. have you ever attended to a synchronous videoconference course?

○ yes ○ no

33. have you ever experienced to give an online ESP course?

○ yes ○ no

34. If yes, what site/platform have you used for your course?

Circle the number that represents your degree of agreement or disagreement about the statements below:

	1	2	3	4	5
35. online teaching is efficient to explain the use of English in real life situations	○	○	○	○	○
36. online teaching improves students' pronunciation as they are exposed to native speakers or professionals	○	○	○	○	○
37. online teaching gives students authentic examples of what is taught in theory	○	○	○	○	○
38. students will have difficulty to follow the speakers online	○	○	○	○	○
39. Iprefer traditional teaching methods	○	○	○	○	○
40. Iprefer online activities as I can have instant feedback	○	○	○	○	○

strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

Section 3: please tell about your attitude toward online learning

41. Do you think online learning could be an efficient tool for teaching ESP "busy" learners who cannot attend an English classroom course?

○ Yes ○ No

42. If yes, what benefits could online learning bring to ESP teaching?

43. If no, what drawbacks may online learning arise if integrated in ESP teaching/learning?

44. would you accept being a part of an online teaching experience through Skype?

○ Yes ○ No

45. If no, what are the reasons that prevent you from accepting that?

Section 4: personal information

46. your gender

○ male ○ female

47. your age

○ 20-29 ○ 30-39 ○ 40-49 ○ 50-59 ○ 60 and over

48. how long have you been teaching ESP

○ 1-5 ○ 6-10 ○ 11-15 ○ 16-20 ○ over 20 years

49. University where ESP is taught

Appendix B. Students' Questionnaire

Students' Questionnaire

Introduction: we are conducting a research on the use of ICTs (information and Communication Technologies) in ESP (English for specific purposes) teaching/learning. We'd love to ask you few questions to know your attitudes towards and your opinion about this use. This will help us suggest new perspectives for the development and the improvement of ESP teaching.

Section 1:your performance at ICTs

Part 1: please indicate your current computer competence level

	1	2	3	4
1. set up software on a computer	○	○	○	○
2. manipulate a computer keyboard	○	○	○	○
3. create files and folders and organize them on a computer	○	○	○	○
4. manage a word processing programme (Word)	○	○	○	○
5. manage a presentation programme (PowePoint)	○	○	○	○
6. Operate a spreadsheet programme (Excel)	○	○	○	○
7. Use internet for communication (e-mails, social networking, Skype)	○	○	○	○
8. Use internet in research studies (browsers, virtual libraries, educational sites, podcasts, e-dictionaries)	○	○	○	○
9. Use of an antivirus programme	○	○	○	○

No competence (1), little competence (2), moderate competence (3), much competence (4).

Part 2: please indicate the level of frequency of internet use in the contexts below.

	1	2	3	4
10. At home	○	○	○	○
11. At the university (library, multimedia laboratory, etc)	○	○	○	○
12. On your lap top	○	○	○	○
13. On your mobile phone	○	○	○	○
14. On your tablet	○	○	○	○
15. At internet café	○	○	○	○

Never (1), sometimes (2), often (3), daily (4).

Section 2: students' attitudes toward the use of ICTs in ESP

Part 1: please identify your attitude toward ICTs use by teachers.

	1	2	3	4	5
16. ICT will improve ESP learning	○	○	○	○	○
17. Teaching with ICT presents real advantages over traditional one	○	○	○	○	○
18. ICT cannot develop students' ESP learning	○	○	○	○	○
19. Any language skill would be easier and more interesting with ICT use in classrooms	○	○	○	○	○
20. ICT is not useful for learning ESP	○	○	○	○	○
21. It would be difficult for me to use ICT in learning ESP	○	○	○	○	○
22. I have no difficulty to understand a computer based course	○	○	○	○	○
23. ICT wastes time and complicates the task to students in the classroom	○	○	○	○	○
24. ICT should be used by all our teachers	○	○	○	○	○
25. Students should use ICT in their self-help studies	○	○	○	○	○

Strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

Part 2: please indicate your general perception about the use of e-tools in classrooms

	1	2	3	4	5
26. ESP Lessons are interesting if teachers use e-Tools	○	○	○	○	○
27. Technology makes me feel I learn through latest learning techniques	○	○	○	○	○
28. I prefer to learn from teachers who use e-Tools	○	○	○	○	○
29. Using computer saves me from embarrassment if I make mistakes	○	○	○	○	○
30. I am more motivated to learn ESP with ICTs	○	○	○	○	○

Strongly disagree (1), disagree (2), neutral (3), Agree (4), Strongly Agree (5).

