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University of Djillali Liabes -SBA
Faculty of Letters, Languages and Arts
Department of English

**Developing the English Competencies of the Telecommunication
Employees through In-Service Trainings. The case of Algerie
Telecom -Saida**

*Thesis submitted to the department of English in Candidacy for the degree of
« Doctorat » in English for Specific Purposes*

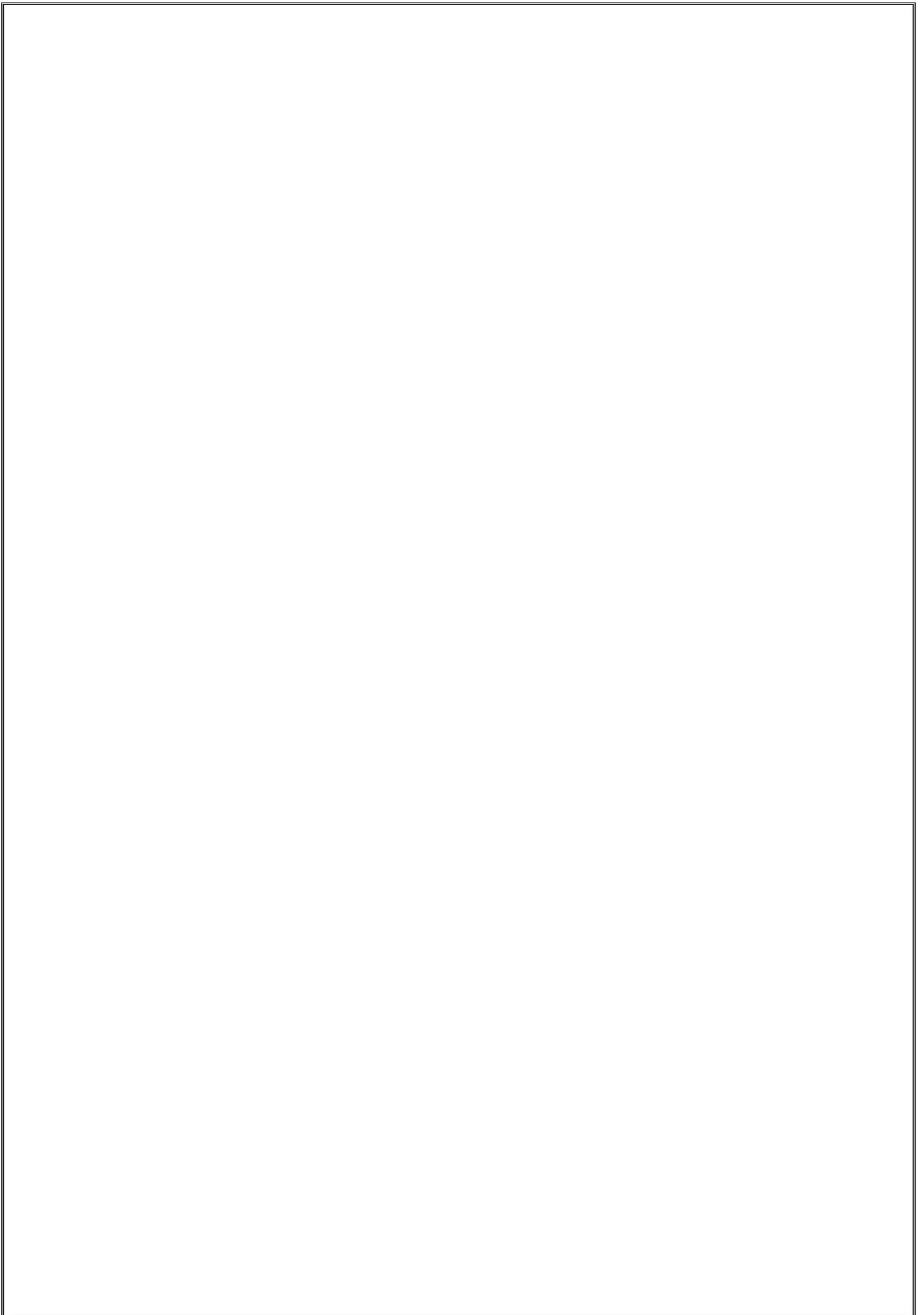
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I hereby declare, Mokhtaria Kherraz, that my docotoral thesis entitled ‘Developing the English Competencies of the Telecommunication Employees through in-service trainings. The case of L’Algerie Telecom-Saida ‘ is my own work and that it does not contain any material that has been submitted before for qualification of any other academic degree or diploma of unversity or institution. I also certify that the present research contains no plagiarism except where others indicated and stated.

Mrs. Mokhtaria Kherraz

January 2021

Dedications

I dedicate this work to

The memory of my father and mother

ALLAH enlightens their earth

My precious angel Imane

My husband for his encouragement and support

My sisters : Malika, Daouia, Fatima, Habiba, Kheira, Melouka

Aicha and Lubna

My nices and nephews

My brothers : Kader, Mokhtar, Abdelkrim and Abdelhak

All my friends

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Abstract

After English for Specific Purposes had strongly spread in the higher educational setting in Algeria, it shifted to the workplace setting where it started to settle itself as an important subject in the trainings that employees in different organizations undergo. In this vein, the present investigation attempts to highlight the use of English for specific Purposes in training employees in one of the most strategic companies in Algeria which is L'Algerie Telecom Company in Saida particularly the software employees who work in the technical body of the company namely the engineers, the technicians and the technical agents. To reach this target, a descriptive analytic research was conducted in order to investigate the extent to which English for Specific Purposes has been integrated in training the technical staff of the company in matter of improving professional English skills at the workplace, the benefits English training may bring to both employees and their company and the effects of their English training on their motivation, interest and satisfaction. The needed data were gathered through several instruments; first, a questionnaire was addressed to the target respondents who are the engineers, the technicians and the technical agents of L'Algerie Telecom Company in Saida. Second, a semi-structured interview was conducted with the responsible in charge of training the employees in the company. Third, another semi-structured interview was conducted with one of their trainers and fourth, a documentation review was done mainly on the training documents in order to have a clear insight on what sources the trainer designs his training courses. The collected data were analyzed both quantitatively and qualitatively. The results revealed that the respondents of the current study lack an important element in their training which is an English program that would enable them improve their spoken and written English communication at the workplace. This requires the call for designing a suitable English program based on the available training material provided by "HUAWEI" Company.

Key-words: ESP, English at the workplace, English program, training employees, AT Company.

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List of Abbreviations and Acronyms

AADL : Agence Nationale d'amélioration et du développement du Logement

ADDIE : Analysis, Design, Development, Implementation and Evaluation

ASTALDI : Italian company

ATC : Algerie Telecom Company

ATKINSON : Turkish company

BEM : Brevet d'Enseignement Moyen

BSC : Basic Station Controller

BTS : Basic Transceivers Station

CBS : Convergent Billing Solution

CCNA : Cursus Certified Network Associate

CISCO : San Francisco

CFPA : Centre de Formation Professionnelle etd'Apprentissage

CLIL : Content and Language Integrated Learning

CNP : Communicative Needs Processor

CRM TTT : Customer Relation Management

DVD : Digital Versatile Disk

EAP : English for Academic Purposes

EBS : English for Business and Economy

EEC : Energy and Environment Center

EGVP : English for General Vocational Purposes

EGP : English for General Purposes

ELT : English Language Teaching

EVP : English for Vocational Purposes

EMP : English for Medical Purposes

ENOP : English for No Occupational Purposes

EOP : English for Occupational Purposes

EPP : English for Professional Purposes

ESP : English for Specific Purposes

ESS : English for Social Science

EST : English for Science and Technology

ESVP : English for Specific Vocational Purposes

FE : Fast Ethernet

GE : General English

HPT : Human Performance Technology

HR : Human Resources

HRM : Human Resource Management

HUAWAI Chinese Company

ICT : Information Communication Technology

ISDM : Instructional Systems Design Model

ISI : Information System Interface

ISDN : Integrated Services Digital Network

IT : Information Technology

LCA : Language-centered Approach

MCFO : Maintenance Center align Fibro-Optic

MPLS : Multi-protocol Label Switching

NA : Needs Analysis

NGBSS : New Generation Business Support System

NRMC : Network and Radio Maintenance Center

ORESC : Odessa Regional Energy Supply Company

PBTD : Pervormance-Based Training Design

PC : Portable Computer

PSA : Present Stuation Analysis

RADAR : Radio Detection and Ranging

SCA : Skill-centered Approach

SHAOLIN : Chinese Company

SONATRACH : Société Nationale pour la Recherche, la Production, le Transport la
Transformation et la Commercialisation des Hydrocarbures

TC : Transmission Center

TNA : Training Needs Analysis

TSA : Target Situation Analysis

VOLL : Vocational Oriented Language Learning

VSAT : Very Small Satellite Technology

General Introduction

General Introduction

It is widely known that any company success depends on the employees' quality. Employees, who are known as human resources, are the creative factor for any company whereas the materialized resources depend on the quality and efficiency of people in the organization that is to mean employees competencies. One of their competencies, which is crucially required nowadays, is to be skillful in the English language.

As the world has become "a global village" due to English globalization and the dominance of the new virtual empire of the internet, most companies are now looking for ways to help their employees improve their English language competencies in order to compete and challenge the national companies and foreign ones as well. One of the strategic companies in any country is the telecommunication company for the great role it plays in providing people with phone service and internet service, and so is the case of L'Algerie Telecom (AT) in Algeria.

The present study is an attempt to highlight the need to use of English for Specific Purposes (ESP) by (AT) employees at their work place particularly the engineers, technicians and technical agents who are working in the technical service of the company. Indeed, when the employee is recruited in the (AT) company for the first time, he is equipped with a certain amount of English knowledge that he has already acquired in vocational institute or in computer science department from where he is supposed to graduate. This cognitive quantum is not enough to carry on with the great progress that information technology improves every day. For that reason,, the focus should mainly be placed upon preparing the employees to be competent in English and this cannot be achieved only through thorough trainings.

It is important to point out that the present study is considered as a second part of a full investigation. The first part focused on AT technicians and technical agents who had graduated from the Vocational Training and Apprenticeship Center (CFPA)" Kada Benammar" in Saida and have been recruited in the technical service of AT company. As trainees, they had studied English for Vocational Purposes (EVP). Hence, the study main aim was to shed light on the appropriateness of the environment in which those trainees were trained. That is to mean their teacher of English competencies, the program and the timing besides their motivation and interest in learning EVP.

To fulfill the investigator's objective in enhancing the previous research work, the present study has partly an aim to shed light on another side which represents the engineers of AT company who, after having graduated from the computer science department in Dr. Mouley Tahar university in Saida, are supposed to work in the technical service; the common point with technicians and technical agents since they are supposed to work together.

Then, the main objective of the current research is to highlight the use of English for Specific Purposes (ESP) by AT technicians, technical agents and engineers as Human Resources at the work place on one side and to check whether English is implemented in their in-service training on the other hand. As a major objective, the reason behind which the investigator has selected this theme is that English is nowadays the language of globalization and the language of technology as well. The dominance of English has led many adult learners to study this language for their specific needs. As a result English for Specific Purposes (ESP) has spread very quickly throughout the world and Algeria in particular. English for Science and Technology (EST) and English for Vocational Purposes (EVP) which are sub-fields of (ESP) are focal points tackled in the present research in addition to English for Specific Purposes which takes the lion share. This latter is spreading fast whatever the discipline is; culture, economy, medicine or teaching, it plays a noticeable and important role in training employees in various fields.

Thus, the work is a form of triangulation of interrelated core points: **EVP, EST** and **ESP**.

The study is based on four research questions

- 1- What kind of English does the technical staff in AT company use at the workplace?
- 2- Does the technical staff in AT company need an English training at the workplace?
- 3- How does implementing English in training the target staff help to cope with technological changes in their company?
- 4- How can in-service English training affect their competencies, motivation and satisfaction?

To answer the stated research questions, the following hypotheses have been formulated

- a- Both the workplace requirements and employees' needs should determine the kind of English to be used.

- b- The work of the technical staff in AT Company is deeply related to Information Communication technology, and then an English training may be needed
- c- Technical staff equipped with the needed English skills may be able to cope easily with technological changes in their company.
- d- A good and beneficial in-service English training may have positive effects on employees' competencies, motivation and satisfaction.

The purpose of the present study is to describe a field that has long been neglected in the land of researches particularly in the use of the English language which hampers the technical staff from doing their tasks easily. Indeed, employees face difficulties at the workplace. Problems sometimes occur in the equipments they use, though there are enough catalogues full of English instructions and are very useful as guides for employees to solve such problems. However, they cannot overcome such problems because of their low level in English.

For that reason, the study in hand sets out to describe the professional improvement of AT technical staff which comprises engineers, technical agents and technicians as Human Resources in comparison to the external environment. As economic globalization has become more pronounced, the ability of organizations to compete in the global marketplace is built on the quality of their human resources. Employees' ability to be competitive in language skills has become an important factor. Nowadays, English use cannot be denied for it is the language of technology besides L'Algerie Telecom investment is related to technology, it has become so necessary for managers in the company to keep their human resources up-to-date through in-service trainings.

Actually, training employees in modern institutions and organizations is considered as a key change for better performance and innovation. Then, training human resources in any organizational context means developing and strengthening their competencies through constantly acquiring new skills and learning new techniques. In other words, employees can refresh their knowledge and strengthen their skills.

Therefore, training has attracted more attention and gained more importance in recent years because it is significant as:

- √ Training enables employees to upgrade their performance through learning modern approaches in order to adapt to the new organizational working development.

√ Globalization which resulted in the appearance of developed techniques and new methods of work. This latter requires training employees to learn new technologies so as to be competent, flexible and proactive..

√ Positive effects of training on employees' attitudes and behaviors in terms of motivation and performance.

It is important to mention that several researchers were interested in searching in the field of training employees at the workplace, whatever the reasons behind which the employees are trained; researchers have assured that training has become an important strategy adopted in order to help the employees improve their professional skills in matter of behavior, attitude and language.

Among the different research works: Mrs. Fawzia Hassaine who, in her magister dissertation, tried to shed light on the need to implement ESP in training employees in order to improve their business communication in HYPROC Shipping Company in Oran. On her side, Asmaa Merine's research, through which, she exploited the field of receptionists in the Algerian hotels. Her investigation was more focused on difficulties receptionists faced while using ESP with clients in the front office. As a conclusion, she made a call for immediate workplace training for the benefits of the receptionists so as to improve their spoken and written communication in English.

Nevertheless, training employees at the work place is not always fruitful; it may have positive, negative or no effects and this can be seen from the employees' performance at the work because training and performance are interrelated. Indeed, training has a direct influence on employees performance, this can be noticed from the benefit training generates for both employees and company. Employees' benefits are reflected in the development of their knowledge, skills, abilities, competencies and behaviors whereas company's benefits are reflected in the increase of productivity and the quality of products or service that the company provides for the clients.

The present investigation is significant in that it will provide benefit to the different AT companies throughout Algeria in realizing the importance of implementing English in training the technical staff of each company. Hence, to adopt such an adequate training as a strategy will certainly develop employees' working performance. It will also serve as a background for further researches in training not only employees in the target company but also in the other private companies such as Mobilis, Djezzy and Oredoo.

From a methodological side, the current research, which is entitled “Developing the English Competencies of the Telecommunication Employees through in-service trainings, the case of L’Algerie Telecom-Saida”, is a descriptive analytic paradigm. It comprises primary data and secondary data. The primary data were gathered through a questionnaire addressed to the employees and two semi-structured interviews; the first was conducted with the manager in charge of the training while the second interview was conducted with the employees’ trainer. As for the secondary data, they were collected from an insight in the documentation of the company such as the English training book, catalogues and software sample. A single case study was adopted in order to investigate a purposive sampling represented by engineers, technical agents and technicians who are working in the technical service of the company.

As any research, the work in hand had a set of limitations among which are:

√ Employees in AT Company vary in two main services: the administrative body and the technical body. The researcher was not able to cover the two bodies because of the wide range of employees. Moreover, English is more used by software employees than administrative employees whose work is limited to French and Arabic languages.

√ As any company, to get access to AT employees was not easy and even to attend a training session with them was impossible that is why the researcher, to be sure, tried to distribute the samples of questionnaire herself to the employees.

√ The researcher faced difficulties in getting access to the documentation of the target company that is why she tried to get several appointments until she could reach an insight on the document that will be later on mentioned in the data analysis chapter.

For the organization of the thesis, the work develops in a general introduction, five chapters, a general conclusion, appendices and annexes. The general introduction is a way paving to the subject matter. It consists of the study background, statement of the problem and for what reasons the theme is chosen. The researcher has also stated research questions in balance with the hypotheses. In what sense the study is significant and the difficulties faced throughout the period of search have also been clarified.

The first chapter is devoted to the review of the literature in relation to the subject. The chapter contains three parts. The first part is an overview of English for General Purposes (EGP) and English For Specific Purposes(ESP), the emergence ESP in Algeria and the difference between(EGP) and (ESP) in addition to the different types of ESP. The second

part focuses on English for Academic Purposes (EAP) and English for Occupational Purposes (EOP) through their definitions in addition to an insight on their similarities and differences. The last part tackles two basic elements within ESP; course design and syllabus design in addition to the different types of syllabi.

The second chapter is a continuity of the literature review. It is divided into three parts. The first part is devoted to a study of both English for Science and Technology (EST) and English for Vocational Purposes (EVP) in matter of definition, characteristics, overview and course design. In addition to teaching English for Specific Purposes in Computer Science department, how students consider learning English and how the teacher views teaching ESP in that department are dealt with.

Then a great deal is devoted to Human Resources as an issue, its importance and the benefits it brings at the workplace. In addition to the role of the English language teaching in the HR training process from both, trainees and trainer's views on one hand and the importance of English use from the employees' views on the other hand. The third part concerns Needs Analysis through the definition, the identification of learner's Needs and the main procedures applied in Needs Analysis.

The third chapter represents the empirical side of the research. It tends to describe the research design, the adopted approaches and the selected procedures in data collection and analysis. The reason behind which a case study is adopted as research method and the combination of qualitative and quantitative methods in data collection and analysis is explained in addition to an overview of qualitative and quantitative approaches is presented. Besides, triangulation in research tools is illustrated through the use of a questionnaire, two semi-structured interviews and documentation insight. The chapter ends with a pilot-study through which the investigator aims to test the reliability and validity of the designed tools.

The fourth chapter is the analytical part of the research. It is a presentation of the results obtained from firstly, the questionnaire that is addressed to the employees as trainees. Secondly, the semi-structured interview which is conducted with the responsible in charge of training process in AT Company. Thirdly, the second semi-structured interview that is conducted with the employees' trainer and fourthly, the documentation review that allows having an insight in the main document that comprises English language and is used in

training AT employees. The findings will be summarized in tables, figures, charts and graphs.

The fifth chapter represents the closing part of the study; it is an annotated catalogue of the findings. As both qualitative and quantitative research approaches have been employed through a triangulation approach to data collection and analysis using interviews, questionnaire and documentation insight, the reliability and validity of the study are more ensured to reach rich outcomes in this chapter. The data analysis is followed by a discussion of the findings obtained. The discussion will highlight the gap in the use of the English language from the vocational institution and computer science department to professionalism. Then fruitful recommendations are suggested as a syllabus design, a course sample and some practical tasks that would enable the respondents to use English at the workplace through improving high quality of professional English in matter of skills and competencies.

In short, the present seeks to explore the use of English by the technical staff in L'Algerie Telecom Company in Saida as a case study. The staff comprises engineers, technician and technical agents whose work is directly linked to equipments such as computers. The investigator seeks to have an insight in the organization in order to check two critical points: a) the need to use English at the workplace and b) whether English is appropriately integrated in training the technical staff.

Finally, the investigator hopes that the current study will highlight a field that has not been explored yet particularly by ESP researchers. Moreover, it will serve as background for further investigations since most researches in ESP have been limited to teaching in higher educational context whereas the economic sector has been neglected though day after day English use spreads more and more in different working contexts and this is due to one factor which is the computerization of all fields of work.

Chapter one

Chapter One

Review of Literature-Part one

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1.1 Introduction

The first chapter is devoted to the literature review in relation to the subject matter English for Specific Purposes (ESP). It contains three parts. The first part is an overview of English for Specific Purposes (ESP), its definitions, characteristics, origin and development in addition to the emergence of (ESP) in the Algerian educational context and the difference between (EGP) and (ESP) followed by the different types of ESP. The second part focuses on EAP and EOP in particular, through definitions and comparison in matter of similarities and differences. The third part provides an insight on syllabus in matter of definitions, types and design in relation to course design.

1.2 Interpretations of English for Specific Purposes (ESP)

After having widely spread, the field of English for Specific Purposes or in short (ESP) has attracted many researchers. It has attracted so many scholars and scientists who have already realized the crucial importance this discipline has throughout the world. So many definitions have been stated by scholars about (ESP) because the way that scholars view this discipline has differentiated from one to another.

Mackay and Mountford (1978:2) state that ESP is “*generally used to refer to the teaching of English for a clearly utilitarian purpose*”. According to Mackay and Mountford, the final objective in teaching English counts much more for learners in order to meet their needs and expectations. MacKay adds that a clear identification of the final goal is itself an important means to teach ESP as an approach (Mackay, 1978:92)

Harmer (1983:1) has supported this point of view and suggests that ESP is “*...situations where the student has some specific reasons to learn a language*”, therefore ESP simply means teaching English to fulfill learners’ needs. Hence, teaching ESP depends on learner’s expectations.

Four years later, Strevens announces that there is a mismatch between scholars in defining ESP; he argues that “producing a simple and straight forward definition of ESP is not an easy task”. Hence, though there has not been a clear definition about this approach, what is clearly understood, according to Munby (1978:2), is that a course design depends on the needs analysis which in its turn will decide upon the content and the materials needed; “*ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learner*”

On their side, Hutchinson and Waters (1978:6) have set up a clear and concise definition through their famous statement *“Tell me what you need English for and I will tell you the English that you need”*

Besides, selecting the suitable methodology is another important point in teaching ESP as Dudley-Evans (1998:9) argues *“ESP has tended to be a practical affair, most interested in investigating needs, preparing teaching materials and devising appropriate teaching methodologies”*. For Dudley-Evans, it is the results of the needs analysis which specify the ESP teaching and materials that should be available. The following questions may be as a key for the teacher to draw his path in preparing his course:

- a. What do learners need English for?
- b. What skills do they need to master and to what extent?
- c. Which genres should the teacher emphasize on either in comprehension or production purposes?

These three criteria may help learners with lower proficiency in language come in contact with the language of their discipline.

Prof. Miliani (1994), on his side, has stated that *“These objectives derive from an analysis of the student’s needs which help determine the way in which a course can go”*. So it is clear that the role a needs analysis plays is to help teacher to choose the best way of teaching an ESP course and to reach learners’ satisfaction.

To sum up what is said by researchers above, ESP; the acronym for “English for Specific Purposes” is an approach of language teaching. ESP is not as some say; special English, but it is rather English for specific needs; an instinctive and strong movement which has spread over the world with more power and effect. As English has become the first international language of technology and science, a new category of learners; who are aware of their needs to learn English appeared and demanded the development of designing specific courses to fulfill these learners’ needs. Then, what does ESP imply?

Actually, ESP is considered as the umbrella that implies broad divisions as EAP (English for Academic Purposes), EOP (English for Occupational Purposes) and EVP (English for Vocational Purposes), EAP also includes EST (English for Science and Technology) as a main part of ESP. It is important to mention that ESP, with its various disciplines, has imposed its influence all over the world and in all fields. It has settled itself in both academic and vocational settings.

In this setting, Basturkmen (2006:18) states that

ESP is understood to be about preparing learners to use English within academic, professional or work place environments and a key feature of ESP course design is that the syllabus is based on analysis of the needs of the students

That is to mean that whatever the setting in which learners are supposed to learn ESP is, the key of a course success should be a needs analysis to facilitate the path of teaching/learning for both the teacher and the students.

Mackay and Mountford (1978) give a more detailed statement:

ESP is generally used to refer to the teaching of English for a clearly utilitarian purpose. This purpose is usually defined with reference to some occupational requirement, e.g. for international telephone operators ... or vocational training programs, e.g. for hotel and catering staff ... or some academic or professional study e.g. engineering ...

ESP is then taught in so many fields that it requires more attention in preparation because it should be centered first on the language; that is to mean repertoire and register and then skills, discourse and genres appropriate to that setting. In this sense, Mackay and Mountford (1978:4) add that teaching ESP comprise “... *a restricted repertoire of words and expressions selected from the whole language because that restricted repertoire covers every requirement within a well defined context, task or vacation*”

Schleppegrell and Royster (1990) claim that;

ESP program design, when selecting texts (spoken or written) it is necessary to identify the language skills that are needed by the learner to perform the task and that are reflected in the text

Thus, according to Schleppegrell et al, designing an ESP course requires appropriate content and methods so that students can acquire the needed skills and performances. On his side, Dudley-Evans and St John (1988) claim that ESP should be clearly defined in its two distinct characteristics; absolute characteristic and variable characteristics:

1.2.1 Characteristics of ESP

After a thorough study, Dudley-Evans and St John (1988) have extended ESP definition by stating two types of characteristics: absolute and variable characteristics.

-Absolute characteristics:

The absolute characteristics are as follow

√ **ESP is designed to meet specified needs of the learners.**

ESP is distinguished from English Language Teaching (ELT) in that learners have a purpose for learning the language. They generally seek to extend their previous competencies to their field of specialism. The communicative competence is considered the most important and the most demanded at the work place.

√ **Content centered on particular subjects, professions and social activities.**

As far as content is concerned, more importance should be given to topics content that is to mean the choice of the topics should serve learners needs. In other words, language specificity appears in the selection of the suitable topics and functions as well. In teaching ESP, the content becomes slightly more complex because it is narrowed to suit learners field of specialty.

√ **Based on the language which is suitable to those activities in syntax, lexis, discourse, semantics etc., and analysis of this discourse.**

Appropriate language teaching in ESP as the choice of tasks and vocabulary represent what in language learning is most important for learners and cannot be selected randomly, in fact it illustrates to what extent the needs analysis is important for the teacher in order to be on the right path to enhance learners' mastery in language practice.

-Variable characteristics:

Whereas variable characteristics are:

√ ESP may be related to or designed for specific disciplines.

√ ESP is characterized by using, in some cases, different methodology distinct from that of General English.

√ ESP is mainly designed for adult learners either at a tertiary level institution, or in a professional work situation. In some situations, however, it can be designed for learners at secondary school level.

√ ESP is generally taught to intermediate or advanced learners.

√ Teaching ESP courses requires some basic knowledge of the language systems.

Therefore, these two distinct characteristics specify what ESP exactly means. In fact, ESP is not as it is thought different from General English but, it is rather an approach to teaching.

1.2.2 EGP VS ESP

One may ask what makes ESP distinct from General English (GE). Hutchinson and Waters (1987:53) state that “*in theory nothing, in practice a great deal*”. Thus, there is no difference between ESP and General English in theory, but in practice the difference lies in that ESP learners are generally adults and possess a previous knowledge in general English, they are also aware of their target needs. In short ESP learners know exactly what they are learning English for, they have a clear purpose to learn either academic, occupational or scientific English, that is why ESP is with a more restricted focus. It offers a complete guide to choose the right material, content and methodology based on needs analysis which are inevitable in ESP and which determine what language skills are useful for the learners to be able to accomplish certain professional tasks.

Stevens (1980) claims that

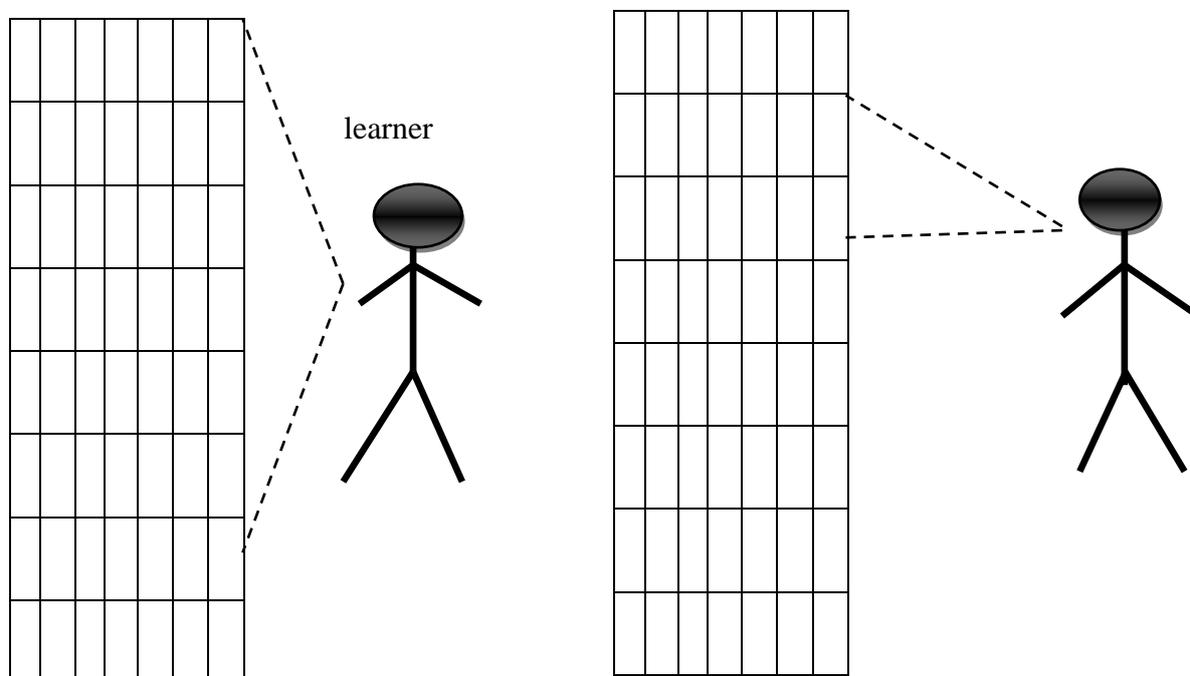
ESP differs from general English in that; it is based on a close analysis of the learners communicative needs for a specific occupation or activity as well as a detailed analysis of the language of that occupation or activity

Besides, English Language Teaching (ELT) which refers to General English is labeled ENOP (English with no obvious purposes) (Harding, 2007) because it is a subject implemented in the educational context with other subjects. Learners are supposed to learn a set of areas in English such as: grammar, lexis, phonology ...etc., it is then language-centered and learners have one target; to pass their final exams.

In Algeria for instance, General English is taught from first year middle school to fourth year where pupils should sit for the BEM exam and English is one of the exam subjects. In the secondary school, students start to specialize in literary, biology or foreign languages streams; they study English with a more detailed grammar, phonetics and lexis preparing themselves for the baccalaureate exam. In such settings, the teacher has only one task to do; it is teaching the program. For that reason general English teachers do not take learners' needs into account, they rather teach them the language for a diversity of situations.

ESP teachers, on their side, are supposed to know what is necessarily to achieve and then teach learners English for a certain area of work place. In addition, they have to play a set of roles from researchers to course designers and from material providers to collaborators and then evaluators. That is why Hutchinson and Waters as well as Dudley-Evans and St. John and many other researchers prefer “practitioner” rather than teacher, because it requires more than teaching. In this sense, Dudley-Evans (1998:13) argues that *“The ESP practitioner has five key roles: teacher, course designer and material provider, collaborator, researcher and evaluator”*.

The next figure clarifies the view of Hutchinson and Waters



General English (GE)

English for Specific Purposes (ESP)

Figure 1.1: The Difference between ESP and GE

(Hutchinson and Waters, 1987:67)

Widdowson (1981) confirms what is said by Dudley-Evans and establishes a set of distinctive features between ESP and general English, they are as follow:

◆ In English for General Purposes:

√ The focus is often on education.

√ To select the course content is more difficult because it is impossible to know learners' future needs.

√ Syllabus has a high surrender value.

◆ In English for Specific Purposes:

√ The focus is on training.

√ Selection of the content is easier because English is intended to be used in specific contexts.

√ The aim is to create a restricted competence in English for Academic Purposes or English for Occupational Purposes; EAP is the theoretical part which is needed to understand or write academic papers, so EAP course is more focused on theory, methodology, concepts and lexicons. EOP, on the other hand, is more oriented towards the application of this knowledge to the real context.

To conclude, ESP has gained its popularity for its clear path from needs analysis to the target situation. Both of practitioner and learner are involved in the selection of the needed material, content and methodology, whereas in ELT, the teacher who is considered as the source of knowledge is autonomous in the preparation of teaching materials, the selection of the methodology and content as well. ELT then stresses the indirect relation to learners' needs Harding (2007).

1.3 Overview of ESP Origins

It is worth noticeable that the historical circumstances of the period of post world war two gave birth to ESP, more exactly in 1945. In fact, there are three main reasons that led to the emergence of ESP. First of all, the demand of "a brave world" Second the revolution in linguistics and third, the focus on the learners.

-Firstly, the demand of "a brave new world" was due to the expansion of scientific, technical and economic activity in addition to the economic power of the United States in the post world war which has resulted in the dominance of English on the international scale. Another factor is the 1970s' crisis of oil which helped western money and English knowledge to invade the oil rich countries. Hutchinson and Waters (1987:6) explain that

This development was accelerated by the Oil Crisis of the early 1970's which resulted in a massive flow of funds and western expertise into the oil rich

countries. English suddenly became big business and commercial pressures began to exert an influence. Time and money constraints created a need for cost-effective courses with clearly defined goals

Moreover, English teaching moved out of the educational establishment to a demand to fulfill the needs of the new generation of learners who knew why they needed to study English and the major reason was business.

-Secondly, the occur of a revolution in Linguistics because of the radical change that appeared in the linguists researches; while their previous researches were based on describing the features of the language, instead revolutionary pioneers, namely Hutchinson & Waters, began to focus on the way in which language was used in real communication. They stated that one of the discoveries is that spoken and written English vary that is to mean English changes from one context to another. In other words, the variation of the language differs according to the situation in which English is used then it is the language instructions that shapes the language in use.

While, in the late of 1960s and the beginning of 1970s, there were many attempts to describe English for Science and technology (EST). Hutchinson and Waters (1987), Ewer and Lattore, Swales, Selinker and Trimble, all were interested in describing this sub field.

-The third reason was the focus on the learner. Hutchinson and Waters noticed that learners used different learning strategies, employ different skills and were motivated by different needs and interests so; more importance was given to the ways in which learners acquired language. A change in the way of learning means a change in the way of teaching through designing specific courses moving from teacher-centered to learner-centered or learning-centered.

1.4 Background and Development of ESP

ESP is an approach to teaching; its main principle is the specification of its syllabus, content and material to meet learners' needs. Teaching approaches have always been in a continuous change and progress and so is ESP. This pedagogy has adopted many teaching theories since its emergence in the 1960's. It has shifted through a set of phases of development. Hutchinson and Waters have stated five phases: Register Analysis, Rhetorical or Discourse Analysis, Target Situation Analysis, Skills and Strategies and a Learning Centered Approach.

•The concept of special language: Register Analysis

This phase was associated with the works of (Haliday, Melcintosh and Strevens, 1964), (Ewer and Lattore, 1969) and (John Swales, 1971). ESP was then concerned with register analysis. Each specialty constituted a specific register. The register of electrical for example differed from that of engineering and the register of biology was different from that of general English. For that reason, scholars focused in their researches on the grammatical and lexical features of each register in order to design a syllabus that gives learners high priority of language forms and help them in their further scientific studies. On his side, Anthony (1997) claims that *“ESP makes use of underlying methodology and activities it serves”* He adds *“ESP is centered on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre”*.

•Beyond the sentence: Rhetorical or Discourse Analysis

Previously, ESP was focusing on understanding the sentence in a discourse to produce meaning, in other words, the focus was mainly on language at the level of the sentence. Then it shifted above the sentence when linguistics breathed life into rhetorical or discourse analysis; a new field concerned with the interrelation between language form and language use.

Discourse analysis study specified in how sentences were combined and how this combination performed in different communicative settings, this helped develop teaching materials needed by students in order to learn some functions such as defining, describing and ...etc.

•Target Situation Analysis

Then, ESP moved to a new phase, emphasis was then put on Target Situation. It was clear that ESP differs from general English in two important features: Needs Analysis that should precede any course design and should be done through a rigorous analysis of linguistic features. Second, Target Situation that should be identified from needs analysis and built on the existing knowledge of learners.

John Munby (1978) on his side suggested a system through which the target situation could be defined. This system, which was called Communicative Syllabus Design, gave a detailed explanation of learners' needs in term of communication purposes, communicative setting, the means of communication, language skills, functions and structures etc., Munby could present all these features through what is known as “Communication Needs Processor” or CNP. The next figure represents Munby's famous CNP

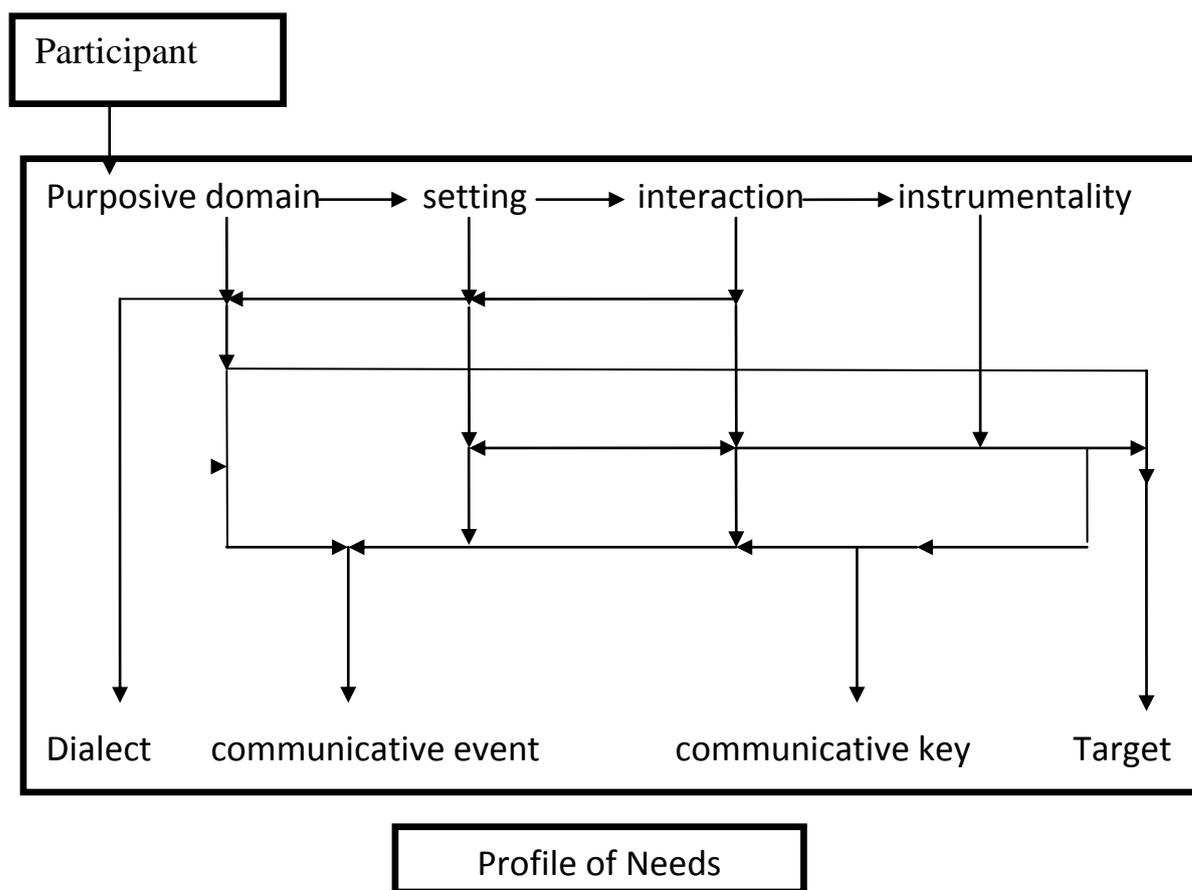


Figure 1.2: Communication Needs Processor (Munby: 1978)

Munby's figure may be explained through a set of questions:

- √Why is language needed?
- √How will the language be used?
- √What will the content areas be?
- √Where will the language be used?
- √When will the language be used?

In his work, Munby introduced Communicative Needs Processor (CNP) and illustrated it through Profile of needs model in which he specified the following parameters:

- a. Purposive domain:** it specifies the type of ESP and the purpose for which learners need the target language.
- b. Setting:** the physical setting describes the situation where English is used while the psychological setting defines the distinct environment in which English will be used.

c. Interaction: it identifies the different settings in matter of status, age group and social relationships with whom the learner will interact with and assumes the relationship between them.

e. Instrumentality: it means three aspects; medium, mode and channel of communication. The first one means whether the language which is used is spoken or written. The second shows the form of language use; whether a monologue, a dialogue ...etc. The third clarifies the means: face to face, through the phone call or radio... etc.

f. Dialects: Taking into consideration the relevant variables shows what kind of dialects the participant is requiring.

g. Communicative event: it shows what participants intend to do with the language: to produce or receive.

h. Communicative key: it shows the politeness or impoliteness of the participants in activities comprising any event.

i. Target level: it shows the linguistic proficiency level of the participants by the end of each course and which may differ for various skills.

With the presentation of Munby's (CNP), Hutchinson and Waters (1987:54) state that;

With the development of the CNP, it seemed as if ESP had come of age. The machinery for identifying the needs of any group of learners had been provided: all the course designers had to do was to operate it

However, Munby's model was later criticized for the following deficiencies:

√The model was systematic and comprehensive which made it inflexible and complex.

√It represented an unordered list of linguistics features.

√It ignored the main stand points that would contribute in the target needs (teacher, learner, sponsors).

Another model was suggested by Mc Donough (1984), it was extracted from Munby's model. This modal could develop the previous one in that it included student-centered and needs were not statistic but rather changing and developing. Yet, it had a negative point, the modal did not concentrate on learning needs, it only concentrated on target and present needs.

The next figure illustrates the model in details.

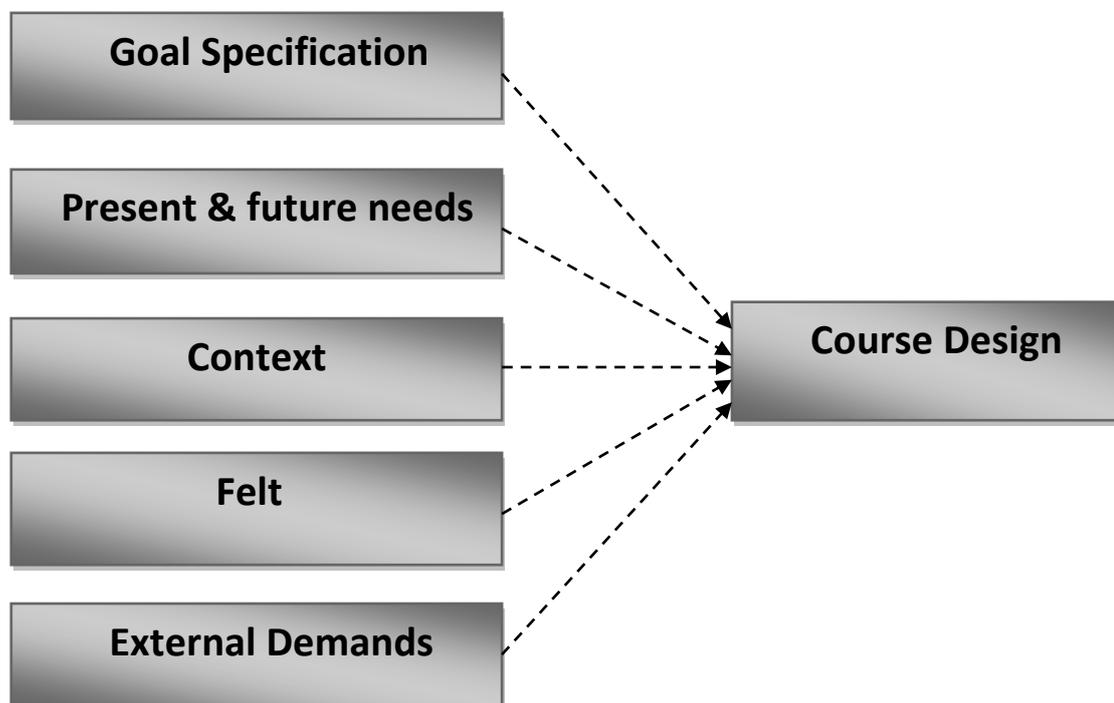


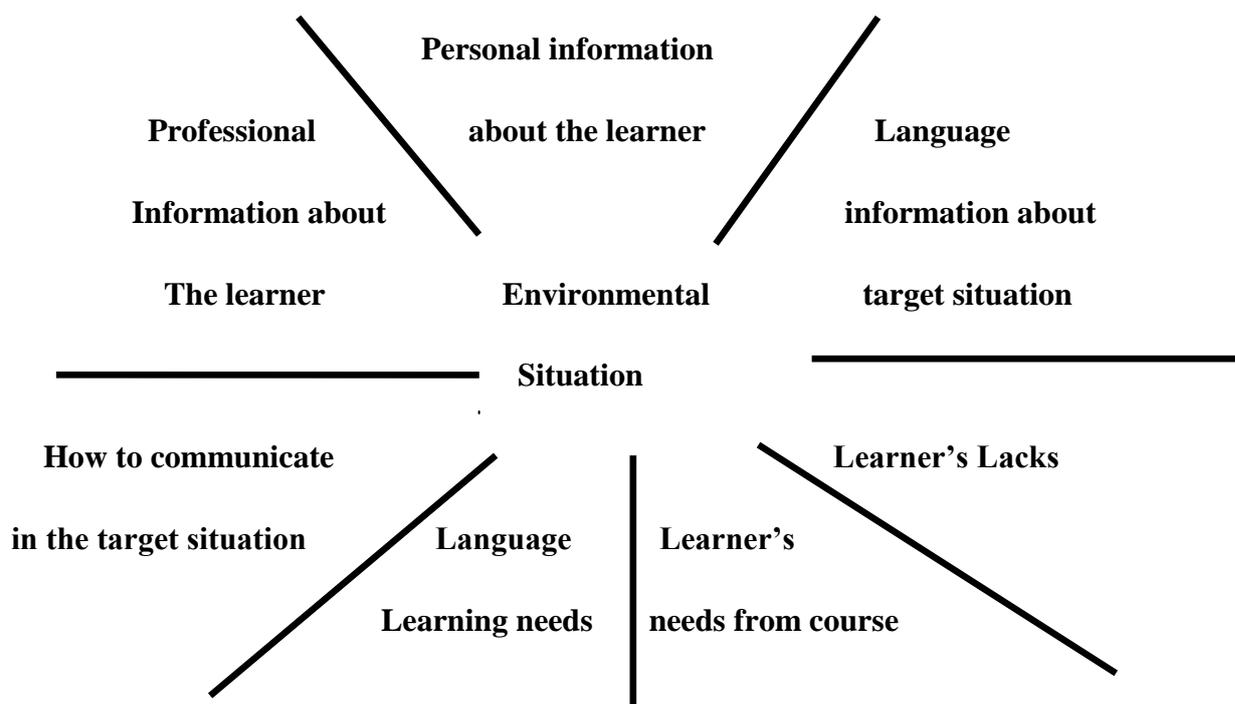
Figure1.3: ESP Needs Analysis Model
(Mc Donough, 1984)

Hutchinson and Waters (1987), on their side, formulated another modal whose basis were “Necessities”, “Lacks” and “Wants”. The modal illustrated these bases as follow:

- a. “Necessities” represent the needs that are determined by the demands of the target situation. Necessities are what learners really need to know in order to function effectively in the target environment.
- b. “Lacks” represent the needs that practitioners need to investigate, it means the previous knowledge that learners have acquired. In other words, lacks are the background on which practitioners can decide which necessities learners need.
- c. “Wants” are simply what learners want to know.

Hutchinson and Waters emphasized on present needs, target needs and learning needs, however, their modal lacked linguistic analysis, discourse analysis and genre analysis.