31. How do you estimate the use of ICTs in your university (classrooms, labs, libraries, etc)?

○ bad ○ below average ○ average ○ good ○ outstanding

32. Comparing to modern countries, and in addition to the existing materials in your University, what other ICT tools you think students and teachers should use inside and outside of it?

Part 3: please indicate your attitudes toward online ESP learning

	1	2	3	4	5
33. The English online course could help me understand better	○	○	○	○	○
34. learning ESP online is efficient to understand the use of English in real work situations	○	○	○	○	○
35. Online learning improves my pronunciation as I am exposed to native speakers and professionals	○	○	○	○	○
36. Online learning gives me authentic examples of what we learn in theory	○	○	○	○	○
37. I have difficulty to follow the speakers online	○	○	○	○	○
38. I prefer traditional English lectures	○	○	○	○	○
39. I prefer online English activities as I get instant feedback	○	○	○	○	○

Strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5).

40. Have you ever experienced learning English through an online course?

○ Yes ○ No

41. If yes, what sites/ platforms have you used?

Section 3: please indicate your attitudes toward online learning

42. Do you think online learning could be an efficient tool to learn ESP?

○ Yes ○ No

43. If yes, what advantages can learning through Skype bring to ESP learning in particular?

44. If no, what drawbacks may online learning arise if integrated in ESP teaching/learning?

45. Would you accept to be a part of an online learning experience through Skype?

○ Yes ○ No

46. If No, what are the constraints that prevent you from accepting that?

Section 4: Personal Information

47. your gender

○ male ○ female

48. your age

○ 20 - 29 ○ 30 - 39 ○ 40 - 49 ○ 50 - 59 ○ 60 and over

49. Your subject matter (specialty)

50. Studies level

○ 3 rd year Licence ○ Master 1 ○ Master 2 ○ Doctorat

51. your University

Appendix C. Examples of Worldwide E-learning Platforms

Name	Devloper	language	Site internet
ATutor 2.2.2	Université de Toronto, Canada	PHP	<http://www.atutor.ca>
Bazaar 7.1.0	Université d'Athabasca, Canada	PERL	<http://klaatu.pc.athabascau.ca>
Brihaspati 2	IIT (Indian Institute of Technology), Kanpur, Inde	JAVA	<http://home.iitk.ac.in>
Claroline 1.6.1	Université catholique de Louvain, Belgique	PHP	<http://www.claroline.ne>
DoceboLMS 2.0.4	Claudio Erba, Fabio Pirovano et Andrea Biraghi, Italie	PHP	<http://www.docebolms.org>
Dokeos 1.8.3	Dokeos, Belgique	PHP	<http://www.dokeos.com>
ELecture 2.2.1	Christian & Thomas Lang, Autriche	PHP	<http://physik.uni-graz.at/ ~cbl/electure>
Ganesha 3.0.7	Anéma, France	PHP	<http://www.ganesha.fr>
LogiCampus 1.1.3	Université de Tarrant County, États-Unis	PHP/JAVA	<http://www.logicampus.com>
Moodle 1.4.1	Martin Dougiamas, Australie	PHP	<http://moodle.org>
Open USS 1.3	Université de Munster, Allemagne	JAVA	<http://openuss.sourceforge. net>
Sakai 2	CHEF Project, Université du Michigan, États-Unis	JAVA	<http://sakaiproject.org>
VU 1	Université de Hagen, Allemagne	PERL/C	<http://vu.fernuni-hagen.de>

Appendix D Post-experiment Questionnaire

The purpose of this questionnaire is to examine your perceptions and attitudes toward the experience in regard to the use of Skype in improving your oral interaction. Please read the directions carefully and provide your answers **honestly** in the format requested.

Questions:

1- How useful was this experience for you? Circle the right degree

0 1 2 3 4 5

(not) (extremely)

2- How did you perceive the management of Skype during the experiment?

Easy ☐ **requires some concentration** ☐ **complicated** ☐

3- Please indicate your feelings about the following: (put a cross X)

During experience	Not satisfied	satisfied	Fairly satisfied	Very satisfied
Ease of talk in regard to anxiety/hesitation				
Motivation				
Course tasks				
Personal productions				

4- What do you suggest to improve the process (online course)?

….....

5- Do you think other language skills could be improved through Skype? Yes / No
If yes, which ones?

……

6- Comparing to traditional methods of teaching and learning, what advantages can you attribute to online learning?

….....

Thank you for filling out this questionnaire.

Appendix E Skype's Participants CAF Evaluation

ASMA								
Fluency	**Comments**							
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
Number of repetitions	6 (and..)	4 (talking)	6 (then) (and)	2 (ok) (and)	1 (and)	2(repetition of a whole sentence)	1 (those places)	0
Number of wrong start	1 (so…)	1 (in the first...)	4 (so…)	1 (so…)	0	1 (so…)	0	0
Number of hesitation and reformulations	6 (ammm) (…a good relationships…euh… relationship)	4 (ammm)	2 (euh…)	1 (euh…)		2 (so…euh so again…) (…what is mixed methods…method)	1 (I..I'll repeat)	there is …euuh there are two
Accuracy	**Comments**							
GRAM	-Subject/verb agreement: (…he show his sympathy) (…he know…) -use of wrong tense: they should took…) -Use of wrong/omission of prepositions: (I was attracted to this writer) (in the last moment -Inappropriate Use of the definite article (the both)	-Subject/verb agreement: (that bring their attention…it go…) (there is two cases) -Use of wrong/omission of prepositions: (presenting yourself for them) (…wondering X something…) (what the reason he is doing the presentation X?	-use of wrong tense: (… that you are mention) -Subject/verb agreement: (there are romantic place)	-Use of wrong/omission of prepositions: the mother is bringing the cake X the children. -Inappropriate Use of the definite article: the boy and the girl (instead of 'a') -Subject/verb agreement: there is balls -use of wrong	-Subject/verb agreement: (there is members) (there is types)	0	-Subject/verb agreement: (she use) (Someone already know) (there is four teacher)	

		-simultaneous use of subjects and their personal pronouns: (my mother she told me)		tense: there (is) balls hanging in the roof				
SYN	-Use of incomplete sentences (segments of phrases) eg: I think the best solution, to put a plan	-Use of incomplete sentences (segments of phrases)	- Use of incomplete sentences (segments of phrases) : Best you can relax	Words order: he well organised the points	Sentence structure: all the work and the pression was on me	- Use of incomplete sentences (segments of phrases) -Words order: this is a chef?		
LEX	Words choice: (my topic would be about (instead of will) have a limit time…(instead of limited)	Words choice: (… that's mean…)	Words choice: told (instead of said)	Words choice: May be I will (would) use…	0	0	words choice: i was shocking (shocked) style problem: (fancy with English) (my high (higher) education)	Words choice: the accomplish of your work (accomplish ment)
PHON	Problems with /Θ/ sound: /tri:/ instead of /Θri:/	Problems with /Θ/ sound: /tri:/ instead of /Θri:/	Miss pronunciation of –ng- and –nk- : /siniəl/ instead of /signəl/, /ting/ instead of /Θiŋk/, /ting/ instead of /Θiŋ/	Problems with /Θ/ sound: /tri:/ instead of /Θri:/	0	0	0	0
Errors free clause	13	17	20	24	25	28	35	47

Complexity	**Comments**							
Number of subordinate clauses used	2 (…because…)	4 (…so that…) (…if…) (…whether…) (while…)	1 (…because…)	2 (…because…) (…that…)	3 (…because…) (Though…) (…if…)	5 (If..) (in order to …) (than…) (..that…) (because…)	5 (rather…) (…because…) (…than…) (if…)	6 (…that…) (…because …) (if…)
Considering the other	**Comments**							
Number of asking for help or clarification	4 (I didn't hear you!) (how to say it? (a word in Arabic)	0	1 (how do we pronounce it?)	2 (I don't know how to call this action! (clapping).) (hen!)	0	0	0	0