At last, Dudley-Evans and St John (1998) tried to develop their own modal. They could formulate a better modal of Needs Analysis:



**Figure 1.4: What Needs Analysis Establishes
(Dudley-Evans & St John 1998)**

Through the present modal, Dudley-Evan and St John tried to include the most important elements that would help the ESP teacher to do comprehensive and rigorous needs analysis in order to achieve the learners expectations in preparing the material, content and course successfully. The information about the environment in which the course will run, that is to mean analysis will clarify what is wanted from the course. It also helps identify the tasks and activities students will be using English for, in other words; Target Situation Analysis (TSA) based on their current skills and language acquired, which means Present situation Analysis (PSA).

●Skills and Strategies

In this setting, ESP moved from the surface forms of the language to below the surface. Previously, it was concerned and limited in language use and language forms. However, scholars claimed later on that the learner needs were at the center of the course design and emphasis should then be put on the thinking processes that underlie language use. To put it another way, focus should be put on the interpretive strategies that underlie language forms, an example may be guessing the meaning from context, determine the type of the text and exploit cognates. This phase was remarked by the works of Grillet (1989),

Christine Nuttal (1982) and Charles Alderson & Sandy Urquhart (1984). They all agreed that ESP must be based on understanding the processes of language learning.

●A Learning Centered Approach

This stage was concerned with language learning, during this period. It was believed that a true approach to ESP was based on understanding language learning processes. According to Hutchinson and Waters (1992)

The learner-centered approach is based on the principle the learning is totally determined by the learner. As teachers, we can influence what we teach, but what learners learn is determined by learners alone. Learning is seen as a process in which the learners use what knowledge or skills they have in order to make sense of the flow of new information

From the previous statement, it can be understood that:

√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 generally designed for intermediate or advanced learners.

√Most ESP courses assume some basic knowledge of the language system.

1.5 Different types of ESP

According to David Carver (1983), there are three types of ESP:

1.5.1. English with Specific Topics

According to Carter, in this type the focus shifts from purpose to topic. It is a basic component of ESP courses or programs with focus on situational language. The situational language is generally required in target work place working. Some examples may be students who need English for postgraduate reading studies, attending conferences or working in foreign institutions as concrete examples.

1.5.2. English as a Restricted Language

The restricted language refers to the special repertoire of words and expressions in the language, the special repertoire or practically the restricted repertoire should cover all what is needed and required within a well defined context or vocation that is to say, the restricted repertoire refers to the focus on the purpose for which learners learn and not on

the jargon or register. Mackay and Mountford (1978:4-2) tried to illustrate the difference between restricted language and language as follow:

....the language of international air-traffic control could be regarded as 'special', in the sense that the repertoire required by the controller is strictly limited and can be accurately determined situationally, as might be the linguistic needs of a dining-room waiter or air-hostess. However, such restricted repertoires are not languages, just as a tourist phrase book is not grammar. Knowing a restricted language would not allow a speaker to communicate effectively in novel situation or in contexts outside the vocational environment

1.5.3. English for Academic and Occupational Purposes

Indeed, ESP is broken down into three main branches; a. English for Science and Technology (EST), b. English for Business and Economy (EBE) and c. English for Social Science (ESS). Each branch is further divided into English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). The next figure illustrates the branches and sub-branches of ESP

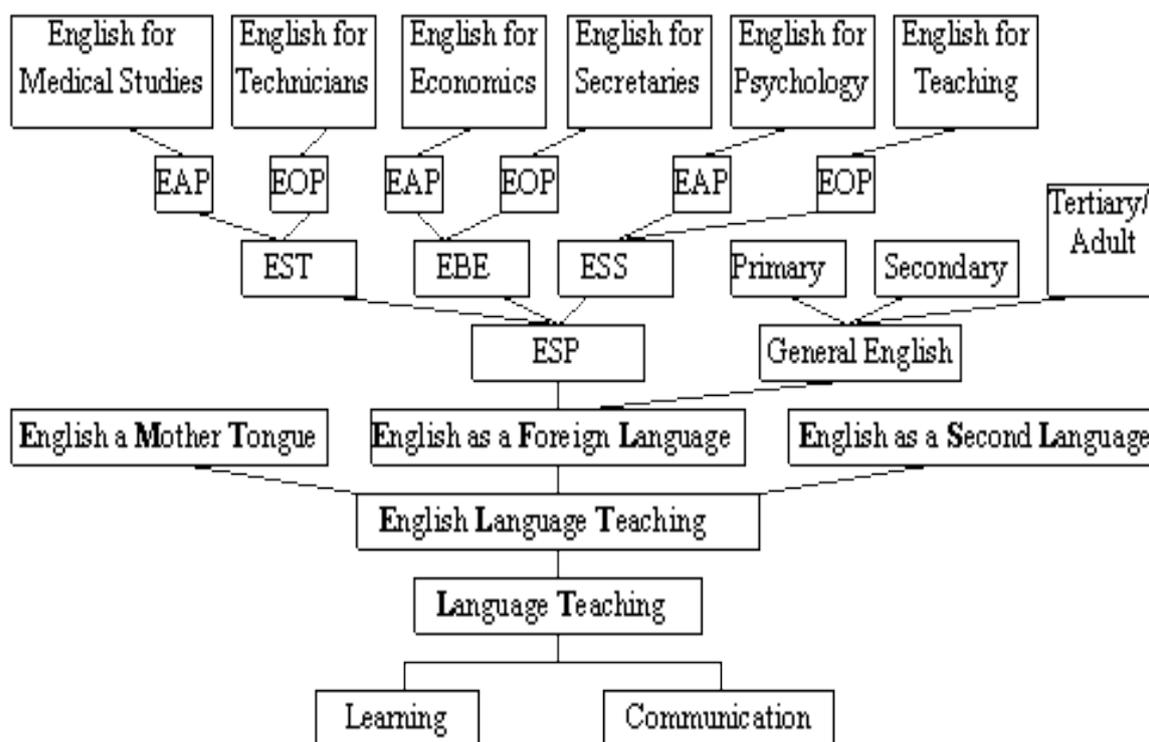


Figure 1.5 : Simplified Tree of ELT (Mackay & Mountford, 1978)

1.6 ESP Brands

There have been several attempts to subdivide ESP into sub-branches. Yet, most of practitioners have agreed on that ESP has two main branches; English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). The former is further divided into English for Science and Technology (EST), English for Medical Purposes (EMP), English for Law and English for Business and Economy (EBE). Whereas, the latter is further divided into two main branches; English for professional Purposes (EPP) and English for Vocational Purposes (EVP).

In this vein, Dudley-Evans and St John (1998) argue that ‘*ESP has traditionally been divided into two main areas: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP)*’. Cummin (2008), on the other side, has differentiated between EAP and EOP in that EAP aims to provide academic proficiency, whereas, EOP leads to interpersonal skills and communication with friends and co-workers in everyday life. The next figure illustrates the attempt of Dudley Evans and St John in subdividing ESP.

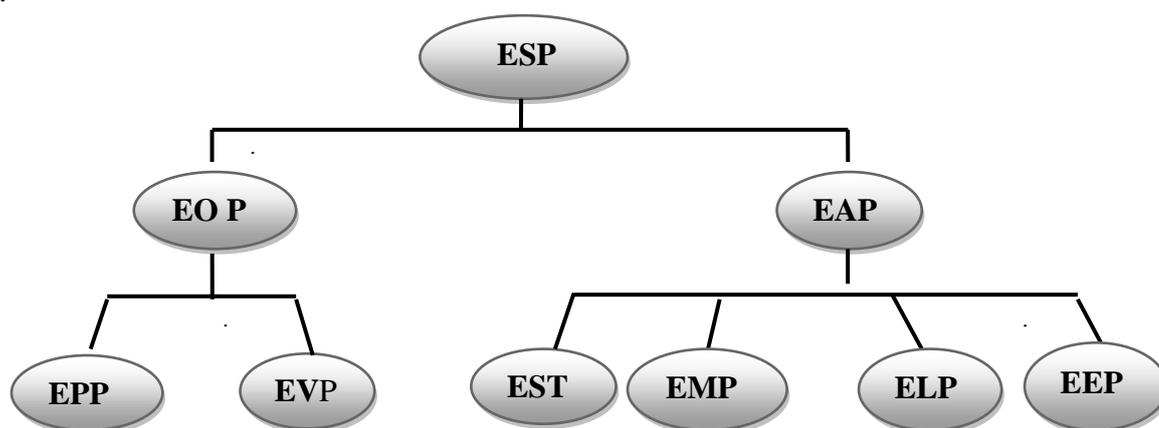


Figure1. 6: ESP Classification

(Adapted from Dudley- Evans & St. John, 1998:6)

1.6.1 English for Academic Purposes (EAP)

English for Academic Purposes (EAP) is a sub-discipline within (ESP). It is characterized by its focus on academic contexts that are encountered in a university setting. It is then a branch of (ELT) and its program is an integrated skills program planned for upper-intermediate to advanced English students who intend to develop their academic reading, writing, speaking and listening skills. Robinson (1988:4) points out; “*EAP is*

generally taught within educational institutions to students reading English in their studies” .EAP generally occurs in the contexts of academic studies. Besides, Robinson (1991: 2-5) describes (EAP) in matters of:

√ EAP learners have usually current higher education level.

√ EAP learners need to learn English to succeed in their academic career.

√ EAP involves an attitude to learning and teaching specific language and practices required in particular academic settings.

√ Most EAP learners are undertaking fixed terms courses to prepare a particular task such as writing essays and dissertation, taking part in group discussions and oral presentations in conferences.

On their side, Hyland and Hamp-Lyons (2002) add *“EAP is the linguistics, sociolinguistic and psycholinguistic description of English as it occurs in the contexts of academic study and scholarly exchange itself.”*

To sum up, EAP is in short the theoretical part which is needed to understand or to write academic papers, where as EAP course is more focused on theory, methodology, concepts and lexicons.

1.6.2 English for Occupational Purposes (EOP)

English for Occupational Purposes (EOP) is another sub-discipline within ESP, but it differs from (EAP) in that it is more oriented towards the application of the theoretical knowledge in the real context. Kennedy and Bolitho (1984:4) state; *“EOP is taught in a situation in which learners need to use English as part of their work profession”*. In addition, (EOP) courses can be considered as a type of English for Specific Purposes (ESP) as Robinson (1991: 3) states *“... for a classification of all the main areas under ESP”*.

On their side, Dudley-Evans et al (1998:7) add;

The term EOP refers to English that is not for academic purposes, it includes professional purposes in administration, medicine, law and business and vocational purposes for non-professionals in work or pre-study work

Thus EOP is concerned with teaching English in occupational settings, in other words, EOP learners require specific English skills in their field of study or their workplace. Teaching EOP in the computer science field for instance seeks to produce skilled

manpower like good advanced-technicians, skilled managers, competent computer programmers and skillful soft-ware and hard-ware engineers.

1.6.3 EAP VS EOP

In the 1980's, both of English for Academic Purposes (EAP) and English for Occupational Purposes (EOP) represented sub-disciplines within English for Specific Purposes (ESP) and were grouped together when Carver (1983) stated three types of ESP: a) English as a restricted Language b) English for Academic and Occupational Purposes c) English with Specific Topics.

As a support to Carver's view, Hutchinson and Waters (1987:16) state that there is not a clear cut-distinction between EAP and EOP;

People can work and study simultaneously; it is also likely that in many cases the language learnt for immediate use in a study environment will be used later when the student takes up or returns to a job

According to Hutchinson and Waters, there is a complimentarity between EAP and EOP, they may even go hand in hand if the learner studies and works at the same time or even if this learner intends to use English at the workplace after having acquired it in an academic setting like the university.

Hyland and Hamp-Lyons state that EAP differs from EOP in its focus on academic contexts, they add; *“EAP is the linguistic, sociolinguistic and psycholinguistic description of English as it occurs in the contexts of academic study and scholarly exchange itself”*. Hamp Lyons on his side assures that the English Language skills of EAP learners will soon develop as the demand for EAP is getting higher by the non-native English speaking academics.

In short, EAP learners require the kind of English to use in academic settings while EOP learners require the kind of English they need in their work profession. Actually, the present study focuses more on EOP for the target context, which will be studied, is the use of English in the workplace training. Besides, Strevens (1977) has confirmed Hutchinson and Waters' view through the following diagram:

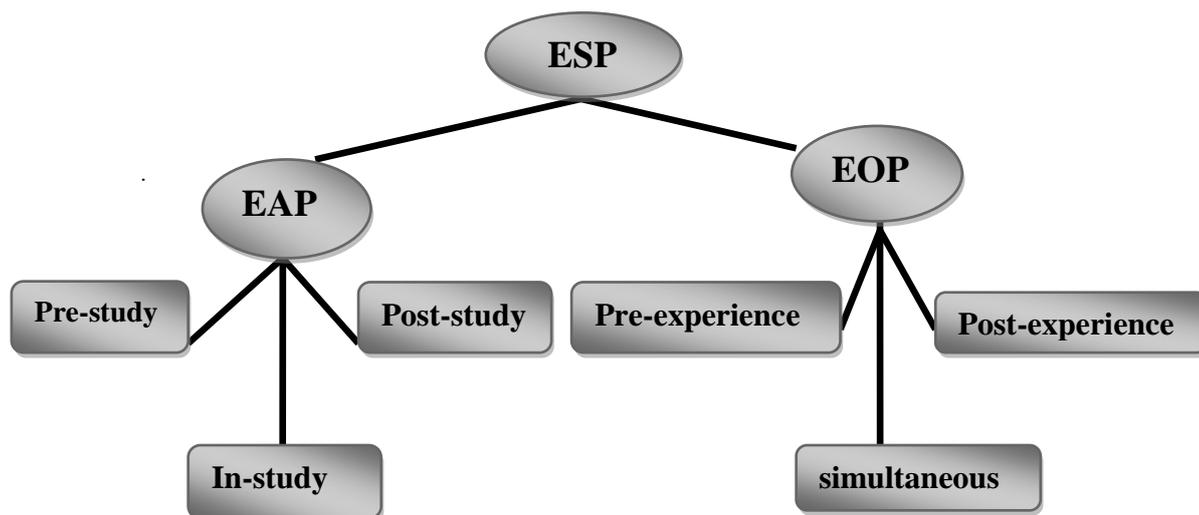


Figure 1. 7: Types of ESP Courses (Adapted from Strevens, 1977)

1.7 ESP as an Approach

English for Specific Purposes (ESP) is not a particular kind of language or methodology nor does it consist of a specific type of teaching materials, ESP is rather an approach to language teaching based on specific needs to learning as Dudley-Evans describes "an attitude of mind". In the same view, Hutchinson et al (1987:19) state " *ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning*". For that reason, designing an ESP course requires much more importance by the teacher than to teach it. According to Robinson (1991: 2), designing an ESP course should be based on the following points:

- 1-Goal directed.
- 2- Based on a need analysis.
- 3-Clearly specified time period for the course.
- 4- Adult students.
- 5-Students are not beginners in English.
- 6-Homogeneous groups; some employees in a company may be required to study English; they should have the shared knowledge and values of the company, but have different jobs to do.
- 7-May include specialist language.
- 8-May include specialist activities.

To ensure a good designing of an ESP course, the teacher should be aware of what is required from him and should be able to cope with any situation in which ESP is taught. However, only an ESP teacher can do so. Yet in Algeria, an ESP teacher is generally a General English teacher who becomes in charge of ESP courses and who needs to know about the different functions of an ESP teacher in order to achieve the target situation for which learners are learning English. Dudley-Evans and St John (1998:15) states 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

Therefore, it is clear that an ESP teacher has more tasks to do than a general English teacher in that he is required to select the right approach that matches the discipline of learners whom he is supposed to teach and he should play the role of a consultant since he does not know more than his learners about the subject matter or the discipline he is teaching them.

1.8 The role of an ESP teacher/Trainer

An ESP teacher's main role is, in fact to help learners. Hence, he is no more a teacher and a source of information, some authors such as (Dudley-Evans and St John, 1998) use the term practitioner because ESP teacher is supposed to be the primary knower, though, learners to whom an ESP course is designed and oriented may know more about the content or work they are engaged in than the teacher himself. Therefore, the main objective of teaching ESP is to improve learners' proficiency in English and performance in their professional area, Robinson (1991:2) states that: "*Students study English not because they are interested in language (or English language culture) as such but because they need English for study or work purpose*"

Besides, flexibility should be one of the main characteristics of an ESP teacher; he should not have the ability to hear but to LISTEN to his learners, take interest in the disciplines or professional activities they are involved in. As a course designer and material provider, the teacher should select the published material and even adapt it if it is not

suitable for their needs and interest. Any subject specific course is often well approached when there is collaboration between ESP teacher and subject specialists; this helps the ESP teacher to design the subject syllabus in an academic context or the tasks that learners have to carry out in a work or a situation. Dudley-Evans (2001) Argues that” *English for Specific Purposes (ESP) has tended to be a practical affair, most interested in investigating needs, preparing teaching materials, and devising appropriate teaching methodologies*”

On the other side, Lorenzo Fiorito (2005) states that:

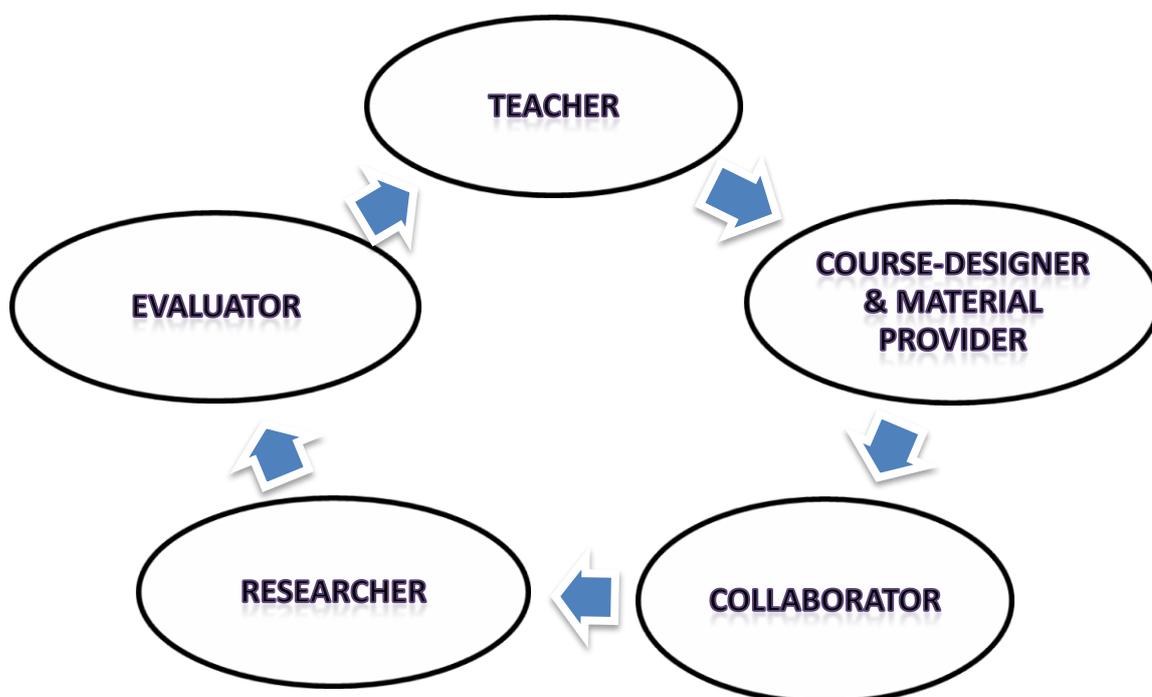
ESP students... have some acquaintance with English and are learning. The language in order to communicate a set of professional skills and to perform particular job related functions. An ESP program is therefore built on an assessment of purposes and needs and the functions for which English is required...ESP concentrates more on language in context than on teaching grammar and language structures. It covers subjects varying from accounting or computer science to tourism and business management. The ESP focal point is that English is not taught as a subject separated from the students' real world instead it is integrated into a subject matter area important to learners

ESP then seeks to set professional skills such as listening; speaking, reading or writing for it is a dependent subject of study linked to particular area: vocational, academic or professional Allen &Widdowson (1974). To improve the speaking skill for instance, the teacher should draw on his learners' previous knowledge in order to generate communication in the classroom.

In another setting, to teach learners how to present a business report orally, it is vital that the teacher adopts the position of the consultant who has the knowledge of communication practices but he needs to negotiate with them to select the best way of communicating in such a situation, that is to mean there should be a sort of partnership between the teacher and the learners.

In addition to designer, material provider and evaluator, the ESP practitioner should be a negotiator with his learners because he is not supposed to know everything about the specialty he is engaged to teach , therefore there should be a two-ways collaboration in which learners will help their teacher learn more about their specialty in turn the ESP

teacher would help them solve the language problems they face. Another important role that the ESP teacher should master is” motivator”; ESP learners are usually upset with the intensive tasks they are involved in and this leads them to be bored. It is then the teacher’s role to motivate them and make them more comfortable by creating a suitable atmosphere and encouraging their learning behavior. The next figure illustrates the ESP teacher roles.



**Figure 1.8: The Role of an ESP Practitioner
(Adapted from Dudley-Evans and St. John, 1998)**

Hence, the ESP practitioner plays remarkable roles in the teaching/learning process as Merine (2019) states

ESP teachers’ qualifications have often been regarded as one of the most important factors affecting the effectiveness of ESP as they are responsible for either the success or failure of the course

Therefore, a good teaching of ESP requires more than teaching a language. The ESP teacher should be able to master a set of roles as he should be a co-learner as long as he is teaching. Dudley-Evans and St John clarify each role with its definition in the following table.

Teacher	Most researchers agree on that an ESP practitioner is first a language teacher who should select the suitable methodologies to teach specific knowledge in order to reach specific objectives.
Course designer and material provider	Designing a course should be firstly based on learners' needs, thus the ESP practitioner should be aware of his learners' expectations in order to provide, adapt and adopt the suitable materials that would help him design and plan appropriate courses.
Collaborator	To be collaborative means to be cooperative and team-teacher. Thus, an ESP practitioner cannot work in isolation or individually, he needs to update his knowledge with the subject specialists to fulfill his tasks. In this sense, Dudley-Evans and St John (1998:16) state that "the fullest collaboration is where a subject expert and a language teacher team-teach classes". Even cooperation with other ESP teachers would result in a successful teaching..
Researcher	The ESP teacher should keep in touch with the latest researches that are related to genre analysis and discourse analysis (Swales, 90; Bhatia, 93). For instance teaching EOP to learners requires making researches in language and skills involved in business communication to know what his learners need for their field of expertise. ESP teacher should then play the role of investigator.
Evaluator	The ESP practitioner is required to evaluate his learners and through their feed- back he would assess himself. It is therefore of crucial significance to test and assess learners' progress and achievements since ESP courses are seen as tailor-made, and this permits the practitioner either to carry on or to change the way he teaches. Dudley-Evans claims that evaluation is an on-going process that should be during and after the course is done.

Table 1.1: The ESP practitioner's tasks

Adapted from (Dudley-Evans & St John, 1998 cited in Harmer, 2011)

To sum up, teaching ESP requires a set of roles that an ESP practitioner should master, knowing that each role completes the other. Indeed, it is not a matter of a duty, but each role he would perform is a must in order to meet learners' expectations and wants. Apart from teaching, designing a course and providing the needed material, collaborating and cooperating, researching and evaluating, the practitioner who is engaged to teach in such a situation has to confront the challenges and be able to better cope with learners needs.

1.9 ESP Course Design

Course design is the procedure by which knowledge about a learning need is interpreted to produce an integrated series of teaching/learning experiences. These experiences lead the learner to a particular state of language acquisition

As it is mentioned previously, ESP has been deeply influenced by ELT methodology and the development of applied linguistics. Yet, it differs in some principles:

- √ ESP is applied to intermediate and advanced learners
- √ Content difficulty should approximate learner's level.
- √ Content should lead language to reinforce learners' basic knowledge.

1.9.1 The Characteristics of an ESP Course Design

According to Carter (1983), there are three characteristics common to ESP courses:

√ESP learners are generally adults. They indeed have an intermediate or advanced level. Therefore, the use of "authentic materials" which is the first feature that characterizes an ESP course from other courses is very important. As Robinson (1991) states; " *Authenticity is a key concept in ESP courses*".

√ The second feature of an ESP course is " Purpose- related orientation". According to Carver, the main objective in teaching ESP is to enable learners to communicate effectively in the target situation and this cannot be achieved only through practice e.g., conducting researches, writing and presenting reports orally and role play in real world situations.

√ "Self direction" is the third feature stated by Carver (1983). This feature aims to turn learners into users, that is to mean learning should totally be determined by learners who should decide what to learn, when and how. The teacher is then asked to conduct a needs analysis so that learners can be autonomous in their choices. Kennedy and Bolitho

(1984:141) state that;” *A prime concern for the teacher is to enable a student to become more and more autonomous in his learning as the course goes on*”.

In short, to ensure an adequate and effective learning, the ESP practitioner should take the previous three features into account so that he may achieve his objectives.

1.9.2 Approaches to an ESP Course Design

In fact, there are three main approaches that are used in course design:

√ **Language-Centered Approach (LCA):** This approach draws a direct connection between content of ESP course and target situation, right from the beginning, it is planned that the learner is supposed to achieve a certain state of knowledge and acquire a restricted repertoire of words and expressions selected from the whole language. This approach has a number of shortcomings:

- a. The process of Language-centered approach seems to be static and inflexible.
- b. Learners are not involved; apart from the needs analysis to know the target situation.
- c. It is rather systematic; learners’ performances and competencies are neglected.
- d. Data is not important in itself.

The following diagram illustrates well this approach to teaching ESP

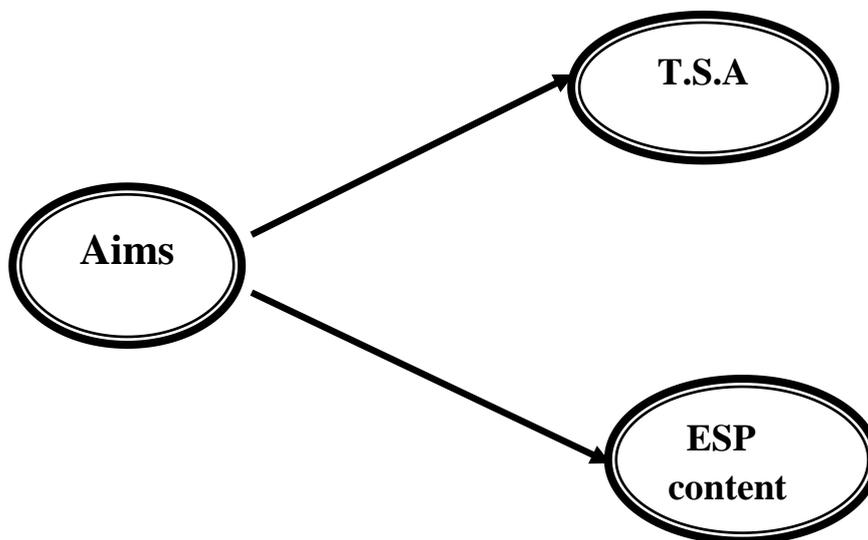
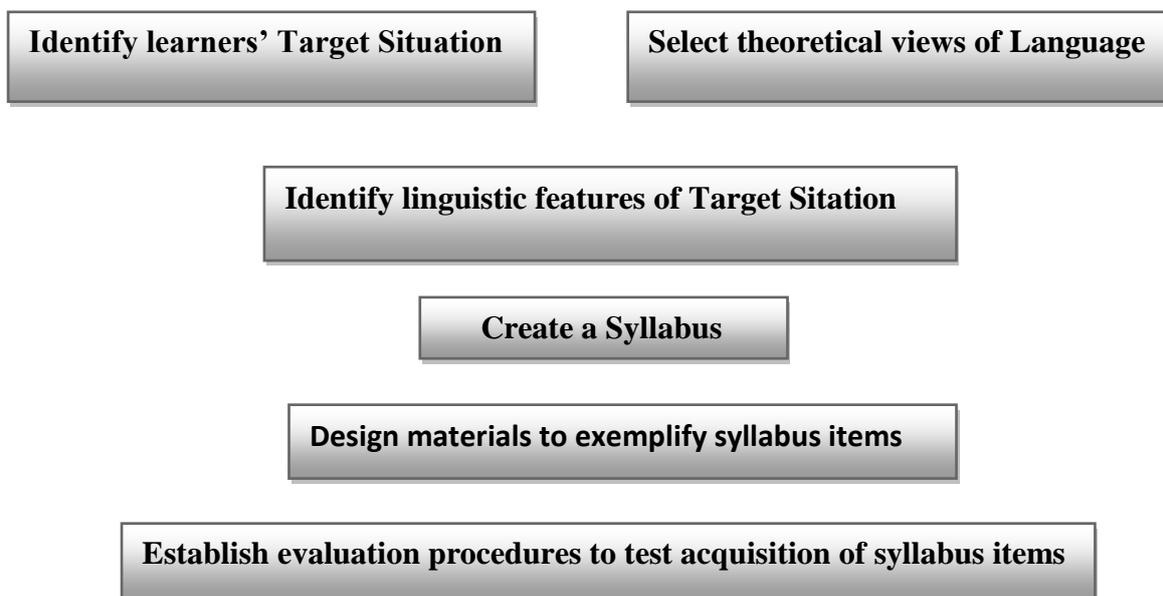


Figure 1.9: Language-Centered Approach
(Modified from the internet)

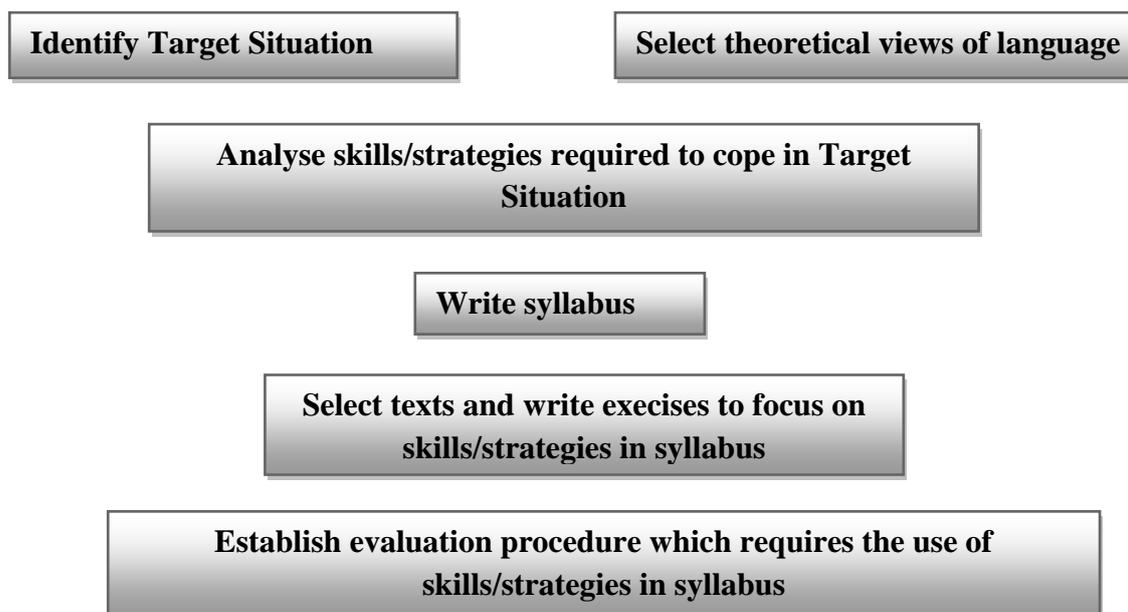
For more clarification, the following diagram illustrates the basis of LCA:



**Figure 1.10: Language-centered Approach Procedure (a)
(Hutchinson and Waters, 1987:70)**

Yet, Language-centered approach has been criticized in a way that it is a straightforward approach and learner's needs are completely neglected as a part in the teaching/learning process though he/she represents a core point without which teaching would not take place. Basturkmen (2010:59) has criticized Language-centered approach for being systematic that is to mean that it is based on statistics. Hutchinson and Waters (1987) have based their criticism on that needs analysis are not taken into account and the approach is a learner restricted instead of learner needs besides it lacks flexibility.

√ **Skill-Centered Approach (SCA):** The SCA helps learners progress their learning skills (Listening, Speaking, Reading and Writing) through different strategies so that they can understand and produce discourse. The SCA main objective is to link learners' performance with their competence as Hutchinson and Waters (1987:69) confirm; "*A skills centered course, therefore, will present its learning objectives (though probably not explicitly) in terms of both performance and competence*". That is to say, SCA is based on goal oriented and process oriented Widdowson (1981). According to Widdowson, SCA helps learners achieve their objectives through their own learning experiences. As a result, they will learn and develop their degree of proficiency in parallel. The following figure explains the basis of SCA.



**Figure 1.11: Skill-centered Approach Procedure (b)
(Hutchinson and Waters, 1987:71)**

As the figure shows, the skill-centered approach starts with the identification of learner's target situation. Besides, a good selection of the theoretical view of language and learning helps in the analysis of skills and strategies that are required to achieve the target situation. Next, it carries on writing the syllabus in which the choice of the texts and the exercises should focus on the skills and the strategies of the syllabus. The SCA ends with establishing an evaluation procedure that requires the use of skills and strategies included in the syllabus.

Comparing the Skill-centered approach with Language-centered approach reveals that more attention is given to the learner in the former approach, but he is still considered as a user not as a learner. In this sense, Huthchinson and Waters (1987:70) state:

Yet, in spite of its concern for the learner, the skills-centered approach still approaches the learner as a user of language rather than as a learner of language. The processes it is concerned with are the processes of language use not of language learning

Thus, Hutchinson and Waters have demonstrated the shortcoming of the SCA in a way that this approach does not respond to the benefit and interest of the learner.

√ **Learning-Centered Approach (LCA):** The first approach that dominated in course designing was based on the grammatical and lexical items of a specific field. Then, the

focus shifted to language use as the need for ESP courses was worldwide spread Dudley-Evans and St John (1998). Next, an outline of LCA is presented

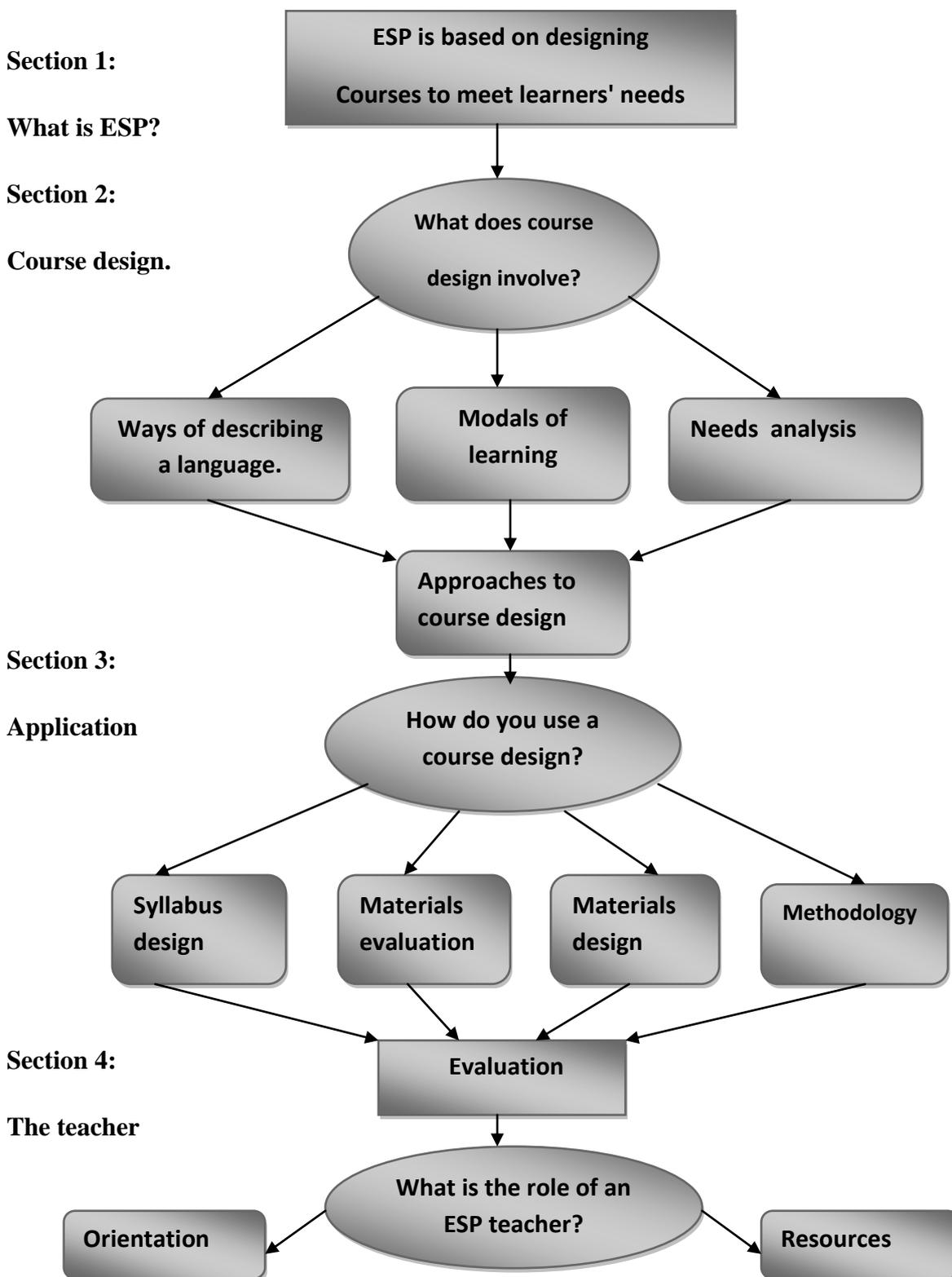


Diagram 1.1: Outline of a Learning-Centered Approach to ESP
(Hutchinson and Waters, 1987:74)

Hutchinson and Waters (1987:72) define the LCA as follow:

Learning is seen as a process in which the learners use what knowledge or skills they have in order to make sense of the flow of new information. Learning, therefore, is an internal process, which is crucially dependent upon the knowledge the learners already have and their ability and motivation to use it

Therefore, Learning-Centered Approach seems to be the ideal approach to adopt in teaching ESP. Among the advantages this approach provides is the participation of the learner throughout his learning and practice which means the learner is more involved the fact which encourages him to work on his own. This latter would increase his motivation and responsibility. Besides, as learners differ from each other in matter of preferences, experiences and skills LC Approach gives the opportunity for each learner to overcome his weaknesses and strengthen his qualities.

It is important to mention that the Learning-centered approach, also known as Learner-centered approach concentrates more on the learner as a basic factor in designing an ESP course. In contrast to the other two approaches, the LCA puts the learner above all when designing the syllabus, providing the needed materials, practice and even evaluation.

So it is obvious that the learner is prior in the LCA approach. While designing an ESP course in Learning-Centered Approach, the teacher should take the following questions stated by Hutchinson and Waters, A (1987: 59) as a guide:

- Why do students need to learn?
- Who is going to be involved in the process?
- Where is learning going to take place?
- When is learning going to take place?
- What do students need to learn?
- How is learning going to be achieved?

In Learning-Centered Approach, the focus is on the learning process. It divides the designing process into two categories:

√ Analysis of actual learning situation from which language syllabus should generate.

and

√ Analysis of target situation on which skills syllabus should be based.

A comparison between the previous approaches indicates that Language-centered approach enables learners to achieve a certain state of knowledge based on identification of their target situation. This contradicts with needs analysis since it is static and inflexible. Whereas, Skill-centered approach looks at the underlying competence to perform skills and strategies in the target situation. However, learners in this approach are language users rather than being language learners.

In Learning-centered approach, learners are more involved because what matters is not the competence itself; it is rather how they acquire that competence. Yet, it is still not a perfect approach because a bad choice of the material or a bad application of a methodology may lead the teacher to a failure.

In the next figure, the learning-centered approach is compared with the other two approaches

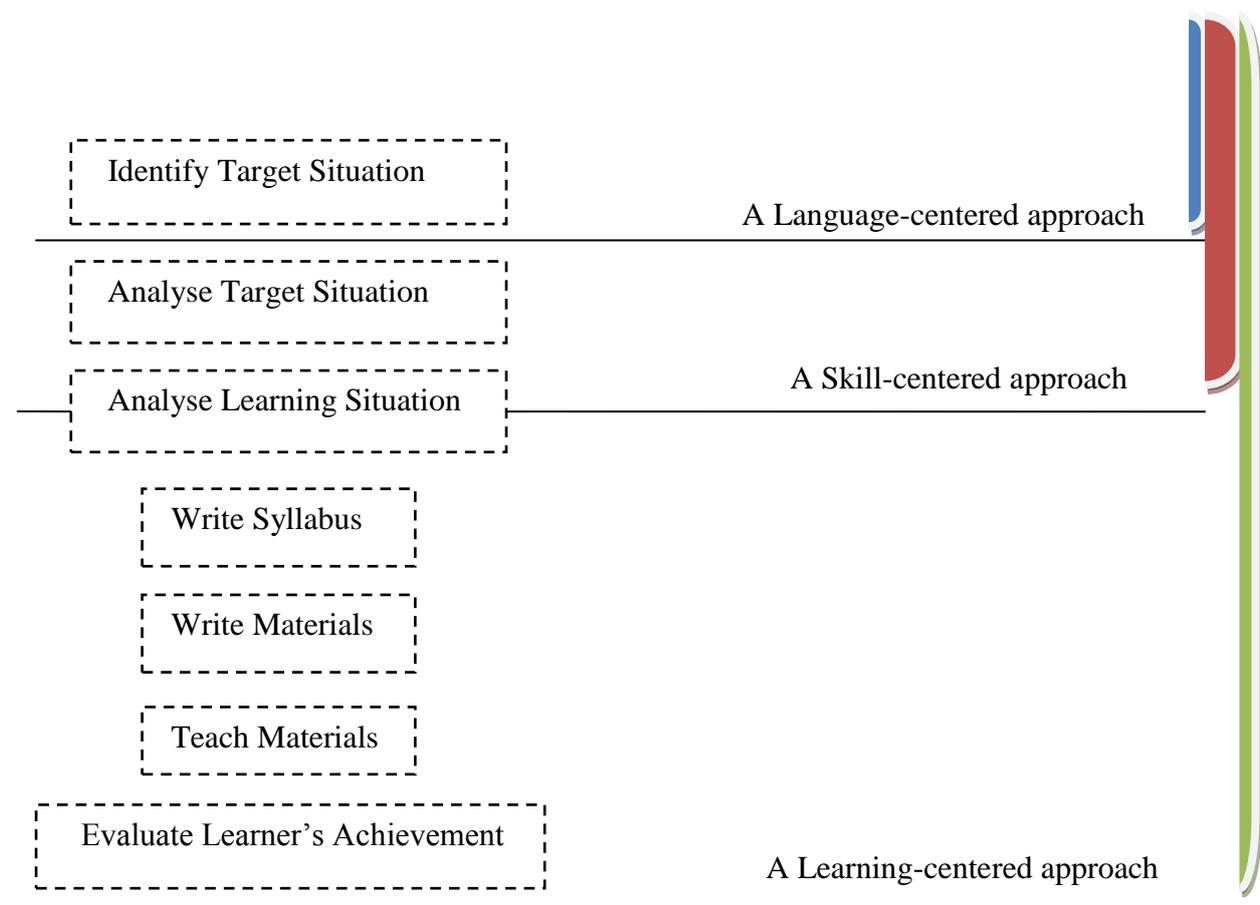


Figure 1.12: A Comparison of Approaches to Course Design

<http://fr.slide share.net/approaches-to-course-design>

To conclude, no approach from the previous mentioned before is perfect. Each approach has advantages and disadvantages. Language-centered approach is rather static because needs analysis are conducted straightforward and are not processed through out course designing. Skills-centered approach on the other hand considers the learner as a user rather than a learner and makes language more important than learning it. Learning-centered approach seems to be better; however it is not a perfect one. A lack or bad choice of the theoretical view of a language may lead to a failure and the planned objective may not be achieved. Therefore, the best way to assure success in designing an ESP course is to adapt and adopt the suitable approaches according to what is required in designing a course, moreover, within the same course eclecticism is required to improve teaching, satisfy learners and assure a good achievement.

1.10 Factors Affecting an ESP Course Design

ESP teachers, indeed, emphasize more on designing courses that would satisfy learners' needs wants and interests. Yet, there are three factors that affect ESP course design as Hutchinson and Waters have stated: a) Language description b) Learning theories and c) Needs analysis. The interdependence of these three factors is required when designing a course to assure success and satisfaction of both the teacher and the learners. More clarification is in the next figure.

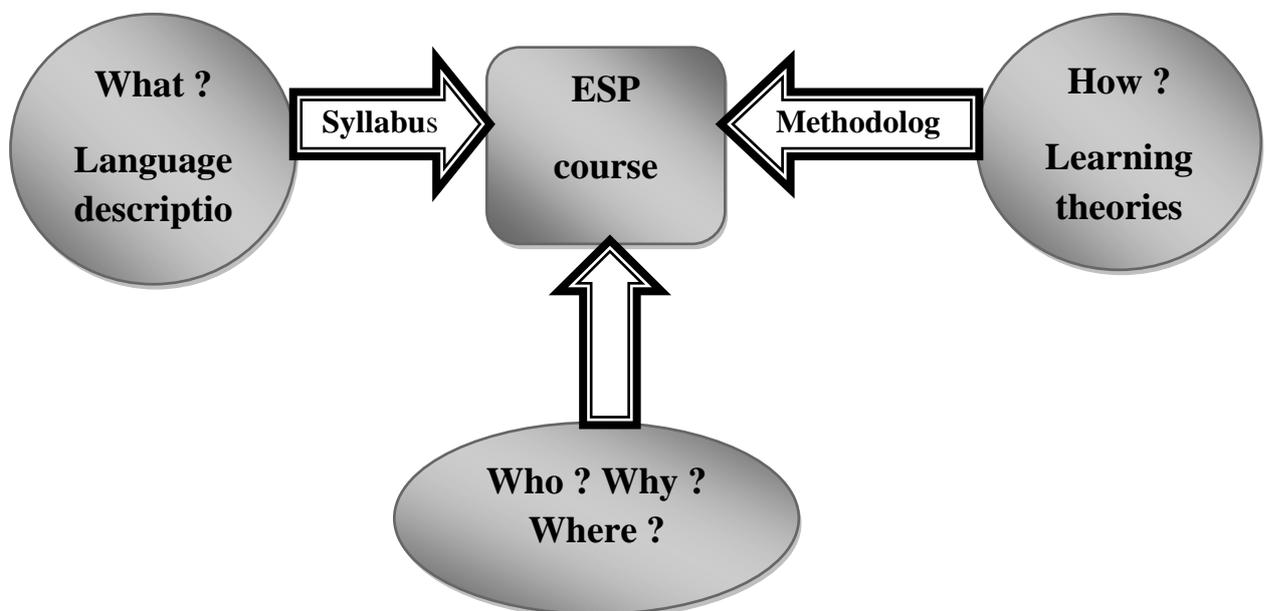


Figure 1.13: Factors Affecting an ESP Course Design
(Hutchinson and Waters, 1987:22)

1.11 Definition of Syllabus

Besides course design and approaches which help the teacher draw his path in teaching ESP, the syllabus is another and certainly not less important guide for the teacher. In this regard, scholars have stated many definitions for the syllabus. Allen (1984:61), for example, says that the syllabus is " *that subpart of curriculum which is concerned with a specification of what units will be taught*"

On his side, Prabhu (1987:86) defines the syllabus as " *a form of support for the teaching activity that is planned in the classroom and a form of guidance in the construction of appropriate teaching materials*". A more specific definition is stated by Nunan (1988:6) saying that syllabus is " *a framework within which activities can be carried out: a teaching device to facilitate learning*".

In short, the syllabus is a statement of what is to be learnt; as content, methodology, aims, feedback and evaluation. It acts as a guide for the teacher by providing goals to be attained.

1.11.1. Reasons for Having a Syllabus

The syllabus is a guide for a better management in organizing the study time, proving the reading materials and assessment. According to Hutchinson and Waters (1987), the syllabus acts as road map for it provides moral support for the teacher and reassures learners. Emphasizing the most important aspects of language to be learnt helps the teacher in selecting the most appropriate materials in designing an ESP course.

Yalden (1987:86) points:

The syllabus is now seen as an instrument by which the teacher With the help of the syllabus designer can achieve a certain coincidence between the needs and the aims of the learners and the activities that will take place in the classroom

The syllabus is also a basis of assessing learners. On the other side, Parker and Harris (2000) see that the syllabus is a contract between the teacher and learners; it serves as a teaching/learning tool.

1.11.2 Syllabus Design

Knowing that syllabus is as important as teaching itself, because without a syllabus neither teaching nor learning would take place, nevertheless, the planning stage of any syllabus should be based on the light of the pre-stated objectives, selected materials and even a time plan. In this sense, Allen (1984:65) points out:

Successful teaching requires that there should be a selection of material depending on the prior definition of objectives, proficiency level and duration of the course. This selection takes place at the syllabus planning stage

In addition to the previous criteria, taking learners' prior knowledge and level of proficiency should also be taken into account when designing a syllabus. In the same vein, Robinson (1991: 34) states that syllabus is “*a plan of work and is, thus, essential for the teacher, as a guideline and context of class content.*” The above assertions point out that the syllabus first concerns the teacher, and that it helps him/her plan courses. Basturkmen (2006:20) argues that “*in order to specify what language will be taught, items are typically listed and referred to as the syllabus*”.

1.11.3 Criteria for syllabus organization

To organize any syllabus, a set of criteria should be taken into account:
In this sense, Corder (1973:296) claims:

A finished syllabus is the overall plan of the learning process. It too must specify what components or learning items must be available or learned in a certain time and what the most efficient sequence in which they are learned is

Therefore, a successful syllabus organization should be based on certain criteria that would help the teacher sequencing the selected topics to be taught, providing the needed materials and timing each task in order not to waste time. All what ESP teacher can do is summarized and clarified in the following notes:

- √ Identify which and what materials to be focused on.
- √ Select the appropriate materials to be taught.
- √ Subdivide the units and put things into subtopics.
- √ Sequence the sub topics and decide which comes first and what comes next.

1.11.4 Types of syllabus

The variety of pedagogical approaches has led to the design of different types of syllabi. It is worth noticeable that various kinds of syllabi have been introduced and applied in ELT. Traditionally speaking, the focus in designing a syllabus has shifted from structural to situational and from functional to topical however, there is now a remarkable blurred vision in making a clear distinction between a syllabus and a methodology. Nunan (1988:52) claims that *“the traditional distinction between syllabus design and methodology has become blurred”*. Syllabuses are labeled under two major types:

1.11.4.1 Synthetic syllabi

Synthetic syllabuses, which are referred to as Product oriented Syllabuses, focus on teaching graded items (structures and functions) that have been segmented from the target language and then should be synthesized by learners. It is important to mention that structural, notional, lexical and situational syllabuses are synthetic.

a. The structural, grammatical or linguistic syllabus

It has been prevalently used in ELT and it is mainly based on grading grammar items from simple to complex. Nevertheless, learners are intended to be able to master a set of grammatical structure as they are expected to be linguistically competent. Yet, the structural syllabus has been criticized because learners acquire passive knowledge and then become language learners rather than language users. Wilkins (1972) claims that the structural syllabus is *“constrained to ordered items to be synthesized in the learner’s mind as knowledge”* Thus communication is completely neglected for the structural syllabus is semantically constructed, thus learners cannot achieve communicate acts in real life contexts.

b. The functional / notional syllabus

The functional/notional syllabus content includes teaching a set of functions such as requesting, complaining, apologizing, inviting ...etc. These functions are performed using a number of notions that embrace comparison, time, age, size, location and so on. Wilkins (1972:8) defines it as *“ the content of language teaching is a collection of the functions or the notions that are performed when the language is used”*. Harmer (2001:297) confirms what was said and adds *“the syllabus designer then chooses exponents for each function”*.

The functional/notional syllabus then adds the communicative performance as a goal to learners’ knowledge so that language can be affectively used in authentic situations. In other words, learners should be able to put their knowledge into action.

Besides, ESP learners should acquire competence through learning and should also perform what they learn to cope with the different situations they face. On his side, Widdowson (1990:31) claims “*a syllabus which defines its content in functional terms is used for communicative competence*”. It is then the teachers’ role to help learners develop their ability to communicate effectively.

It is important to mention that both the instructional and the functional syllabuses complete each other because without linguistic forms a learner cannot communicate and without communicative competence the learner cannot be involved in the learning process. Hence, to design an effective program that would enable the learners to improve their communicative competence at the same time master the linguistic forms of the English language both syllabuses should be well utilized.

c. The lexical syllabus

The lexical syllabus content implies vocabulary and lexical units. The linguistic issues applied to this syllabus are:

- √ Word formation (suffixes, morphemes)
- √ Compound items
- √ Connotations
- √ Denotations
- √ Collocations
- √ Lexical chunks
- √ Vocabulary related to different topics, such as jobs and occupations.

Besides, the target vocabulary to be taught is normally arranged according to educational levels. The following table illustrates the amount of the vocabulary in each level:

Elementary level	Intermediate level	Upper intermediate level	Advanced level
500 words	1.000 words	1.500 words	2.000 words

**Table 1.2: The Amount of Lexis stated in the Lexical Syllabus.
(Richards, 2001)**

As any syllabus, the lexical syllabus outcomes have advantages and conversely have also a number of deficiencies. The next table summarizes the positive and negative outcomes:

Advantages	Disadvantages
<ul style="list-style-type: none"> ● High gain of vocabulary acquisition. ● Facilitate acquisition in a limited time. ● bridge the gap between the acquired knowledge and productivity of target vocabulary. ● Focus is on vocabulary as bases to function the four skills 	<ul style="list-style-type: none"> ● Difficult to apply. ● Lexis have various facets ● Grammar is neglected ● It lacks a learning theory

Table 1.3: Advantages and disadvantages of lexical syllabus

d. The situational syllabus

The situational syllabus implies the content of language teaching of different situations such as ; at school, in the hospital, at the bank, in the airport etc. In fact the situation means the setting in which particular communicative acts occur. Like the previous syllabuses, the situational syllabus has advantages and disadvantages:

Advantages	Disadvantages
<ul style="list-style-type: none"> ◆ Ability to communicate in different settings ◆ Teach the language rather than either grammar or vocabulary in isolation. ◆ Gain social and cultural information ◆ Motivate learners to meet their everyday communication needs 	<ul style="list-style-type: none"> ◆ Difficult to sequence the situations ; what comes first and what comes next. ◆ It is short-term and special-purpose ◆ Language use is limited in the classroom ◆ Language used in a situation may not transfer to other situations.

Figure 1.14: The Advantages and Disadvantages of the Situational Syllabus (Wilkins, 1976)

1.11.4.2 Analytic syllabi

After realizing the weaknesses of the synthetic syllabi, a new approach evolved, it had “*the goal of communication and interaction from the first day of the study at whatever age or learning level*” Finochiaro & Brumft (1983:10). This new approach is the Communicative Approach. Hence, new teaching syllabuses have then been designed, they are called “Analytic syllabi”. These new syllabi are organized in terms of purposes of learning; procedure, process and task that is why they are referred to as process oriented syllabuses. In such syllabuses, language is presented as a whole chunk aiming at enhancing the communicative language skills through tasks and activities.

Nunan says that much more focus is given to the learning process than to the learning product Nunan (1988). Wilkins, on the other hand claims that the analytic syllabus plan should be “*organized in terms of the purposes for which people are learning language and the kinds of language performance that are necessary to meet those purposes*” Wilkins (1972:13).

a. Topical/ Content based syllabus

This syllabus is generally organized around themes and topics. It has positive points at the level of linguistic forms which are more meaningful in comparison with other syllabuses. In addition to the integration of the four skills and the use of authentic materials which is an important factor of learners’ motivation.

b. Skill-based syllabus

It aims at developing the language skills (listening, speaking, reading and writing). In designing the skill based syllabus, the teacher focuses on the skill(s) that learners need to acquire, and then the selection of the topics, structures, vocabulary should be according to the target skill(s). An example may be listening for specific information, reading and answering a questionnaire, writing an application letter and speaking or telling about past events. The skill based syllabus helps learners ameliorate their communicative competencies.

c. Task-based syllabus

This kind of syllabus is organized so as to encourage learners perform a set of tasks in order to develop their language competencies. In fact, the tasks are distinctive between real-world tasks and pedagogical tasks. Long explains that real-world tasks are “*examples of task include painting a face; dressing a child; filling out a form ... In other words, by task it is meant the hundred and one things people do in everyday life*” Long (1985).

Pedagogical tasks, on the other hand, are the structured work students are asked to perform in the classroom.. Indeed, the aim of the task-based syllabus is the focus on meaning and context rather than teaching grammar. The tasks in such a syllabus may vary from interpreting timetables to reading maps and transferring charts and diagrams into written passages and vice versa. Furthermore, the task-based syllabus aims at:

- √ Focusing on learners' needs and expectations.
- √ Teaching communication through practice, such as interaction between learners.
- √ Introducing authentic texts.
- √ Teaching real language through the use of authentic materials.

This syllabus was criticized in that skills and grammar are neglected and therefore, learners would not be able to use the tenses appropriately.

To sum up, there is no ideal syllabus that may meet learners' expectations and satisfy their needs. For that reason, Benyelles (2009:55) confirms that "*no syllabus can bring positive results on its own because of the variety of students' needs.*" Thus, in order to assure successful teaching, eclecticism is required for it is the only method that facilitates the combination of several syllabuses to create a suitable syllabus.

1.12 ESP syllabus Design

In ESP, syllabus design is based on a set of points to which the teacher should give importance: Learners' needs analysis is the starting point followed by the ESP syllabus design that is focused on content, skills, and methods (Martin, 2012). Then, ESP syllabus is constructed according to learners' needs and this does not prevent the ESP teacher to be selective in his teaching that is to say integrate several syllabuses in his designing. Accordingly, Yalden (1987:94) argues;

One might begin with grammar and pronunciation only, as one does in a structural approach, but introduce work in the language functions, and in discourse skills fairly early and in time increase the component of the course

Therefore, it is the role of the teacher and syllabus designer to be selective and list a set of pragmatic or semantic units they think are important. What matters here is learners needs and expectations.

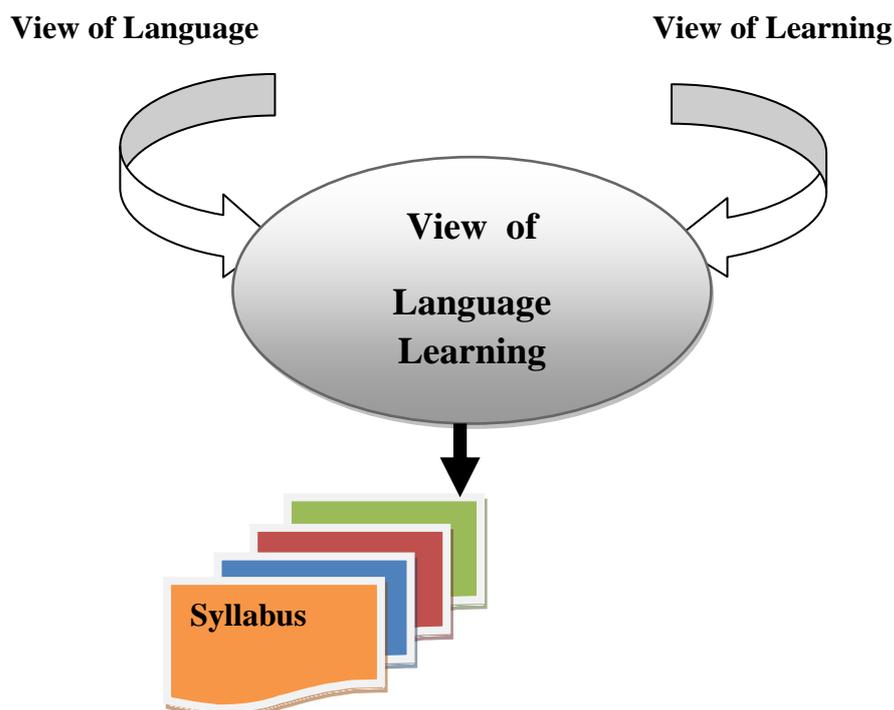
Previously, scholars agreed that teaching English for Specific Purposes was not intended for social purposes academic, professional or workplace settings differed from other settings. For that reason, they used the term “hard” language that should be a focus in teaching ESP rather than “soft”; which means social functions. Halliday (1973) also, mentioned the terms “referential” that means language used to convey facts and knowledge, rather than “instrumental” which refers to language used to get things done. Yet, modern applied linguists investigated the social functions in different workplaces and recognized their importance. An example may be pilots use of easement (soften utterances) at the workplace correlated with their safety level, Linde states that “*the more mitigation the pilots use, the higher their safety performance records become*” Linde (1988)

Accordingly, Flowerdew and Peacock (2001) confirm that designing an EAP course should be based on the following combination of syllabuses:

- Lexico-grammatical (based on structures and vocabulary)
- Functional-notional (based on communicative functions and notions)
- Discourse-based (based on aspects of text cohesion and coherence)
- Learning-centered (based on what learners have to do in order to learn language items and skills not the items and skills themselves)
- Skills-based (based on particular skill)
- Genre-based (based on conventions and procedures in genres)
- Content-based (based on themes)

Integrating content-based syllabus, for instance, helps selecting particular topics while instructing the teaching language. Teaching ESP for computer science students for instance would include describing the software engineer tasks. On the other hand, the functional syllabus which is based on communicative performance would provide learners with linguistic means to perform communication in different situations. Whereas skill-based syllabus would facilitate teaching basic language competencies like: listening, reading, writing and speaking skills.

Therefore, the integration of the previous syllabi in teaching English for Academic Purposes would enable learners to prepare and present academic reports in an academic setting. Besides, teaching English for Occupational Purposes require the integration of several syllabuses in order to enable students solve problems and carry different tasks in a professional setting. Basturkmen (2010) has clarified what is said in the next figure



**Figure1.15:Views of Learning and Course Design
(Basturkmen, 2010)**

. Besides, Robinson (1991) mentions that flexibility is another key success for the ESP teacher, in order to shift from general language teaching to specific purpose teaching and to be able to cope with different groups of learners, and perform different tasks. The principle of flexibility implies an eclectic approach to the teaching methods. In this sense, Miliani (1994) claims that

...eclecticism ...leaves the door open for any stratagem or technique which could fit in a given situation. It all depends on the teachers' know-how and his approach to language teaching

From another perspective, Nunan (1991:228) states that *"it has been realized that there never was and probably never will be a method of all"*. Thus, in order to diagnose, treat and assess ESP learners, this should be with respect to the selected pedagogy adopted to teaching. According to Brown (2008), it is the role of the ESP teacher to select the syllabus and divide the course designs and objectives taking into consideration learners' needs in their learning context. Then, the challenge is thrown on the teacher in making any decision

that concern teaching ESP that is why a complete awareness of the purpose, context and needs of learners is crucially recommended by ESP teachers.

1.13 Conclusion

To give a comprehensive and complete concept to ESP is not an easy task as it would take a long path to give a full explanation to this field of study. Yet, among the relevant literature to ESP, only the most important characteristics have been stated. Those characteristics are just the starting trials paving the way for other practitioners to continue researching in the land of ESP. This chapter has dealt with a general literature review of ESP in matter of definition, classification, characteristics, brands and development over the last few decades. The chapter has also highlighted the roles that an ESP teacher should master in his teaching in addition to a full view on course design and syllabus design in the frame of ESP teaching. The next chapter is a continuity of literature review.

Chapter two

Chapter two

Review of Literature-Part two

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2.1 Introduction

This chapter provides a review of literature of both English for Science and Technology (EST) and English for Vocational Purposes (EVP) as focal bases that frame the subject matter. Then a great deal is provided to employees at the workplace in matter of training. The chapter ends with a review of Needs Analysis (also known as needs assessment) then it specifies to the needs analysis related to the present study.

2.2 English for Science and Technology (EST)

Since the 1960's, English for Science and Technology (EST) has established itself as an area within English for Specific Purposes (ESP) in addition to English for Academic Purposes (EAP), English for Occupational Purposes (EOP), English for Vocational Purposes (EVP) and many other disciplines Belchor (2009). There were many attempts to describe English for Science and Technology (EST). Among the prominent descriptive EST pioneers; Ewer and Latorre (1969), Swales (1971), Selinker, Trimble and Trimble (1976) and many other scholars. Indeed, their works were specifically concerned with English for Science and Technology. Though, both (ESP) and (EST) were seen as synonymous at that time. Yet, Hutchinson and Waters (1987:9) maintain that: *"It will be noticeable in the following overview that one area of activity has been particularly important in the development of ESP. This is the area usually known as EST"*.

Moreover, some scholars considered the development of EST as the development of ESP in general, such as Swales (1985) who argues

...English for Science and Technology has always set and continues to set the trend in the theoretical discussion, in ways of analyzing language, and in the variety of actual teaching materials

2.2.1 Definition of EST

As ESP was increasingly recognized as a new trend of teaching foreign languages, there was in parallel an increasing need to clearly define those areas which exist as its subsets, particularly, English for Science and Technology (EST) which has been considered as a major subdivision within ESP.

Trimble (1985:6) defines EST in a way that it

Covers the areas of English written for academic and professional purposes and English written for occupations (and vocational purposes), including the

often informally written discourse found in trade journals and in scientific and technical materials written for the layman

In fact, this quote is a clear indication that the "audience" is an important concept for writers when producing technical and scientific material. In this sense, EST may be directed to those who are already workers in fields as engineering in physics, or computer sciences, and thus have occupational purposes (EOP). Moreover, EST may have an academic focus for those students at universities who deal with scientific and technical subjects.

Widdowson (1979,:45), on the other hand, attempts to define EST stating that it *"is best considered not a separate operation but a development from alternative realization of what has already been learned of existing knowledge."*

Then he adds *"thus knowledge of EST can be derived from that the student knows of science and the functioning of his own language in association with what he learnt of English usage."* In other words, Widdowson argues that EST learners have a special knowledge of science in addition to some acquaintance of general English knowledge.

Many other linguists share Widdowson's view as Hutchinson and Waters (1981) who assert that the knowledge that science students possess should be used as a base for target language learning.

Another definition may be of Strevens (1977) who defines EST in terms of what makes it distinct from all the other types of ESP courses. While comparing it to English for general purposes, he says that they share the same rules for sentence formation, except those features which are considered as a property of the language of science and technology. In the same sense, Swales (1985) argues that EST compared to ESP is senior in age, since it has witnessed a large number of publications as well as practitioners involved. Besides, he classified three categories under EST:

- a. The first one deals with the level of education depending on the context in which it is taught, for example, English taught in: secondary school, and universities.
- b. The second category concerns the subject matter. That is, when English is used for general science, biology, and so forth.
- c. The last category deals with the types of activities involved such as: reading, writing, and attending seminars.

Last but not least, it is worth mentioning that our study will focus on the third category, namely, when English is used to read and analyze scientific materials. From another perspective, Munteanu (2011) defines English for Science and Technology (EST) as “*the language used in the professional contexts of natural sciences and technology.*”

In fact, EST has emerged first, when the world was dominated by science and technology in the 1960’s and 1970’s. Then, it burgeoned due to two factors; the first factor was the description of scientific and technical English done by the prominent descriptive EST pioneers. Besides, the second factor was that EST grew out of a demand of learners who needed English to pursue their studies particularly in science and commerce, and were aware of their English language needs. Hutchinson and Waters (1992) argue;

Learners were seen to have different needs and interests which would have an important influence on their motivation to learn and therefore on the effectiveness of their learning

2.2.2 Categorization of EST

It is worth noticeable to mention that there have been reflected views about whether (EST) is a subdivision within (ESP) or it is an individual branch. A first attempt of classification was carried out in 1975 in Great Britain, when the British council under the auspices of the ministry of foreign affairs provided taxonomy of ESP which included two main sub-sets based on both specificity and purpose (EAP) which included English for Science and Technology (EST). The other one was English for Occupational Purposes (EOP).

Later in 1977, Strevens introduced another classification as a component of the previous attempt. He suggested a taxonomy in which ESP was categorized into two main subdivisions. Later on, in his next version, Strevens (1988) suggests a fundamental distinction between EST and the other areas within ESP and proposes a further type of EOP teacher’s conversion. In other words, the ESP courses are taken through practicing by teachers.

From a similar perspective, Mc Donough (1984) for instance, supports the first view and considers (EST) as a sub-branch of (EAP), he illustrates his view in the following figure.

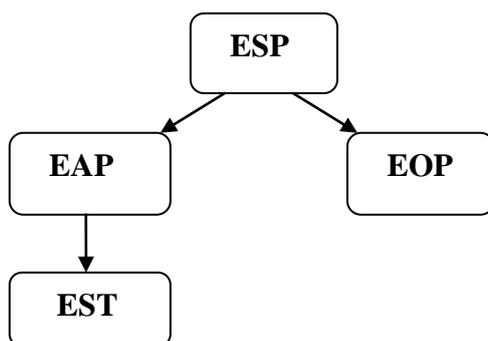


Figure 2.1 : Subdivision of ESP (a)
 (Adapted from Mc Donough, 1984:6)

According to Mc Donough, EST is a sub-branch of EAP because the field of science and technology is basically academic. The next figure is suggested by Hutchinson and Waers

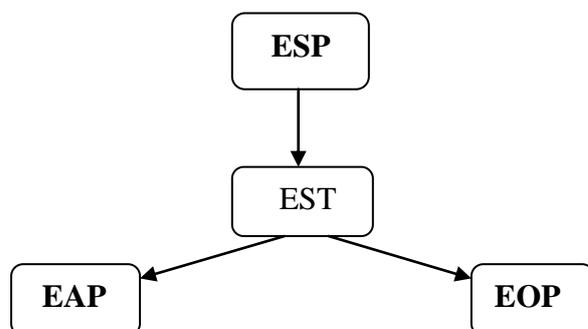


Figure 2.2: Subdivisions of ESP (b)
 (Adapted from Hutchinson and Waters, 1987:17)

Hutchinson and Waters, on the other side, see that if EST is applied in a professional setting, it is then an activity-oriented. Besides, in a formal educational context, EST can be a study-oriented. Thus, EST may be taught for either academic or occupational purposes. From another perspective, Robinson suggested a different subdivision

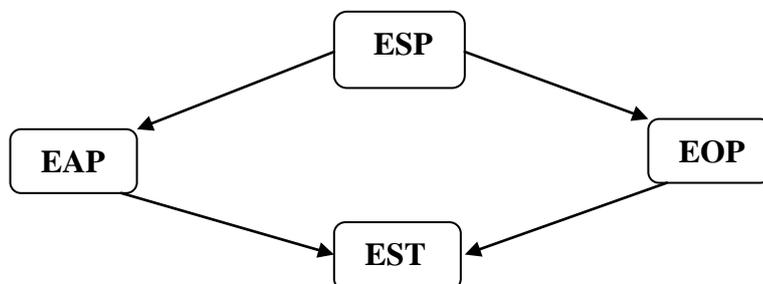


Figure 2.3: Subdivision of ESP (c)
 (Adapted from Robinson, 1991:2)

As the figure indicates, Robinson introduced a new classification considering that EST is a shared sub-branch between both EAP and EOP

Generally speaking, as English has become a lingua franca in different fields of expertise, English for Science and Technology is now a dominant and distinct variant of language in use for researchers, teachers and learners as well. It has then gained a central place in both academic and occupational areas.

2.2.3 Areas in which EST occurs

Indeed, EST is much more required by scientists and technologists, Kennedy and Bolitho (1990) claim that:

Much of the demand for EST has come from scientists and technologists who need to learn English for a number of purposes connected with their specializations. It is natural; therefore, that English for Science and Technology (EST) should be an important aspect of ESP programs

These programs cover a number of specialties such as chemistry, mathematics, physics, biology, general science and many other fields of specializations. As a result, EST has recently become a crucial subject for graduate learners who need to improve their scientific knowledge in both spoken and written in order to prepare articles, papers, scientific reports, oral presentations and written ones. In this regard, Kamarova and Lipgarts (1994) state that:

a student should be able to read literature pertaining to his subject, to discuss it with his colleagues, to give lectures and write his own articles in Englishthese studies may indirectly develop one's ability to use English for communicating on any subject but..... this is only a by-product of teaching ESP.

2.2.4 Characteristics of EST

EST is basically characterized by its scientific and technical discourse that is intended to realize universal specialized communicative functions. Widdowson (1975) claims that most world languages use common universal sets of concepts, methods and procedures that represent an essential part of scientific and technical discourse. Swales (1985:70) adds

We should think of scientific discourse not as a kind of text, that is to say a variety of English defined in terms of its formal properties, but as a kind of discourse, that is to say a way of using English to realize universal notions with scientific enquiry

In the same view, authors such as Larry Selinker, John Lack Storm & Louis Trimble (1972) focused in their endeavors on the relationship between EST grammar/lexicon and the rhetorical purposes in texts. They all agreed on that EST is characterized by its own functions of statement, description, exposition, definition, classification, instruction, comparison, exemplification and interference. In fact, due to this set of functions, EST could form its own language characteristics that differentiate it from other disciplines. These characteristics lie mainly at the lexical, syntactic and rhetoric levels.

a. Lexical characteristics

EST is basically featured by exactness and preciseness in both written and communicative use, yet function words and general words make up the jargon of EST vocabulary. Indeed, this vocabulary can be categorized in four groups:

- a) Pure scientific and technological words such as “software” in computer science.
- b) Semi scientific and technological words such as “ energy, magnetism.... etc”
- c) Common scientific and technological words such as “service, feed, power.... etc”
- d) Built scientific and technological words such as ” micro-browser”.

These words are generally built through compounding, blending, acronyms etc. There also appear a number of descriptive adjectives used to describe the state, degree, size, genre and shape of computer hardware and software for instance. These adjectives are generally accompanied with prefixes and/ suffixes such as” ible, able, ment and ics” Moreover, this vocabulary can be collocated with abstract nouns to indicate highly professional existences such as “bandwidth, broadband etc”

In this regard, Strevens (1980) has suggested a ‘specialized vocabulary’ from which fall three types: i) The vocabulary of scientific concepts ii) a stock of words composed of Greek and Latin roots and affixes iii) a number of other words or special scientific and technological origins. The knowledge of such vocabulary, according to him, enables students to fulfill their academic needs and requirements.

In short, this vocabulary is better used in science and technology articles to improve a good process, result, state and specializations. Whereas verbs, to improve formality, preciseness and conciseness, single verbs are more formal than verb phrases. As far as tenses are concerned, Barber (1962:9) states that

the great bulk of the (verb) forms fall into two tenses; the present simple active (64%) and the present simple passive (25%), leaving only 11% divided among the other eight tenses

b. Syntactic Characteristics

At the level of syntactics, EST is featured by the use of postpositive attributives such as prepositional phrases, adjectives/adjective phrases, adverbs and participles. For the attributive clauses, there is much more use of non-predicative verbs, use of long and complicated sentences and the use of the passive voice; for more clarification, Strevens (1980:128) has explained the choice of the passive voice in scientific text as follow

with two facts about the rhetoric of English sentences and the nature of much scientific writing. The organization of clauses in English is such that the initial position for the subject (such as occur in passive construction) is normally the strongest

Hence, the use of the passive may be more helpful in the construction of academic and scientific texts than the active.

c. Rhetorical Characteristics in EST Discourse

Trimble defines rhetoric as follow “*Rhetoric is the process a writer uses to produce a desired piece of text. This process is basically one of choosing and organizing information for a specific set of purposes and a specific set of readers.*” Thus, rhetoric is referred to as one important part of any scientific or technical discourse. Scholars identify three major rhetorical characteristics that both researchers and students need to learn and understand:

√ **Rhetorical Functions** are the basic elements used for analyzing written discourse. They include definition, classification, description, visual-verbal relationships. In this vein, Trimble (1985:19) indicates that “*the rhetorical functions are the foundation of the rhetorical approach to the analysis of written EST discourse*” For instance, presenting information on software or hardware labels the rhetorical functions of a computer

√ **Rhetorical Techniques** refer to rhetorical elements that relate together the information in any EST text, they consist of:

- 1- Natural patterns (order) such as time order, space order, causality and result.
- 2- Logical patterns order of importance, comparison and contrast, analogy, exemplification and visual illustration (graphics).

√ **Rhetorical strategies** refer to metaphor, metonymy, synecdoche, irony and other stylistic devices.

Later on, Louis Trimble and Mary Todd Trimble (1978) focused on curriculum design. They investigated both lexicons and grammar features to build a rhetorical theory based on the connection between purpose and device. Indeed, the scientific text differs from other kinds of texts in a set of characteristics such as the use of the passive voice to avoid subjectivity; Swales for instance argued that 25 percent of the verbs in research articles are in the passive voice.

2.2.5 Integrating the Four Skills in Teaching EST

Teaching English to EST students is basically related to teaching the four skills: reading, listening, speaking and writing. In addition to grammar, pronunciation, vocabulary and spelling which are very important, then a good teaching of EST cannot be effective unless the four skills are integrated. According to Widdowson (1979), speaking and listening refer to aural medium whereas reading and writing are related to visual medium. Nevertheless, teaching language skills depend upon learners' needs and interest, in this vein, Paltridge and stratfield (2013:31) state that

ESP pedagogies have tended to focus on identifying sets of transferable generic language and literacy skills that are seen to be applicable in the majority of academic and workplace settings

Actually, teaching the four skills should not be equally important. It is learners' needs which indicate what skill should be primarily focused on. In what follows, some strategies are suggested to help learners improve their language skills:

a. Speaking Skill

As for the speaking skill, learners should be able to express themselves. Yet, this requires a great deal of fluency and accuracy in matter of phonology, grammar and lexis.

In the case of EST students who are supposed to make oral presentations along their studies period, speaking for specific purposes is crucially required. Hence, some of the tasks that an ESP teacher may adopt to help students activate their knowledge is to put them in “a safe situation” Scrivener,(2005). Among these tasks are the following:

- √ Practice role play.
- √ Read the texts loudly.
- √ Give instructions to show someone how to use computer, data show ...etc.
- √ Present a project orally (after having prepared it) and debate with classmates.
- √ Participate in study days, conferences and seminars if possible.

b. Listening Skill

A good listener should be able to understand what others are saying even if they are native speakers and this is the objective that an ESP teacher should train EST students to master. In this sense, Flowerdew (1997:179) argues that

The act of decoding involves not only recognizing unit boundaries phonologically, but also the recognition of irregular pausing, false starts, hesitations, and stress and intonation patterns

Some of fruitful tasks are as follow:

- √ Guess what will be said with easiness.
- √ Guess the meaning quickly.
- √ Hold in mind the most important points.
- √ Identify discourse markers (now, then, finally).
- √ Grasp the pragmatic meaning of their utterances.

c. Reading Skill

In order to enable EST learners improve their reading skill, ESP teacher should first provide the appropriate material as the choice of authentic scientific texts. Then, being familiar with the general organization of scientific passage and being able to comprehend the text instruction help learners to be skillful in recognizing, understanding and interpreting any scientific context.

In this vein, Anthony (1997) states

Reading is the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language and the context of the reading situation

Here are some tasks that may be helpful to practice reading

- √ Extract the general idea of the text.
- √ Understand the details.
- √ Interpret graphics, charts, tables, diagrams and convert them into passages.
- √ Deduce the meaning of unknown lexis according to their context.
- √ Sum up long texts using simple and complex sentences.

d. Writing Skill

Writing is a process and feedback of what EST learners have learnt through listening, speaking and reading. It, thus, reflects students' abilities to express themselves through discourse taking into account coherence, cohesion and rhetorical conventions such as definitions, classifications, clarifications and generalizations. According to Jordan (1997), the process of writing enables the students to direct their own writing through different ways such as discussions, tasks and feedback and this way, EST learners may be able to produce several kinds of writing among which academic writing is prior in their context. The following tasks may be helpful for EST learners

- √ Exercise completion.
- √ Combining statements to write definitions (Widdowson, 1979).
- √ Labeling diagrams and writing short descriptions.
- √ Summarizing a passage (after reading it).
- √ Project works.

In the case of Computer Science students at the university of Saida (who are supposed to work in L'Algerie Telecom Company later on), though it is worth noticeable that in the new millennium the need to communicate is important, yet the target learners are required in most of their learning situations to comprehend and decode the meaning of scientific texts. Of course this does not mean that learners rely only on their acquired knowledge in the subject area, but they have already some acquaintances in General English (prior) which is for most of them insufficient and needs to be up-dated and enriched with the new terminology related to their field of expert.

2.2.6 EST at the Computer Science Department in Saida

In the case of the present research, teaching EST for Computer Science students at Dr. Mouley Tahar University in Saida is basically supposed to fulfill those students' needs. Then, it aims to enable learners to understand the written information in any scientific context and to communicate in the English language. And this cannot be reached unless these learners develop their receptive and productive English skills. In fact, language skill development requires from the students:

- √ To read any scientific text with comprehension.
- √ To express scientific and technological thoughts.
- √ To think logically and
- √ To recognize and use common pattern of scientific and technological thoughts.

At the Computer Science department, English is considered as a compulsory module taught to students once a week during the second and third year licence and first year master. where as in the first year they are supposed to study common mathematics trigger. When they get their master degree, some of them join L'Algerie Telecom to get the job of advanced technicians or engineers. Yet, teaching English to EST students is not an easy task because teaching English for Science and Technology is considered as an "extension from science education" (Widdowson, 1979). In fact, students of Computer Science have already some acquaintance of an adequate English usage on one hand and they have already acquired a certain extent of scientific knowledge in their native language on the other hand.

Besides, Widdowson claims that "*What students need to know is how English is used to realize the discourse of that level of scientific instruction that they arrived at*" (Widdowson, 1979:43). Accordingly, it is the role of the ESP teacher to provide his students with an appropriate and effective way in order to reuse the scientific knowledge they have already acquired in their mother tongue in the English language. In this sense, Mackay and Mountford (1978:4) claim that

Students or professionals in the various branches of science and technology are already familiar with the procedures of their field and the manner in which communication in their specialism are recognized. The task of the English program is, therefore, by taking advantage of this knowledge to demonstrate to

them how these procedures and principles of communicative organization are realized in English

Therefore, ESP teachers should focus their students' interest on acquiring the skills that enable them to use the English language to achieve real life communicative tasks. For this sake, the ESP teacher who is in charge of teaching EST students at the Computer Science department in Mouley Tahar University, Saida has tried to suit the English program to the other modules content of the subject matter so that there would be a concordance in both content and context. The following table summarizes the timing of teaching the English module in each level.

Level	Teaching Unit (TU)	Module	Courses	TD/TPsessions	Hours/week
2nd year Licence	TU2. 3 rd Semester	English	14	/////	1h & 1/2
	TU2. 4 th Semester		14		
3rd year Licenece	TU3. 5 th Semester		14		1h & 1/2
1st year Master	TU 1 (Micr& Sic). 1 st Semester (+ Ris) 2 nd Semester		14		1h & 1/2

Table 2.1: English at the Computer Science Department

According to the previous table, computer science students study English for three semesters; two semesters in the second year licence, and one semester in the third year. At the end of each semester they set for an exam. The last semester is devoted to training report preparation where as in Master both specialties (Micr and Sic) students study English in the first semester and second semester in addition to (Ris) students

2.2.7 EST Teaching and Course Design

In the second half of last century, there has been a noticeable growth of the EST population everywhere in the world. As a result, the demand to learn EST rose so rapidly

that several EST text books and courses were designed and put into practice. Besides, so many scholars started searching in the field of teaching/learning EST, among whom (Basturkman,2006; Dudley-Evans & St.John,1998; Flowerdew & Peacock,2001; Garcia Mayo,2000; Hutchinson and Waters,1987; Richards,2005; Robinson,1980; Strevens,1988; Swales,2001). Hence, various textbooks were published such as “The Structure of Technical English” (1965) by Herbert, “A Course in Basic Scientific English” (1969) by Ewer and Latorre, “Writing Scientific English” (1971) by Swale and “English for Science and Technology” (1976) by Dudley-Evans.

In the case of Computer Science, language and science are interrelated for language is the only means to convey knowledge and information. As far as course content is concerned, EST scholars consider English (in particular) and science as inextricably bounded. Besides, Computer Science learners are introduced to a whole repertoire of unfamiliar jargon and phrases throughout their study period. Crystal (1995:385) notes that the main birthplace for new words is in science. Nevertheless, introducing any scientific work requires the correct language, Ford and Peat (1988:2) confirms that “*an attempt to express new scientific ideas is a matter of using the right words*”. Moreover, Halliday and Martin (1993:4) state that the creation of a new technical term is itself a grammatical process.

Indeed, ESP teacher or course developer should know that ELT is different from ESP (and so is any sub-branch of ESP) in a matter of internal and external goals Cook (2002). ELT main target is based on internal goals; these goals are related to educational aims whereas ESP has relation with external goals which are related with real-world situations, that is to say outside the classroom. In other words, the difference between EST and ELT lies in the purpose to learn English as mentioned by Lorenzo (2005:43)

ESP students ... have some acquaintance with English and are learning the language in order to communicate a set of professional skills and to perform particular job related functions. An ESP program is therefore built on assessment of purposes and needs and the functions for which English is required ... ESP concentrates more on language in context than on teaching grammar and language structures. It covers subjects varying from accounting or computer science to tourism and business management. The ESP focal point is that English is not taught as a subject separated from the students' real

world (or wishes); instead, it is integrated into a subject matter area important to the learners

For example, a student of English for engineering course may seek to learn how to manage whenever a problem of 'RESEAU' occurs. Hence, in order to accomplish his tasks the ESP teacher, more than being a designer, a material-provider, an evaluator, should:

√ Teach knowledge of the needed domain that is to mean teaching EST for instance should deal with subject specific matter like focusing on patterns of interaction for communicative aims and written genres for written skills.

√ Have a considerable experience in selecting academic texts and needed skills, for example to design a course for academic speaking target the teacher should first master skills such as oral presentation and discussion skills.

√ Learn how to design a course in a conceptual area of interest in order to enable learners to analyze and describe the selected texts without difficulties.

√ Respect the limited period of time provided by the institution

In short, teaching EST in the Computer Science Department requires a whole knowledge from the ESP teacher. Next, a review of English for Vocational Purposes (EVP) is introduced

2.3 English for Vocational Purposes (EVP)

Another sub-branch of ESP, that has been a subject of importance and interest, is English for Vocational Purposes (EVP). Though, it has long been neglected in the land of research, scholars have recently recognized the importance English can play in the vocational training field particularly when it is connected to the vocational area. The present investigation is partially grounded in the vocational institute context; more precisely in Human Resources specialty in Kada Benammar Institute, Saida. Then, a clear and meaningful definition of the term EVP is needed.

2.3.1 Definition of EVP

English for Vocational Purposes (EVP) is a branch within (ESP) Basturkmen (2010). The term (EVP) is mainly taken into consideration 'under the umbrella of English for Specific Purposes (ESP)' (Widodo, 2016: 278). From another perspective Fang (2016:2) define EVP as

“Different from the teaching modes of other colleges and universities, English teaching in vocational colleges focuses more on professionalization, practicability and specialization”.

Though neglected for a long time, a number of scholars have begun exploring in this area among whom; (Platt, 1996, Black & Yasukawa,2012, Vogt & Kontelinen,2013 and Widodo,2015).Their works are mainly based on teaching and learning vocational competencies and English Language skills as social practices because Vocational English appears in authentic environments. Hence teaching Vocational English aims at developing learners’ skills and preparing them for life at work place or for higher educational context. Nevertheless, a successful teaching of vocational English requires first a program *“which equips students with English competence that supports their vocational expertise”* (Widodo, 2016:280).

Although, scholars have previously localized EVP in the area of EOP, some other scholars like Basturkmen (2010) and Widdodo (2016) claim that EVP is a sub-branch in addition to EAP, EOP and EPP. As an illustration, Widodo has produced the following classification:

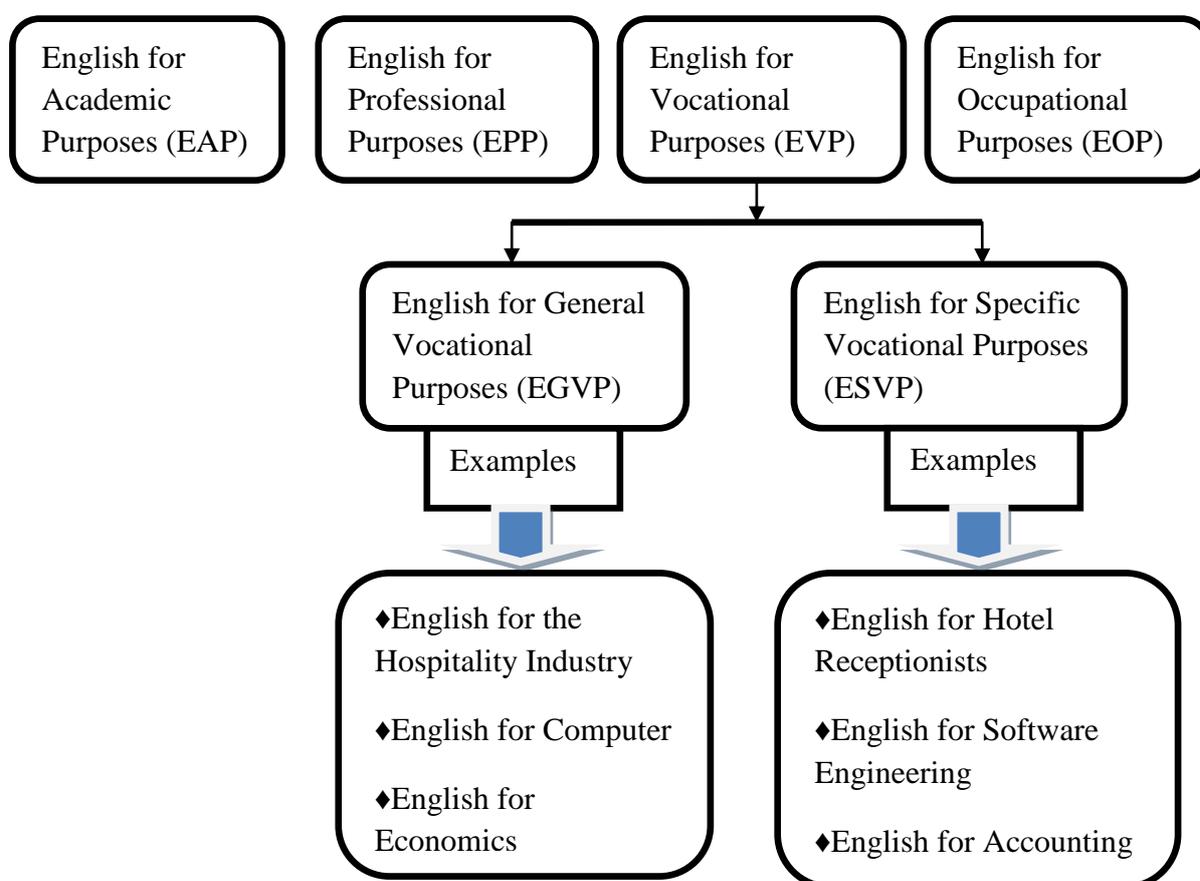


Figure 2.4: Extended Classification of ESP Domains (Widodo, 2014)

According to Widodo, ESP fields are grouped into four major branches: academic, professional, vocational and occupational. Whereas EVP, in particular, is designed to meet the English language needs and expectations of learners in various desired specializations. In the same context Widodo (2016:280) adds

The role of English as a medium of vocational communication helps students understand their vocational content, build and develop their vocational knowledge and skills, communicate their vocational expertise and perform specialist tasks, and develop their disciplinary language

2.3.2 EVP VS EGP

Therefore, EVP main aim is to bridge the gap between education and employment. Yet, EVP differs from EGP in matter of focus, needs and objectives

EGP	EVP
<ul style="list-style-type: none"> ◆ The focus is on education ◆ Learners' needs are unknown ◆ Teaching EGP emphasizes language proficiency ◆ The final aim is to set for examinations 	<ul style="list-style-type: none"> ◆ The focus is on the training ◆ As the target goal is known and English is intended to be used in a specific vocational context, the selection of the appropriate content is easier. ◆ The final aim is to achieve a restricted English competence

Table 2.2: The Differences between EVP and EGP

2.3.3 History of EVP

The inception of EVP dates back to 1950s with the burgeoning of English for Science and Technology and English for Business which started to dominate the field of teaching (Vogt and Kantelinen, 2013). With the council meeting of Europe's Project "Language Learning for European Citizenship", EVP emerged through Vocational Oriented Language Learning (VOLL) which is meant by teaching language in a professional context. Indeed, VOLL is specifically concerned with teaching "key skills such as communication, Information Communication Technology (ICT), problem-solving and working with others"

(Sewell, 2004:7). Besides, VOLL aims at preparing students for real life communication needs.

On his side, DiNapoli (2001:5) states that “*VOLL becomes an integral part of a lifelong educational process which combines work-related skills with personal growth, cultural awareness and social skills*”. Therefore, Teaching Vocational English takes into consideration developing the skills and increasing both personal and cultural responsibility of students in order to prepare them for life at work and in the society.

Besides, Content and Language Integrated Learning (CLIL) is another approach that is interrelated with EVP in matter of language and content. Next a detailed explanation of VOLL and CLIL approaches is introduced.

2.3.4 Approaches to Vocational English Teaching

In fact, EVP is deeply connected with two main approaches; Vocational Oriented Language Learning (VOLL) and Content and Language Integrated Learning (CLIL).

VOLL means teaching and learning a foreign language within a vocational context. Yet, VOLL is distinct from ESP in a matter that it may include other languages than English, Lindahl claims “*Like ESP, Vocationally Oriented Language Learning is focused on English for Specific Purposes. However, VOLL, in contrast to ESP, is a broader term that includes more situations learners need to be prepared for, and encompasses languages other than English*” (Lindahl,2015:.26). More clarification is in the next figure

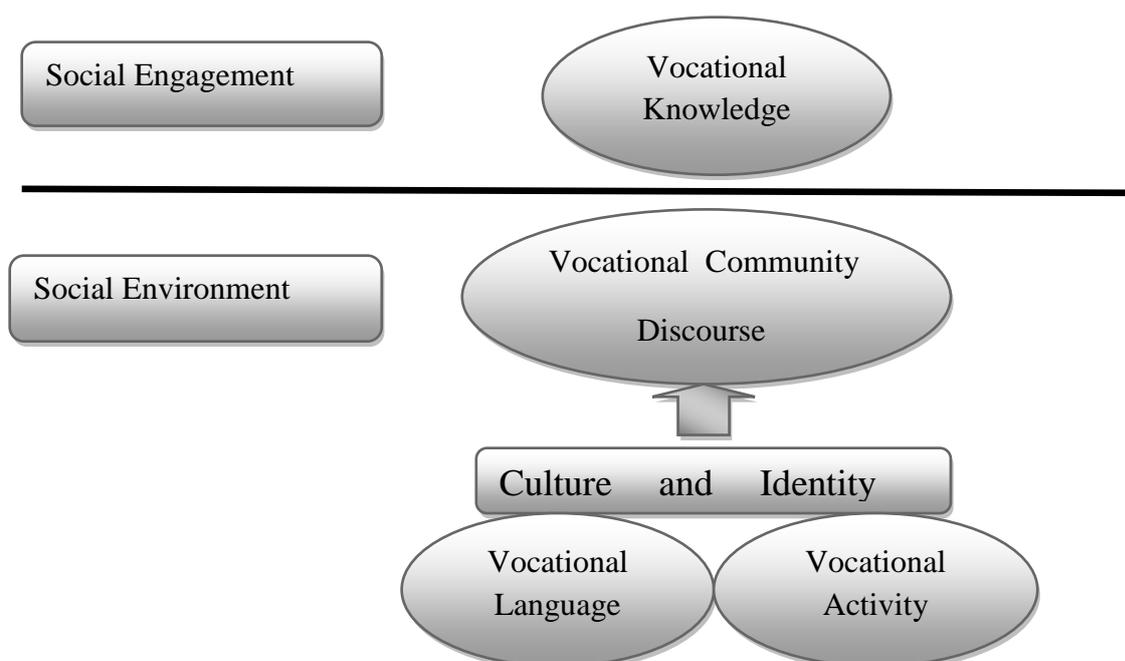


Figure 2.5: Components of Vocationally-Oriented Language Learning (VOLL)
(Lindahl, 2015)

From this figure, it is clear that in the context of VOLL, Vocational English is an ESP-based approach in which the program has three characteristics:

- √ The duality of the discipline (vocational language) and language teaching.
- √ The relevance of vocational knowledge.
- √ The centrality of vocational discourse.
- √ The specificity of vocational activities and tasks.