BOUCHRA								
Fluency	**Comments**							
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
Number of repetitions	8 (so) (like)	4 (I'd like to)	3 (there is)	3 (may be) (something)	2 (may be)	1 (that)	2 (I)	2 (and)
Number of wrong start	3 (so…)	2 (so…)	1 (there is…)	2 (ok..)	0		0	0
Number of hesitation and reformulations	6 (…how to say…) (I'm not sure) (STOP…I forgot the idea)	4 (oh…no I …) (amm)	2 (amm)	2 (amm…)	1 (when we are child..euh, children) (I feel like..)	1 (if…euuh no…)	1 (we… I don't know)	2 (euuhh..)
Accuracy	**Comments**							
GRAM	-Wrong use of the conditional: if	0	Inappropriate use of the definite	0	Inappropriate use of the	Subject/verb agreement: she	Miss Use of conditional: if	Miss Use of conditional:

	they are real (instead of if they were real) -wrong use of articles: the face book		article: it is the cloudy day		definite article: paying attention to the life) Use of wrong preposition: I am addicted in…	have…	I will prepare.., I will use…	if he didn't reject them he will gain…
SYN	-use of incomplete sentences (segments of phrases)	-Use of incomplete sentences (segments of phrases)	-Use of incomplete sentences (segments of phrases) -sentence	-Use of incomplete sentences (segments of phrases)	-Use of incomplete sentences (segments of phrases)		0	
LEX	-Words choice: there are an audience – mixing (instead of confusing) between French and English	-Missing words: I suggest X we … - Words choice: if you have any questions, I'll be happy to accept them	Words choice: countries where I've visited -Missing words: On the left X (side) of the street	Style problems: It is one of my favourite country	0	Words choice: what I am speaking (talking) about (What are you doing with your face) -Style problems: I have rules; I've never slept with makeup.	0	Words choice: it is very famous (common)
PHON	Use of /t/ instead of /Θ/: in three - /ʃ/ instead of /k/: in anarchy	0	0	0	0	Use of /tʃ/ instead of /ʃ/ in SHOES	Use of /t/ instead of /Θ/: in three	
Errors free clause	6	10	18	22	30	47	32	58
Complexity	**Comments**							

Number of subordinate clauses used	3 (…but…) (…unless..) (…otherwise…)	2 (if…), (…because…)	4 (…which…) (…because…) (…while…) (if…)	6 (if…) (…because…) (…that…) (although…)	8 (Once …) (if …) (though…) (whenever …)	11 (…because…) (if …) (…so that…) (once…) (since)	7 (since…) (if…) (that…) (because…) (whenever…) (when…)	5 (if …) (because…) (when…) (who…)
Considering the other	**Comments**							
Number of asking for help or clarification	2 (I didn't understand the question)	1 (can you repeat?)	0	1 I didn't get it	0	1 (could you please repeat?)	0	0

FATIMA								
Fluency	**Comments**							
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
Number of repetitions	37 (inappropriate use of the word "like")	20 (inappropriate use of the word "like")	2 (inappropriate use of the word "like")	1 (and)	2(we)	4 (and)	0	0
Number of wrong start	3 (so…)	2 (so…)		1 (thus, there is a party…)	0	0	0	0
Number of hesitation and reformulations	6 (ammm)	4 (I'll start again) – (… no...)(may..euh..might…) (Germany..euh..German courses)	2 (ammm)	1 (the balls, euh… the balloons)	2 (euh..) (she's, she's …she feels pain)	1 (may be if you... let's say…)	0	0

Accuracy	**Comments**							
GRAM	- Subject/verb agreement: …when a person say…he try to … -Use of wrong/ omission of prepositions: except X (for) linguistics	-Use of wrong tense: (wrong conditional form)	-Use of wrong tense: (before, there is…), (wrong conditional form)	Subject/verb agreement: (there is two kids) (there is toys)	Subject/verb agreement: (she go out) (this quotations) -Use of wrong/ omission of prepositions: (she feels pain her X back) (we concentrate about the price)	Miss use of comparative form: It's more softer	-Subject/verb agreement: There were a conference	-Wrong Comparative: More better
SYN	-Use of incomplete sentences (segments of phrases)	-Use of incomplete sentences (segments of phrases)	-Use of incomplete sentences (segments of phrases)	0	0	-Words order:(So why not we discover …)	Sentence structure: The world where he lives in	0
LEX	Words choice: (when (as) time goes on…) – (…show that we are stressful (instead of stressed)	Words choice: (have a truth idea about him) (..then (instead of but or however) we don't have it)	Words choice: you may (instead of could) visit Tajmahal		-Irrelevant Words: make it focused -Words choice: how happen… (Instead of, how come that…) (they are depended on other people)	they guess what you're saying and what do you mean) (while at the same time…)	Wrong noun: importanty (importance)	0