In the context of VOLL, learners are pedagogically and socially engaged. This engagement is realized through language, knowledge and practice. For instance, students, who are engaged in the Telecom Company as engineers, need to know all what concerns the computer software and hardware components and applications; and this represent knowledge. Or when these learners are asked to reply to phone calls, they need to know how to respond and satisfy customers particularly, foreign customers who speak just English like the Chinese and Turkish in Saida. Besides, those customers represent two different communities with different culture and identity.

In short, VOLL is considered as an approach to language teaching. Thus, it firstly requires a program in order to teach students both vocational English (in the case of the present thesis) and knowledge of the subject matter. In this sense, designing an EVP program should address vocational knowledge taking into account contextual input through using English. Therefore, VOLL program seeks to enhance learners' awareness of how English characterizes the selected texts. In other words, English is not seen as just a subject, but also a tool that makes sense of students' vocational knowledge and a means to learn particular vocational discourse communities.

Content and Language Integrated Learning (henceforth CLIL), on the other hand, refers to teaching the content in combination with language learning (Lindahl, 2015:26). Like ESP, EVP course design requires a specific content that meets learners' needs in the target language. Therefore, both language and content are the two sides of the same coin. In other words, content and Language Integrated Learning can be described as *'a dual-focused approach' that focuses on both language and content*" (Lindahl, 2015:24). From another perspective, CLIL *"can be described as an educational approach where curricular content is taught through the medium of a foreign language"* (Dalton-Puffer, 2011:183).

2.3.5 English Vocational Training in Algeria

Since its independence, there has been a need to create a skilled workforce in Algeria. Yet, and due to the good policy adopted by vocational institutions in preparing students for employment market in addition to the partnership with industrial companies, there has been an increase need to join vocational education. (British Council Report in 2015).

Indeed, vocational training in Algeria is part of the education system; its main objective is to integrate the trainees into the educational and skills levels and paths. There are different sorts of training among technical education and vocational training.

-Technical education is implemented in technical schools, universities, institutes. It concerns technicians, advanced technicians and engineering diplomas.

-Vocational training is implemented in institutes and is devoted to offer State-recognized diplomas and advanced technicians diplomas.

-Vocational training that is implemented in centers offers certificates of aptitudes.

-In-company sector training under the aegis of Ministries such as the Ministries of Industry, Trade and Tourism.

-Private training provided in approved establishments.

Kada Benammar vocational institute in Saida, for instance implement several training specialties among which Human Resources (HR) is offered to trainees who wish to hire after graduation in the case company of the present research; L'Algerie Telecom Company (ATC). During their studies, HR trainees set for a training period of five semesters in which English for Vocational Purposes (EVP) is taught to them as a module in addition to French and a number of other modules related to the field of specialism.

Throughout the first two semesters, trainees acquire general learning through general courses while in the second two semesters, trainees are supposed to acquire specific knowledge. In English, for instance, a specific program is prepared for them including Application letters, the block format of Administrative letters and their different parts. At the end of each semester, the trainees set for an exam and the fifth semester is devoted to the dissertation preparation. By the end of the training, trainees are offered "Technicians' Diplomas" and "Advanced Technicians' Diplomas". The holders of these two diplomas may be recruited in L'Algerie Telecom Company as technicians and advanced technicians. Indeed, there is not a great difference between the tasks related to both apart from the rank in their salary. The training includes the following theoretical and practical courses:

- Communication
- Arabic
- Foreign Languages (French and English)
- Human resources
- Mathematics
- Accounting
- Management
- Research Methodology.
- Social Studies
- Psychology
- Business Studies
- Security and prevention

The following table summarizes the training period:

First semester	Second semester	Third semester	Fourth semester	Fifth semester
General learning +exam	General learning + exam	Specific learning + exam	Specific learning + exam	Thesis preparation

Table 1.3: The Training Period in the Institute

During the first year of the training in the CFPA, the English syllabus includes General English courses as Hutchinson and Waters (1998:55) point out" *English for General Business Purposes courses are usually for pre-experience learners or those at very early stages of their career*". The lessons are about:

- Punctuation
- Adjectives and Adverbs
- Comparative and superlative
- The present and the past simple tenses
- Word order

► The ESP syllabus which is presented in the second year of the training includes the following:

- Types of letters: Persuasive, Complaint, Application, friendly,...etc
- Letter Formats
- Layout of the Business Letter
- Messages and E-mails.

To evaluate the trainees, each semester ends with a written exam. Once the trainees graduate and start their professional life in L'Algerie Telecom, they face a world that requires a high competency in the English language particularly for those who work in the technical body of the company.

2.3.6 Areas in which EVP occurs

In the teaching/learning context, English for Vocational Purposes which is acronym (EVP) aims to help students function well in a work place or a vocational higher education setting (Widodo, 2015). Hence, teaching EVP in particular has been adopted and adapted in different vocational areas such as hotel hospitality, accounting, tourism management and company engineering. In short, EVP has relation with all contexts that are framed in business setting.

2.3.7 EVP and Course Design

Designing an EVP program, which is later on broken into a set of courses, should be derived from vocational knowledge taking into consideration contextual input for using English. The selected syllabus for trainees who graduate from CFPA and intend to be Telecommunication technicians or technical agents, for instance, should be specific to discourse in that context. That is why VOLL programs in particular are intended to enhance learners' awareness of the way EVP characterizes the selected texts. In this vein, English is not considered as just a subject in isolation, but also as a tool that helps students put their vocational knowledge into practice. Moreover, it encourages learners to acquire particular vocational discourse vocabulary in order to communicate effectively.

Nevertheless, to design an EVP course for trainees in a vocational setting, teachers as course designers need to find out what the language-based objectives of the trainee are in the target occupation or workplace and make sure that the content of the EVP course works towards them. In other words, while designing an English course, teachers should focus on when, where and why learners need to study English in such a context. These may help teachers/ course designers make decisions about what to teach and how to teach (Dudley-Evans and St John, 1998). On his side, Widodo (2016:279) has clarified the starting point for an EVP course design as follow:

As part of ESP instructional design, needs analysis serves as the basis for informed curriculum practices, such as syllabus design, material development and instructional design

Besides learners own needs, the institution itself has its own demands. Hence, English teachers find themselves in a complicated situation because they are asked to improve usage of these two interrelated needs, wants and lacks. Therefore, teachers need to take the following criteria into consideration:

√ Foster their learners' language skills through employing more effective techniques and encourage learners to plan their learning by setting realistic aims.

√ Analyze learners' needs, particularly their communicative needs in order to establish the structure and content of the English course. Indeed, ongoing needs assessment would help teachers adjust the courses to their learners' changing needs throughout their learning period. It also plays a role in deciding what to add or delete from the course Barnard & Zemach (2003:306-7).

√ Involve learners in the target community they envisage working in later, for example trainees who study English for workplace, and intend to join Telecom Company, need first to develop their knowledge about the work in that company (Wenger, 1998). Learners, in this case, are seen as pre-experienced and need to have the language skills they need to work with at the workplace. In short, all what is said before about the objectives of course designing whether for EST students or EVP learners can be summarized in the following table

EST Course design	EVP course design
<ul style="list-style-type: none"> - Would be framed in terms of study skills and communicative needs of the students. - Students' target needs may require reaching a high standard of English language proficiency quickly and economically so as to pursue a course of academic study. - May be either common core i.e its main objective falls into language study skill or subject specific i.e it is basically related to the study of a specific discipline. 	<ul style="list-style-type: none"> - May be designed to satisfy either pre-, in- or post-service use. - Needs analysis require knowledge of the target occupational field - Built on the right vocational knowledge and language skills (Widodo, 2016:297) - Requires teaching both content and language. - Intends to enable learners communicate their vocational expertise and develop their disciplinary language.

Table 2.4: The Objectives of Course Design in both EST & EVP context

Yet, at the Vocational Training and Apprenticeship Center Kada Benammar in Saida, teachers of the English Language are not qualified to teach specific English, they are rather General English Language teachers. Though, English is considered as an important subject, there is no official academic ESP syllabus. Besides, any language content of any ESP course should be based on Needs Analysis; however no Needs Analysis has ever been conducted to identify the trainees' needs while the objectives of an ESP course should be determined by a learner's Needs Analysis as Miliani (1985:19) states "*These objectives derive from an analysis of the student's needs which help determine the way in which a course can go*". Then, conducting needs analysis is the basis for an ESP course design.

In short, both English for Science and Technology (EST) and English for Vocational Purposes (EVP) which are sub-branches within English for Specific Purposes (ESP) lead together to a common point which is the focal issue in the current study "employees at the workplace". What human resources mean with all its implications comes next.

2.4 Employees at the Workplace

All what was tackled before represent different angles that share the same target "employees". The term, employees, is synonymous with Human Resources. Nevertheless, the word employees is frequent and more used though Human Resources is more practical and formal in any work place all over the world. Indeed, the success or failure of any company or organization is depending on the quality of its Human Resources. In other words, the essential element for developing any company is the role of the people in the organization.

In this vein, Price (2007:30-31) states:

All the decisions, strategies, factors, principles, operations, practices, functions activities and methods related to the management of people as employees in any type of organization ; all the dimensions related to people in their employment relationships : and all the dynamics that flow from it : all aimed at adding value to the delivery of goods and services ; as well as the quality of work life for employees and hence helping to ensure continuous organizational success in transformative environment

In his quote, Price has stated the most important criteria related to the management of employees at the work place and that ensure employees satisfaction on one hand and

organizational success on the other hand. From his point of view, Armstrong (2016:7) argues

Human resources management is a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organizations

Then, it is clear that the term human resources does not refer to people but it rather refer to their knowledge, skills and performance they use at the work place. On their side, Boxall and Purcell (2016:7) confirm this view and state that “*Human resource management is the process through which management builds the workforce and tries to create the human performances that the organization needs*”. Therefore, it is a matter of what people in the organization are able to do and what achievement they can realize. Nevertheless, management is in a continuous change because of the progress technology improves everyday that is why training employees has become crucially required in every organizational setting but what is meant by training in this context?

2.4.1 Training Employees at the Workplace

Training employees at the workplace is an important factor that influences employees’ skills, abilities and attitudes. It also helps up-date their professional performance with the advance of technology and enables them to manage the functions of the newly technical equipment. Through training, employees can increase their performance and be able to acquire new information and skills as Armstrong (2006) states “*Performance is the matter of what people achieve and how they achieve it. Performance is, thus, the affective use of the required knowledge, skills and competencies*” (Armstrong, 2006:497-498).

In other words, having high potential employees does not mean that they will succeed. Yet, they must know what they have to do and how to do it. That is why training experts often use the phrase “*workplace learning and performance*”. Therefore, taking the employees’ performance as target to develop before their workplace training takes place would certainly facilitate the path for the trainer to point out the objectives to be attained such as developing employees’ language skills, language proficiency and adopt an effective strategy in his teaching. The next figure illustrates more

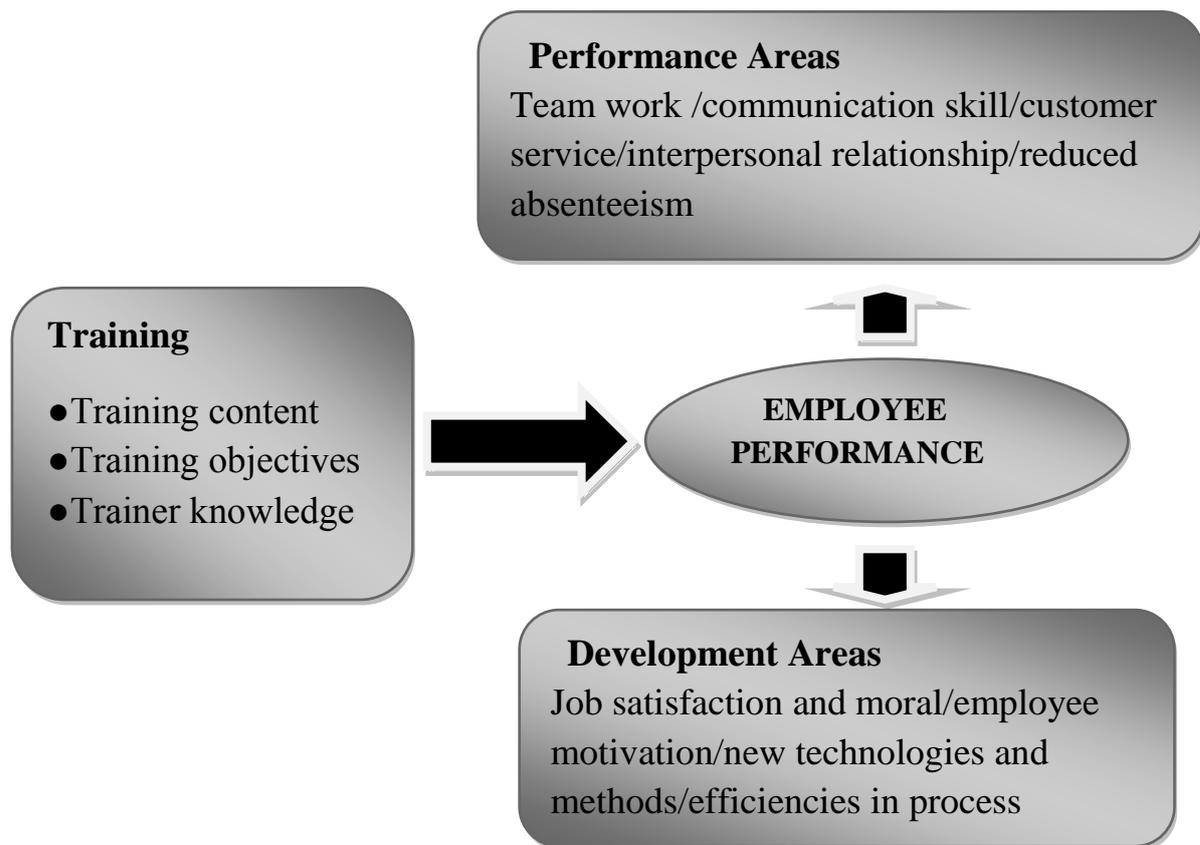


Figure 2.6: The Relation between Training Employees and their Performance
Boxall and Purcell (2003)

Besides, both practitioners and researchers in the field of work place training agree that there are a set of factors that affect the effectiveness of employees training in their professional environment, among which are the following:

♦ **Motivation:** Ellis (2003:536) argues that motivation belongs to the “*affective factors which are more adaptable than learning style and can influence the learning outcomes*” According to Ellis, among the factors she mentioned; self-efficacy, tolerance, ambiguity and anxiety which represent individual feelings that reflect learner attitudes. It has also been approved that adult language learners are generally successful because they are “*active in the task of language learning as they use the language for communication and interaction and they are able to overcome their difficulties while learning*” (Naiman, Floelich, Stern, & Todesco,1978 in Gan Z.D.,2011:68). Besides, they have mentioned two distinct sorts of motivation: Extrinsic motivation which is related to external factors such

as high grades, praise, money etc. And Intrinsic motivation which is related to internal factors such as self-esteem (Jordan, Carlile, & Stack, 2008:157). In addition, there are two other distinct kinds of motivation but they specifically concern second language learning context: a) Integrative motivation meaning a positive view of point towards the foreign culture and acceptance to participate as a member. B) Instrumental motivation meaning a desire to acquire the language for the sake of using it for specific purposes such as career advancement (Ehrman, 2003:.319).

In short, researches have proved that most work place adult learners are motivated intrinsically by their career development and they are extrinsically motivated by financial benefits and promotions. Besides, they have positive attitudes towards learning a foreign language and they demonstrate their effectiveness in their interactions through telephone conversations, face to face or in meetings.

◆ **Personality:** it is the mirror that reflects the individual differences. Indeed, work place adult learners who have different personality types adopt different learning strategies and styles and they are autonomous in their learning. (Oxford & Ehrman, 1995:362).

◆ **Language Aptitude:** Ellis states that “*it is associated with intelligence and memory*” (Ellis, 2003:530). Whereas Robinson argues that individual differences are affected by “*intelligence, aptitude and working memory*” which, according to Robinson, include both implicit learning and explicit learning. However, “*explicit learning has greater variance than implicit learning*” (Robinson, 2002:259). In other words, learning implicitly is distinct and less variant than learning explicitly

2.4.2 Work place English Training Program

During the 1960s, 1970s and 1980s, training employees focused on the writing side only. Then focus shifted to “spoken interaction” including spoken interaction and oral presentation and this gave the four skills (listening, reading, writing and speaking) full attention. Later on training has covered “business communication skills” including socializing, telephoning, meetings, oral presentations and negotiation. Hence, work place training evolution kept up with advanced communication technologies such as “*telecommunication, computer network and video conferencing*” (Dudley-Evans and St John, 1998:.28).

2.4.3 Benefits of English Training at the Workplace

Training in the workplace has a central meaning in the discussion of the role of Human Resources in any organization. Training is the key reason for success because there is a continuous change in the strategies of the management of any company and L'Algerie Telecom must go hand in hand with these changes. Employees in L'Algerie Telecom have a direct connection to the company's quality of service and to the Company's technological investment. For that reason, employers should adapt training programs for the benefits of their employees as well as for the organization in order to:

- √ Increase confidence and motivation.
- √ Decrease risks because well trained employees can use the material and equipment without waste.
- √ Bring a sense of security and therefore reduce labor turnover and absenteeism.
- √ Involve the employees in the change process and provide them with the skills needed in order to adjust with the new situations.
- √ Enhance their responsibility and therefore increase pay and promotion
- √ Improve the availability and quality of the staff.

2.4.4 Workplace English Training Process

Dessler (2013) has divided the training process into five phases:

- ▶ **Phase one:** Analyze the training needs. Indeed, training needs are usually collected in systematic process between the trainer and the stakeholders of the organization.
- ▶ **Phase two:** Design the overall training program. In fact, a good program is the one that intend to achieve measurable targets, if the improved achievements in matter of proficiency can be measured then the selected program is good.
- ▶ **Phase three:** Develop the course (providing the needed materials/equipments). Any work place English training program should focus on authentic scenarios taking into consideration the selection of training program , materials, tasks and methods.
- ▶ **Phase four:** Implement the training by training the target sample of employees. In the case of the current study the target participants are limited in the technical staff of the company.
- ▶ **Phase five:** Evaluate the training effectiveness. This evaluation cannot be done only after a certain period that may be six months to one year. This period is enough to see the outcomes of the workplace training and measure its effectiveness.

2.4.5 Ways of Conducting English Training

Accordingly, there are various ways to conduct workplace training. The most common are:

- **On-the-job Training:** It is an under-study method through which an experienced worker trains the other employees through observation.
- **Apprenticeship Training:** It is an internal context program
- **Team Training:** It is done through cooperation between employees.
- **Job Instruction Training:** Using a wall sheet, the employees may be trained through learning step by step.
- **Lectures:** It is a quick and simple way to present knowledge for training.
- **Audio-visual based Training:** It may be done through using DVDs, films, PowerPoint and audiotapes.
- **Video Conferencing:** Using visual aids in this type of training may be interesting for the employees and cuts down the cost of training for the organization.
- **Computer-based Training:** It is the use of interactive computer-based systems to increase knowledge and skills.
- **Interactive Learning:** From classroom based learning to interactive learning using video café, YouTube, type platform. In such training the customer may be involved as a source of information.
- **Informal Training:** Target employees may learn from their colleagues.

2.4.6 Designing an English Training Program

In any organizational setting, success depends on whether the company trains its employees or not for workplace training gives employees the skills they need to perform well in their jobs. Training may involve a multi-week period that is why designing the suitable program must be carefully planned. Therefore, the best design might be as follow:

- √ Plan a detailed training outline (different from start to finish).
- √ Include (in the program) the training factors that motivate employees to both master and apply what they learn in the workplace.
- √ Choose the right and suitable content (books, exercises and activities).
- √ Provide the needed material (I-pad, workbooks, power point slides, course activities and web-sites and computer-based activities).
- √ Decide about the schedule so as not to disinterest employees (full day training is not as effective as half a day or three-fourth a day).

√ Appraise and reward employees for using the new skills they acquired during their training.

2.4.7 Motivating factors for employees

It has recently been approved that employees are motivated in their training by the following factors (top – down from most used to least)

√ Employees recognition

√ Gift certificates

√ Sweep stakes

√ Cash rewards

√ Merchandise incentives

√ Individual travel

√ Training programs

√ Work life benefits

√ Variable pay

√ Group travel

2.4.8 Role of Professional Trainer at the Workplace

Who is a professional trainer? Indeed, a professional trainer is a professional ESP teacher trainer who is supposed to train employees at the workplace. Either in L'Algerie Telecom Company setting or any other organizational setting, professional ESP trainer is an expert in training employees for any profession, he should

√ Be knowledgeable, approachable and a good listener

√ Have a good understanding of the employees needs and requirements

√ Have a good understanding of learning theories of the learners

√ Be able to design the right program and select the needed material.

What is he supposed to do? The professional trainer should train the employees to acquire the academic skills employees need to impart for their real professional environment. He should also encourage and convince employees to use their acquired skills and knowledge when they deal with authentic tasks in their professional context. Hence, the trainer designs his training program having in mind both the employer's organizational objectives and the employees' target language use situation. Nevertheless, any professional trainer, in order to fulfill and achieve the planned objectives, has a set of roles to accomplish in order to ensure a successful training.

a. Course Planning

It is worth noticeable that the language trainer at the work place is going to meet highly motivated, disciplined, intelligent and dynamic learners. That is to mean that it is not so easy to achieve his goals and objectives unless he has a tight control of the course and careful selection of materials and tasks (Ellis & Johnson, 2002:25). For that reason, the trainer should base his teaching on:

- ◆ Learners' needs analysis which should be conducted right from the beginning.
- ◆ Employer's interview(s).
- ◆ Target performance competencies.
- ◆ Enhancing critical awareness.

Ellis and Johnson (2002, p.35) state that when planning an English course, the trainer should incorporate:

- √ Language (vocabulary, grammar and functions)
- √ Content (marketing, management, telecommunication etc.)
- √ Communicative skills (telephone, meeting, oral presentation, interaction)
- √ Cultural awareness (social and business behavior)

To sum up, course plan in work place context should be flexible and tailor-made. Identifying employees' strengths and weaknesses should be a background for the trainer to decide about what is needed either English oral communication or English written communication or both.

b. Course Timing

In the context of work place training, course timing is a matter of negotiation between the trainer and the company/ organization that receives the training. The course timing is usually agreed on and should be in compliance with the work timetable of training learners. An example may be the Canadian case where classes of training employees are scheduled twice a week for about five months and each class lasts two hours whereas in India, the training period lasts for twenty eight hours during fourteen weeks organized in two hours per week.

c. Course Materials

The selection of course materials is very important for a successful training. Ellis and Johnson propose; “published materials, job-specific material, self-access materials and

video materials”. Besides, authentic materials which are specifically provided in different organizational settings may be books, media, annual reports, etc. (Ellis and Johnson, 2002:117). In our case, authentic materials which are related to the daily use of telecom employees are drawn from computer databases. (Paltridge, 2012:180). Materials selection phase should be done according to the course objectives, the target learners and whether the selected materials suit learners’ needs. Next, an overview of the case company is sated

2.5 The Case Company

. L’Algerie Telecom Company (ATC) which is the target organization in which the present research aims at analyzing the quality of human resources in matter of English language competencies and whether English is appropriately implemented in training employees at the work place particularly the technical staff.

It is worth noticeable that during the last decade, the Algerian economy has been open on the world market. As a result, various conventions were signed between Algerian companies and foreign ones for the sake of partnership. In Saida for instance, three companies are still settling; the Italian company “ASTALDI” specialized in railway construction, the Chinese company “SHAOLIN” investing in building bridges and the Turkish company “ATKINSON” investing in AADL project. Each company has its own human resources.

Hence, in order to convince these foreigners with a high quality of service, AT employees, who hold the posts of engineers, technicians and technical agents and who are supposed to interact with these foreigners when they are in charge of settling cables of internet for the sake of these companies or overcome any technical problem, they are unable to communicate with them in English. Moreover, these respondents sometimes face serious problems with equipments like the installation of new machinery phase, though they have the guide books which are written in English, they find it difficult to understand or apply the instructions. That is why learning English is not just a need but a MUST.

Indeed, AT employees have some acquaintance in English language. In other words, both university master holders and institute diplomas holders acquire a certain English knowledge, yet “Does the company offer them in-service English training in order to renewal their knowledge and competencies?” This will be highlighted later in the data analysis.

Therefore, training employees at the work place has been crucial especially for those companies which are open on the world market such as L'Algerie Telecommunication Company (ATC); the case study of the present research.

2.5.1 L'Algerie Telecommunication Company (AT)

L'Algerie Telecommunication abbreviated Telecom Company (AT) is second most important company in Algeria after SONATRACH. It was public but in the way of privatization after the decision of the prime minister.

Established on August, 5th, 2003, the company still offers services such as voice, data, satellite and internet access to residential and business owners. AT Company is the owner of the infrastructure of the national communications network, it is specialized in providing Internet services (in the management of the national network of fiber optics), furthermore L'Algerie Telecom is the main operator of the Internet services, the fixed and the mobile telephone services in Algeria.

In 2007, the Algerian government announced plans to partly privatize L'Algerie Telecom. Such reorganization has also permitted the opening of the sector to competition for certain telecommunications services; new operators have already been present in the area of cellular phones, Internet service providers, VSAT etc. Competition in the sector has led to an increase in telephone penetration, lower service charges and access to telephones for a larger segment of the population. In the telecommunications sector, the Bank is financing a project which essentially seeks to upgrade the telecommunications network, in order to render it ready to compete when the fixed telephone service will be open to competition, on the one hand, while facilitating the opening of the operators' capital to a strategic partner.

On October, 3rd, 2017 L'Algerie Telecom signed a convention with the constructor and operator Chinese Company "Huawei" for the sake of partnership in Oran. The objective of that partnership was mainly to develop the network of fiber optics and ameliorate the internet access for the clients. The convention was signed by the general manager of AT Company "Adel Khemane" and the delegate of Huawei "Gao Jre".

Among the latest services that L'Algerie Telecom Company offers to its clients is the « Wireless Local Loop » or WLL which is a home telephone by which the customer may use it with no need to a cable. It is also important to mention the strategy that AT Company

in saida has adopted like decreasing the price of some services (like easy service) in order to gain more customers. The following organization chart will show the different services that belong to this company

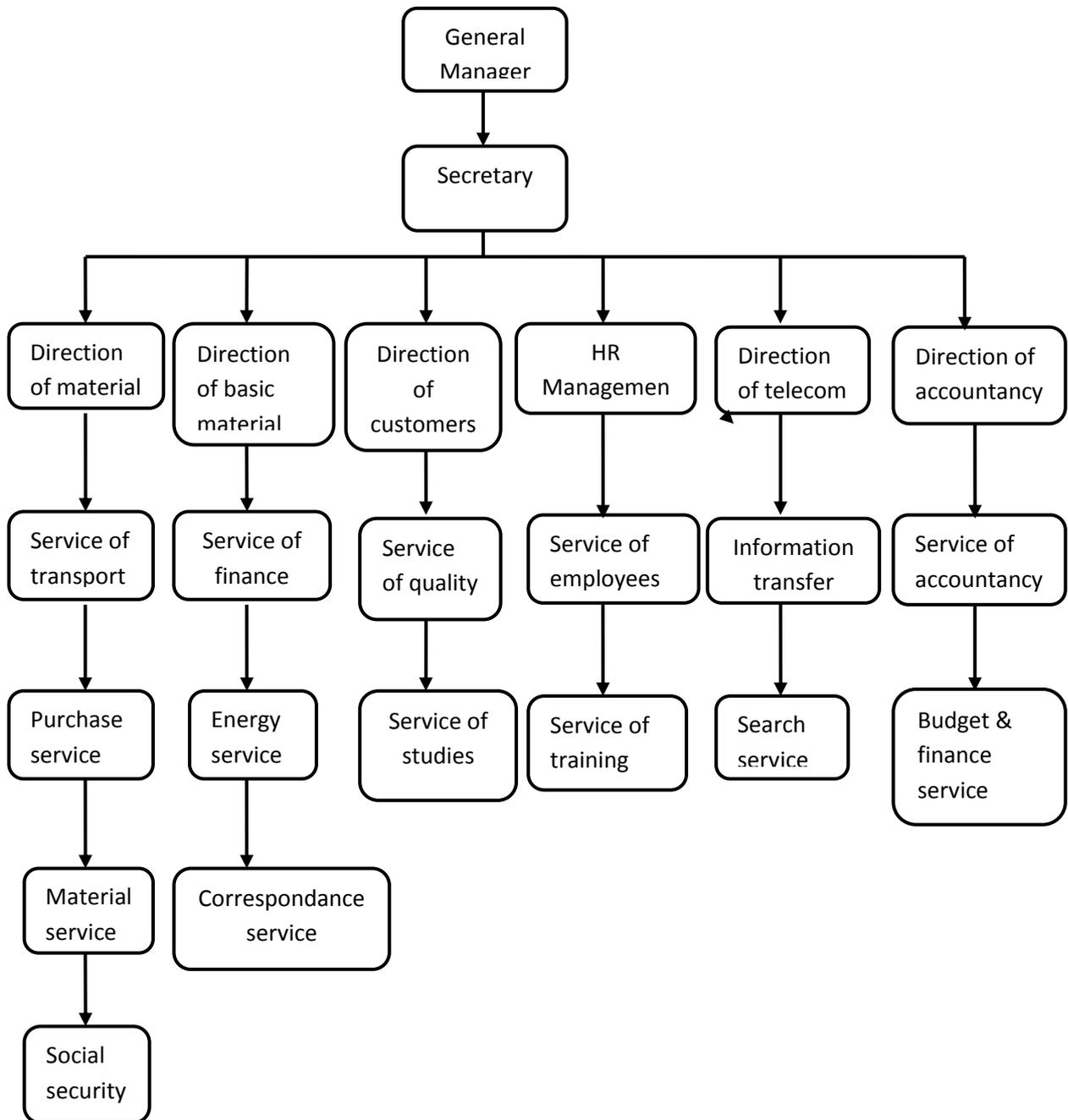


Diagram 2.1 : The Organizational Chart of L'Algerie Telecom Company

2.6 Needs Analysis (NA)

Unlike English for General Purposes, teaching either ESP, as an approach to language teaching, or any of its sub-branches should be based on learners' needs in their respective areas of specializations. (Hutchinson & Waters, 1987) what matters in this study is to look upon the target setting that is to conduct a work place training needs analysis for employees who have either EVP or EST background and who are supposed to work together in L'Algerie Telecom Company (the case study of the present work).

Thus, the design and implementation of any curriculum depends on the needs analysis of the target group of learners. Though, all courses are based on a perceived needs of some sort. One may ask "Why would these employees need to learn English?" Indeed, needs in General English (GE) are not specifiable; hence what distinguishes ESP from GE is the awareness of the existing needs of learners in ESP. Then, if the ESP trainer is aware of these needs, there will be a reasonable content in the work place English training program. Moreover, workplace English training program should have a different curriculum process from that in education because it is based on business outcomes not just language outcomes. Yet, what is meant by needs analysis ?

2.6.1 Definition of Needs Analysis

First of all, a clear definition of needs analysis is assessing the needs for which a learner or group of learners learn a language, yet "What does needs mean?" and "What kind of feed- back does a needs analysis (NA) tell?" On their side, Hutchinson and Waters (1987:19) define Needs Analysis as

" an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning" This means that when designing any English program, teachers often start questioning *themselves* "Why do these learners need to learn English?"

This starting point helps identify what texts and what activities or tasks learners need to experience or study. This last is more useful for the trainees at the vocational institution in order to better select the needed type of language. Accordingly, Needs Analysis is regarded as a) goal-oriented because they refer to what learners need to do with the language once they have learnt it b) context-independent for Needs Assessment change in context from one group of learners to another according to "necessities", "lacks" and "wants" Dickinson

clarifies that *“Needs are those skills which a learner perceives as being relevant to him; wants are a subset of needs, those which a learner puts at a high priority given the time available; and the lacks mean the difference a learner perceives between his present competence in a particular skill and the competence he wishes to achieve”* (Dickinson,1991:91) and c) population-specific because each group of learners should have specific needs related to their study area.

Analysing learners’ needs is, then, a changing process in which the role of the teacher is to identify (on the basis of their present knowledge) the language and the skills that learners will use in their target professional or vocational workplace situation. Therefore, the teacher should be selective in collecting the suitable data while assessing learners’ needs. Then, the outcomes obtained from this assessment process are used to determine and refine both the required content and useful method of the ESP course. Basturkmen claims that Needs Analysis involves:

- ◆ **Target situation analysis** which helps identify tasks, activities and skills learners will use English for.
- ◆ **Discourse analysis** which helps identify the description of the language used in the target situation.
- ◆ **Present situation analysis** which helps identify what learners know and do not know in relation to the requirements of the target situation
- ◆ **Learner factor analysis** which helps identify learners’ factors to learn the language such as motivation, learning styles and their perceptions of their needs.
- ◆ **Teaching context analysis** which helps identify different factors related to the realistic context in which the course will be presented.

2.6.2 Overview of Needs Analysis

Needs analysis or needs assessment in ESP date back to the 1970s and since then, it has noticed a continuous change and evolution. Before, needs analysis were done according to the teacher’s intuition and personal analysis of students needs (Flowerdew, 2013:326). Among the first pioneers of this research area are Richterich (1972) and Munby (1978), this latter is known for his famous model “The Communication Needs Processor” (CNP). It is worth noticeable to refer to (CNP) as the most and widely known work on needs analysis. Munby (1978:32) sum up his Communicative Needs Processor (CNP) work frame and claims that

One starts with the person and investigates his particular communication needs according to the socio-cultural and stylistic variables which interact to determine a profile of such needs. This profile is eventually translate the ESP specification that indicates the target communicative competence of the participants

Munby clarifies that the CNP is taken from “*the variables that affect the communication needs by organizing them as parameters in a dynamic relationship to each other*”. Indeed, he has stated three main variables, the following figure illustrates them

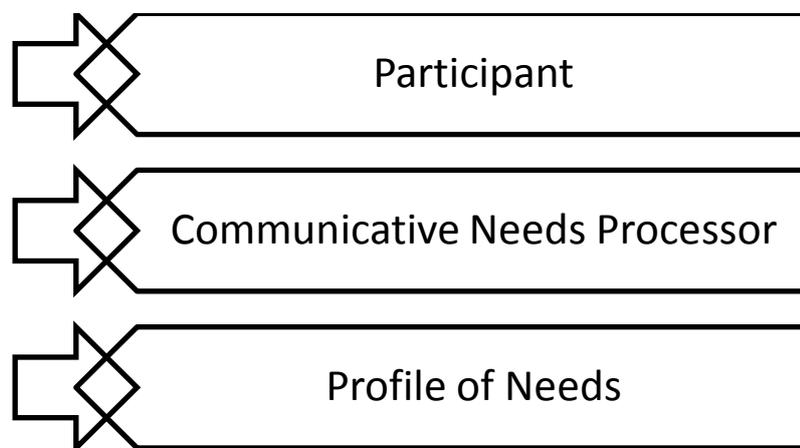


Figure 2.7: The main variables in Munby’s CNP (Munby, 1978)

Indeed, the profile Munby’s approach has built, works at two levels: **priori** and **posteriori**

● **Priori:** at this level Munby includes

- √ Participant (identity, language needs)
- √ Purposive domain (occupational/ educational purpose)
- √ Setting (physical and psychosocial)
- √ Interaction (interlocutors)
- √ Instrumentality (medium, mode, channel of communication)

● **Posteriori:** at this level, Munby has presented parameters such as

- √ Dialect (British/American/regional variety)
- √ Target level (processing through the model)
- √ Communicative event (productively/receptively)

√ Communicative key (how to do the activities)

Through his approach the “Communicative Needs Processor” (CNP) , Munby has opened the door for many scholars to tackle the issue of NA as an important part in teaching ESP. Some of them have supported Munby’s model like Brumfit (1979:31) who has stated that *“Munby’s work is so detailed that many problems both practical and theoretical can be examined for more clearly than had been possible in the past”*

Hutchinson and Waters (1987:54) have also supported Munby CNP framework and confirm that

With the development of the CNP it seemed as if ESP had come of age. The machinery for identifying the needs of any group of learners had been provided: all the course designers had to do was to operate it

This view has changed during the 1980s, as Chambers (1980) claims:

Needs Analysis should be concerned with the establishment of communicative needs and their realizations, resulting from an analysis of the communication in the target situation analysis

Whereas others have disagreed with Munby about some points such as Shurtz and Derwing (1981) who claimed that Munby’s model is ambiguous and is not practical in most ESP programs because it does not respond to the needs of every individual learner.

Moreover, much criticism has been brought to Munby’s model for being too mechanistic and that it has served in designing syllabuses with a narrow focus like “English of Motor Mechanics”. Yet, it is assumed that certain structures, functions, topics and even vocabulary are peculiar to the field of Motor Mechanics and they are not found in General English.

In short, needs analysis has noticed a set of variations that helped in molding its ground. From different attempts of various scholars who tried to give a scope to NA, it has gone through a long development process which has resulted in different definitions characterizing the practices in which needs analysis would serve the ESP teaching/learning context.

The following table summarizes the alternations that NA has passed over

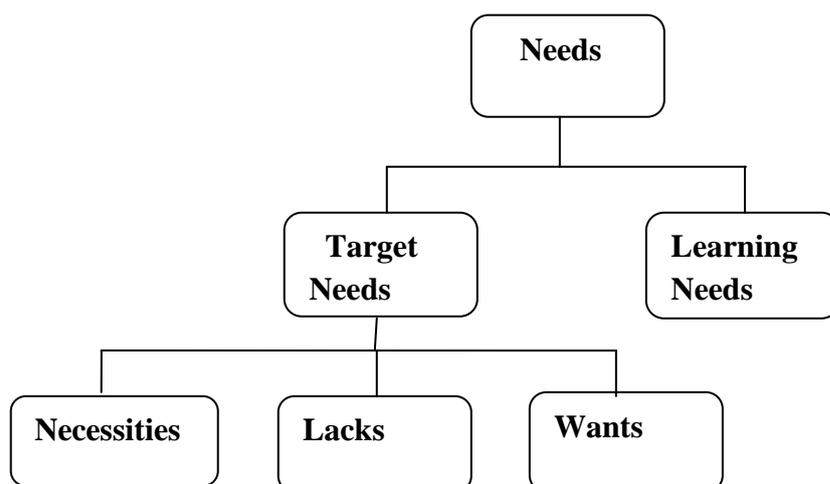
Stage/ Period	Focus		Scope of analysis
Early 1970s	ESP	EOP	-Target situation analysis
Later 1970s		EAP	-Target situation analysis
During 1980s	ESP & GE		-Target situation analysis -Deficiency analysis (present situation analysis) -Strategy analysis
Early 1990s	ESP		-Means analysis -Language audits Learning- centered approach

Table 2.5: The Evolution of Needs Analysis (Howard & Brown, 1997, p.70)

2.6.3 Types of Needs Analysis

Teaching ESP was previously concerned with the linguistic aspects of the language, later, it has shifted towards developing communication skills and now learning is much more directed by learners' needs. Scholars have defined NA in different terms. Widdowson (1981), for instance, has differentiated "goal-oriented" definition from "process-oriented" definition of NA. Goal-oriented means what the learner intends to do once he/she has learnt the language, whereas process-oriented refers to what the learner needs to do to acquire the language. Thus, according to Widdowson, the present situation in which the learner is learning the language is as important as the target situation which he/she is supposed to achieve.

Besides, Hutchinson and Waters have stated two distinct needs: "target needs" and "learning needs". . Kandil (2002) has adopted Hutchinson and Waters' view of dividing the needs into target needs which represent what the learner should be able to do as a final objective and learning needs which give information about the learner, his style of learning, strategy of learning, skills, the setting in which he is learning and the time allowed for his learning. For more clarification, Kandil (2002) has introduced the following diagram



**Figure 2.8: Types of Needs Adopted from
(Hutchinson and Waters, 1987. Cited in: Kandil, 2002:6)**

a. Target Needs

The target needs refer to what learner needs to do in the target situation. They have been sub-divided into:

√ **Necessities:** Kind of needs that are concerned with the demand of the target situation, in other words, what the learner needs to know in order to function effectively in the target situation.

√ **Lacks:** refer to the learner's actual language proficiency so as to decide which of the necessities he/she lacks. Reading a text in the subject area for instance, requires a certain proficiency in doing some tasks; yet this target proficiency needs to be matched with the existing proficiency of the learner that is to say, what he knows already. Then the gap between both proficiencies is seen as learner's lacks (Hutchinson, Waters and Breen, 1979).

√ **Wants:** besides needs, learners also need to be involved for they, too have a view on what their needs are. In this sense, Richterich comments "... a need does not exist independent of a person. It is people who build their images of their needs on the basis of data relating to themselves and their environment" (Richterich, 1972:29).

Hence, learners' awareness of their needs should be coupled with their involvement and both ESP designers and teachers have to take these wishes and views into account.

As Davies and Currie (1971) state:

*A method which frustrates the predictions of the learner is patently bad ...
Much of the satisfaction (of) learners will come when they feel the hurdles they
themselves have predicted have been cleared.*

In the same vein, the target needs require the collection of information that would be enough to analyze learners needs, as Brown has stated that needs analysis is referred to as “the activities involved in gathering information that will serve as the basis for developing a curriculum that will meet the learning needs of a particular group of students” Brown (2009:35). In fact, there are a number of ways to gather the needed information, the most frequent are: questionnaires, interviews, observation, data collection, and informal consultations with sponsors, teachers, learners and others.

It is generally advised to use more than one of these methods and it is crucial to remember that needs analysis is a continuing process. Hence, the feed-back is constantly checked and re-assessed; scholars like Mackay (1978), Munby (1978), Cohen and Mannion (1980), Richterich and Chancerel (1980) have all introduced the target situation analysis framework. This latter is presented in a set of questions:

● **Why is the language needed?**

For study/ for work/ for training/ for a combination of these/ for other purposes; such as status promotion

● **How will the language be used?**

Medium: speaking, writing, reading and listening

Channel: telephone, face to face ... etc,

Types of text or discourse: academic texts, lectures, informal conversations, technical manuals ... etc,

● **What will the content area be?**

Subjects: medicine, biology, architecture, shipping, commerce, engineering ... etc,

Level: technician, craftsman, postgraduate ... etc,

● **Who will the learner use the language use with?**

Native speakers or non-native

Level of knowledge of receiver: expert, layman, student ...etc,

Relationship: colleagues, teacher, customer, superior, subordinate ...etc,

● **Where will the language be used?**

Physical setting: office, hotel, workshop, library ...etc,

Human context: alone, meeting, on telephone ...etc,

Linguistic context: in own country or abroad.

● **When will the language be used?**

Concurrently with the ESP course or subsequently.

Frequently, seldom, in small amounts or in large chunks

Indeed, it is necessary to obtain answers to the above questions from a variety of sources; designers, teachers, learners etc; and then try to discuss and negotiate a satisfactory compromise.

b. Learning Needs

Considering learners lacks as the starting point and necessities as a destination towards the final point; wants. Learning Needs are considered as the route linking the three points together. According to Kandil, learning needs explain the means through which learners proceed to reach their target needs starting with realizing their lacks. In fact, ESP is basically concerned with learning process which is meant by needs, potentials and constraints that represent the learning situation. The more these three criteria are taken into account the more useful needs analysis will be. In other words, learning needs can be identified through lacks which deal with the deficiency side (present knowledge), necessities that concern what students need to know (required knowledge) and wants that represent students' individual desires (subjective needs).

Indeed, learning needs have later been labeled in different names: present knowledge/required knowledge, objective needs/subjective needs and perceived needs/felt needs (Dudley-Evans and St John, 1998), they have claimed that objective needs can be evaluated through tests where as subjective needs may be analyzed through interviews. Moreover, identifying learning needs depends on learner's previous knowledge, skills and strategies that represent the existing roads within learner's mind.

Nunan (1988) has mentioned two types of needs analysis: a) learner analysis which carries information about the learner himself and b) task analysis that help get information about learner's expected tasks.

West (1998) has suggested needs analysis taxonomies and listed the following types:

1. Target Analysis: it indicates the necessities which mean what learner expects to learn in the target situation.
2. Deficiency analysis: it concerns the analysis of the gap between the present knowledge and the required knowledge at the end of the program.
3. Strategy analysis: it identifies the different learning styles of learners.
4. Means analysis: this type of analysis indicates the logistics, practicalities and constraints of needs in a course.
5. Language audits:

2.6.4 Purposes for Doing a Needs Analysis

Accordingly, needs analysis may serve a set of different purposes, Richards (2005:54) for instance has listed six purposes:

- To identify what language skills a learners needs to perform well in his/her discipline.
- To determine whether the existing course is adequate to the needs of potential learners in learning English for Specific Purposes (ESP).
- To determine learners who need the training in particular language skills more than the others.
- To bridge the gap between what learners are actually able to do and what they need to be able to do.
- To identify a change of direction that people in a reference group feel is important.
- To gather as much information as possible about the problem learners are experiencing.

In fact, Needs Analysis bridge the gap between the present situation and the target situation. Nunan (1988) claims that Needs Analysis “*provides a basis for setting goals and objectives*”.

In the same vein, Widodo and Pusporini (2010: 150) state that needs analysis main aim is to “*bridge a gap between insider’s perspective/assumption and outsider’s perspective/assumption.*”. Indeed, needs analysis helps design the suitable syllabus and provide the needed material, hence, it arises teachers’ self awareness and critical reflection about learners expectations and goals. For that reason, ESP teachers should first question what learners’ “needs” are to determine their” wants”, “interests” and “lacks”.

2.6.5 Needs Analysis in an ESP Course Design

First, needs analysis is basically related to all the phases of an ESP course development as course design, material selection, pedagogical approaches, assessment and evaluation. In the past, needs analysis were regarded as the initial step in a linear process of course development. However, Dudley-Evans and St. John (1998) say that it is more cyclical. The following figure illustrates their view

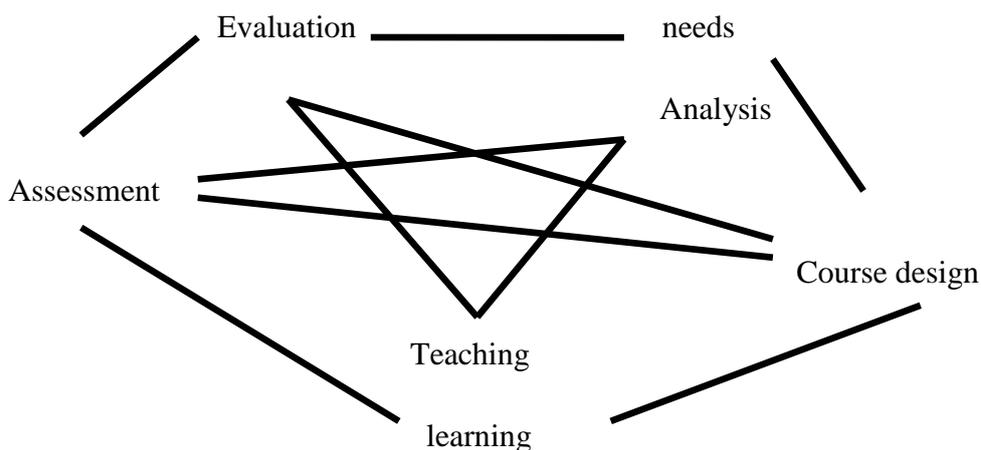


Figure 2.9: Stages of Needs Analysis in an ESP Course

(Dudley-Evans & St. John, 1998:121)

According to Dudley-Evans and St. John, though needs analysis is initially established as point of departure in course development, decisions that are made may be changed during course development and redeveloped. Thus, needs analysis is an on-going task that can be conducted at different phases of course design (Dudley-Evans & St. John, 1998) in order to suit the course content to learners' needs and stakeholders' expectations. An on-going needs analysis helps the teacher to add, delete or even modify the content according to the changing needs of learners over time.

Many researchers, in Algeria, have investigated teaching and learning ESP in higher education and at workplace. Hence, needs analysis was tackled in different ways. Yet, none of their academic works have shed light on neither conducting needs analysis in vocational institutions nor conducting training needs at the workplace. Hence, it is an opportunity to highlight this neglected issue in this study paving the way for further research works.

2.6.6 Process of Conducting Needs Analysis

Indeed, needs analysis should be conducted through a process that comprises as set of steps

a. Data Collection Procedures

According to Nunan, needs analysis refer to “*a family of procedures for gathering information about learners and communication tasks*” (Nunan, 1998:75). Brown, on his side, has confirmed Nunan’s view and claims that “*needs analysis is the systematic collection and analysis of all information necessary for defining a defensible curriculum*” (Brown,2009:269). The next table clarifies different sources and method

Main sources	Data collection methods
<ul style="list-style-type: none"> - Learners/Ex-students - People working or studying in the field - Documents relevant to the field -Clients - Employers and employees - Colleagues -ESP researchers in the field 	<ul style="list-style-type: none"> - Questionnaires - Analysis of authentic spoken and written texts - Discussions - Interviews - Observations - Assessments

**Table 2.6: Main Sources and Data Collection Methods of Needs Analysis
(Dudley-Evans & St. John, 1998:132)**

b. A Sample of Needs Based Survey

A sample of a survey that is adapted from an Indian experience and that is conducted to analyse the language needs of the students of Science and Technology in India may be adopted for the same objective with the ESP learners in the higher educational context in Algeria. The survey used a questionnaire that assessed seven main areas:

- Importance of English for Academic Purposes
- How students see fluency in English i.e. an advantage or not.
- Whether students need to improve their English or not.
- which language skill students need to master.
- what students’ personal preferences in English course content.
- what students think about assessment and what assessing ways they prefer.

- Self attitudes towards self-study materials.

Therefore, the questionnaire helps tackle students' needs from different angles. This is related to the teaching/learning ESP in an academic context. What comes next is a definition and an overview of training needs analysis which concerns employees at the workplace more particularly; the engineers, technicians and technical agents at AT company in Saida.

2.7 English Training Needs Analysis

Nowadays work environment requires skillful employees in order to perform their tasks well, increase the productivity of their company and therefore reach the expected level of competition with other companies. For that reason, managers have turned their attention to Training, as a tool that improves employees' performance in order to reach and realize the credibility and viability of their organization. According to Gordon, training is a planned and systematic change in behavior that results from learning activities and programs and that helps employees improve their knowledge, skills, competency and ability through effective work (Gordon, 1994:235).

It is worthy noticed that the technological developments have led to a change in the organizational management of any company and the employers have then realized that training employees is no more a choice but a must. Yet, do employees accept training? If yes, are they motivated? Researchers in the area of Human Resource training have confirmed that training should be related to other factors that motivate employees because the more the employee is motivated, the quick the skill or knowledge is acquired and transferred into practice .They have stated some factors such as job promotion, rewards and responses as Gary Dessler (2006:4) states

HRM is the policies and practices involved in carry out the people or human resource aspects of a management position, including recruiting, screening, training, rewarding and appraising

Workplace training plays an important role in developing employee performance which leads to increase company strength and performance. According to Hutchinson (2002) and Harrison (2000), employee performance is distinct from company performance and there is no relation between them. Yet, Guest (1997) argued that company performance depends on employee performance and therefore employee performance is a

function of company performance. Hence, workplace training plays a significant role in increasing employee competencies in matter of skills, knowledge and abilities which would lead to realize an effective organizational performance (Wright & Geroy, 2001).

Nevertheless, conducting successful training needs analysis helps identify both the target employees who need training and the right kind of training needed for those employees. On his side, Brown (2002) argues that needs analysis in training employees is crucial and should be an on-going process so as to determine the needed types of training which are beneficial for an organization rather than implementing training directly without conducting any needs analysis the fact that leads to spent cost and time without achieving the stated organizational objectives. For the case of AT employees, their English training should start with analyzing their needs in the English language in matter of skills or performance or both. Successful analysis lead to successful program and outcomes.

2.7.1 Types of English Training Needs Analysis

Among the different types of training needs analysis (TNA), the following table indicates the most important and frequent needs analysis.

a. Frequent Needs Analysis

Type of NA	Corresponding criteria
Organizational Analysis	-Who decided that training is needed? -Why a training program is considered as a solution for a business problem?
Person Analysis	-Who should receive the training? -what is their learning style? -who is going to conduct the training? -are there changes to procedures, software or equipment that require training?
Work Analysis/ Task Analysis	What are the specific duties and skill level required?
Performance Analysis	-Do employees perform up to the expected level?

	-If no, can training help to improve this performance?
Content Analysis	-What knowledge or information is used in manuals, documents or regulations (so that training content does not contradict job's requirements)?
Training Suitability Analysis	-Will training be effective in solving employment problems or not?
Cost-Benefit Analysis	-Will the training result in a return of value to the company?

Table 2.7: Types of Workplace Training Needs Analysis

As the table shows, these types of needs analysis are available to conduct in different workplaces context. Besides, there is another type that is called Language audits; it seems the most appropriate in most organizational workplaces.

b. Language Audits

Among the different types of Training Needs Analysis, "Language Audits" or "Linguistic auditing" are large scale surveys to be conducted in a company or an organization (Jordan, 97; West, 94). In this kind of analysis, it is preferable to use systematic methods to understand the organizational communicative needs related to different tasks conducted by different posts holders. Indeed, a comprehensive linguistic auditing should involve interviews with both managers and employees in order to gather enough information and corporate development goals and managerial expectations (Donna, 2000:12). This kind of work place needs analysis concerns firstly learners' learning style, trainers' teaching needs, business needs and organizational communicative needs (Frendo, 2007). On her side, Basturkmen clarifies that this type of analysis gathers both "objective assessment" of communicative requirements and "subjective views" from Language and non-Language professionals (Basturkmen & Elder, 2004:676). If the linguistic auditing is well conducted, then designing a successful work place training program may be achieved.

According to the present study and as far as the target employees are concerned, three types of a training needs analysis are suitable: a) Organizational Analysis, b) Work

Analysis or Task Analysis and c) Content Analysis because the world of computerization is in a continuous progress, thus employees need each time to up-grade their knowledge in order to catch up with the advancement of technology in the field. Moreover, a right diagnosis indicates the right tasks to include in the training that is supposed to coincide the requirements of the company. As far as the case company; AT is concerned, a check up of the available manuals and documents used by employees is helpful so as to suit the training program to the requirements of the company. Therefore, to ensure a good training for the employees, it is crucial to conduct a training needs analysis based on the right and useful techniques. The results obtained from the TNA should be documented and analysed in order to move to the next step which is designing an appropriate training program. That is why a professional trainer should be able to conduct the needed TNA and specify:

- a) Who need the training?
- b) Why do employees need the training?
- c) What skills need to be acquired?
- d) When will they need the new skills?
- e) How may the new skills be imparted? And
- f) Where may the training be conducted?

In addition to the previous criteria, the following figure illustrates the suitable tools for each type of analysis

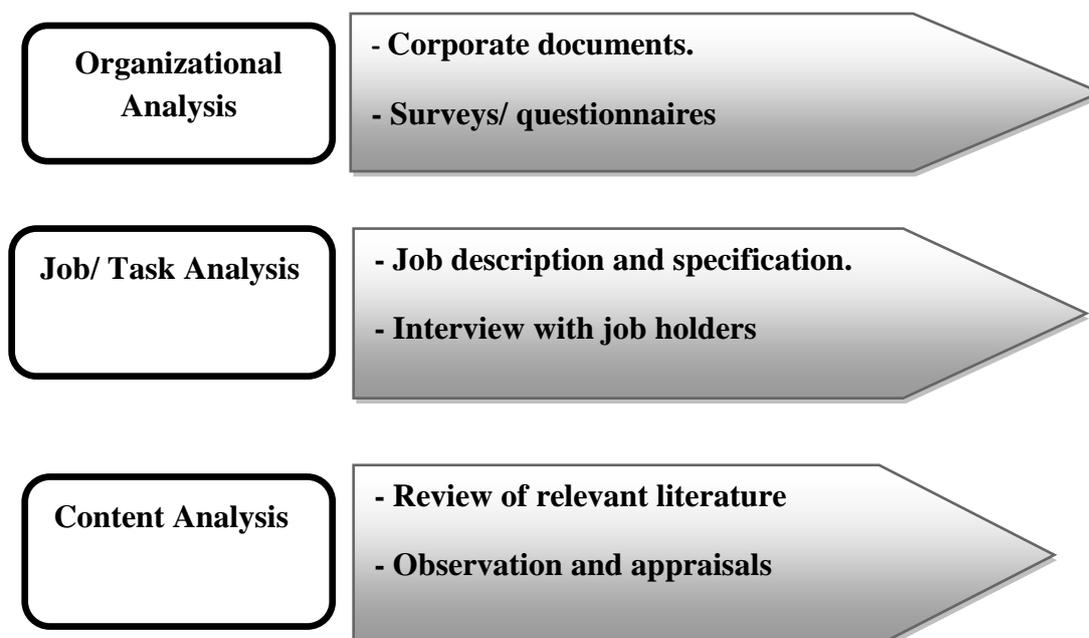


Figure 2.10: Data Sources for Different Levels of TNA

Besides, to improve a good quality of service, any company all over the world particularly those which are almost seeking to hire employees who are independent in their thinking and responsible in decision making. For that reason, training these employees has an important objective; employees should be skillful and competent to perform their tasks well. Here are some targets that a trainer may focus on in his TNA design for the employees in AT company

- √ Refinement of the existing skills to adapt with the new technologies.
- √ Assess the gap between the existing and desired skills and capabilities.
- √ Acquire future skills needs in order not to face difficulties with new technologies.

These targets are the umbrella under which there are three areas: skills, attitudes and behavior. Hence, the more these areas are taken into account, the more sure the success of the company will be. Nevertheless, a good training needs analysis should be followed by a good selection of training options such as courses and classroom training, external courses and programs including formal qualifications or on- the-job training including shadowing and observation.

Accordingly, the competitive environment in which companies are nowadays investing requires from the managers to look for an effective way to train their employees. Besides, workplace training which is planned without the conduct of training assessment/analysis would certainly be fruitless because training needs should be based on companies' needs. Moreover, training needs analysis would decide about what is effective, what should be modified and what should be completely changed for the next workplace training.

As far as AT Company in Saida is concerned, the lack of conducting training needs assessment is one of the factors that lie behind the mismatch between the trainer and the trainees. Training is rather a spoon feeding and the employees are not involved, they are unfortunately neglected as partners from participating in the training process. In fact, to ensure good outcomes from the workplace training the AT managers should understand that investing in training means investing in the trained employees and investing in employees means investing in the company so planning a workplace training should imply the involvement of all the partners as for the employees, they should be part in training needs assessment as a beginning for a good strategy of workplace training.

2.8 The process of Conducting an English Training

Michael Armstrong has suggested a complete process for workplace training. This type can be adapted for English training. The following chart illustrates the model

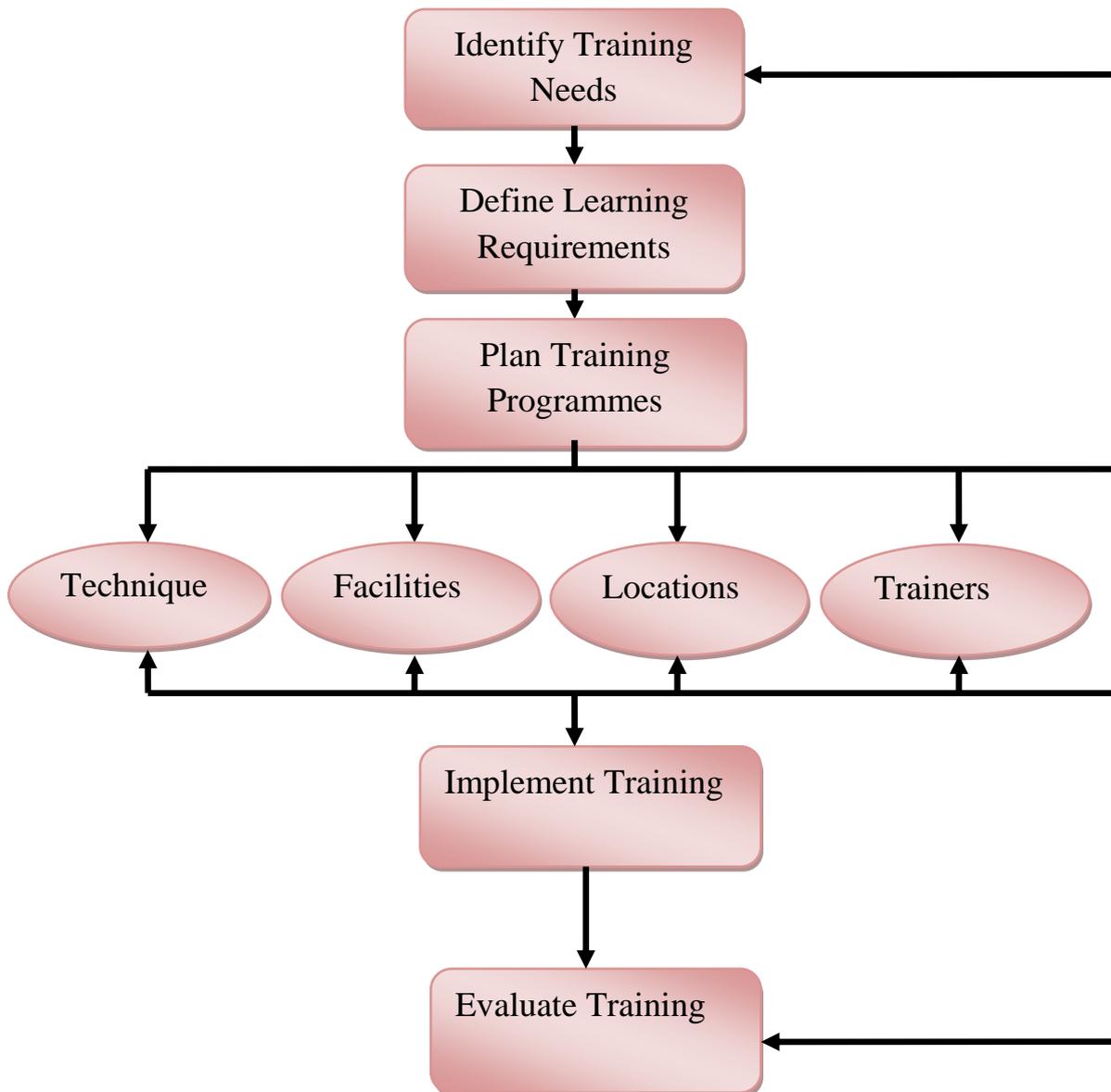


Diagram 2.2: The Process of Planning a Training (Armstrong Michael, 1995)

It is, then, clear that work place training is systematic. Obtaining the needs analysis result, the trainer next designs the overall training program, implement the training and get the feedback from the evaluation of the training.

2.9 Conclusion

This chapter is considered as a second part of literature review of the present investigation, as a continuity, the chapter dealt with EST and EVP through their

definitions, characteristics and the areas in which they occur in addition to course design in each branch. Then, the focal point in the present study was studied in details; which is English training of employees at the workplace in addition to an overview of training needs analysis and the case company was introduced through a detailed description followed by a chart. In what comes later, the research methodology adopted for the investigation will be tackled.

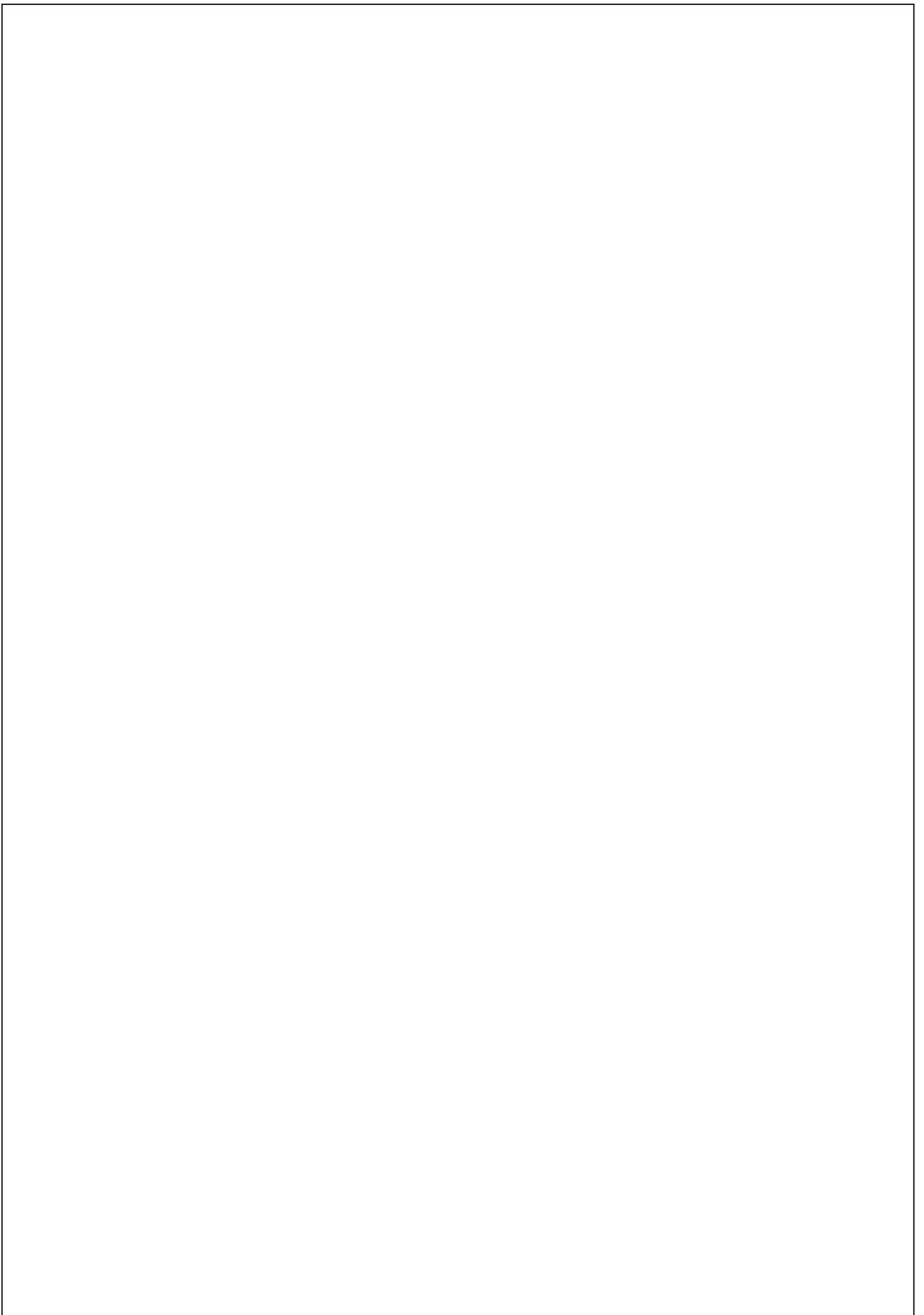
Chapter three

Chapter Three

Research Methodology

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3.1 Introduction

The present chapter is an attempt to address the practical side of the research study. To put this investigation in its right frame, it provides a situation analysis of an overall description of integrating ESP in training the technical employees of L'Algerie Telecom Company in Saida who represent the target participants. It also provides details about the adopted methodological procedures; then attempts to discuss the reasons for which a case study has been adopted and finally highlights the main instruments of data collection which have been carefully selected, implemented and assessed. Besides, a careful addressing has been provided in order to improve validity and reliability of the adopted tools.

3.2 Research Design and Methodology

Indeed, it is the purpose (s) of the investigation which determines what methodology or methodologies and design to adopt in order to improve the feasibility, practicability, credibility and legitimacy of the research area. Thus, decision should be made upon: from whom data is required (sampling), what kind of data is needed and then what methodology is required for the research. The present study concerns training a sample of employees at the workplace, that is why a piece of case study design seems to be appropriate. For data collection, a combination of qualitative and quantitative methodologies is needed for data collection. Next, a definition and an overview about case study are provided in the next section as a starting point in the empirical part.

3.2.1. Defining a Case Study

Case studies have long been an interest in the field of research for a number of scholars among whom (Basturkmen, 1988; Orum, Feagin and Sojberg, 1991; Yin, 1994; Stake, 1995 Bassey, 1999) and many others. Yet, there have not been a unique interpretation for case study and researchers have not agreed on a common definition as Ragin (1993) argues that in social science, for instance, researchers rarely define a case in their case studies and that there is no agreement about what a “case” is. Nevertheless, most scholars have attempted to define case study from different perspectives. Yin has defined the case study as “*an empirical inquiry that investigates a contemporary phenomenon with its real-life context*” (Yin, 1994:13). Case study or “Field work”, as Howard Becker (1986) called it, is both “*a process of inquiry about the case and the product of that inquiry*” (Robert &Stake, 1995:136).

either holistic or embedded. The next figure shows the two different designs of single case study.

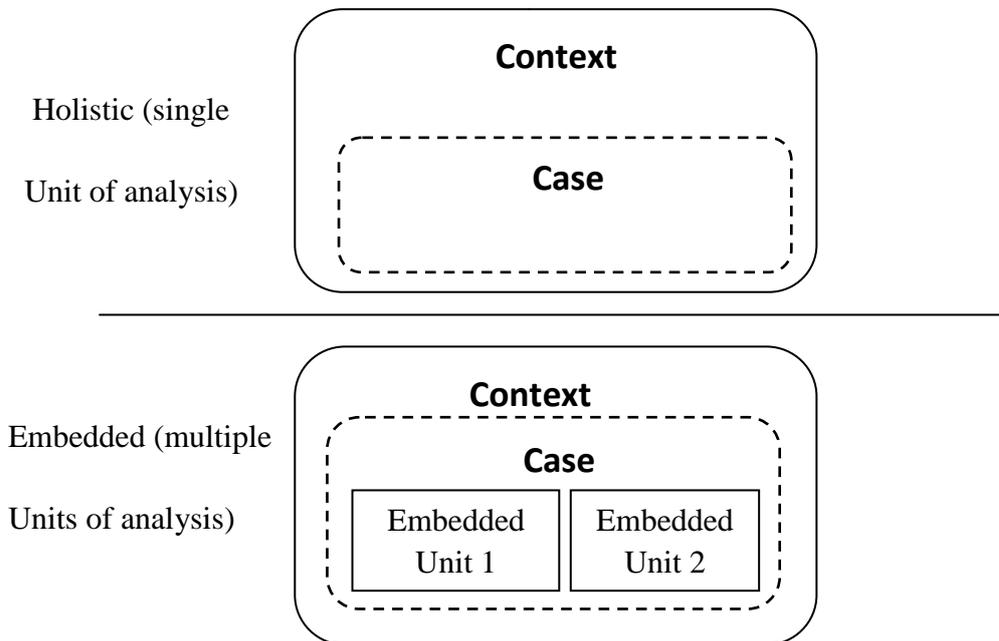


Figure 3.2: Single Case Study Design (Yin, 2009)

3.2.2. Characteristics of Case Study

As any other research design, case study has been tackled from the three main philosophical perspectives of Yin (1994), Stake (1995) and Basturkmen (1998, 2009). Their works explicate how these researchers' views influence the application of case study in real-life contexts.

Though, Yin suggests a remedy to ensure validity by using multiple sources of evidence. There have been so many criticisms to use this research that Yin (1994) asks in his book on case studies *"If the case study has serious weaknesses, why do investigators continue to use it?"* On the other hand, case study design ensures that the procedures used are well documented and can be repeated with the same results and this represents the reliability, accuracy and precision of measurements of this research. Moreover Yin states that *"Readability, credibility and concern with conformability all matter"* Yin (2014:192). Then, according to Yin the quality of any case study depends on its rigor, validity and reliability. As any research method, case study has its own characteristics. Yet, scholars view these characteristics from different perspectives. Here, it is important to state the three pioneers who have tackled the case study as a main concern: Yin (2014), Stake (1995, 2006) and Merriam (1998). The next table summarizes the main characteristics they have stated

Researcher	Characteristics of case study
Yin (2014) Realist- Postpositivist	<ul style="list-style-type: none"> - A form of social science. - A form of empirical inquiry. (p.16) - Use of a realist perspective. (p.17)/real world setting. (p.16) - Use of objective process in methodology. - Use of multiple methods and triangulation - Categorize qualitative data to create quantitative data - Use of statistical method for analysis. - Maintain honesty, manage bias and acknowledge limitations
Merriam (1998) Pragmatic- Constructivist	<ul style="list-style-type: none"> - Use of processes that help interpret, sort and manage information - Adapt findings to convey clarity and applicability of the results - Use of a pragmatic approach - Use of both qualitative and quantitative methods and triangulation - Provide a rich holistic description (1998) - Interviews are the most common forms of data collection - Use of rigorous, credible and applicable structures - Use of descriptive, thematic and content analysis processes
Stake (1995, 2006) Relativist- Interpretivist	<ul style="list-style-type: none"> - Use of qualitative and /or quantitative methods - Researcher should be interpretive - Study the case situationally and experience the case in its context - Use instrumentality to provide insight on the issue (2006) - Use of multiple sources and methods in data collection - Interviews and observations are the most preferred - Use of description to convey the findings.

Table3.1: Characteristics of Case Study from three Philosophical Perspectives

3.2.3. Components of Case Study

Remarkable researches have been conducted by many case study researchers like (Basturkmen, 2009; Stake, 1995-2006; Yin, 2014; Creswell, 2013-2014; George & Bennett, 2005; Simons, 2009) and have contributed to the development of case study and its components. These components differentiate case study from other forms of research.

Elements	Description
The case study	<ul style="list-style-type: none"> - Identified as the entity of interest or unit of analysis. - Program/individual/group/social situation/organization/event/ Phenomenon/process.
A bounded system	<ul style="list-style-type: none"> - By time, space, and activity. - Of connections - That applies frames to manage contextual variables. - That may be blurred between the case and context.
Studied in context	<ul style="list-style-type: none"> - Real-life setting or natural environment. - Significant setting to understand the case. - Contextual variables such as political, economic, social, cultural, historical and organizational factors.
In-depth study	<ul style="list-style-type: none"> - About intrinsic fieldwork to the process of the inquiry. - Including techniques that reflect the credibility of the research process. - Depending on the philosophical orientation of the research, purpose and methods.
Selecting the case	<ul style="list-style-type: none"> - According to the purpose and conditions of the study. - That involves decisions about people, settings, events, phenomena and social processes. - Scope: single/ within case and multiple case sampling - Board: unique, varied and/or accessible aspects. - Methods: specified criteria, methodical purposive; replication logic: theoretical or literal replication (Yin, 2014)

Multiple sources Of evidence	<ul style="list-style-type: none"> - For comprehensive depth and breadth of inquiry. - For data collection: interviews, observations, focus groups, artifact and document review, questionnaires and/or surveys. - For data analysis: vary and depend on data collection methods and cases; should be systematic and rigorous. - For triangulation which is highly valued and commonly used.
Case study Design	<ul style="list-style-type: none"> - Descriptive, exploratory, explanatory, illustrative, evaluative. - Single or multiple cases. -Embedded or holistic (Yin,2014) - Particularistic, heuristic, descriptive (Merriam, 1998, 2009) - Intrinsic, instrumental, and collective (Stake, 1995, 2006)

Table 3.2: Components of Case study

3.2.4 Justification for the Choice of Single Case Study

For the present study is descriptive, a single case study seems to be an appropriate type of research to study a real-life phenomenon of employees working in AT company on the one hand and to represent those participants within a natural setting which is their workplace, on the other hand. Indeed, the descriptive elements should include (participants, setting, interventionist, baseline and intervention and other dependent variables). Moreover, it is contemporary and complex at the same time. In this vein, Yin argues that if the researcher seeks to study a single case (a specific person among a group or a specific group among people), then a single case study is the best choice (Yin, 2003). Yin adds that the choice of a single case study as a holistic unit is right if the researcher aims to make the unfamiliar familiar and have the ability to study the case from data analysis within case analysis (Yin, 2003).

While some researchers have demonstrated the advantages of a single case study Yin, Dyer and Wilkins (1991), Siggelkow (2007), other scholars have stated the weaknesses of single case study research Nisbet and Watt (1984). Here are the strengths and weaknesses of single case study:

♣Strengths of Single Case Study Research

- √The investigator can get a deeper understanding of the phenomenon. (Dyer and Wilkins, 1991)
- √The investigator can create a high-quality theory. (Dyer et al)
- √The researcher can prove the existence of the phenomenon. (Siggelkow, 2007)
- √The researcher can investigate the existent theoretical relationships within a context and explore the new existing ones. (Yin, 2003)
- √When the researcher selects a single case study within embedded units he can be able to explore those subunits that exist within larger cases.

♣Weaknesses of Case Study

However, Nisbet and Watt (1984) have listed three weaknesses in conducting a case study:

- √ Case study research relates to single project. Hence, the results cannot be generalized
- √ The researcher often does not have control over certain variables and events.
- √ Case study may be selective, biased, personal and subjective, and then validity is problematic.

Nevertheless, the reason for this choice is that methodologically talking, designing a case study addresses the “WHY”, “WHAT” and “HOW” of the case issue which help researchers to explore, explain, describe, evaluate and theorize.

Besides, single case study research requires a number of typologies that are specific and distinct from those of multiple case studies. Yin (2003) has stated them as follow:

- √ **Critical to test:** If the propositions are confirmed in the study, then they are true.
- √ **Extreme/ Unusual:** offers clear insights of the outcomes.
- √ **Common:** selects insights of everyday life.
- √ **Revelatory:** selects phenomena that were not previously accessible.
- √ **Longitudinal:** investigates how phenomena change over time.

Accordingly, AT company which is the target setting in the present work provides a suitable context for a single case study research. Moreover, ESP researchers have never highlighted the atmosphere in which AT employees are working. In other words, whether they keep up with the progress Telecommunication employees in other countries have achieved (English competencies for instance) or they are still maintaining the same way of working and training.

3.2.5 Criteria for Judging the Quality of Research Method

In contrast to the other research methods, case study cannot be entirely planned because the investigation in which case study is adopted is always faced with a set of variables that are outside the investigator's control. For that reason, it is important to assess the reliability and validity of the findings. Hence, to be sure of the final quality of the case study, Yin (1998, 2014) and Maxwell (1996) have stated six tests comprising: constructive validity, internal validity, external validity and reliability. The next table offers more explanations

Criteria	Case study tactics	Application in general	Application in this study
Construct validity	<ul style="list-style-type: none"> ◆Use multiple sources of evidence ◆Establish chain of evidence ◆Have key informants review draft case study report 	<ul style="list-style-type: none"> - Data collection - Data collection -Data analysis and report writing 	<ul style="list-style-type: none"> -Conducting an Interview/ --documentation insight - Use of questionnaire -Report the collected data.
Internal validity	<ul style="list-style-type: none"> ◆Do pattern-matching ◆Do explanation-building ◆Address rival explanations 	<ul style="list-style-type: none"> - Data analysis - Data analysis - Data analysis 	<ul style="list-style-type: none"> - Cross- case analysis - Implications - Interview clarification
External validity	<ul style="list-style-type: none"> ◆Use Replication logic in multiple case studies 	<ul style="list-style-type: none"> - Research design 	<ul style="list-style-type: none"> - Choice of multiple case study over single case, comparison to literature
Reliability	<ul style="list-style-type: none"> ◆Use case study protocol ◆Develop case study database 	<ul style="list-style-type: none"> - Data collection - Data collection 	<ul style="list-style-type: none"> - Use of tested interview protocol -Thoroughdocumentation

**Table 3.3: Case Study Tactics for Four Design Tests
(Adapted from Yin, 2003:34)**

According to Bassey (1999), A case study, in order to be valid and reliable, should follow a certain procedure design as he suggested by identifying the research issue, stating the research questions, collecting and storing the needed data, generating and testing analytical statements then interpreting the results, deciding about the outcomes and writing the final report and at last publishing the final work. Next, the research design of the current study is presented and clarified.

3.2.6 Research Design

Case study is mainly characterized by triangulation in data collection because triangulation increases the precision of any empirical research by means of taking different angles towards the studied phenomenon and therefore providing a clear and broader picture and this is the case for case study research. Indeed, triangulation requires multiple sources of evidence as Yin (2003) states that case study *“copes with the technically distinctive situation in which there will be many more variables than data points, and as one result it relies on multiple sources of evidence, with data needing to converge in triangulating fashion”*. Among the tools that are often used in data collection for a case study, the following diagram demonstrates:

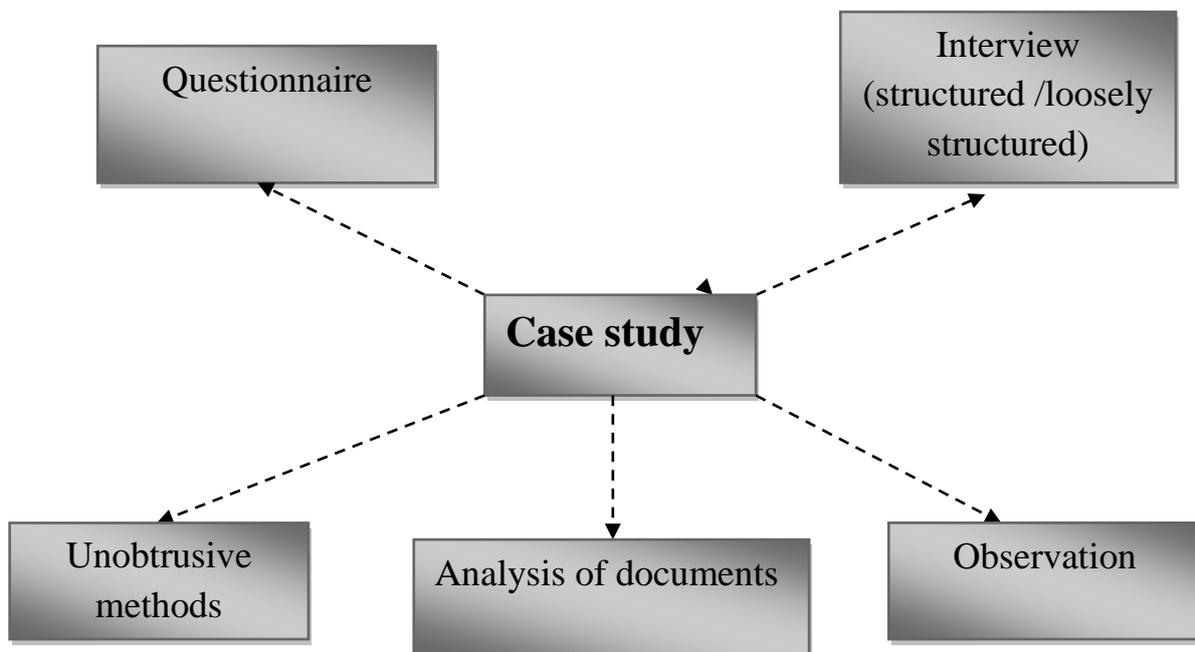


Figure 3.3: Relationship between Research Design and Data Collection Methods (Yin, 2003)

3.2.7 Study Design and Assumption

To conduct any scientific research, an appropriate research model is required as a first step to follow in order to obtain valid outcomes. Different types of research exist in English for Specific Purposes (ESP). For the present study is a single case study the research is designed to investigate the use of English by AT employees (more specifically engineers, technicians and technical agents) at the workplace, and then a descriptive study seems appropriate. Indeed, this kind of study involves collecting information on how

English is used at the workplace (ATC), through data review, surveys, interviews and/or observation. In this vein, Dorneyei argues; *“The purpose of a descriptive research is to examine a phenomenon that is occurring at a specific place(s) and time.”* (Dorneyer, 2007). Besides, it stated that there are three types of descriptive study: simple, comparative, or co- relational . These types may be characterized as follow:

√ Simple descriptive study is adopted when the researcher seeks to collect data to describe a person (s), organizations, settings or phenomena.

√ Comparative description study aims to contrast between two or more groups or settings with the intention to test a particular hypothesis.

√ Co- relational descriptive study is used to describe the statistical association between two or more variables.

Nevertheless, descriptive research has strengths and weaknesses as illustrated in the following table

Advantages	Disadvantages
<ul style="list-style-type: none"> ◆ Gives a holistic understanding of the phenomenon through the use of both qualitative and quantitative data collection. ◆ Data is varied, diverse and thorough. ◆ Conduct the research in a natural setting which ensures a high-quality and reliable data collection. ◆ Is not time and money consuming. 	<ul style="list-style-type: none"> ◆ Respondents are not always truthful, this means that data are not always valid ◆ Sample may not representative if it is random ◆ Descriptive research focuses mainly on “what” when investigating a phenomenon, then it does not the “why” or “how” which represent a limitation in identifying specific causes.

Table 3.4: Advantages and disadvantages of Descriptive Research

Next, an overall design of the work in hand is presented and clarified in a diagram

3.3 The Overall Design of the Study

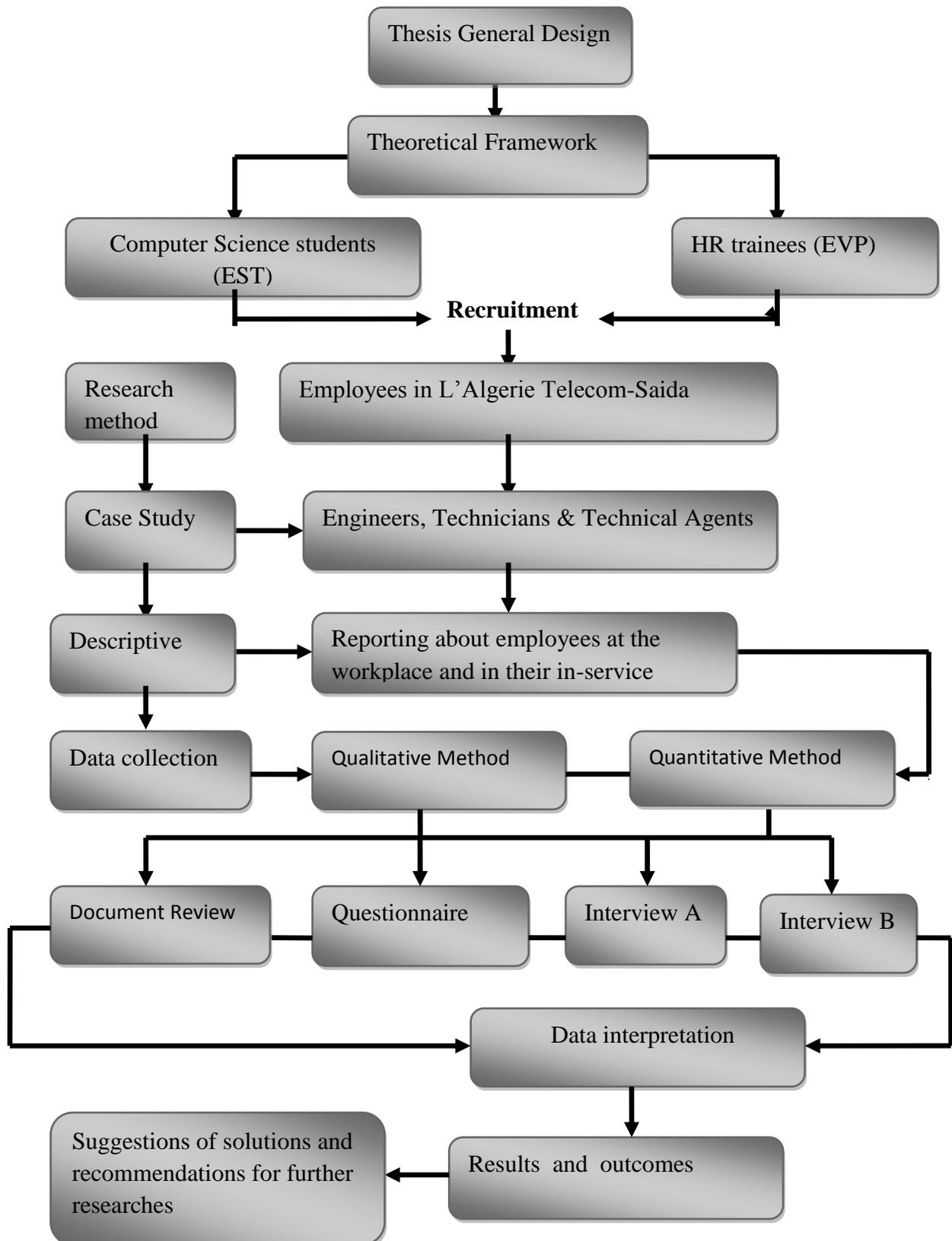


Diagram 3.1: The Overall Design of the Study

3.4 Research Approaches

Data gathering is the roadmap that the investigator draws to bridge the gap between the theoretical and the empirical parts of the case study, but what if the investigator does not improve the right selection of data collection approaches? For that reason, it is very important for any researcher to rely on scholars' guidance. As far as the choice of the appropriate approaches needed in gathering data, the Yinian view states that a combination of quantitative and qualitative approaches is required because, according to Yin, they are equally instrumental. Whereas, according to Stake and Merriam, the collection of data should be exclusively qualitative.

according to Brown (2007) both Yin (2014), Stake (1995, 2006) and Basturkmen's (1998, 2009) works contribute to the same target which is qualitative and quantitative continuum, except that Yin's view lies on one side, whereas Stake's view stands on the other side and Basturkmen's view rests to the center. Brown confirms this through his claim "*case study research is supported by the pragmatic approach of Merriam, informed by the rigor of Yin and enriched by the creative interpretation described by Stake*" (Brown, 2008).

From another perspective view, Creswell (2007:245) states

"Case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple systems (cases) over time through detailed, in-depth data collection involving multiple sources of Information (e.g., observations, interviews, audiovisual material, documents and reports) and reports a case description and case based themes"

Yet, Seaman views that a combination of qualitative and quantitative approach often provides a better understanding of the target phenomenon (Seaman, 1999) or as it is called "mixed methods" by (Robson, 2002).

In fact, most data collection methods and particularly in case study, both qualitative and quantitative approaches are used. Yet, these two paradigms are distinct in the formats of gathering, analyzing the data and even the presentation of the final findings. The following points clarify this distinction

√ The way the information is gathered; through a structured or unstructured formats.

- √ The way the information is recorded; in descriptive, narrative, categorical or on a scale.
- √ The way the information is analysed; through a descriptive, categorical or numerical analysis.
- √ The way findings are presented; through a descriptive or analytical manner.

The present study requires for a combination of both qualitative and quantitative approaches because they are considered suitable for single case investigation. In what follows a detailed definition clarifies what both qualitative and quantitative approaches mean.

3.4.1 Quantitative Research Approach

Indeed, quantitative approach is specifically concerned with data in the form of numbers. Hence, it uses mathematical operations in order to investigate their statistical properties. Then, quantitative approach seeks to measure, explore, control, test hypotheses, make forecasts, make comparison and construct concepts and theories.

In case study, quantitative approach does appear though not as much as qualitative approach which seems to be the dominating one. In this vein Eisenhardt states “*In case study qualitative data is the dominating sources, even though quantitative data often appears*” (Eisenhardt, 1989) and “*case study focuses more on qualitative than quantitative*” (Eisenhardt, 1989). Hence, the aim behind the selection of quantitative research in the present inquiry is to objectively study the numerical data collected from the target population and measurements reveal reliable results.

3.4.2 Qualitative Research Approach

Qualitative research, on the other hand, focuses on data in the form of words that is to mean language in the form of extended text. It is mainly based on observations, interviews, documents and artifacts outcomes. Yet, the data which are qualitatively collected can never be objective at hundred percent. They are, indeed, based on the researcher’s interpretations of experiences. In other words, qualitative data are not about behavior as they are about actions that is why they require plenty of care and self-awareness on the side of the researcher. As any other approach, qualitative data have characteristics that differentiate it from other paradigms. These characteristics can be summarized as follow:

- √ Qualitative data collection focuses on ordinary events that occur in natural setting.
- √ They focus on a specific case, a bounded phenomenon embedded in its context.
- √ Qualitative data are rich and holistic; they provide vivid descriptions.

- √They are powerful to respond to “How” and “Why” things happen.
- √They are so flexible that they give confidence to the reader(s).
- √They serve to discover, explore, test and /or develop hypotheses.
- √They either supplement, validate or illuminate quantitative data collected from the same setting.

Though, the major point that Robert Yin as a methodologist, Robert Stake as an interpretivist and Merriam Basturkmen as a realist, have agreed on, is the effectiveness and suitability of qualitative research use in case studies, Merriam’s account about the use of qualitative seems to be the best because she focuses more on conducting effective interview, mining data from books and being a careful observer are the main guidance in conducting a case study.

Accordingly, both quantitative and qualitative approaches can enrich the academic body of knowledge as they complement each other (Rossman and Wilson, 1985). Thus, a mixed method approach is useful in case study research through combining the advantages of both of them and moderate their weaknesses according to the studied context. Moreover, It offers a detailed explanation for each approach highlighting their aims in general frameworks, their analytical objectives, their questions formats, data format and their flexibility in a research

In short, for the current research, using both quantitative and qualitative data or mixed method seems the most appropriate strategy because it is a strong analytic method that can yield appreciable outcomes.

3.4.3 Quantitative VS Qualitative

Accordingly, there have been distinct point between the quantitative and qualitative approaches stated by scholars. In this perspective, Denzin and Lincoln (2011) have stated the following:

▶ In quantitative research, participants are randomly selected while in qualitative research participants are selected purposefully

▶ Anonymous questionnaires for quantitative research while qualitative research requires face-to-face data collection instruments like interviews and observation

► Predesigned instruments for record in quantitative research where as in qualitative research the investigator's self-design protocols is required

The next table provides more explanation through a comparison between qualitative and quantitative approaches.

	Quantitative	Qualitative
General Framework	<ul style="list-style-type: none"> ◆Aims to confirm hypotheses ◆Use more rigid style of eliciting and categorizing ◆Use questionnaires, surveys and structured observations 	<ul style="list-style-type: none"> ◆Aims to explore phenomena ◆Use more flexible style of eliciting and categorizing ◆Use semi-structured methods such as in-depth interviews
Analytical objectives	<ul style="list-style-type: none"> ◆Quantify variation ◆Predict causal relationships ◆Describe characteristics of a population 	<ul style="list-style-type: none"> ◆Describe variation ◆Describe and explain relations ◆Describe individual experience And group norms
Question formats	◆Closed- ended	◆Open-ended
Data format	◆Numerical (obtained by assigning numerical values)	◆Textual (obtained from field notes)
Flexibility in study design	<ul style="list-style-type: none"> ◆Stability of study design from beginning to end ◆Study design is characterized by statistical assumptions and conditions ◆Participant responses do not influence or determine how and which researchers ask next 	<ul style="list-style-type: none"> ◆Some aspects of the study are flexible (the addition, exclusion or wording of particular interview questions) ◆Study design is interactive; data collection and research questions are adjusted to what is learned ◆Participant responses affect how and which researchers ask next.

Table 3.5: Comparison between Quantitative and Qualitative Research

Approaches (Mackay et al, 2005:3)

3.4.4 Mixed Method

It has recently been noticed that case study researchers apply mixed method in their studies more than in the past. Mixed method refers to the integration of quantitative and qualitative research approaches (Johnson, Onwuegbuzie and Turner, 2007).

Johnson et al (2007:123) state

Mixed methods research is the type of research in which a researcher or researchers combine elements of qualitative and quantitative research approaches for the broad purposes of breadth and depth of understanding and corroboration

Accordingly, the context in which the present investigation is conducted needs more understanding and insight. For that reason, mixed method is preferable.

3.5 Sampling Design

For a reliable investigation, the researcher has to plan his sample design from the target population before collecting any data. The population is also called a universe that can be either finite or infinite. Besides, the sample may be probable or non-probable. These two categories imply a set of different sampling types that the following table clarifies.