PHON	0	/binifikəl/ instead of /binifiʃəl/	/send/instead of /sænd/, /mægnifikənt/ instead of /mægnifisənt/	0	0	/spri:ng/ instead of /spriŋ/	0	0
Errors free clause	6	8	10	23	25	38	42	53
Complexity	**Comments**							
Number of subordinate clauses used	2 (…because…)	3 (…because…) (…which…)	5 (…which…) (…because…)	3(…which…) (…who…) (…because…)	5 (…since…) (…after that...) (even though…) (whenever…) (…because…)	4 (…than…) (…that…) (if…) (when …) (while…)	4(…because…) (…since…) (…which…) (if…)	5 (even…) (…because…)
Considering the other	**Comments**							
Number of asking for help or clarification	2 (first activity?) (A or B)	1(…is it correct?)	0	0	1 (I didn't get it)	0	0	0

OUM KELTOUM								
Fluency	**Comments**							
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
Number of repetitions	7 (and)	4 (and)	2 (so)	2 (and)	1(and)	2 (I)	1 (so…)	2 (Talk) (she)
Number of wrong start	3 (the use of "so" in each start).	1 (the use of "so" in a start).	1 (the use of "so" in a start).	1 (here…)	0	1 (I am third year student)	0	0
Number of	7 (euuuh…) (how can	4 (euuh…)	1 (know	2 (I think…)	1(there	1(she	1(She	1 (I talk…I

hesitation and reformulations	I say it)		some, eeuh few…)		is...euh ... there are people)	finish…finishes)	speak..speaks…spoke about…)	mean…)
Accuracy	**Comments**							
GRAM	-Use of wrong/ omission of prepositions: (I need to focus about the topic) (…share X their friends) -Omission of auxiliaries in questions: X you mean…? X write it on…? - Subject/verb agreement: someone post pictures… -Use of wrong tense: (we X already spoke …)	-Wrong personal pronoun: …problems if you can solve it -Use of wrong/ omission of prepositions: I think X Sunday - Use of wrong tense: they posted …, you don't see it?	Use of wrong tense: (I've never speak …) -(I had this dream since I am in secondary school)	-Omission of demonstrative pronouns: (here, X (there) are …), (are this courses help you) -Inappropriate Use of the definite article the (with indefinite words). - use of wrong tense: (she might be prepare), (she want) (he wash dishes) (are this courses help you)	-Subject/verb agreement: : (this guy hide) (it don't appear in his face …) -Omission of possessive pronouns: …they destroy X (their) life	-Use of wrong tense: (I'll be choosing linguistics) (I discovered they are Indians through…) -Inappropriate Use of the definite article: to get the (a) job there	-Subject/verb agreement: she hold -Use of wrong/ omission of prepositions Should conclude with (by)	-Subject/verb agreement: he speak/ mention Omission of personal pronoun: X (I) enjoyed the experience
SYN	Use of incomplete sentences (segments of phrases) -Words' order: It is …?	Use of incomplete sentences (segments of phrases) -Words' order: tomorrow we	Use of incomplete sentences (segments of phrases)	Use of incomplete sentences (segments of phrases)	-Use of incomplete sentences (segments of phrases) -Style problems: they destroy	Words' order: about your webcam, you can't do it?	0	0

		will have …?			X (their) life			
LEX	Words choice: (they do a post on face book)	Words choice: (things who are …) – (I speak (talk) to the headmaster) -use of wrong transitional word: and (instead of however, but or while)	Words choice: (all what concern…) – (best way to move (instead of leave) Algeria	0	0	Words choice: about your webcam, you can't do it?	Words choice: the slide took the summary	Words choice: She talks (says) (When audience are asking)
PHON	0	0	0	Road: **/ru:d/** instead of **/rəʊd/**	0	0	0	0
Errors free clause	2	2	4	8	13	20	21	27
Complexity	**Comments**							
Number of subordinate clauses used	2 (…because…) (though…)	2 (…because..)	0	1 (…though…)	3 (Even if…) (that) (…though…)	3 (…because…) (when…) (even…)	3 (…that..) (…because…)	3 (…that..) (…because…)
Considering the other	**Comments**							
Number of asking for help or clarification	4 (I didn't understand) (can you repeat please!)	1 (do you mean…?)	1 (sorry I didn't prepare well, hhh STOP)	1 (I didn't understand)	0	0	0	1 (So what is mantra?)