Types of sampling	Characteristics
Non probability sampling	Subjects selected by the researcher
<ul style="list-style-type: none"> - Convenience - Purposeful - Snowball - Quota 	<ul style="list-style-type: none"> - A group already formed and easy to use. - Knowledgeable and available persons. - Selected respondents suggest other respondents - Stratified sampling but not randomly chosen
Probability sampling	Subjects selected by a random mechanism
<ul style="list-style-type: none"> - Simple random - Systematic random - Stratified - Cluster 	<ul style="list-style-type: none"> - Pull names out of a chat. - Computer generated numbers to select. - The sample divided into groups. - Groups of strata.

Table 3.6: Types of Sampling (Griffee, 2012:58)

In selecting any case study, the sampling is usually purposive, judgmental or information-oriented sampling. The same thing is for a single case study which is suitable for an in-depth insight into the situations where a group from the whole population is selected. In this vein, Burns argues that *“In a case study the focus of attention is the case in its idiosyncratic complexity, not on the whole population of cases”* (Burns, 1997:365). Gilbert adds that case study is an approach *“in which a particular instance or a few carefully selected cases are studied intensively”* (Gilbert, 2008:36) Hence, the target population in the present study (sampling) is employees in L’Algerie Telecom Company in Saida where as the case of study, which represent the sample, is a specific category of employees in AT company; the technicians, technical agents and engineers who are currently working in the technical service of the company. The next figure explicates more about sampling and sample.

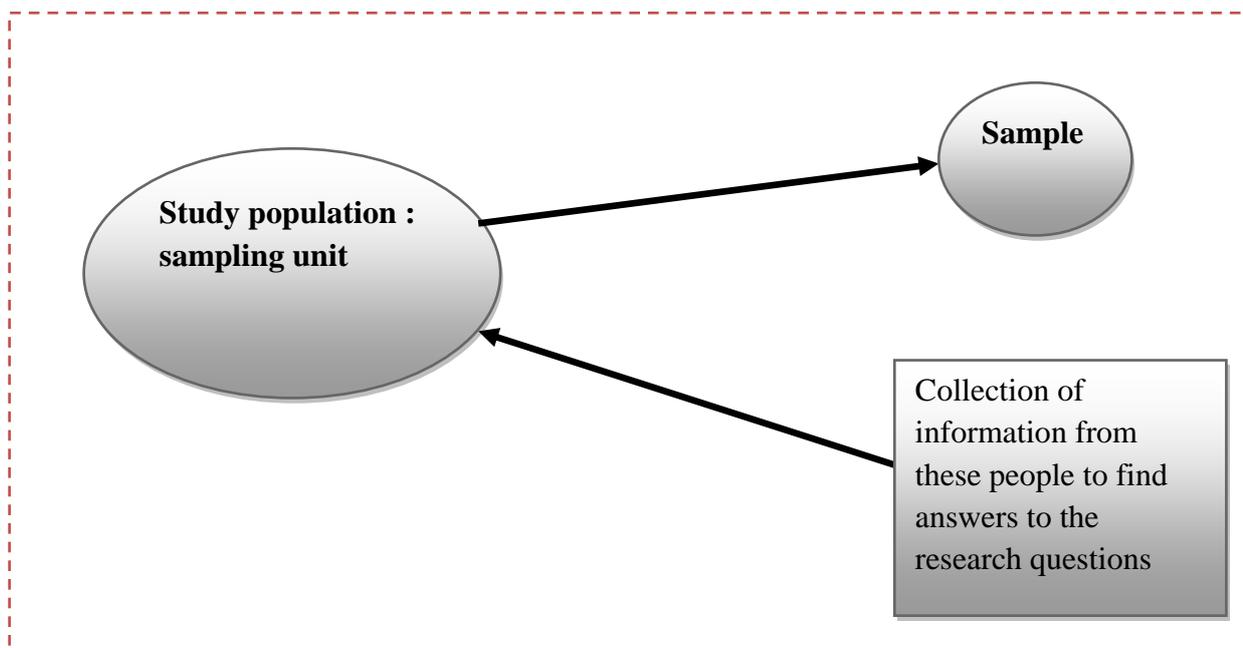


Figure 3. 4 : The Concept of Sampling
(Ranjit Kumar, 2011: 176)

Though, there have not been any research (in the field of ESP) that has been conducted in this area, nevertheless the choice of conducting a case study in this company is not random because case study is useful particularly when exploring an area where little is known and it is suitable for the researcher to present a holistic understanding of the situation under investigation. Moreover, investigating a case study from the target

company can be representative of other cases in other settings of the same company (across Algeria) since the company is public and the same regulations are applied in forty eight towns. Then, if the current investigation is conducted elsewhere (in any other AT company in Algeria), it would reveal the same findings. According to Burns (1997:364);

“To qualify as a case study, it must be a bounded system, an entity in itself. A case study should focus on a bounded subject/unit that is either very representative or extremely typical”.

3.5.1 Sampling Procedure

Regarding that the target case of the present investigation is homogeneous, that is to mean each individual of the selected population has an equal chance to be selected and this means that the case, of technicians, technical agents and engineers in AT company in Saida, represents a probability sampling for the choice of the target employees, is done purposively and thus can be typical and representative of the whole working technicians, technical agents and engineers in the other AT companies throughout Algeria. Moreover, purposive sampling is useful particularly for case study research for three reasons a) when the case(s) is unique and informative b) when the members of the selected population are difficult to be reached c) when the purpose is to get deeper insight in the target case (Neuman, 2009). The next table represents different basic sampling designs

Element selection technique	Representation basis	
	Probability sampling	Non-probability sampling
Unrestricted sampling	Simple random sampling	Haphazard sampling or convenience sampling
	Complex random sampling (such as cluster sampling, systematic sampling, stratified sampling etc.)	Purposive sampling (such as quota sampling, judgment sampling)

**Table 3.7: Basic Sampling Designs
(Neuman, 2009)**

Yet, the investigator may face the problem of bias in this type of sampling technique particularly when the selection of the sample is according to his point of view and this generally happens with new investigators. Whereas, well experienced researchers are often objective in their selections which help them obtain reliable results.

On the other hand, descriptive case study is intended to describe an intervention or phenomenon in a real-life situation and this is the case of the study in hand. Hence, the selected case is critical in testing a particular theory (Yin, 2003). As far as the present case is concerned, it seems that the socio-technical theory is appropriate to examine the impact of technology on the social and organizational change in AT Company. What comes next is an interpretation of the socio technical theory with all its implications.

3.6 Definition of the Socio-technical Theory

Indeed, the socio-technical theory implies that on one side, it is people, as an element in the social system that uses tools, techniques and knowledge, who make up organizations Pasmore (1988). On the other side, organizational change and progress depend on technology (Perry and Danziger, 1980; Norris and Moon, 2005).

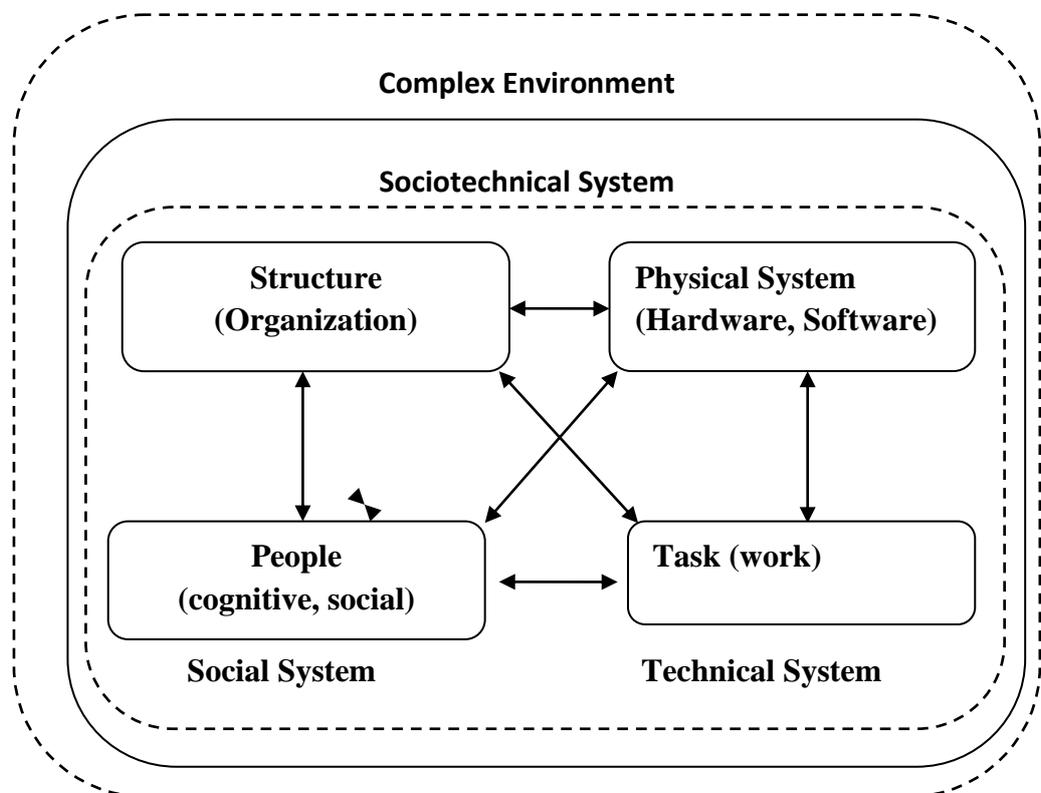


Figure 3.5: Socio-Technical Theory Retrieved from:

(business.leeds.ac.uk/research-stc/doc/socio-technical-systems-theory)

As can be seen from the figure, the socio-technical theory seeks to bridge the gap between the social aspects that consist of people (all what concerns knowledge, skills, attitudes, values and needs) and society from one side and the technical aspects which comprise the procedures and the processes (including devices, tools and techniques) of the organization (Albert Chems, 1976) and (Chris Clegg, 2000). Indeed, procedures and processes are related to knowledge. In other words, the more knowledgeable the employees are, the more development the organization can ensure.

Besides, people in AT company employees (who represent the human resources) and technology represent two sides of the same coin that is the key success of any organization. It is true that employees are available, but are they up-dated to the technological progress? In other words, are they well trained to keep up with the technological progress in what concerns English language proficiency? Hence, using a theoretical approach helps generalization to other similar cases, Mikkelson (2005:92) states that

“Case studies, as the name indicates, concentrate on special cases. Generalizations from case studies must be handled with care. To serve a foundation for generalizations, case studies should be related to a theoretical framework, which in turn may be adjusted as case study results provide new evidence. The ‘generalizability’ of case studies can be increased by strategic selection of critical cases.”

Therefore, the present case study findings can serve as an example to build generalization to other AT companies throughout Algeria. Another advantage from using a theoretical approach is to clarify how the needed data should be gathered and analyzed and ensures reliability and validity of the outcomes. Next, data collection methods are stated and clarified.

3.7 Methods of Data Collection

As has been mentioned before, this descriptive case study employs a mixed method which comprises both qualitative and quantitative approaches in order to collect a wide range of information from different participants using a triangulation in data collection. Actually, “triangulation is a powerful way of demonstrating concurrent validity” (Cohen, 2000). On his side, Yin (2003) has explained that using multiple sources of evidence would enable the researcher to cover a wide range of issues and to develop converging line by the

process of triangulation. Therefore, to ensure more accuracy, data were gathered in two phases. The first phase at the workplace while the target respondents were working so as to have an in depth-insight on how English is used during their working hours, whereas the second phase was carried out with the responsible in charge of training through a semi-structured interview. The reason of planning two phases was to see whether their in-service training is well planned to serve their professional needs or it is just a matter of a MUST.

Before talking about gathering data, one may ask about the type of data required for a specific research. Indeed, there are two kinds of data:

a) Primary data which are fresh data for they are collected for the first time and are original in character.

b) Secondary data which have already been collected and processed by other researchers.

In the next figure, Saunders, Lewis and Thornhill (2009) illustrate data collection methods

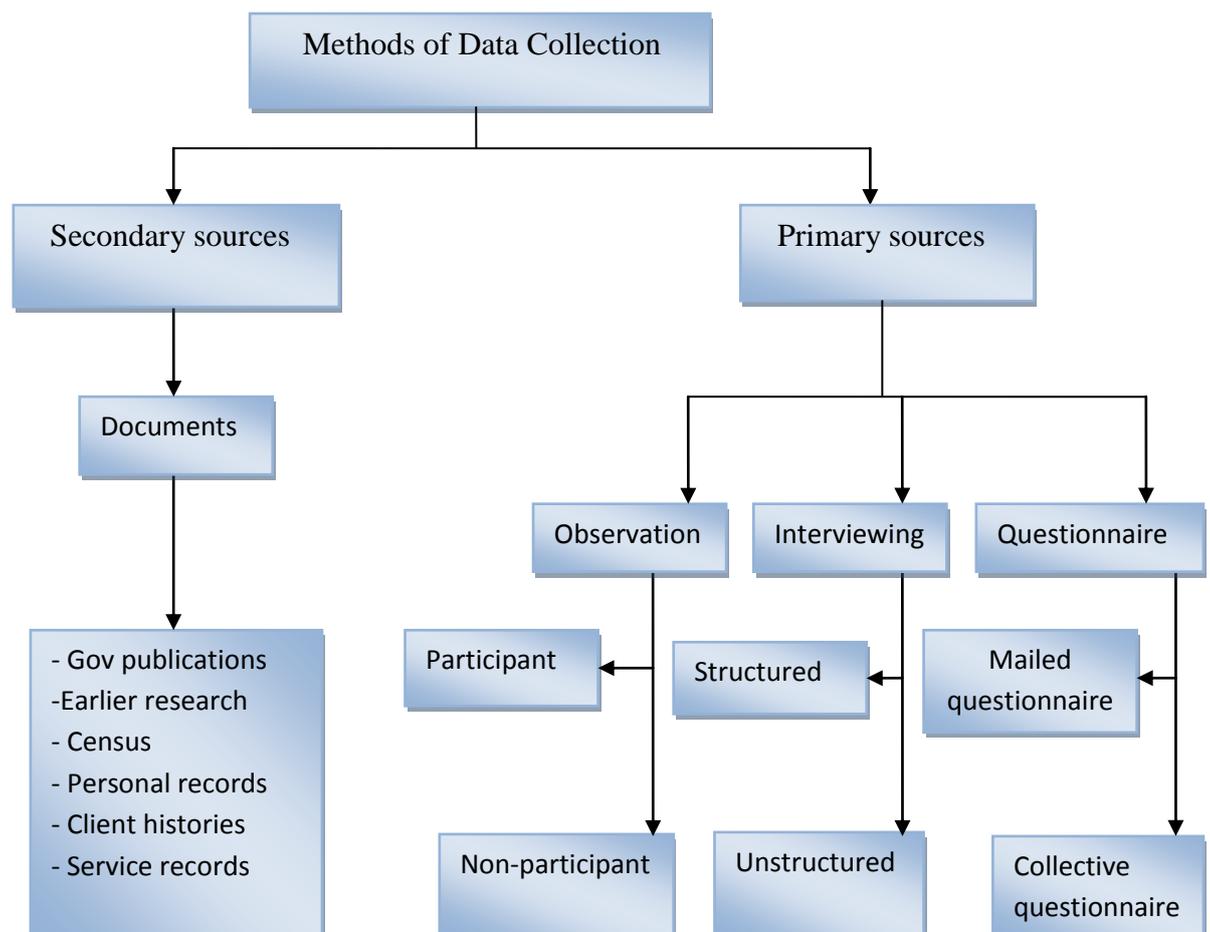


Figure 3. 6: Data Collection Methods (Saunders et al, 2009)

It is noticeable from the figure above that secondary data, known as second-hand data, are already available in documents (books, journals, magazines ...etc), earlier researches and so on whereas primary data, known as first-hand data, are originated from the researcher himself and can be collected through a variety of tools as mentioned in the figure and which are going to be explained later on.

Yet, it is important to mention that the collected data through either primary or secondary sources may or may not be reliable. This depends on a set of variables that affect the quality of the data collected and here comes the role of the researcher. One factor is the characteristics of the respondents, the investigator should know as much information about the target population as possible such as age, educational level, socio-economic status and ethnic background so that s(he) may select the suitable method to gather the needed information. Respondents sometimes do not feel at ease when they are interviewed whereas others do not express themselves well through questionnaires.

Moreover, respondents with low educational level do not behave the same as the high educated ones. Another factor is that the respondents should understand the purpose and relevance of the study particularly when using questionnaires because filling a questionnaire does not require the presence of the investigator and if the respondent does not know exactly what is required from him/her s(he) may fill whatever s(he) has in mind.

3.7.1 Data Collection Procedures

In fact, data collection procedures depend on the kind of research conducted and the type of research questions adopted. In case study research, for instance, there are different sources of evidence that any researcher can use to collect information about the target population. In similar vein, Yin (2003) has explained that the use of multiple sources enables the researchers to cover a broader range of issues and to develop converging lines of inquiry by the process of triangulation. The major sources that have been identified by Yin (1994) including their strengths and weaknesses are as follow:

A/ Documents Review

Documentary information is one of the most commonly used tools in doing case studies (Marshal & Rossman, 1989). Indeed, documents are useful and reliable because they lack bias when they are well utilized. Yet, they require more careful when used by an investigator. For case studies, in particular, documents are used to corroborate and raise evidence. They are helpful in a) verifying the correct spellings and titles within an

organization b) providing more specific details to corroborate the information got from other resources c) making inferences from documents. On the other hand, while collecting data, documents are frequently searched explicitly and systematically. In the case of AT Company, for instance, before a work place visit, internet searches may produce misleading information. Whereas, a field visit would facilitate using reliable documents such as proposals for projects or programs. Forms, strengths and weaknesses are stated below

Sources of Evidence: Documentation		
Forms	Strengths	Weaknesses
Letters, memoranda, agendas, communications, announcements, minutes of meetings, written reports on events, administrative documents (proposals, progress reports, internal records), formal studies,	<ul style="list-style-type: none"> ◆ Stable: can be reviewed repeatedly. ◆ Unobtrusive: not created as a result of the case study ◆ Exact: contains exact names, references and details ◆ Broad coverage: long time, many events and settings 	<ul style="list-style-type: none"> ◆ Retrievability: can be low ◆ Biased selectively if collection is incomplete ◆ Reporting bias: reflects bias of authors ◆ Access: may be deliberately blocked

Table 3.8: Strengths and weaknesses of Document Review

B/ Archival records

Indeed, archival records are similar to documents to a certain extent, yet they imply collecting data from equipments like computer files. Archival records have advantages and disadvantages

Sources of Evidence: Archival Records		
Forms	Strengths	Weaknesses
Service records, organizational records, Maps and charts, lists, survey data and personal records	<ul style="list-style-type: none"> ◆ Stable: can be checked repeatedly ◆ Unobtrusive: not created as a result of the case study ◆ Exact: contains exact names, references and details ◆ Broad coverage: long time, many events and settings ◆ Precise and quantitative 	<ul style="list-style-type: none"> ◆ Retrievability can be low ◆ Biased selectively if collection is incomplete ◆ Reporting bias: reflects bias of the authors ◆ Access may be deliberately blocked ◆ Accessibility due to privacy

Table 3.9: Strengths and Weaknesses of Archival Records

C/Interviews

According to Yin (2014:103), interviews are one of the most important sources of data collection in case study. Yet, as any other data collection method, interviews have merits and weaknesses. The following table states them in details

Sources of Evidence: Interviews		
Forms	Strengths	Weaknesses
<p>Guided conversations instead of structured queries. Important to 1) follow your own line of inquiry as reflected by the case protocol; 2) to ask actual conversational questions in an unbiased manner.</p> <p>Open ended questions. Could even be a focused, short interview.</p> <p>Surveys.</p>	<ul style="list-style-type: none"> ◆ Targeted: focused directly on the case study topic ◆ Insightful: provides perceived causal inferences./ Flexible ◆ Provide oral-verbal responses through interviewing and observing ◆ collect more information about the setting and the respondents' characteristics ◆ The sample is more controlled 	<ul style="list-style-type: none"> ◆ Bias due to poorly constructed questions ◆ Response bias ◆ Inaccuracies due to poor recall ◆ Reflexivity: interviewee gives what interviewer wants to hear. ◆ In the workplace, employees are not available.

Table 3.10: Strengths and Weaknesses of Interviews

In short, to collect reliable data through interviewing it depends on the investigator's honesty, sincerity and hardworking because if the interviewer is technically incompetent and practically inexperienced, s (he) cannot keep the respondent on the track.

In addition to the previous instruments, there are other techniques yet no technique is completely advantageous. Each technique has strengths and weaknesses that is why doing a good case study requires using as many sources of evidence as possible. What come next summarizes the different instruments, their strengths and weaknesses

D/ Direct Observation

One of the most reliable data collection instrument is the direct observation of the investigator for the collected data are more realistic. Indeed, using such instrument helps the researcher to have a direct sight in the target setting and by observing and recording

what appear as interactions and behaviors of the respondents allows him/her get reliable data. Yet, like the other instruments direct observation has advantages and disadvantages, the next table clarifies more

Sources of Evidence: Direct Observations		
Forms	Strengths	Weaknesses
<p>Behavior or environmental conditions worth observing at a site. Ranges from formal to causal data collection activities.</p> <p>Have more than a single observer.</p>	<ul style="list-style-type: none"> ◆ Reality: covers information in the real time. ◆ Contextual: covers context of the event 	<ul style="list-style-type: none"> ◆ Time consuming ◆ Selectivity: unless broad coverage ◆ Reflexivity: event may proceed differently because it is being observed. ◆ Cost: hours needed by human observation.

Table 3.11: Strengths and Weaknesses of Direct Observation

E/ Participant Observation

In contrast to direct observation, participant observation means that the researcher plays two roles: a participant in the setting he/she wants to explore and an observer of the target setting with the participants. In other words, the researcher takes part in the group to be observed which means his/her observation would be from the inside. According to Young ((1992) *“The participant observer using non-controlled observation, generally lives or otherwise shares in the life of the group he is studying”*.

Sources of Evidence: Participant observation		
Forms	Strengths	Weaknesses
<p>The assumption of a variety of roles within a case study situation and it may actually require the participation in the events being studied.</p>	<ul style="list-style-type: none"> ◆ Reality: covers information in the real time ◆ Contextual: covers context of the event ◆ Insightful into personal behaviors and motives 	<ul style="list-style-type: none"> ◆ Time consuming ◆ Selectivity: unless broad coverage ◆ Reflexivity: event may proceed differently because it is being observed ◆ Bias due to the investigator’s manipulation of events

Table 3. 12: Strengths and Weaknesses of Participant Observation

F/ Physical Artifacts

Using physical artifact to gather the needed data is more suitable in the organizational setting in order to explore or describe any phenomenon qualitatively. In the context of the current study, examples of artifacts may be charts, letters or emails, reports and records of meetings or conferences. Though using artifacts analysis may seem a good instrument to collect data because it is time consuming, it still has strengths and shortcomings. The next table demonstrates them

Sources of Evidence: Physical Artifacts		
Forms	Strengths	Weaknesses
A technological device, a tool or instrument, a work of art, or some other physical evidence	<ul style="list-style-type: none"> ◆ Insightful into cultural features ◆ Insightful into technical operations 	<ul style="list-style-type: none"> ◆ Selectivity ◆ Not always available

Table 3.13: Strengths and Weaknesses of Physical Artifacts

In addition to what has been suggested above as sources of evidence, case study also requires collecting data quantitatively as Yin argues *“regardless of whether one favors qualitative or quantitative research, there is a strong and essential common ground between the two”* Yin (2002:15). Then, it is obvious that Yin foregrounds the common tools quantitative and qualitative tools that can be functional in the design and methods of case study research.

3.7.2 Instrumentation

Case study is a strong research because it is able to deal with a variety of evidence collected from documents, interviews, questionnaires and observation. In fact, the case study is mainly dominated by a qualitative study design, though it is also explored quantitatively. Grinnell (1981:302) clarifies that *“case study is characterized by a very flexible and open-ended techniques of data collection and analysis”*. The next table illustrates the different data collection sources appropriate for case study.

	From an individual	From an organization
About An individual	Individual behavior Individual attitudes Individual perceptions	Archival records Other reporters behavior, Attitudes and perceptions
About an organization	How organizations work Why organizations work	Personal policies Organizational outcomes

Table 3.14: Sources of Data Collection in an Organizational Setting

From the table above, it is clear that sources of data collection are varied and different in unit of analysis. Thus, it is the investigator's purpose which determines what unit to select from an organizational setting; whether the organization as a whole or a specific unit from the setting which is the case of the actual work that is a group of employees.

It is important to understand that whatever the data collection method is, respondents must clearly understand the purpose and relevance of the study, this way both investigator and respondents would face no misunderstanding, particularly when a questionnaire is used because the investigator may not be present himself and this may result in more bias. From another perspective, case studies have long been criticized for being weak in generalizing that is why using triangulation in data collection would be useful. According to Yin (2009), in case study, it is of crucial importance to use multiple sources of evidence, create a case study database and maintain a chain of evidence. Besides, Yin (2009) has given much more importance in the preparation phase to skills development of the case study, case study protocol development and pilot case conduction.

3.7.3 Pilot Study

Yin argues that pilot study *“will help you refine your data collection plans with respect to both the content of the data and the procedures to be followed”* Yin (2002:79). Besides, Stake and Basturkmen who are known as the case study methodologists in addition to Yin, concentrate on the piloting of each data collection instrument. Nevertheless, From a Yinian (1994) perspective, case study protocol is required as first stage in case study methodology. Case study protocol implies two subheadings:

◆**Determine the required skills:** according to Yin (1994), a case study researcher must be able to

- √ Ask good questions
- √ Interpret the different responses
- √ Be a good listener
- √ Be adaptive and flexible
- √ Have a firm grasp of issues being studied
- √ Be unbiased
- √ Be as a senior investigator (Feagin, Orum & Sjoberg, 1991)

◆**Develop and review the protocol:** a protocol should include

√ **An overview of the case study project** which include an overview of the target case containing the objectives, research methods in terms of a) what (the aim of the study) b) why (the choice of the case) and c) how (the way of conducting the research)

√ **Field procedures (it is indispensable)** that remind about procedures applied when collecting data (the way to contact AT company and how field visits to be conducted that is to mean data sources and location of those sources)

√ **Case study instrument** (while collecting data). As mentioned previously data may be collected from multiple sources which is known as triangulation. This latter is highly recommended by many researchers (Miles & Huberman, 1994; Yin, 1994; Neuman, 2000) in order to increase the reliability and validity of the study. Data analysis are then analyzed using both inductive and deductive techniques

√ **A guide for the case study report** in order to make the outline and format of the report.

Therefore, the case study protocol represents an important source of information whenever the research is presented or reported and it may be stored as a version control. From a similar perspective, Pervan and Mainbo (2005) have suggested the following outline of case study protocol. Both Pervan and Mainbo have suggested a detailed outline of case study protocol to introduce a well structured research scope.

Section	Content
Preamble	- Contains information about the purpose of the protocol, guidelines for data and document storage and publication.
General	- Provides a brief overview of the research project and the case research method.
Procedures	- Detailed description of the procedures for conducting each case including down-to-earth details on contacts and timing
Research instruments	- Interview guides, questionnaires etc. to be used to ensure consistent data collection
Data analysis guidelines	- Detailed description of data analysis procedures including data schemas prior codes etc.
Appendix A	- Template letter to invite participants

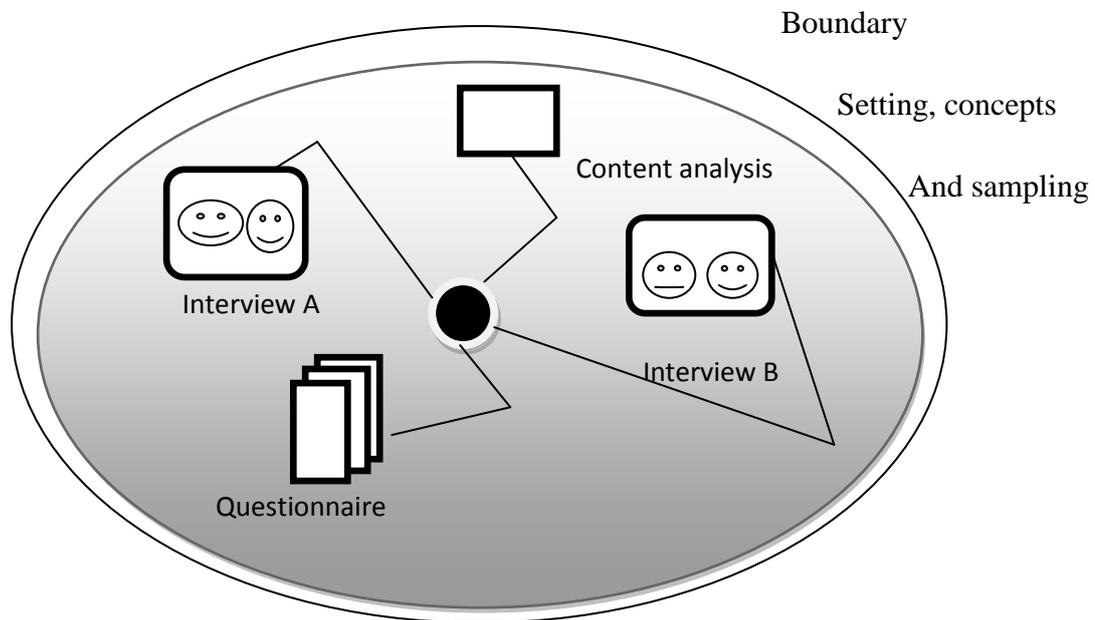
**Table 3.15: The Outline of the Case Study Protocol
(Pervan & Mainbo, 2005)**

3.7.4 Triangulation

Case study requires strengthening validity through triangulation which is needed to verify and corroborate the obtained results. Indeed, triangulation means collecting data using various techniques. Yin calls it “multiple sources of data collection” (1994) and “converging lines of inquiry” (2009). Hence, using different techniques in gathering the needed data within case study can ensure the validity of the study in a way that each tool capitalizes on the weaknesses of the other and adds to the accuracy and credibility of the data collected. In this vein, Cohen (2000) argues that “*triangulation may be defined as the use of two or more methods of data collection in the study of some aspects of human behavior*”. Thus, in order to ensure reliable findings four instruments were used in this case study: a questionnaire that was addressed to the technicians, technical agents and engineers, a semi-structured interview that was conducted with the responsible in-charge of the training, and another semi-structured interview that was conducted with the employee trainer and documents review.

It is important to mention the difficulty that the investigator has faced in order to gather data from the fourth source which is document review because, according to the manager,

it is confidential and no one is allowed to access to it. Yet, after several trials the investigator could get the training book. The next figure illustrates more.



**Figure 3. 7: Convergence of Case Study Tools
(Cohen, 2000)**

As the figure indicates, for the current study a combination of a questionnaire, two interviews and document review seems appropriate because of time and money constraints. The observation tool is not advisable in this case because getting access to the inside employees of AT company is not possible.

Besides, as case study is required to be rigorous and robust four data collection instruments (previously mentioned) are adopted in the present study because conducting a case study in an organizational setting is not an easy task and because there is more confidentiality in such a context, so the more data collection instruments are varied, the more reliable findings will be.

On the other hand, in order to ensure good study, each procedure should be developed independently so as to improve property. Besides, a good investigator is the one who selects the suitable and useful procedures for his/her case study research. In this vein, Patton (2002) suggests four types of triangulation for evaluation

- Data sources (data triangulation)
- Different evaluators (investigator triangulation)

- Perspectives to the same data set (theory triangulation)
- Methods (methodological triangulation)

The present study is concerned only with the first type (data triangulation). Yet, this type needs more clarification because it may be ambiguous to some investigators. Indeed, there is a difference between using multiple sources for the same case and using multiple sources for different data within the same case. In other words, there is a distinction between

- a) When data are triangulated (facts or events) and have been analyzed by multiple sources
- b) When data are not triangulated and have been analyzed by more than a single source of data, then each source is analyzed in isolation without triangulating the collected data.

Next, the planned data collection tools are introduced, defined and discussed in matter of applicability and suitability to the subject matter.

3.7.4.1 Questionnaires

Questionnaires are considered as an appropriate tool to collect quantitative data, but can also be used for qualitative data. They may be structured or unstructured. Structured questionnaires are definite and have pre-determined questions in a form of closed such as yes/no questions or open for which the respondents are supposed to respond to in their own words. In this type of questionnaire, all respondents have to answer the same questions. Like any other data collection tool, questionnaire has advantages and disadvantages. Strengths in using a questionnaire are:

- Using a questionnaire can enable the investigator to organize the questions and receive replies without the need to have a direct contact with the respondents.
- It is very flexible.
- It has a structured form.
- It is easy and convenient to the respondents.
- It is cheap and quick to administer to a large number of respondents.
- There is no influence from the side of the investigator.

Whereas the disadvantages are:

- Questionnaires can be addressed to people who can read and write only. Hence illiterate, young, old and handicapped are excluded from the target population.
- The response rate is always low. This is due to a set of factors like the length and layout of the questionnaire, the purpose and the relevance of the issue to the respondents' interest.
- Self-selecting bias; attitudes, attributes and motivation differ from one respondent to another.

- Lack of the clarification; if the respondents do not understand the questions their answers will affect the information provided.
- Responses are not supplemented with other information; the interview is generally supplemented with observation, yet the questionnaire lacks this advantage.
- The possibility to consult others; respondents sometimes consult other people for help when they fill a questionnaire and this leads to subjectivity in their feed-back.

While administering the questionnaire, it is important to take the previous points into consideration so as respondents can overcome the difficulties when replying. In such a case, it is better to pre-test the questionnaire on a small number of respondents which is known as **pilot-study**. Piloting helps check what questions are understood by the respondents and what questions are not. Then, the investigator can change the wording or the whole question (s) if necessary.

In this research, one sample of questionnaire is addressed to the employees of the target company particularly those who are working in the technical body of the organization. Yet, choosing the appropriate type of questionnaire remains crucial. Saunders and Thornhill (2009) have stated the different types of questionnaire in the next figure

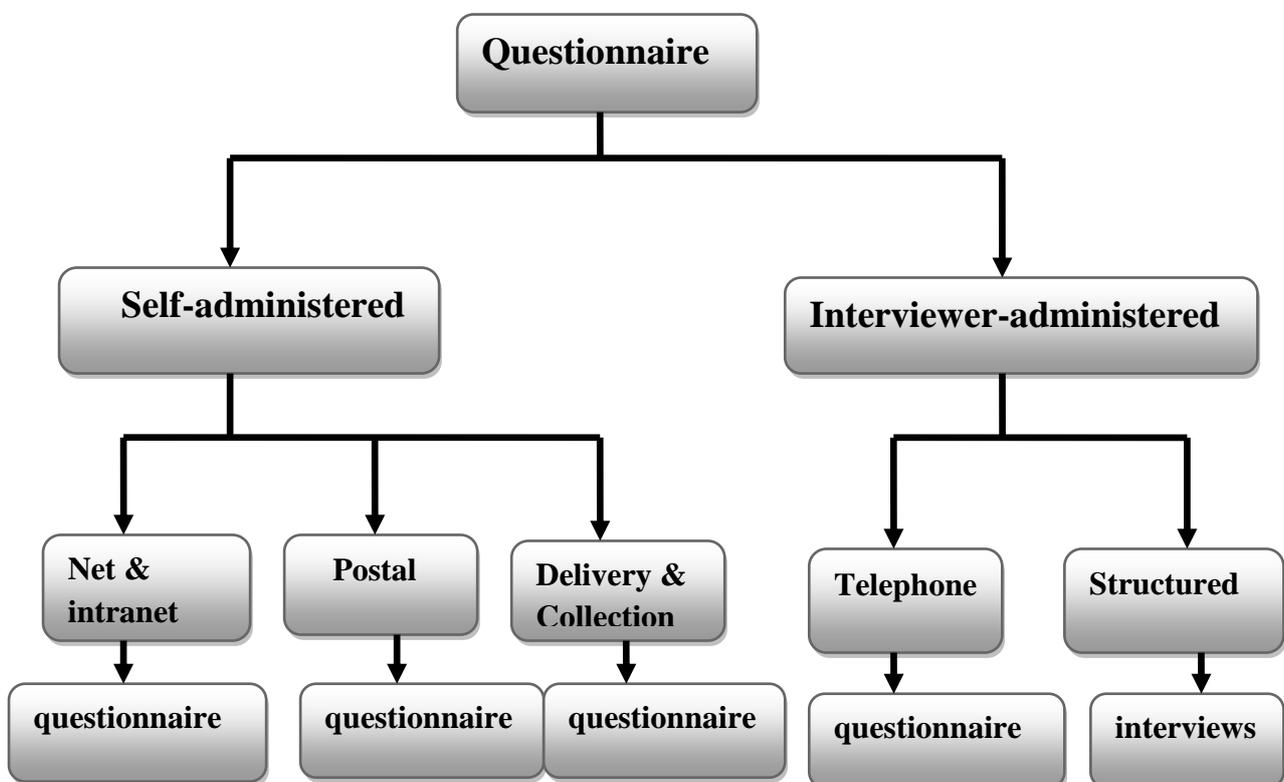


Figure 3.8 : Types of Questionnaires (Saunders et al, 2 009 :363)

From the different types of questionnaires, interviewer-administered questionnaire seems appropriate because of the time constraints of respondents at the work place. And for this type, delivery and collection of the questionnaire samples is suitable to ensure that the target respondents will fill and give their responses back.

Actually, the choice of interviewer-administered questionnaire for the study in hand was not done randomly it was done because this type of questionnaire has set of advantages that serve to provide the investigation with much reliability. Among the advantages are as follow

► **Advantages of interviewer-administered questionnaire**

- √ Questions and responses can be clarified
- √ Allows probing for additional information
- √ Open-ended and complex questions are possible
- √ Answering the questionnaire by intended person is assured
- √ Respondents participation may be increased through direct contact

Therefore, questionnaire as a tool of data collection should be well administered. In other words, the choice and classification of the questions should be carefully planned in advance. In this regard, Denzin (1978) states that

“The typical questionnaire is highly structured data collection instrument, with most items either asking about very specific piece of information (e.g., one’s address or food preference) or giving various response options for the respondent to choose from, for example, by ticking a box.”

◆ **Procedure**

As has been mentioned previously, the researcher distributed the samples of the questionnaire herself. Yet, not all the target employees were present; some of the technicians and technical agents were on training and for the engineers as they work in the underground service the investigator could not get access to them because no one is allowed to get there. Thus, the researcher let some samples and took them back later. The questionnaire implied three rubrics a) the first section comprised four questions that concerned personal information about the respondents so that the researcher could have a clear view about the people she was searching about. The questions varied from age, gender, post to working experience in the target company b) the second section was

devoted to the respondents professional information particularly their English background, it includes four questions about their English competencies, the difficulties they face concerning both oral and written English c) The third section concerned a description of the English training they undergo which is the core point of this investigation. The questionnaire was written in both languages English and French, yet most of the respondents fell them in French while the others who fell the questionnaires in English asked for clarification of some details.

It is also important to mention that this is the first investigation that was done for the sake of English language use in the context of Telecommunication which has lead the employees to show a great deal of motivation and interest to fill in the samples of questionnaire and express their desire to learn English in their workplace training.

3.7.4.2 Interviews

The second and most desirable technique for data collection in case study is the interview. Yet, the interview “*should only be used to obtain information that cannot be obtained in any other way*” Darke, Shanks and Broadbent (1998:283) It can be either a personal interview which is done face to face between the investigator and the respondents or a telephone interview. The interview is more preferable in most types of research because it is helpful in way that the investigator can get the needed data in real life context. In this sense, Cohen (2000:267) states

Interviews enable participants be they interviewers or interviewee to discuss their interpretations of the world in which they live and to express how they regard situations from their own point of view. In these senses the interview is not simply concerned with collecting data about life; it is part of life itself, its human embeddedness is inescapable

Therefore, interviewing is flexible in case study research; and conducting an interview necessitates a careful planning and a piloting so that the investigator would make the right choice of the basic questions as s (he) may modify, add or delete certain questions throughout his/her interviewing phase.

As it can be standardized or non-standardized, Saunders (2009) has illustrated these two types in the following diagram.

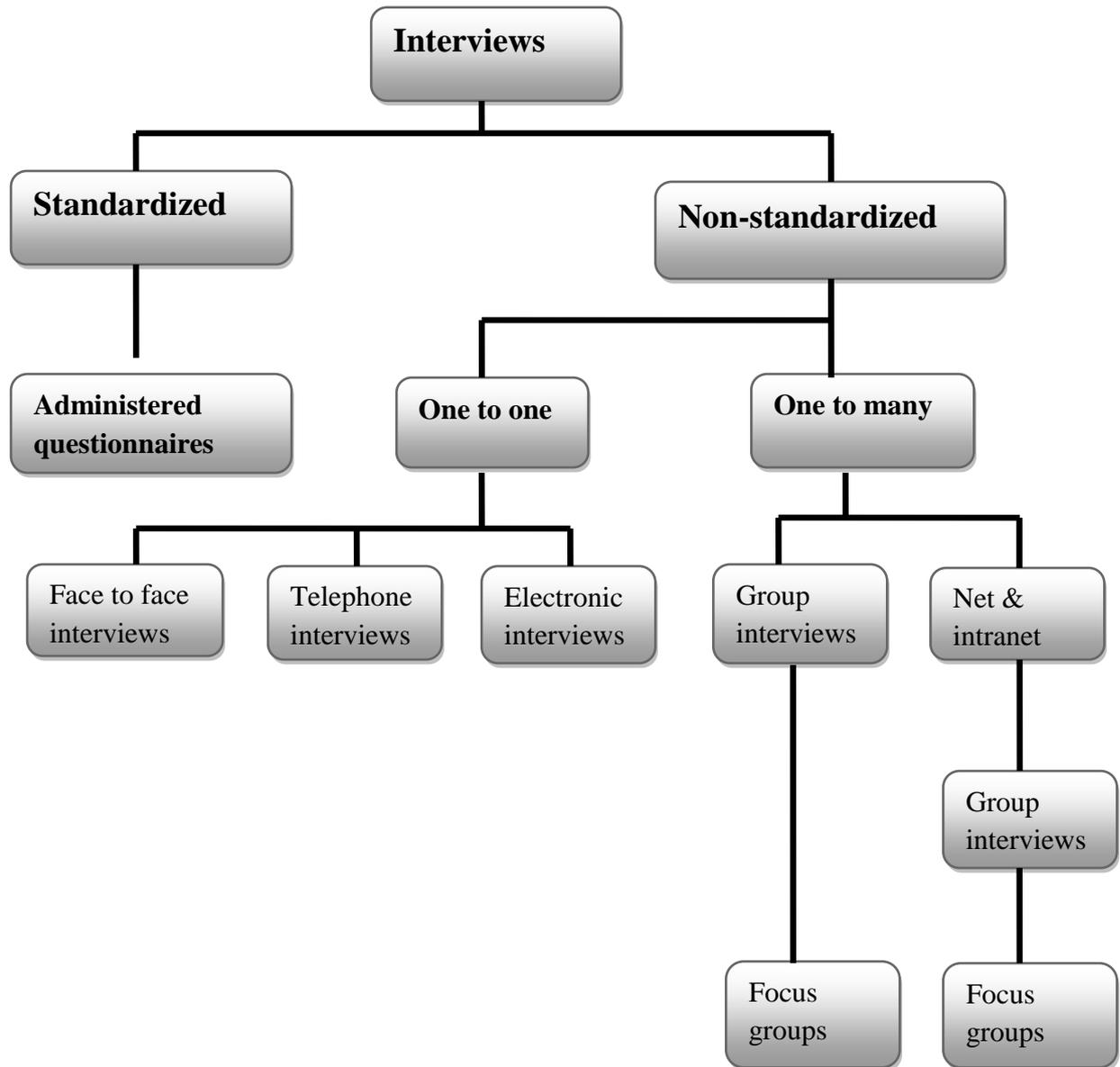


Figure 3.9: Types of interviews (Saunders et al, 2009:321)

Interviews can also be structured with pre-determined questions or unstructured which is preferable in case study research because it is more flexible that is to mean there is no a pre-planning of questions nor has the investigator to follow a specific techniques. Hence, the investigator is free to add or delete some questions or even to change them.

Corbetta (2003:270) argues that

The interviewer is free to conduct the conversation as he thinks to ask the questions he deems appropriate in the words he considers best to give explanations and ask for clarifications if the answer is not clear, to prompt the

respondent to elucidate further if necessary and to establish his own style of conversation

For being descriptive, the present case study requires semi-structured interviews simply because they aim to provide a safe basis for generalization to all L'Algerie Telecom companies throughout Algeria. The next figure illustrates the two types of interviews.

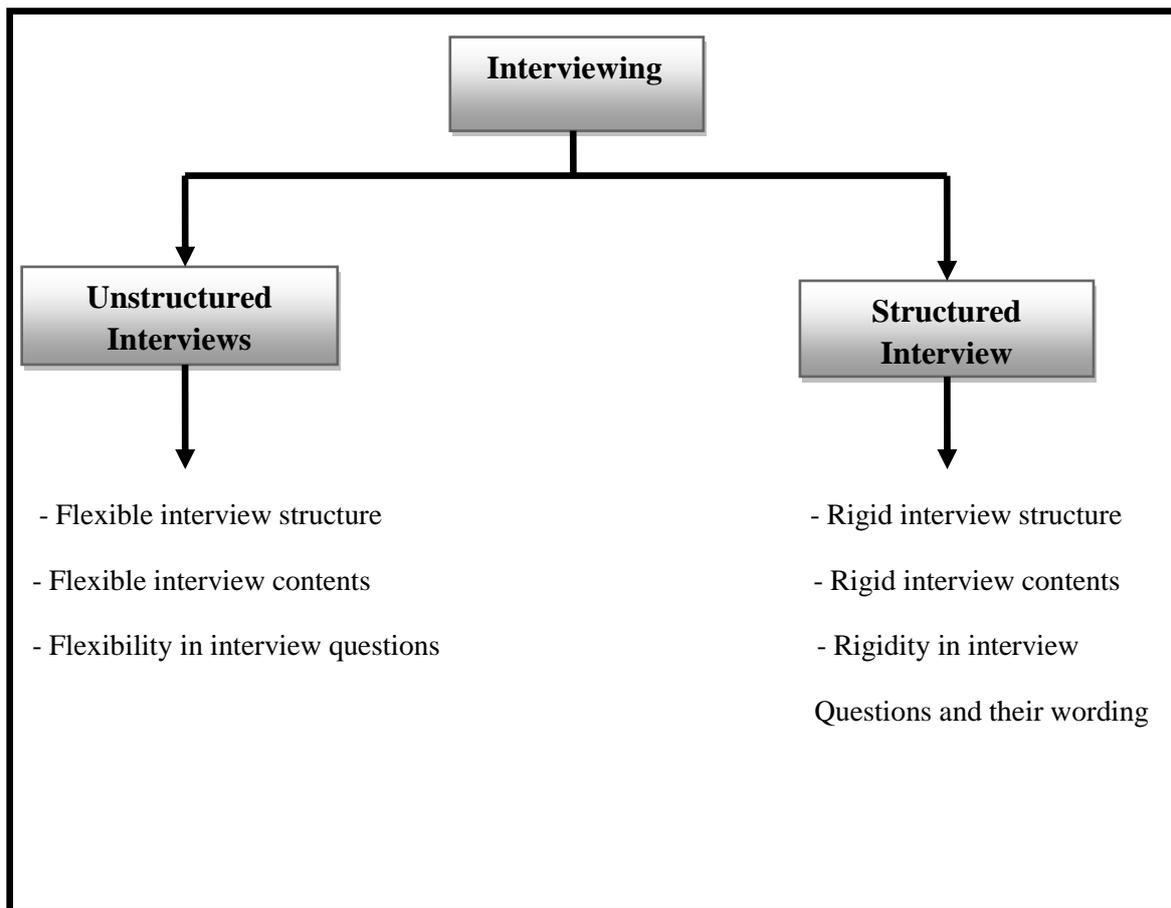


Figure 3. 10: Types of Semi-Structured Interviews

(Saunders et al, 2009)

◆ Procedure

In the present investigation, two interviews were used as data collecting tool. One interview was conducted with the responsible in charge of the workplace training of the employees. This interview aimed at getting an insight from an administrative side. The second interview was conducted with the employee trainer because the researcher could not get access to the Chinese trainer who was working for the benefit of HUAWEI Company, so she tried to interview the AT employee who was supposed to train her colleagues at the workplace after having benefited from a national training in Algiers. This

interview main aim was to have an insight on the pedagogic side of the workplace training. It is important to mention that both interviews needed piloting as has been asserted by Nunan (1992: 151):

...it is very important that interview questions are piloted with a small sample of subjects before being used. This gives the researcher the opportunity to find out if the questions are yielding the kind of data required and to eliminate any questions which may be ambiguous or confusing to the interviewee.

Hence, after having piloted the two interviews it was recognized that some questions had to be modified while others had to be changed because they were confusing. The two interviews were planned as follow

3.7.4.2.1 Interview A

As already mentioned above, an interview has been conducted with the responsible in charge of the training process. Indeed, the researcher opted for a semi-structured interview which is the best tool to gather as much information as possible but requires for a ready-made questions because it is flexible and works as a conversation for this reason the investigator has already prepared an interview guide in order to keep in the issue to cover. In this vein, Mc Donough and Mc Donough (1997:184) state *“The interviewer, then, remains in control of the direction of the interview but with much more leeway ...”*

From the other hand, it is important to mention that the investigator could not cover all the questions in one meeting, it rather required four meetings each lasted for half an hour because of the time constraint of the interviewee. Moreover, while interviewing the respondent, the interviewer recognized some new details that she was not aware of so it demanded to re-prepare new questions so as to gather as much data as possible. While interviewing, the investigator relied on note-taking and voice recording in order not to miss any detail and then the recordings were written in scripts. On the other hand, because the manager in charge of the training had low level in English the interviewer interacted in French and right after translated the conversation in English.

As far as the questions are concerned, most of them have been open-ended so as the respondent would feel free to give all the details about the training from an administrative perspective. The face to face interview has covered the following points

- ◆ A short introduction of the respondent's profile.
- ◆ Identification of the target sampling (the different units concerned by workplace training).
- ◆ Professional information about the respondents (number, grade, qualifications etc)
- ◆ Function and tasks related to each category
- ◆ Types of training that AT company provides
- ◆ How many times and how long each type of training lasts
- ◆ The official languages implemented in the trainings
- ◆ Implementation of English in training AT employees in different AT centers in Saida.
- ◆ The kind of English implemented in the workplace training.
- ◆ The availability of an appropriate English training program
- ◆ Professional information about the trainers (grade, qualifications)

3.7.4.2.2 Interview B

For more reliability and comparability of qualitative data collection, another semi-structured interview was conducted with the employees trainer and who is an employee in AT Company, too.

Interview B was conducted with the employee trainer, because one of the trainings that AT employees under-go at the workplace is done by one of their colleagues who is supposed to under-go the training in Algiers and then transmit it to her colleagues in the organization. Indeed, this semi-structured interview tended to highlight the pedagogical side of the workplace training. Such an interview was conducted at one meeting and lasted for two hour. The investigator has already piloted the interview as a pre-session as Creswell argues that researchers should pilot their interviews before carrying them out because this will not just refine the interview content but also ensure its feasibility and usefulness as a research instrument (Creswell, 2009). Yet, an interview guide which contained some prepared questions was used by the investigator, this face to face conversation could reveal much more information that the investigator herself was not aware of and this is due to the open-ended questions which offered more freedom for the interviewee to express herself and who was very collaborative in her interaction.

It is worth noticing that the interviewee was a good English speaker that is why the conversation was conducted in English. As in interview A, a tape-recorder was used during the meeting and then it was scripted in addition to a note-taking which was helpful in

writing a number of terminology that were mentioned by the respondent. Unlike the manager in charge of the training, the employee-trainer could answer the interviewer's questions in simple and clear English and this was a motivating factor for both. This interview was used to highlight the following notes:

- ◆ Professional information about the respondent (experience, grade, English qualifications)
- ◆ The kind of English that is used in training
- ◆ Conducting needs analysis with the trainees
- ◆ The attitudes of the trainees towards training and trainer as a colleague.
- ◆ The strategies used by the respondent in training the employees.
- ◆ The skills that the respondent focuses on.
- ◆ The objectives to be attained
- ◆ The availability of a training program
- ◆ The suitability of the training program if it is available
- ◆ The availability of the needed materials
- ◆ The suitability of the training timing
- ◆ The difficulties the trainees face during the training.
- ◆ The difficulties the trainer faces during the training
- ◆ The rewards that trainees get from English training
- ◆ Suggestions for a better English training

The last data collection tool used in the present study is introduced in what follow

3.7.4.3 Document Review

Document review or document analysis is the fourth data collection tool used in the present work. Indeed, document analysis is considered as a qualitative method of data gathering. It is seen as a systematic procedure that tends to review and evaluate both printed and electronic documents. These latter may be shaped as texts or images. They are also referred to as "social facts" Atkinson & Coffey (1997:47) and they may come in different forms such as advertisement, manuals, books, brochures, journals, letters and memoranda, maps and charts, organizational or institutional reports and application forms. What matters, in the present investigation is to have a look at the target organization reports to check whether English language is used and in what form in addition to the training book in order to highlight the English training program adopted by AT company. On the other hand, the availability of previous works would certainly be a source of data

for the current work. Yet, since there has never been a similar study in this context (all the respondents have confirmed it), then document review will serve as raw data.

From another perspective, it is confirmed that document review is more applicable to case study research as (Stake, 1995; Yin, 1994) have explained that this technique is useful in producing rich descriptions of a single event, program, phenomenon or organization. In the same sense, Basturkmen (1998:118) argues that “*Documents of all types can help the researcher uncover meaning, develop understanding and discover insights relevant to the research problem*” Indeed, documents review provide a background of more data to the investigator that is why they are given importance as Atkinson and Coffey (1997:47) state

We should not use documentary sources as surrogates for other kinds of data. We cannot, for instance, learn through records alone how an organization actually operates day-by-day. Equally, we cannot treat records-however ‘official’-as firm evidence of what they report.... That strong reservation does not mean that we should ignore or downgrade documentary data. On the contrary, our recognition of their existence as social facts alerts us to the necessity to treat them very seriously indeed. We have to approach them for what they are and what they are used to accomplish

Yet, as any other research techniques documents review has advantages and disadvantages, they are stated as follow:

a) Advantages

Documents review may be

- ◆ Less time-consuming
- ◆ Less costly
- ◆ Unobtrusive and non-reactive
- ◆ Stable and suitable for repeated reviews
- ◆ More exact because it implies exact names, references and details (Yin, 1994)
- ◆ Covered with a wide range of events and settings (Yin, 1994)

b) Disadvantages

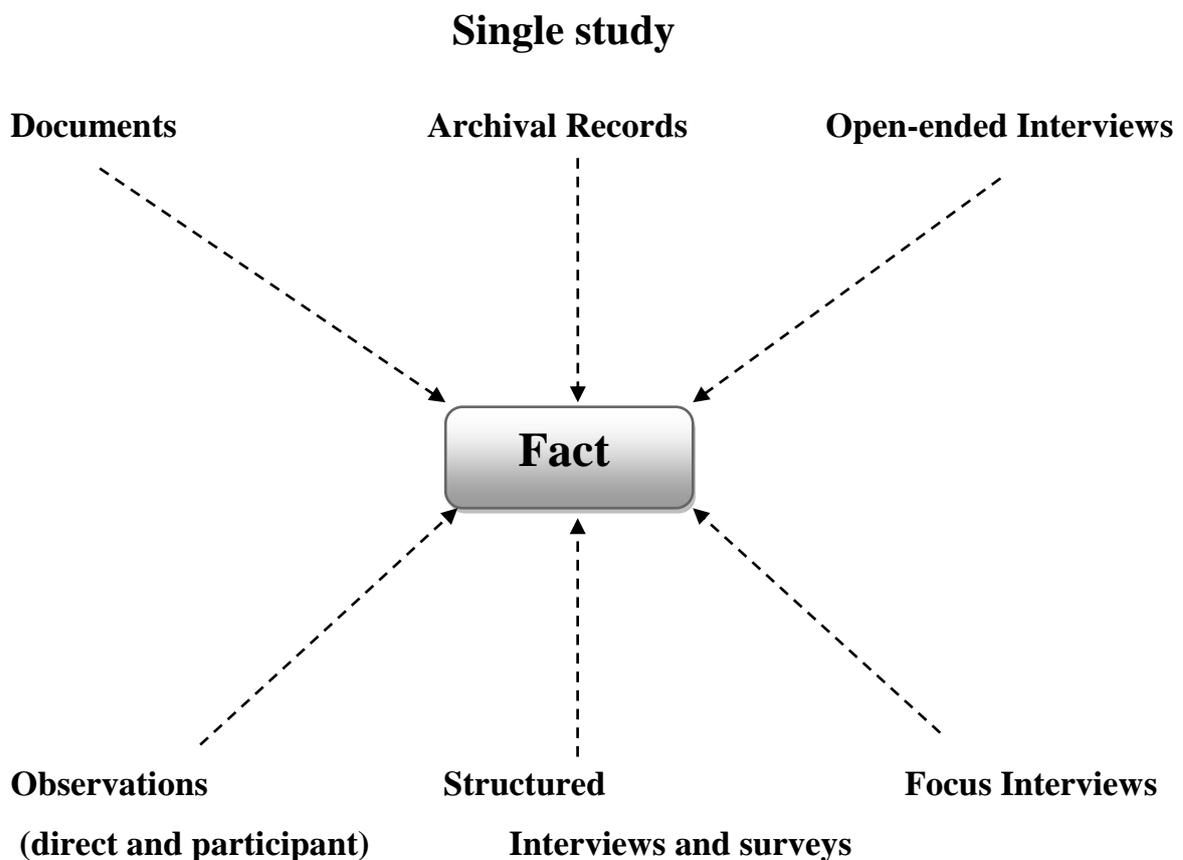
Documents review may have the following disadvantages

- ◆ Low retrievability: access to documents may be deliberately blocked (Yin, 1994)
- ◆ Insufficient details

◆ Biased selectivity particularly in organizational context, the documentation is generally incomplete Yin (1994:80).

It has already been mentioned before that single case study requires triangulating of multiple sources of evidence so as to be robust. Yet, triangulation may come in two different ways to corroborate the findings. The next two figures show the convergence and non-convergence of multiple sources of evidence in case study research.

a) Convergence of evidence



b) Non-convergence of evidence

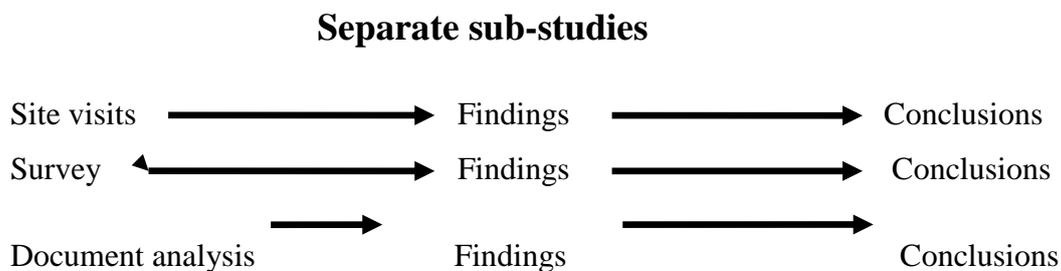


Figure 3.11: Convergence and Non-Convergence of Multiple Sources of Evidence (Cosmos Corporation Cited in Yin, 2003)

Actually, the figure illustrates two ways of triangulation. The upper part shows that data is really triangulated because the fact of the case study is supported by more than one single source of evidence while the lower part illustrates when having multiple sources as part of the same study but address different facts, in this case the data is not triangulated which means that each source is analyzed separately and then the conclusions are compared. Yet, the case study research requires the first way in order to be highly qualified.

In short, data triangulation using multiple methods reflects the high quality of the case study research in terms of validity and reliability. In what comes after, an overview of reliability and validity of the case in hand.

3.8 Integrity of the Case Study Research

Case study has always been criticized for lacking a rigour methodology in addition to the problem of bias (Billingsley and poole, 1986; patton, 1990; Smith, 1997; Yin, 1989). That is why improving the integrity of the present study in terms of reliability and validity is crucial. As has been previously mentioned in this chapter that Yin (2003, p.34) has suggested four tests as tactics to achieve integrity, Miles and Huberman (1994) have suggested five approaches: construct validity, confirmability, internal validity/credibility, external validity/transferability and reliability/dependability. Next, more explanation for each approach is introduced

3.8.1 Validity

In order to increase the validity of case study research, the investigator should maintain a chain of evidence. This latter helps any outsider to follow the derivation of evidence from start “initial research questions” to the end “conclusions” and vice versa (forward and backward). This facilitates moving from one part of the research to another part with clear cross-referencing to the methodology adopted and then the resulting evidence. If the selected chain of evidence is well maintained, then the investigator can achieve valid findings and the case study will be highly qualified.

Therefore, to maintain a chain of evidence which was suggested by Yin (2003) represents the third and last principle in data gathering in case study. By this, Yin means keeping data from the research questions to the conclusions of the case study research in a sequential way.

The next figure represents the chain of evidence

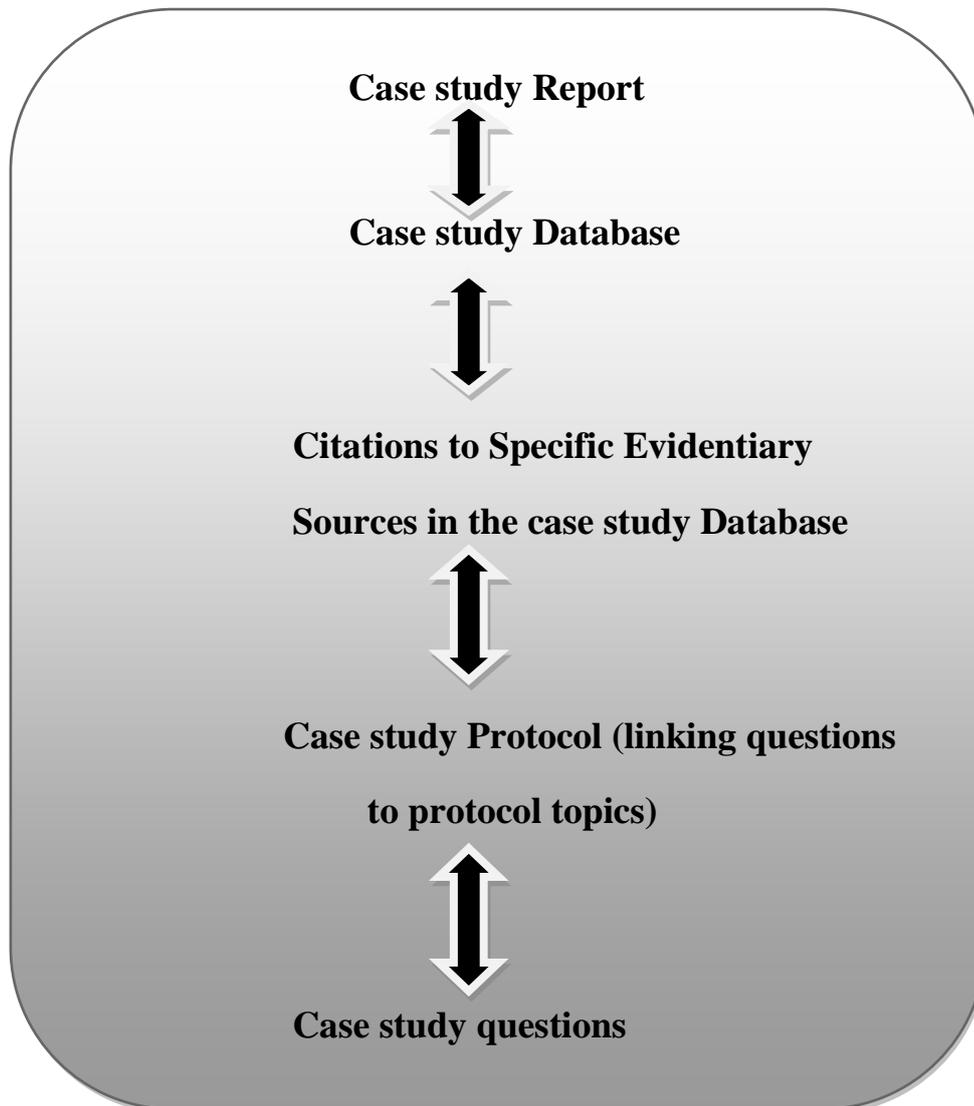


Figure 3.12: Maintaining a Chain of Evidence (Yin, 1994: 124)

From the above figure, it is clear that the steps in conducting a case study should be interrelated. Hence, moving forward and backward between the steps reflects the high validity of the research. Indeed, case study research is mainly characterized by its rigour in order to be highly qualified and this requires from the researcher to maintain a chain of evidence in his/her investigation.

3.8.1.1 Internal validity/Credibility

In contrast to the quantitative research which seeks to identify causal relationships between variables (Emory & Cooper 1991; McDaniel & Gates 1991; Miles & Huberman,

1994), qualitative research target is to establish the phenomenon under study in a credible way that is “causal powers” (Guba & Lincoln, 1994; Miles & Huberman, 1994; Yin, 1993). In other words, case study research seeks to identify generative mechanisms which determine inferences about the target phenomenon (Basturkmen, 1988; Sykes, 1990 and 1991).

Besides, to establish the internal validity of any case study requires the use of case analysis, cross case analysis, pattern matching, coherence in the findings, developing the diagrams and data matrices. According to Yin (1993) What demonstrates the internal validity of the research is the distinguished unit of analysis, the dependability of the analysis to the prior theory stated in the review of literature and the presentation of the pilot case studies.

3.8.1.2 External validity/Transferability

Case study, as known, can be applied in real-life setting and can be generalized to other settings, people and times that is why case study, in particular, is characterized by high external validity. Though external validity is difficult to achieve in a single case study (Yin, 1994), it can be achieved from theoretical relationships and from these latter, generalization can be made. As far as the present case is concerned, the findings can be applied to other settings which represent AT Company throughout Algeria and with other people who are engineers, technicians and technical agents. Therefore, external validity in this case is transferable.

Yin, Stake and Basturkmen have defined validity from different perspectives. According to Yin, case study researchers need to assure construct validity through triangulating multiple sources of evidence, chains of evidence and member checking whereas external validity can be guaranteed through analytic generalization. On the other hand, Stake (1995:107) states

“In our search for both accuracy and alternative explanations, we need discipline; we need protocols which do not depend on mere intuition and good intention to ‘get it right’”

On her side, Basturkmen (1998:202) views that

“One of the assumptions underlying qualitative research is that reality is holistic, multidimensional, and ever-changing; it is not a single, fixed,

objective phenomenon waiting to be discovered, observed and measured as in quantitative research”

To clearly explain the difference between internal and external validity, the next figure offers more illustration

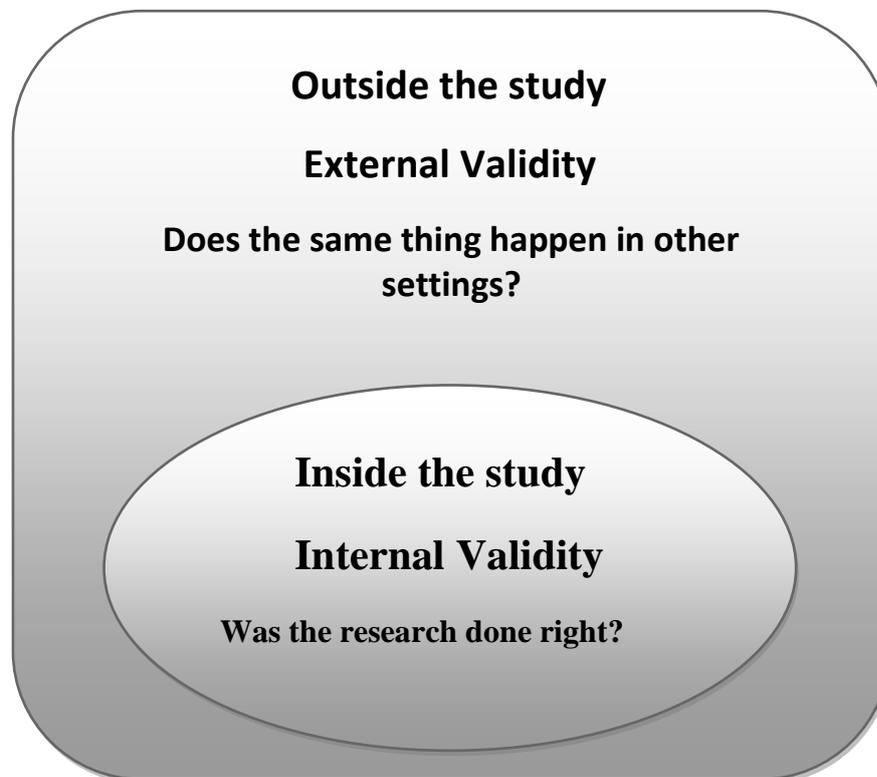


Figure 3.13: The distinction between Internal and External validity
Modified from (Yin, 1994)

3.8.2 Reliability/Dependability

Investigators have never conducted a case study research in AT Company, particularly, those who are specialized in the English language though this strategic setting notices a continuous change day after day depending on the technological progress. Hence, the study in hand serves as a background for further researches to carry out searching in the same context and from different angles (Emory & Cooper, 1991; Mc Daniel & Gates, 1991; Miles & Huberman, 1994). Yet, to achieve a reliable or dependable case study, it needs to approve particular techniques like to establish a case study protocol when collecting data, execute interview protocol and establish case study data base (Eisenhardt, 1989; Basturkmen, 1988). Yin (1994) also confirms and states that forming a case study data base helps other researchers access the files (this is what has already been done).

In short, to guarantee the integrity of a case study research depends on the validity and reliability of the data collection and data analysis as well. Even though, data collection in case studies is more complex than in any other research, this does not mean that the quality of this research is low. On the contrary, to select the right procedures when gathering data would reflect the quality of the study. The more construct validity and reliability are taken into consideration the worthy the research becomes for further analysis.

3.9 Data Analysis Techniques

Before talking about the procedures intended to analyze data of the present study, it is important to define data analysis. Hence, data analysis consists of examining, tabulating, categorizing and testing evidence. It is upon the investigator to trace the priorities for what to analyze and why. In this vein, Le Compte and Schensul (1999) states that data analysis is to select from the large amount of data gathered what make sense of them. On his side, Patton (1987) refers to three criteria in data analysis: a) organizing data b) reducing the collected data through summarizing and categorizing c) identifying and linking the patterns and themes included in the target data. In other words, having an overall analytic strategy would facilitate the investigator's next step which is stage of analysis. Indeed, choosing the right strategy would

- √ Help study the evidence fairly.
- √ Produce persuasive analytic conclusions.
- √ Exclude the alternative interpretations
- √ Help use tools to make head measurements more effective.

3.10 Conclusion

In conclusion, chapter three attempted to highlight the critical part of the present work which is the research methodology through which the investigator tried to demonstrate the importance of mixed method use in addition to multiple data collection instrument and the research design that was adopted. On the other hand, maintaining a chain of evidence was assured through improving the validity and reliability of the study.

The next chapter will introduce the practical side of the investigation through analyzing the collected data.

Chapter four

Chapter four

Data Analysis and Research Findings

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4.1 Introduction

The major concern of this chapter is to analyze the data collected for the sake of this investigation that aims to explore the use of English in the technical service of L'Algerie Telecom Company in Saida and to check whether English is well implemented in training the target respondents. Based on their qualitative and quantitative needs, the findings are presented and analysed in tables, pie-charts and bar-graphs. Through analysis and interpretations, the researcher seeks to provide answers to the already stated research questions in a descriptive manner and then decides either to confirm or reject the suggested hypotheses.

4.2 Data Analysis

In accordance to the research tools, the analysis is divided into four sections. First of all, a questionnaire was addressed to the employees in AT Company some of whom are engineers and the others are technicians and technical agents. Second, a semi-structured interview that was conducted with the manager in charge of the employees training in the company is analyzed. The interview aims to study the issue from an administrative perspective. Third, another semi-structured interview was conducted with the employee trainer (who is supposed to train her colleagues in the company). This interview seeks to shed light on the pedagogical side of the employees training. Fourth, document analysis was the last section. It implied the study of the available documentation in the company. What comes next is a refinement of the previous findings as a background paving the way to data analysis.

4.2.1 Methods of Data Analysis

A descriptive statistical method seems to be appropriate in providing numbers and percentages in order to answer all the questions integrated in the questionnaire that was addressed to engineers, technicians and technical agents who are working in the technical body of AT Company in Saida. Based on the research questions, the questionnaire aimed at investigating the first and the second research questions.

Actually, the questionnaire was divided into three sections. The first section comprised six questions that required personal information about the target employees in matter of age, sex, working experience and obtained certificate so as to have a clear image about the respondents. The second section, which implied a table that used to examine respondents' competencies, was devoted to explore the use of English at the workplace. The third

section contained eight questions including a table, this section examined employees' opinions about implementing English in their training and required some suggestions from the respondents concerning the use of English at the workplace.

The second data instrument was a semi-structured interview conducted with the manager in charge of the training process. The interview aimed to have an insight from an administrative point of view. In other words, interviewing the manager in charge of the employees training might be helpful to shed light on the strategies AT Company takes to up-date employees' English competencies. Moreover, it may pave the way and helps expand the questions for the next interview. This latter was conducted with the employee trainer. It attempted to shed light on the pedagogical side of the workplace training. The last tool was a review of the available documents that had relation with the use of English at the workplace and during the training phase. Yet, the only and unique document the investigator could reach with difficulty was the training book provided by HUWAEI Company. The main results of the pilot study are presented next.

4.3 The main findings of the Pilot Study

As has been mentioned in chapter three, a pilot study was conducted as a guide for the researcher in order to check whether the questions in the questionnaire were well formulated, classified and organized. The pilot questionnaire which was filled by three engineers and two technicians (a sample is in the appendices), revealed the following results:

√ The need to translating the questionnaire into French because it is the dominant language at the workplace. Hence, to get a better feedback and to avoid any ambiguity while responding, the investigator decided to use French and English in conducting the final samples of questionnaire.

√ The need to reformulate some questions because the respondents misunderstood the meaning, then the responses were inappropriate.

√ The need to avoid open-ended questions because respondents misunderstood them. Moreover, it was difficult for the investigator to meet the respondents during their working-time so closed-end questions were preferable in this case.

√ The questionnaire was time consuming. It took one week to get the feedback because first, it was quite long for the sake of covering all the needed information. Second, the employees were busy all day long and had no time to fill the questionnaires. Hence, to

avoid random responses, the investigator tried to give them enough time to respond in order to get a reliable feed-back. At last, the investigator could prepare a final sample of questionnaire.

4.4 Discussion of the Findings

As has been mentioned before, four data collection instruments were used: a questionnaire was addressed to the technical staff, a semi structured interview was conducted with the manager in charge of training, a semi-structured interview was conducted with the employees' trainer and a documentation review. Respecting the previous sequencing of the data collection tools, it seems appropriate to analyze the interviews data, then the questionnaire and at last the document review.

4.4.1 The Interviews Analysis

It is preferable to begin the analysis with the semi-structured interview A which was conducted with the manager in charge of training because it was helpful in providing more details that appear only when interviewing as Patton (1987) states "*we interview people to find out from them those things we cannot directly observe, we have to ask people about those things*". In other words, this data collection tool helped the researcher add more suitable questions in the second interview.

4.4.1.1 Findings of Interview A

First of all, it seems important to introduce the interviewee so as to have a clear and objective judgment about her responses. Indeed, the interviewee, as has already been mentioned before is the manager in charge of the employees' workplace training. She has been working in AT Company for 12 years and has been in charge of the training process for 7 years. She is holding a Licence degree in Computer Science and intends to continue her studies in Master. After having an appointment, the interview lasted for about one hour and was repeatedly done for four times. Of course a preplanned list for questions was used as guide though some questions were added along the conversation because the interview was semi-structured and the interviewee provided new details.

In order not to miss any detail, the use of recorder was needed in addition to a note taking. After each meeting was over, the recorded conversation was written in script. The interview implies two types of questions; open-ended questions so as to collect a wide range of information and closed questions in order to gather as much detailed information

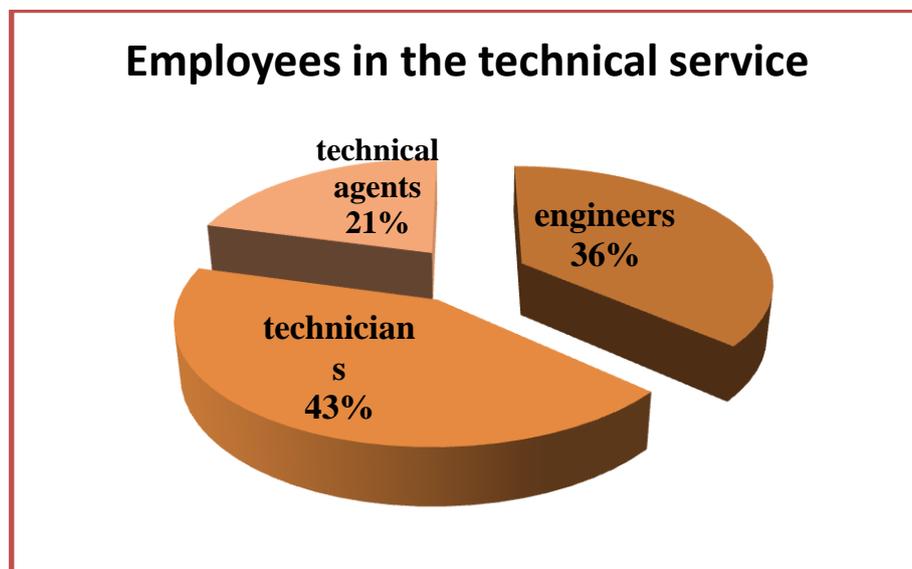
as possible like yes/no questions. The interview contained two phases a) introductory questions that helped the researcher introduce the subject under study and to have a clear image about the respondent and this could pave the way to the second phase which is b) the main interview questions that took a large part of the meeting. The interview was as follow:

Q1: Who are currently working in the technical service of the company?

The manager, in charge of training in AT company, stated that the technical staff comprises engineers, technicians and technical agents who are supposed to graduate to technicians after having exceeded 10 years of work (experience) in the company. That is to mean their graduation does not require a training certificate.

Q2: How many engineers, technicians and technical agents are there?

The respondent said that there are 30 engineers, 35 technicians and 17 technical agents which make a total of 82 employees who work in the technical service of L'Algerie Telecom Company in Saida. Each employee is supposed to do specific tasks that are related to the category he/she belongs to. The following figure illustrates more



Pie-chart 4.1: Distribution of Employees in the Technical Service

She added that the engineers are holding a master degree in Computer Science or Electro-technical or Telecommunication whereas the technicians are holding a DEUA

(Diplome d'Etude Universitaire Appliqué) and have graduated from Telecommunication Institute "Institut Nationale des Telecommunications et des TIC Abdelhafid Boussouf, Oran". This latter, with a convention with AT Company of Saida offers four types of training:

√ **Academic Training** aims to recycle AT engineers.

√ **On-going Training for Development** aims to recycle employees' previous professional knowledge.

√ **ORSEC Training** enables employees to secure means of communication (telephone, fax, internet and data system). A laboratory is available for training 24 trainees.

√ **CISCO Training** includes four modules Curses Certified Network Associate (CCNA) : CCNA1, CCNA2, CCNA3 and CCNA4. Each module has a specific English program.

In addition to the Institution of Oran, there are three similar institutions in Ouargla, Bouferik (Algiers) and Quanstantine.

Q3: What are the function and tasks related to each category?

The respondent clarified that it depends on the employee and the tasks that he is supposed to perform in his post, for instance repairing is related to technical agents, programming and supervising are related to engineers and transmission is related to both engineers and technicians.

Q4: Do you offer them in-service training?

She replied with yes, frequently. Indeed, training employees is one of the most important strategies that L'Algerie Telecom company managers take into consideration. Hence, training employees is at the top of the strategies the company invests in.

Q5: Do all of them get benefit of the workplace training?

She answered with yes, of course. Indeed, engineers, technicians and even technical agents all get benefit from the in-service training. Yet, each status (post of employee) requires a certain kind of training.

Q6: Do they benefit from the same type of training?

According to her, the employees get benefit from the in service- training. Yet, the type of training depends on the status of the employee. In other words, the training offered to engineers differs from that offered to technicians and advanced-technicians (both are

considered the same) and the kind of training program offered to technical agents is also different from the other trainings.

Q7: What are the types of training you offer them?

As she mentioned, the target employees in AT Company are mainly concerned with Technical Skills Development Training also known as hard skills Training. The objective of this training is the know-how to do tasks such as data analysis, coding, content writing , programming , social media management etc. That is to say, through this kind of training, employees who are beginners can be able to technically do their tasks right whereas, the experienced ones stay up-to date with the latest developments. As far as AT employees in Saida are concerned, three types of training have been stated:

√ **Continuing training (ongoing training):** the respondents get benefit from an ongoing training in Abdelhafid Boussouf Institute in Oran.

√ **Workplace training:** the respondents are trained in the company by a Chinese trainer in a sort of seminars under a convention signed between AT company and HUWAWEI Company. Besides, they get benefit from another workplace training done by one of their colleague as she is already trained for that sake.

√ **Training abroad:** employees are sent to China, Japan and Sweden to hold a professional training there. This type of training is generally offered to engineers only.

Q8: How often do the employees undergo training?

She replied that it depends on the training itself, as far as the technical stuff is concerned employees may undergo training six or seven times a year because they must be up-dated to the technological changes that occur in the field of the telecommunication whereas the front office employees may be trained from four to five times a year.

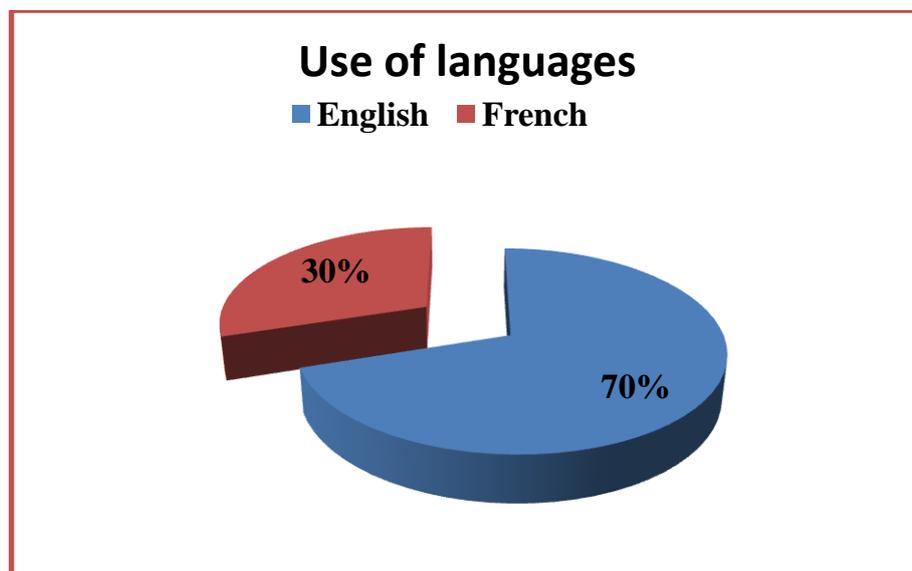
Q9: How long does each type last?

For the ongoing training, the concerned employees spend one week/year, five hours a day in the institute. It is important to mention that all the employees, engineers and technicians and technical agents are concerned by this kind of training. The workplace training is planned whenever there is a need for it. In other words, when there is a need to implement a new invented configuration or use of new equipment. Also for this type of training all the technical staff is concerned with. Besides, employees are sent abroad for a training that lasts nine months and the choice of employees depends on the specialty that is implemented in the training design.

Q10: What are the languages required in each training?

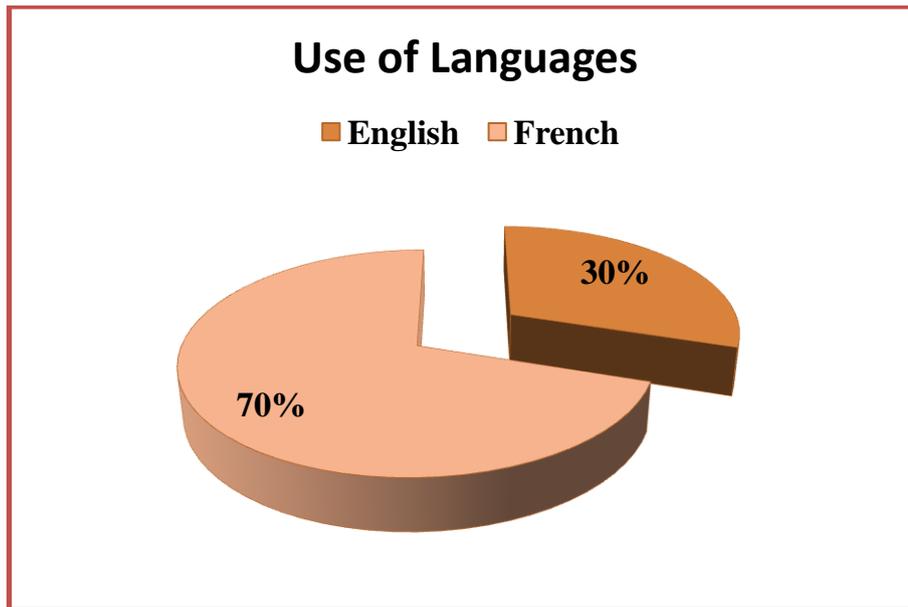
The respondents mentioned that two languages are implemented in training the technical staff: French and English. Yet, the use of Arabic is limited in the mail and reports that should be sent to the Wali. Indeed, though French is more used in some centers that belong to AT Company, we can find that English is also more needed in other centers. For Arabic use, it is limited to administrative correspondence between the target company and the other enterprises as clients or the responsible such as the mayor, the wali and so on.

It is important to state that different centers belong to the AT company and each center has its own employees who are in charge of specific tasks. Then using English or French differs from one center to another. The centers of AT Company are: 1) The Network and Radio Maintenance Center (NRMC) 2) The Maintenance Center align Fibro-Optic (MCFO) 3) The Energy and Environment Center (EEC) and 4) The Transmission Center (TC). The following figures represent each center and the extent to which English and French languages are used.

√ The use of English in L'Algerie Telecom Centers in Saida

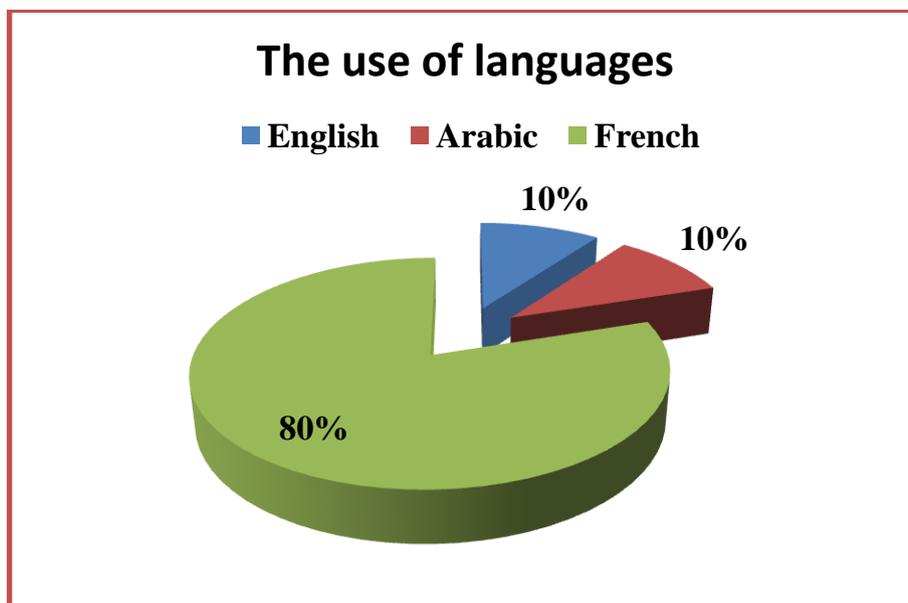
Pie-chart 4.2: The Use of Languages in Network and Radio Maintenance Center (NRMC)

From the figure above, it is clear that English is the dominant language in the Network and Radio Maintenance Center because this center is specialized in configuration and use of equipment maintenance. Thus, it is purely technical which requires using more English. In addition, the only supplier is HUWAWEI whose official language is English.



Pie-chart 4.3: The Use of Languages in Maintenance Center aligns Fibro-Optic (MCFO)

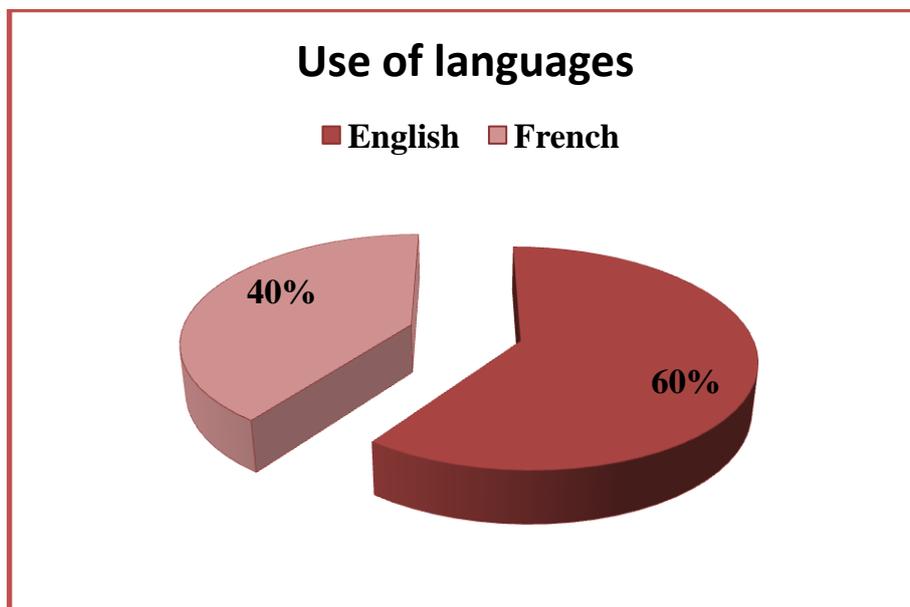
The Maintenance Center aligns Fibro-optic is specialized mainly in the installation of Computer Network Telephone, Surveillance Cameras and Intercom and Videophones. Hence, installing the mentioned equipments does not require the use of language, it rather requires professional skills. The next pie-chart represents language use in EE Center



Pie-chart 4.4: The Use of Languages in Energy and Environment Center (EEC)

The Energy and Environment Center, from the name, is more administrative than technical. As it is known that the official language used in the Algerian administration is either Arabic or French. For that reason, the EE Center is more dominated in matter of documentation by French than English whereas Arabic is used only in matter of writing reports. That is why Arabic use is limited to 10% and English with 10% whereas French takes the lion share with a percentage of 80%.

At last, the Transmission Center (TC), which is specialized in installing, command and configuration, is mainly dominated by the use of the English language. Indeed, all the configuration done at the level of the previous centers is done in English for that reason, according to the manager in charge of training, English for Specific Purposes is crucially required in their trainings. Moreover, their tasks which are mainly related to the installation and configuration of the equipments require a competency and knowledge in the English language so that employees in such a strategic center may do their work properly and whenever a problem occurs in the equipment, they can solve it without the need for other people to interfere. The next figure illustrates more.



Pie-chart 4.5: The Use of Languages in Transmission Center (TC)

Q11: What kind of English is implemented in each type of training?

The respondent said that technical English is needed for the three types of training that is English for Technical Purposes which is required for the workplace.

Q12: Is there a specific program for each type of training?

She replied with yes, of course. The program designed for training the technical agents for instance includes studying the Systems and the Equipments in the Outdoors, Indoors, Shelter (the small rooms that are built in each district), BSC (Basic Station Controller) and BTS (Basic Transceivers Stations) ...etc all these programs are taught in English.

Q14: How do you select employees to undergo workplace training?

The manager in charge of training confirmed that it depends on the company's needs. She added that sometimes the same employee may benefit from training twice or three times consecutively. Yet, this does not mean that some employees do never benefit from the training. Particularly during the last few years, they have recognized that both the company and the employees are in need of being trained in English for the rapid and noticeable progress telecommunication field notices every day. Thus, the more their employees improve their English competencies, the more benefits their company will ensure.

Q15: What learning opportunities may the employees get from their training?

“Actually, it is without a doubt that the first benefits go to the AT company” the interviewee clarified. She added” Training employees will enable them to up-date their professional knowledge and therefore they can keep the path with the progress that foreign Telecommunication companies have improved and this can be recognized in their ability in improving their competencies in matter of implementing the new technological investments at their workplace this way AT company will gain a skilled workforce.

Thus, the better outcomes AT Company can achieve, the better the conditions the employees will work in”. By mentioning good conditions, the respondent meant that employees will be more engaged, highly graded as they will create a bounded team. Then, training employees ensures positive effects that may be shared on both sides; the company's side and the employees' side.

Q16: Do you think that one day English will be prominent in AT company managment?

According to the respondent, English is the language of technology and due to it, employees are able to adapt with the technological development easily and quickly. Yet,

the policy makers in Algeria have imposed the use of French as an official language in the management of AT Company. Nevertheless, English has invaded the telecommunication field very quickly and it can be used over French only if the political view to French changes.

4.4.1.2 Findings of Interview B

As has been mentioned earlier, the second interview main aim was to study the English training from another angle; that is the pedagogical side to ensure more reliable outcomes. Indeed, the investigator tried to interview the Chinese trainer, yet it was not possible because it was not the period he offered trainings in the company. The interview was then designed to the employee-trainer, yet it was not easy to get an appointment with her at the workplace for confidential reasons. For that reason, the investigator used other ways to conduct the interview; the two ways which were helpful were: telephone calls and e-mails. Though it was time consuming because the respondents faced ambiguity in interpreting some questions and the investigator had to reform the questions after several attempts, the investigator could have fruitful feed-back.

What was advantageous was that the interview was piloted which assured its reliability and validity. On the other hand, the investigator applied the pyramid principle in the interview session that is to mean the researcher began her interview by asking general questions about the background of the interviewee and then moved to more specific questions in order to exploit the subject in matter in details. Hence, the investigator views that this interview analysis would consist of stating the questions and responses in a reported speech. It is worth mentioning that the interview questions were written in English and the respondents responded in English, too which indicates that she has a good level of interaction.

Starting with the interview design, the interview comprised thirty questions. The first seven questions concerned the interviewee in matter of introducing her professional profile. The questions targeted the professional experience, the English qualifications held by the interviewee, the criteria of being a trainer, whether the trainer is trained, by whom and what studies are implemented in her training.

The respondents informed that she has been a commercial report for eleven years and she is supposed to train her colleagues in the same field she specializes in. Talking about her level in the English language, she said that her level is good in matter of professional

competencies as she is holding a trainer certificate offered by HUAWEI. In fact, the responses she sent were expressed in a simple, clear and correct English. The respondent said that she has been a trainer since 2018. Speaking about on which criteria she has been appointed as a trainer, she explained that she is well qualified in the English language in addition to her post as a commercial report permits her to be a workplace trainer. For the next question, the respondent confirmed that she has already been trained for this sake and she still undergoes training in Algiers to up-date her knowledge and catch up the path with all what is new in the field. As far as the trainers are concerned, she said that she has been trained by HUAWEI Company trainers among whom some are from India , Japan and China During her training, she studied the new system NGBSS in English.

For the type of English employees were supposed to be trained in, the respondent replied that English for Commercial Purposes was the type of English recommended in training the employees. Another question was asked about using translation during the training sessions, she said that because employees varied in age as there were young employees with whom she faced no difficulty of language, there were also old employees who had not practiced English for a long time. For these latter, the trainer needed to use translation in order to transmit her message. The translation had to be in French only.