Résumé

Dans la recherche d'un meilleur enseignement et d'un meilleur apprentissage de la langue anglaise dans les Universités algériennes -particulièrement dans des disciplines spécifiques- l'étude présente revendique l'avantage de l'intégration des TIC comme un outil pédagogique qui peut résoudre plusieurs problèmes d'enseignement des langues à savoir le manque de motivation et de la compréhension.

La présente recherche est une étude de cas qui essaye d'examiner l'application de tels outils dans l'enseignement de l'anglais avec quelques étudiants universitaires algériens. L'étude est composée de deux parties majeures : la partie de l'étude quantitative (l'utilisation de questionnaires) qui vise à examiner les attitudes et les perceptions de 63 étudiants Algérien en ESP et 20 enseignants d' ESP (de différentes régions en Algérie) envers l'utilisation des TIC dans l'apprentissage et l'enseignement de l'ESP. Les résultats de l'enquête révèlent l'existence d'un écart d'empressement entre les étudiants algériens et les enseignants concernant l'adoption d'un enseignement/apprentissage basé sur les nouvelles technologies.

La deuxième partie de la recherche est une étude expérimentale qui vise à tester l'efficacité de l'enseignement à distance en ligne par Skype dans l'amélioration des compétences de communication orales de quatre EAP étudiants. L'étude expérimentale est basée sur quatre instruments majeurs : l'entretien de pré-expérience, la grille d'observation, l'évaluation de l'Aisance-d'Exactitude-Compétence (CAF) et le questionnaire de post-expérience. L'expérimentation a montré des résultats positifs en ce qui concerne l'amélioration des compétences orales des participants (CAF l'amélioration) et dans leur motivation et attitude vers l'apprentissage en ligne. En conséquence des découvertes, on proposerait quelques changements comme l'utilisation de Skype dans l'enseignement à distance en ligne à être mis en œuvre dans l'enseignent/apprentissage de ESP.

Mots clés : intégration - TIC - enseignement à distance en ligne - Skype - compétences en communication orales.

ملخص

من أجل البحث عن أفضل الطرق للتعليم والتعلم باللغة الانكليزية وخاصة في تخصصات محددة في الجامعات الجزائرية, تقترح هذه الدراسة بإدماج تكنولوجيات المعلومات والاتصالات بوصفها أداة تعليمية لحل مشاكل عدة في تدريس اللغة مثل انعدام الحوافز والفهم

هذا البحث هو دراسة حالة انفرادية لمحاولة درس إمكانية تطبيق هذه الأدوات في تدريس اللغة الانجليزية مع بعض طلبة الجامعات الجزائرية. الدراسة تتكون من جزأين رئيسيين: الجزء الأول دراسة كمية (استخدام الاستبيانات) التي تهدف إلى دراسة اتجاهات وتصورات 63 طالب و20 أستاذ في ESP (مدرسين من أنحاء مختلفة من الجزائر) نحو استخدام تكنولوجيا المعلومات والاتصالات في التعليم والتدريس .نتائج التحقيق تكشف عن وجود فجوة بين الطلاب والمعلمين بشان استعدادهم لاعتماد تكنولوجيا التعليم والتعلم.

الجزء الثاني من هذا البحث هو دراسة تجريبية تهدف إلى اختبار كفاءة التعلم عن بعد عبر الانترنت عبر Skypeفي تحسين مهارات الحوار الشفوي بالانكليزية لأربعة طلاب (EAP). تعتمد الدراسة التجريبية على أربعة أدوات رئيسية: الملاحظة، شبكة التقييم للدقة الكفاءة الطلاقة (CAF) و التقييم بعد تجربة الاستبيان. نتائج التجارب أظهرت نتائج ايجابية في تحسين مهارات المشاركين في الكفاءة الشفوية و في تحفيز على التعلم عبر الانترنت.

ونتيجة لما توصل إليها الدراسة، بعض التغييرات مثل استخدام Skype في التعليم عن بعد عبر الانترنت مقترحة من أجل تنفيذها في التعليم/التعلم (ESP)

الكلمات الرئيسية: دمج الإعلام والاتصال - التعليم عن بعد عبر الانترنت - Skype - مهارات الحوار الشفوي.