The next three questions aimed at highlighting the employees' behavior towards the workplace training they undergo with the respondent. The interviewee replied that the trainees are interested in the English training she undergoes with them and this is obvious from the high motivation they demonstrate. She added that it is a matter of trust and respect which characterize their interaction with her as a colleague on the one hand and their high motivation to be trained provide a good relationship, on the other hand.

What come next are the questions about the training process. First, tackling the issue of needs analysis, the interviewee said that though she conducts needs analysis with the trainees through asking them about their wants however, according to her, employees do not specify all what they want is to learn English as a language. Therefore, she teaches them the NGBSS (the system of commerce in AT Company) in English. Nevertheless, she said that not all employees are concerned with this type of training, only the technical staff is. Another question was about the different types of training the employees were concerned with, the interviewee confirmed what the manager in charge of workplace

training said in the previous interview; that AT employees are concerned with three types of training (mentioned earlier in interview A).

The next question was about the strategies the respondent adopts in training the employees. For this question, she replied with assertion without looking at document and this means that she uses the same strategies in her training. The interviewee explicated that the main strategies she adopted are as follow:

- √ Help the trainees practice the new skills they have learnt during the training sessions.
- √ Tie the training goals closely into performance and development process learning on the job.
- √ Encourage the trainees to share the training materials and learning experiences.
- √ Test the applications learnt during the training after the training sessions

Whereas for the methods she used in her training, the respondent explicated that the interactive methods were preferable for her case because more interaction ensures more trust and better results in effective learning and this was done through three methods:

- √ Visual method aiming at learning by seeing.
- √ Auditory method aiming at learning through hearing and
- √ Kinesthetic aiming at learning by doing

As for the skills that she focused more in training her colleagues, the respondent clarified that since the major aim behind her training is to enable the trainees to learn about the applications in the system, so the skills that trainees should focus more on are reading and writing, though listening and speaking are required but at a lower degree. She added that the main objective she seeked to attain was to enable the employees to apply the new knowledge, experiences and even simple ideas they learn in an appropriate way.

The next four questions aimed at exploring the availability of the English program, the suitability of the timing and whether the materials were available and used or not. Yet, the most serious obstacle she faced was the lack of the English program as she said “Unfortunately, there is no specific program. All the efforts I am making are inspired from what I learnt in my trainings in Algiers” she added that she designed the training content according to what employees needed to know though she sometimes implemented what she saw appropriate for them. As for the material, she replied that all the needed material was available. According to the interviewee, the needed material was purely electronic

such as computers, videos, etc. For the timing, she clarified that it was suitable for all the trainees. It started from 9 am to 2p.m and it lasted for five days each semester.

The next phase of the interview targeted the assessment of the employees' achievement. It seems important to mention that the interviewee answered the interviewer's questions without hesitation, yet when she was asked to give a sample of an exam she hesitated and explained that this was confidential. Hence, asking about whether assessment took place or not, she replied that it was considered as part of the training so as to know to what extent the training had been successful. Besides, the way of assessing, according to her, was sometimes oral or written and sometimes both.

From another perspective, when she was asked about the difficulties the trainees faced, the respondent clarified that the main difficulty the trainees faced was the language. She said "Though they are motivated in being trained in English, they cannot express themselves; hence apart from the training which is primarily devoted for the company benefits the employees want to learn English in order to be competent and to be autonomous in their learning. According to her, this would require more English trainings" While the trainer's difficulties lie in the lack for a suitable program that would be helpful systematically and pedagogically. Talking about whether the employees were rewarded for being trained or not, she replied that training is part of their job, though the company offers them certificates for graduation.

To end the interview, two open-ended questions were asked to the respondent, the first was about whether she wanted to carry on training the employees or give up and if she had any suggestions for a better English training.

For the first question, she replied that she wanted to carry on because she was pleased to be a trainer and she recognized that importance English played in improving professional competencies. She added that she was sure that English would be the official language recommended in AT Company someday.

Responding to the second question, the only suggestion the respondent has proposed was providing an appropriate program that would suit the trainees' needs wants and desire on the one hand and serve the company needs and benefits on the other hand. In addition, she added "training employees at the workplace is an on-going process and can never be ignored particularly when the employee is motivated because the more highly the

employee is motivated the high rapidly the new skills, knowledge and competencies are acquired”

4.4.2 Questionnaire Results

The third data collection instrument used in the present research was the questionnaire for it has a set of advantages that may serve this investigation. In this vein, Gillham (2000) cited in Dorneyer (2003:9) states

The main attraction of questionnaires is their unprecedented efficiency in terms of (a) researcher time, (b) researcher effort and (c) financial resources. By administering a questionnaire to a group of people, one can collect a huge amount of information in less than an hour and the personal investment required will be a fraction of what would have been needed for, say, interviewing the same number of people.

For this research work, 82 samples of questionnaire have been distributed to the technical staff only. In return, 61 samples of the total number were filled and returned back that is 74.39%. In order to analyze the findings, tables, pie-charts and bar-graphs were used. The questionnaire addressed to the three categories that is to mean engineers, technicians and technical agents were comprising the same questions because they represent the same case whereas the findings were analyzed separately. In other words, each category was studied alone (for the same questionnaire) then in order to ensure a deep understanding a comparison between the three categories was introduced using the mean and standard deviation.

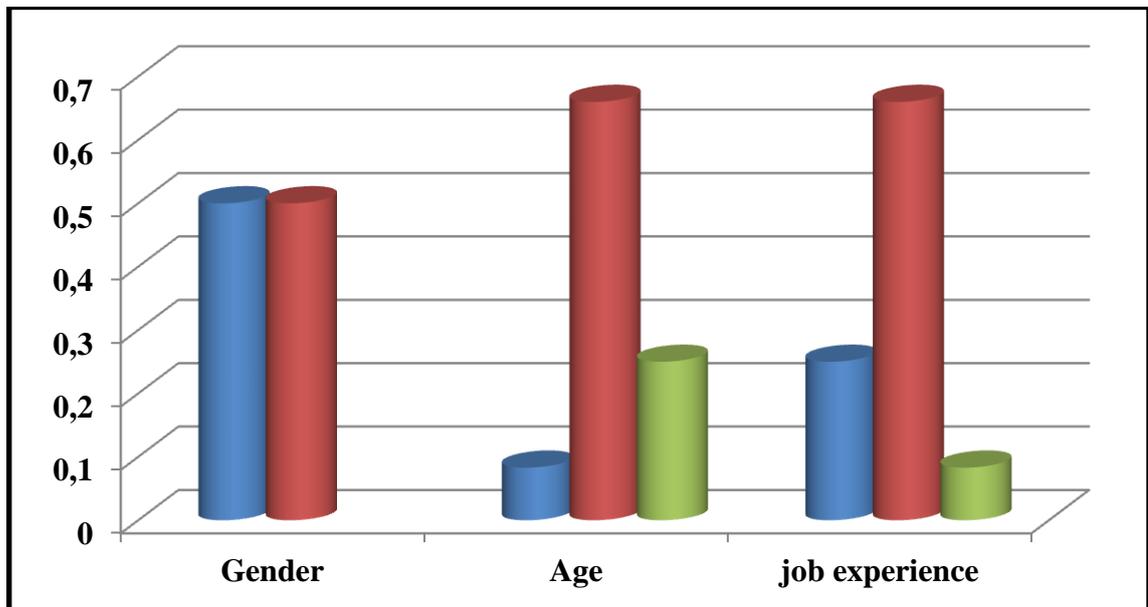
The questionnaire comprised four sections. Each section included a number of questions. The first rubric concerned the respondents’ personal information in matter of gender, age and job experience in the company. The second section concerned the professional profile of the respondents so as to have a clear image of the case study sample. This section aimed at exploring the use of English at the workplace, to do so, the selected questions would offer an insight in their tasks, their current levels in matter of oral and written English competencies in addition to the ability to use English to solve problems that may occur in using the equipments. For more details, section three targeted the training process in matter of the languages used in their training, the reasons of undergoing an English training, the types of trainings they underwent and the benefits they

intended to reach. The last section aimed at highlighting their opinions about the training and this was particularly done to shed light on the psychological side of the respondents.

4.4.2.1 Section one

Respondents' personal information

► Engineers



Bar- graph 4.1: Engineers Personal Information

From the bar-graph above, as has been mentioned above, this section comprised three points:

Gender: the number of males was equal to the number of females. Twelve males and twelve females, from the thirty engineers as a whole, represented the respondents who have filled up the questionnaires and gave them back. This represents a percentage of 80%.

Age: from the bar-graph above, most of the engineers were aged between 30 and 40 with a percentage of 66.66% where as two engineers were aged less than 30 with a percentage of 8.33% and six of them were aged more than 40 with a percentage of 25%.

Job experience: Among the respondents sixteen engineers with a rate of 66.66% have worked more than twenty years in L'Algerie Telecom company that is to mean that they are enough experienced to recognize the need for an English training for their professional requirements, four of them were less than ten year experienced, two were more than ten years of experience and only two were more than thirty years experienced.

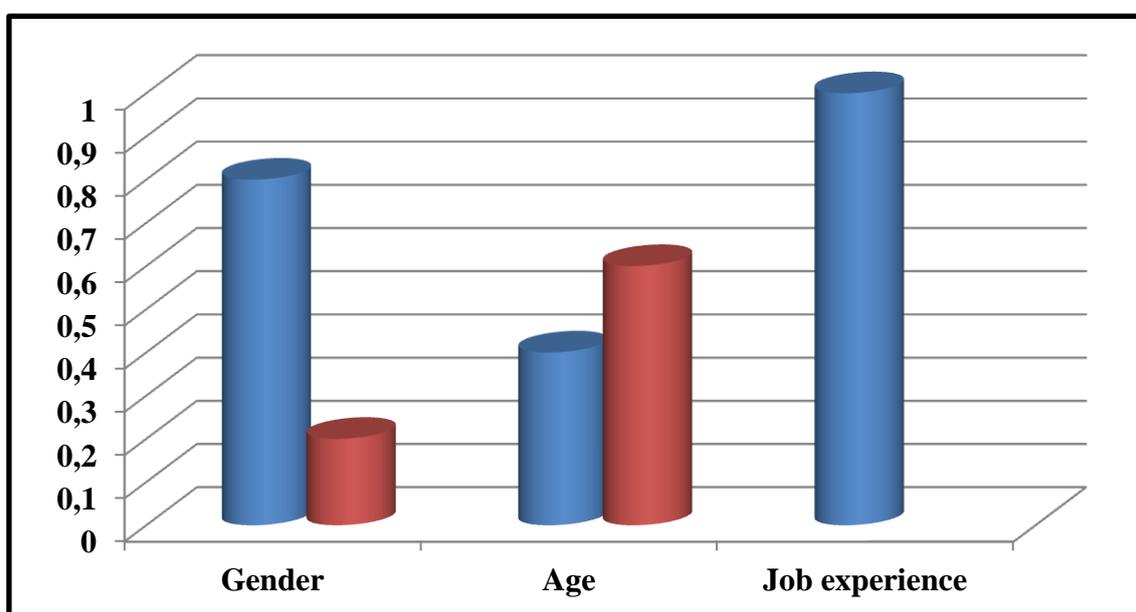
► Technicians (and Advanced Technicians)

Among thirty five technicians, only twenty five were at work which made a percentage of 71.42%. The other technicians were not present. For the results obtained, the next bar-graph shows that for

Gender: the majority of the technicians were males and this may be due to the location of the service (RADAR) which is somehow far from the town (on a mountain). Out of twenty five technicians, there were twenty male technicians (80%) and five female technicians (20%).

Age: Among twenty five technicians, ten were aged less than thirty years with a percentage of 40% where as fifteen technicians (60%) were aged more than thirty and this was advantageous for the investigator as they were very motivated while filling the questionnaires. This may reflect their need and interest to conduct English training.

Job experience: Another reason for their motivation is that they are beginners; they all have not exceeded thirty years of experience. When filling the samples of questionnaire, they showed their interest to learn English because, according to them, learning English was more required than ever and they showed their readiness for English workplace training.



Bar-graph 4.2: Technicians and Advanced Technicians Personal Information

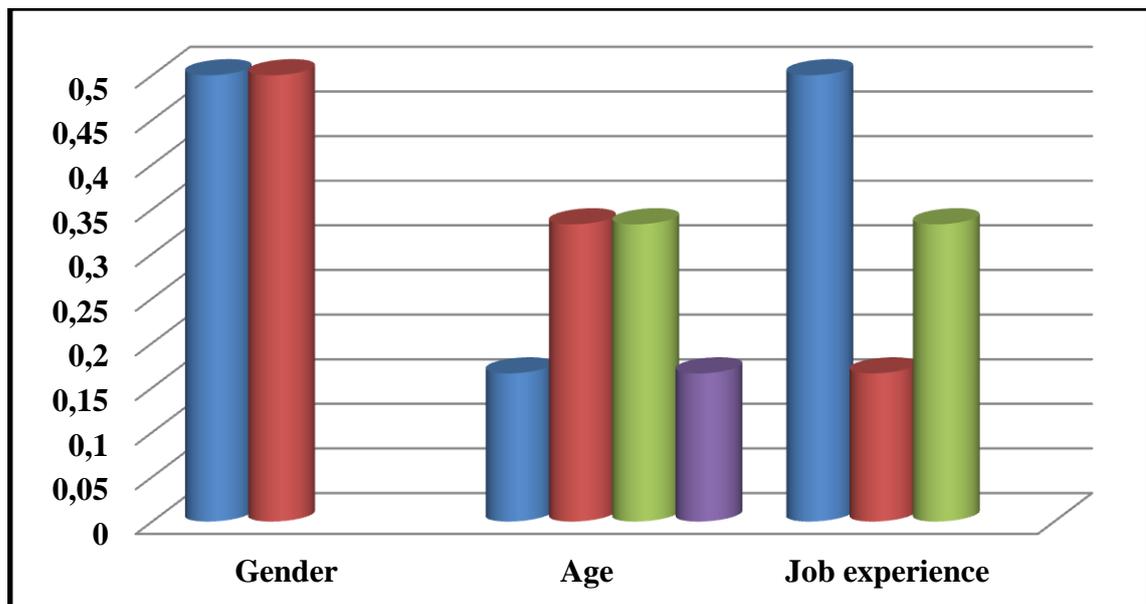
► Technical Agents

As far as the third category of technical staff was concerned, among the seventeen technical agents, twelve agents filled up the questionnaires and returned them back with a percentage of 70.58%. The obtained data was as follow:

Gender: the questionnaire's responses revealed that both males and females technical agents were equal in number; six men and six women, with a percentage of 50% for each.

Age: among the twelve technical agents, two agents were aged less than thirty (16%), four were aged between thirty and forty (33%), four others were aged between forty and fifty (33%) and two were aged more than fifty (16%). Thus, there is a clear balance between young workers who are not well experienced and who need more training at the workplace. and old ones

Job experience: about 50% of the technical agents have not exceeded twenty years of experience. Two agents had more than twenty years of experience (16%) and four agents were more than thirty years of experience in the technical service.



Bar-graph 4.3: Technical Agents Personal Information

In order to have a clear sight about the whole technical staff, a table is preferable to get a general insight about the three categories together using the mean and standard deviation and using numerical data.

Items		Mean	S. Deviation	Percentage
Gender	Male	12.666	7.023	0.622
	Female	7.666	3.785	0.377
Age	30	4.666	4.618	0.229
	30 – 40	11.666	6.658	0.573
	40 – 50	2.666	2.309	0.166
	50	0.666	1.154	0.032
Job experience	≤ 10	1.333	2.309	0.065
	10 – 20	2.333	3.055	0.131
	20 – 30	14.333	11.590	0.704
	30≥	02	02	0.098

Table 4.1: AT Technical Staff Personal Identity

According to the table above, two third of the technical staff employees were men and this is due to the nature of the work they are supposed to do. It is widely known that women are much better workers in the administrative side in any company. For the age, it can be enclosed that more than the half of the respondents were aged between thirty and forty and this can be advantageous for the company in matter that the employees are still young to be trained as adults. Moreover, as it can be noticed that most of the respondents have not been working in AT Company for more than thirty years; this means that they still need training and they are ready to learn more about their tasks in French and in English because in Algeria in particular it is known that the more experienced the employee is the less motivated to be trained he/she is.

4.4.2.2 Section two Respondents' professional information

Though engineers, technicians and technical agents, all work in the same service each category is concerned with specific and different tasks from the other two categories. The next table demonstrates their different tasks

Position	Tasks	Number	Percentage
- Engineers	Do detailed studies about any new work and managing both technicians and technical agents	24	0.393
- Technicians& AT	Do detailed and complex maintenance of technical equipments in the different AT centers under the guidance of the engineers	25	0.409
- Technical Agents	Do different simple maintenance of cables and circuits under the guidance of engineers	12	0.196

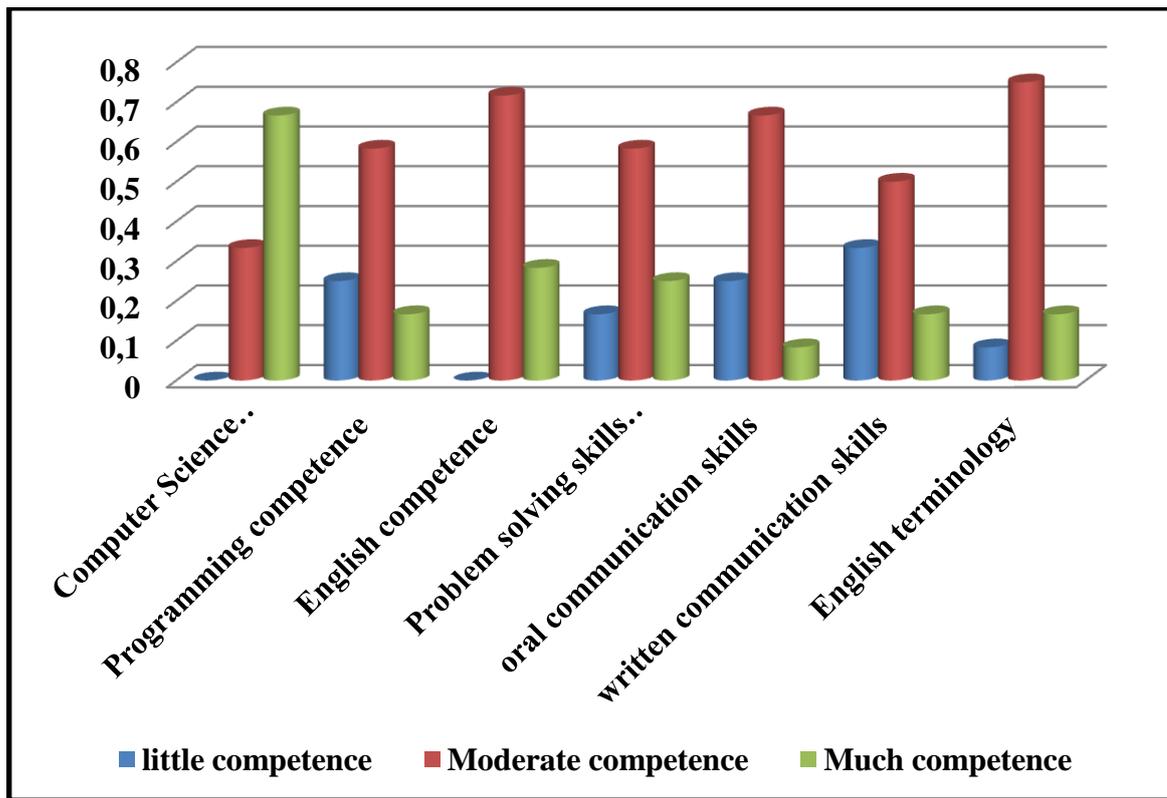
Table 4.2: Workplace Tasks according to Employees' Category

As far as the professional identity is concerned, the table indicates that the tasks related to each category of the technical employees make a pyramid in which the top refers to the engineers who are supposed to do detailed studies about the work and design the operations for both the technicians and technical agents. Hence, the engineers are managers in their posts. For the technicians, their work is framed in doing detailed and complex maintenance of the equipments but they are still under the engineers' management. The technical agents (who represent the bottom of the pyramid) are responsible of different cables and circuits' maintenance and other simple operations that engineers design for them.

b- Respondents' current level

It is worth noticeable that competencies within the technical staff differ from one category to another. Engineers, for instance, have certain competencies that both technicians and technical agents do not have and this is according to the tasks that they are concerned with. Among the competencies, the master of the English language since it is needed at their workplace. The next bar-graph demonstrates the competencies the engineers in AT Company have.

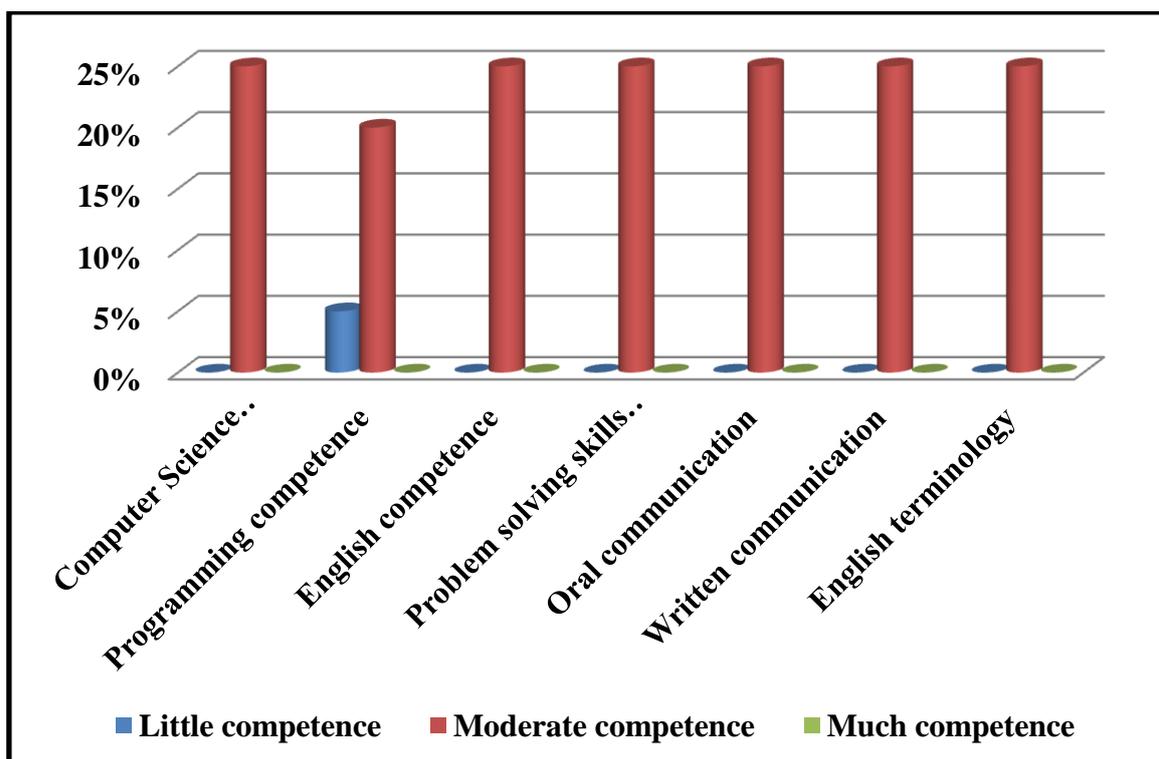
► Engineers



Bar-graph 4.4: Engineers' Competencies at the Workplace

The results show that most of the engineers had much competence in their profession particularly in what concerns PC software and equipments manipulation. Besides, most of the respondents had a moderate competence in either oral or written English or even the terminology that they needed at the workplace. About 71.66% among the engineers had a moderate level of English competency where as 28.33% were well competent. Indeed, they acquired this high level of competency from their studies in the university. For both English oral and written communication, the results revealed that more than 50% had a moderate competency where as one fourth were little competent in oral communication and one third had little competency in written communication which means that an English training is crucially needed for these respondents.. Speaking about the English terminology, 75% of the engineers had a moderate level of master and 16.66% were much more knowledgeable in the English terminology. It is worth noticeable that the respondents of this category had graduated from the university as engineers which means that they have already studied English for Specific Purposes and they had a certain competency of English in their field. Next bar-graph represent the technicians

► Technicians (and Advanced technicians)



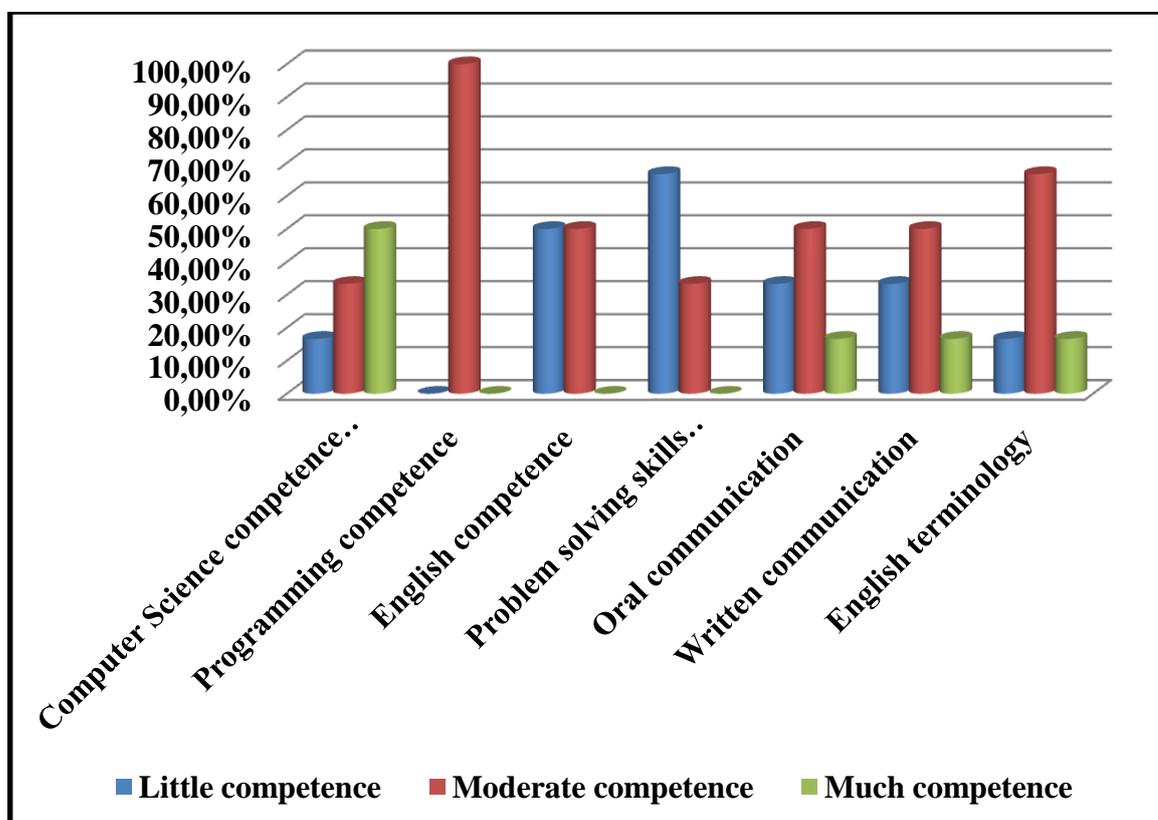
Bar- graph 4. 5: Technicians and Advanced Technicians’ Competencies at the Workplace

For the technicians and advanced technicians, it is important to mention that they were working in a separate service called (RADAR) which is located on a mountain. That is to mean that it was difficult to arrive to that service on foot. On the day of meeting, the target respondents showed a high motivation to fill the questionnaire especially when they knew that it concerned their English competencies. Yet, they claimed about the training program which was not relevant to their professional needs. Moreover, they had undergone the training only once or twice.

The results have revealed that the twenty five respondents who were working in the target company had a moderate level in both software and English competencies (100%) except five of technicians who still faced difficulties with programming because they were not well experienced (new employees) and who needed more training in this field with a percentage of 20%. Hence, having a moderate level in oral and written English communication in addition to English terminology and problem solving using the English guides are positive indicators of respondents’ ability to ameliorate their competencies.

► Technical Agents

The third and last category was the Technical Agents who, according to the results in the next graph, had a balance between their professional and English competencies. In other words, though they had a moderate average in dealing with hardware and software problems, more than 50% had an acceptable average in oral, written and mastery of the terminology. According to them, this is due to the English program designed for their training because the content was not relevant to their specialty and even the trainers who came to train them at their workplace do not speak English clearly (problem of pronunciation) and this because they are not native speakers; some are Chinese and the others are Indians.



Bar - graph 4.6: Technical agents' Competencies at the Workplace

Therefore, from the three categories of software employees responses it is understood that though they had a certain acquaintance of the English language in matter of oral and written communication with a remarkable mastery of English terminology, they still needed workplace English training in order to learn more and improve their English

proficiency. The next table represents an insight on the different tasks related to the technical staff as a whole using the mean, standard deviation and percentage.

	Little competence			Moderate competence			Much competence		
	M	S.D	Per	M	S.D	Per	M	S.D	Per
Computer Science competence (PC & software)	0.666	1.154	0.032	12.333	11.150	0.606	7.333	8.082	0.360
Programming competence	3.666	3.214	0.180	15.333	4.163	0.754	1.333	2.309	0.065
English competence (technical)	2	3.464	0.098	17.666	10.214	0.868	0.666	1.154	0.032
Problem solving skills (equipments)	4	4	0.196	14.333	10.503	0.704	2	3.464	0.095
English communication (oral)	3.333	3.055	.163	15.666	9.504	0.770	1.333	1.154	0.065
English communication (written)	4	4	0.196	14.333	9.712	0.704	2	2	0.098
Knowledge of English terminology	1.333	1.154	0.065	17	8.0544	0.836	2	2	0.095

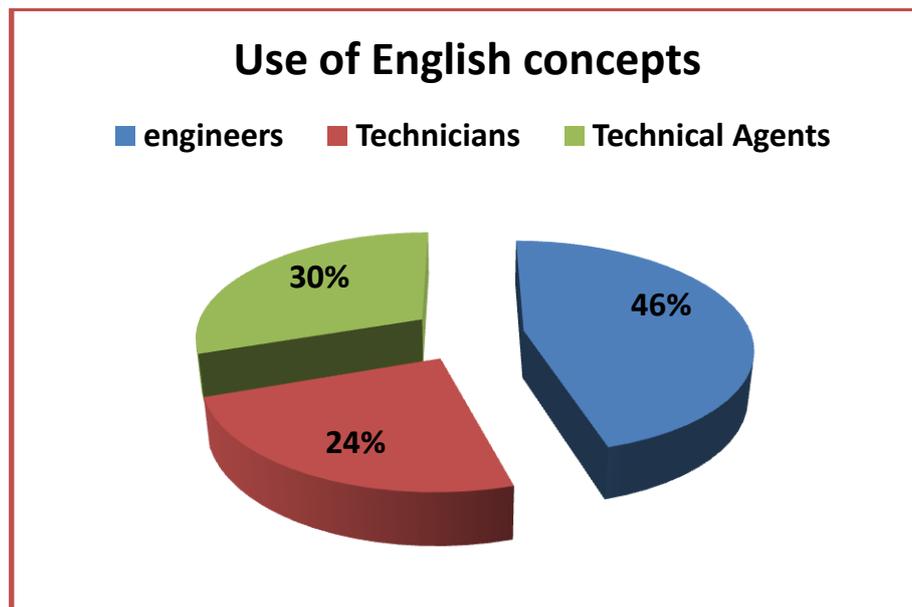
Table 4.3: Technical staff English Competencies at the Workplace

As can be noticed, the table above indicates that there is a balance between the professional competencies and English competencies of the respondents. In other words, regarding the Computer science, programming competencies and problem solving competencies, the results have revealed that employees had a moderate level of 60%, 75% and 70%. On the other hand, regarding the technical English competencies which mean manipulation of the equipment by using English, 86% of the employees had a moderate competence. For

English communication, 70% of employees had moderate competence in oral and 77% had also a moderate competence in written which mean that the respondents had an equilibrium in their language skills. As far as their English terminology, more than 80% did master English terminology that is related to their field of expert. In addition to tables, the respondents had to reply to some questions.

Q1: Do you need to use English concepts when you face problems with the equipment?

For this item, eighteen engineers replied with “yes” whereas six responded with “no” and it is important to mention that the six respondents were head of services in AT Company so it is obvious that they do not use English in their administrative work. On the other side, ten technicians confirmed that they needed to use English concepts whereas fifteen replied with “no” because, according to them, their tasks are more practical. On their side, six technical agents said that they needed to use English concepts when problems occur with equipments with a rate of 50%. The next pie-chart explains more



Pie -chart 4.6: The Use of English Concepts by the Technical Staff

4.4.2.3 Section three Respondents' workplace training

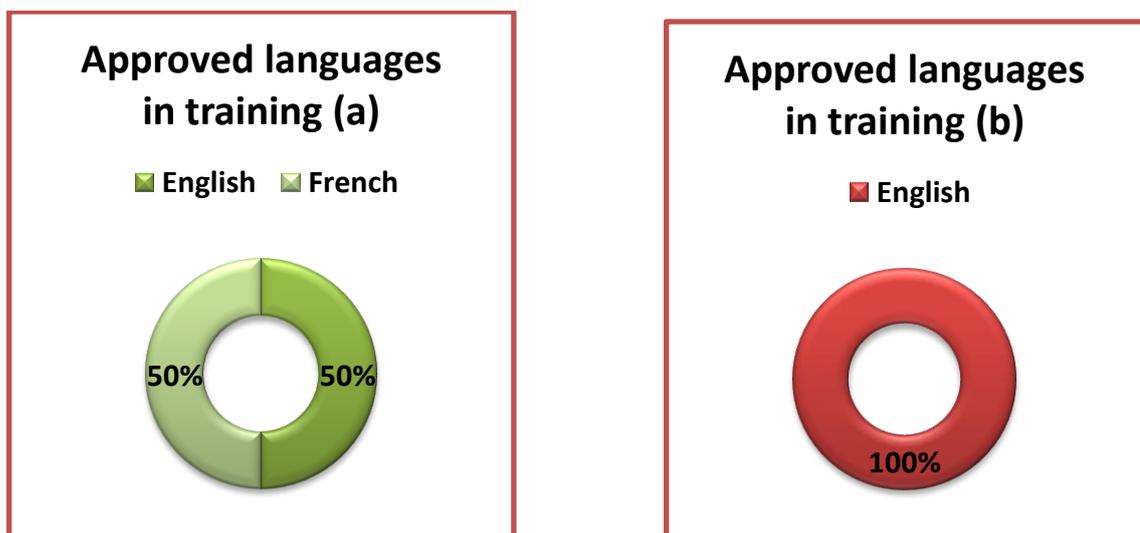
Q2: Do you undergo an in-service training?

For this question, all the respondents whether engineers, technicians or technical agents have responded positively because in fact employees of AT company particularly in the

technical service are concerned with in-service training and this is what the interviewee has confirmed previously. According to the respondents, training is not a matter of voluntary or obligation yet it is a need and they were very conscious that training was part of their profession, being trained according to them would help them up-date their knowledge and enable them renew their professional information.

Q3: What are the languages used in your training?

According to the respondents who were concerned with training, only French and English were used in the training they undergo in the institution (figure a) whereas, the training they undergo at the workplace with Chinese and Indian trainers (figure b), the language which was approved was English, yet there was one of their colleagues who was in charge of retraining them at their workplace (the interviewee of the second interview).



Pie - chart 4.7: The Approved Languages in Training AT Technical Staff

Q4: Why do you undergo an English training?

For this item, the investigator wanted to highlight the respondents' personal views about undergoing the English workplace training. The respondents were supposed to express their opinions. To facilitate and narrow down the responses for the sake of keeping the respondents' views on the same way, the researcher used MCQ and suggested three answers: a. whether the English training was interesting for the respondents b. it was compulsory or c. it served them in the augmentation of their salaries. The three suggestions were stated using likert scale questions. The next table is about the engineers' view.

► **Engineers**

	Strongly agree		agree		disagree		Strongly disagree	
	N	%	N	%	N	%	N	%
- It is interesting	22	0.916	02	0.083	00	00	00	00
- It is compulsory	20	0.833	04	0.166	00	00	00	00
-For salary augmentation	04	0.166	02	0.083	04	0.166	14	0.583

Table 4.4: Engineers' Needs from the English Training

The present question was more psychological than professional. Indeed, it was not the question which helped know the employees 'desires but it was rather the suggestions given which helped the investigator to quantitatively test the extent to which employees were motivated in being trained. According to the table, the engineers were more interested in having English training than considering that it was an obligation or in order to have having an increase in wages.

► **Technicians and Advanced Technicians**

	Strongly agree		agree		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%
- It is interesting	25	1	00	00	00	00	00	00
- It is compulsory	15	0.600	00	00	00	00	10	0.400
- For a salary augmentation	00	00	00	00	05	0.200	20	0.800

Table 4.5: Technicians and Advanced technicians' Needs from the English Training

The table denotes that similar to the engineers, 100% of technicians and advanced technicians have showed their desire in having an English training and this reflected their motivation and interest to be trained in English. Besides it is important to mention that 80% of the employees disagreed with the suggestion of having training for a reward of an increase in their wages. Whereas, 60% accepted the English training as it was compulsory. As the investigator has noticed, the respondents did not care about the third suggestion which is salary increase may be because they are well paid in AT Company and they.

Thus, their first target from the English training was a matter of improving their competencies.

► **Technical Agents**

	Strongly agree		agree		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%
- It is interesting	08	0.666	04	0.333	00	00	00	00
- It is compulsory	00	00	04	0.333	04	0.333	04	0.333
- For a salary augmentation	00	00	02		02	0.166	08	0.666

Table 4.6: Technical Agents Needs from the English Training

The table above indicates that technical agents also had the same opinion about English training. It was rather their interest which let them undergo the training; more than 60% of the technical agents showed their interest in having English training whereas, most of them did not consider that increasing of their salaries would be a motivating factor. A table about the employees in the technical service comprising the three categories is presented in the next table using the mean and standard deviation.

	Strongly agree		Agree		Disagree		Strongly disagree	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
It is interesting	18.333	9.073	2	2	00	00	00	00
It is compulsory	11.666	10.408	2.666	2.309	1.333	2.309	4.666	5.033
For a salary augmentation	2.666	4.618	1.333	1.154	3.666	1.527	14	6

Table 4. 7: The Staff's Needs from the English Training

As table above indicates, most of the employees in the technical staff considered the English training one of their interests (18.333) which motivated the investigator to continue her research believing that investigating in such a theme would be beneficial for both the software employees and their company. Besides, (11.666) thought that training

was compulsory the reason for which they accepted to undergo it and this shows that the respondents respect the regulations of their company which was also an advantageous indicator of their seriousness.

Q5: What type of training do you undergo?

This question was addressed to the respondents in order to highlight the type of training they were concerned with and they found that it served their interest and needs

Type of Training	Engineers	Technicians	Technical Agents
At the workplace	18	12	01
Attendance at conferences, fairs and workshops	00	05	00
Team training	14	05	05
Training abroad	04	00	00
In the institution	14	20	08

Table 4.8: Employees' Preferable Types of Training

From the table above, it is clear that training was offered to all employees in the technical service. Yet, the type of training differed from one category to another for instance, engineers were more concerned with workplace training (75%), training in the institution (58.33%) and team training (58.33) whereas few of them (16.66%) had undergone their training abroad (in China, Japan and Sweden) because, according to them, it lasted for nine months that is why employees were sent abroad only when it was urgent for example when there was a new invention or a new program to be learnt. As far as the technicians were concerned, 80% have had their training in the Institution of "Abdelhafid Boussouf" in Oran and 48% have done it in the company, this does not mean that each employee has benefited from one type of training but, as it has been mentioned in the interview, the same employee may undergo different types of training and for many times it depends on the company's needs. While, the technical agents who are less experienced than the technicians, the table indicates that more than 60% have had their training in the institution and about 10% only have undergone their training at the workplace whereas some technical agents have not had training yet because they were beginners and they needed first to improve their related tasks. For team training, it is noticeable that

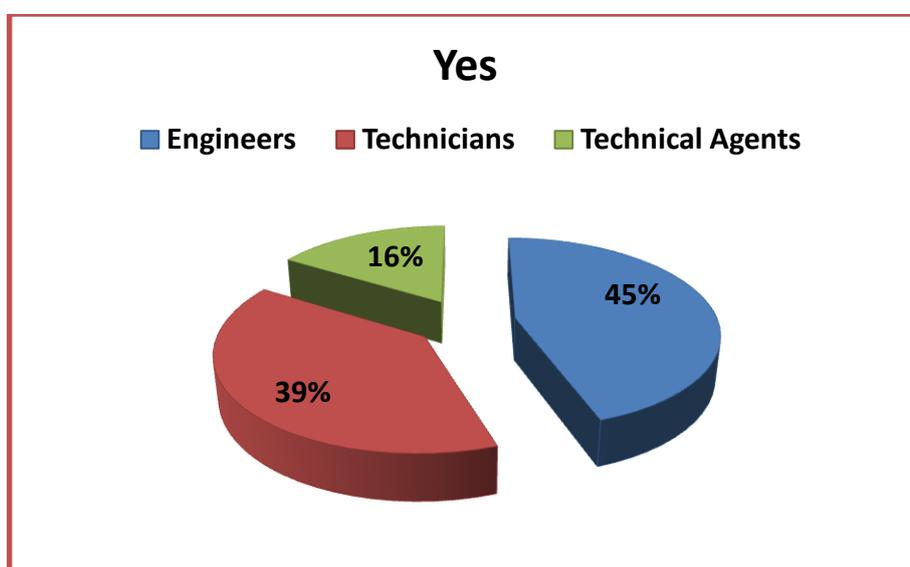
employees in the technical staff cooperated with each other and learn from each other. Thus, this type of informal training was helpful for both company and employees.

4.4.2.4 Section four

Express your opinion

This section is the most important for it is concerned with the detailed analysis of the English training of the technical staff. Hence, the same statements have been stated for the engineers, technicians and technical agents in order to get a yes/no response and to compare their responses, pie-charts have been used for analysis.

The training I undergo has increased my English skills



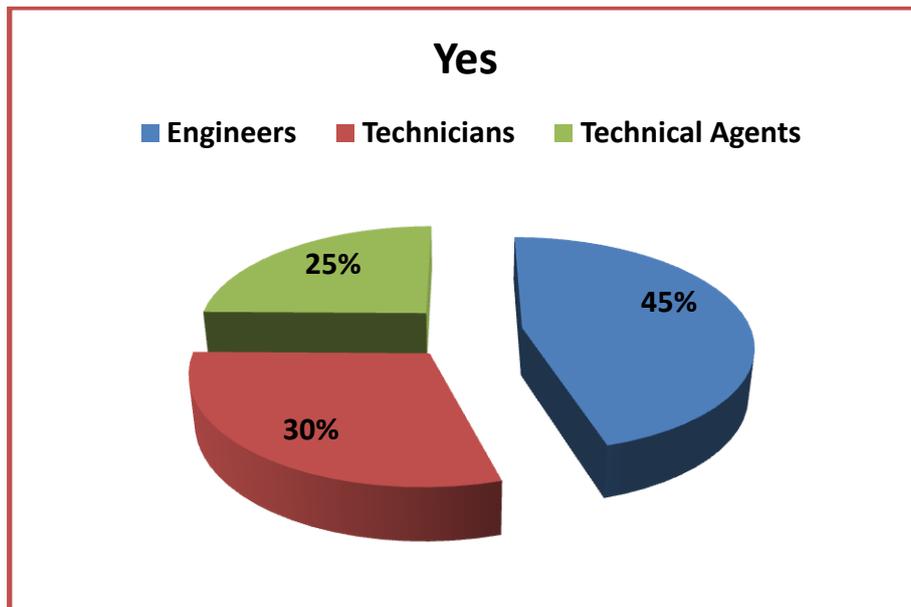
Pie-chart 4.8: Training Positive Effects on Employees' English Skills

As the figure indicates, training has positively affected on engineers, technicians and technical agents as well, yet the degree to which employees have ameliorated their skills differed from one category to another. For example, engineers could benefit from the training more than technicians whereas the technical agents were the least beneficiaries because using English at the workplace was very limited for the technical agents that is why they could not recognize the effects of learning English on their professional tasks.

► The method used in training is good

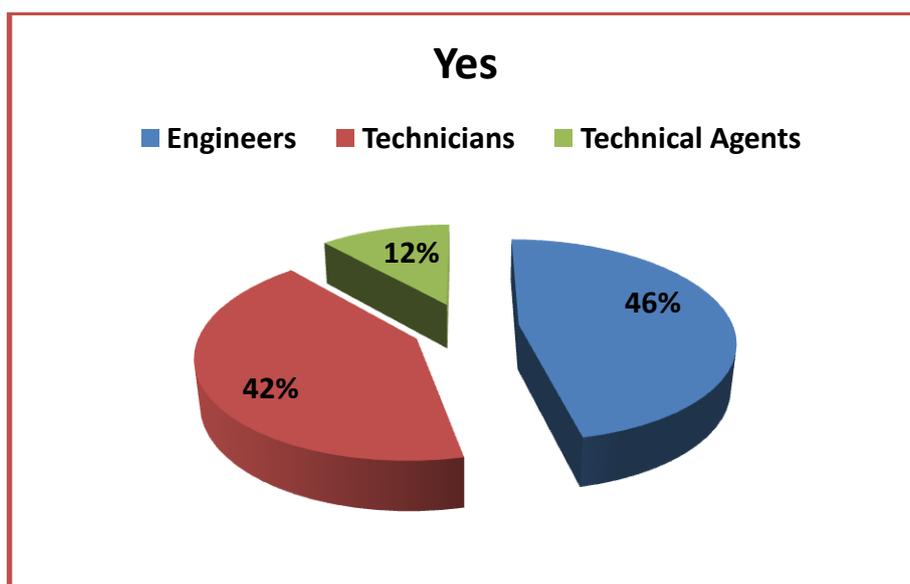
This statement showed an agreement from many employees in the technical service. The engineers responded positively because, according to them, trainers whether in the institution or at the workplace were competent and well experienced, technicians, on the

other hand, said that the only opportunity they have was the practice of English through training because they were involved in the courses trainers offered them during their training either through individual work or workshop. Technical agents also showed their satisfaction of the method applied in training. They said that they could have the opportunity to participate either in oral or written ways. Employees' responses are illustrated in the next figure.



Pie - chart 4.9: The Efficiency of the Training Method

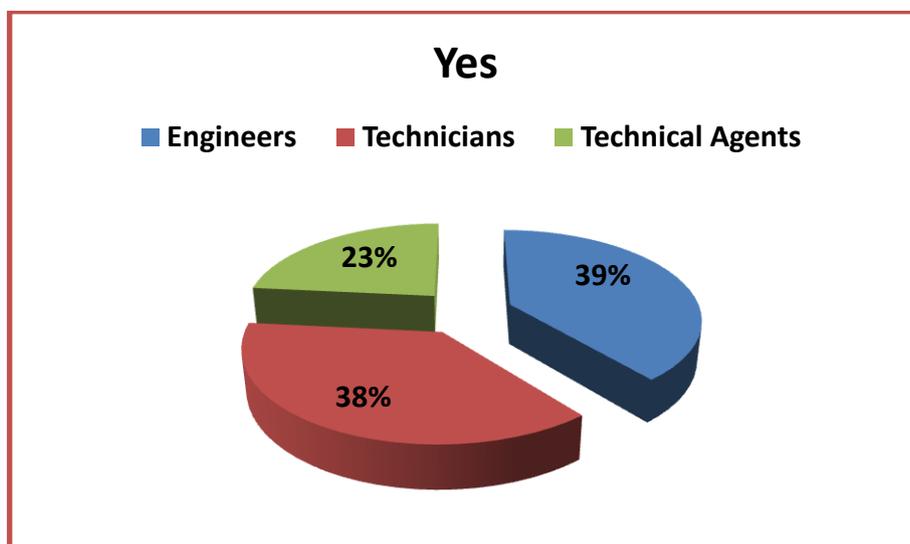
► **The training program is relevant to my work**



Pie - chart 4.10: Relevance of the Training Program to Employees Demands

After requiring about the method used in their training, employees were asked about the relevance of the training program to the demands of their workplace. As far as the program of the training was concerned, the figure shows that more than the half of both the engineers (54%) and technicians (58%) were not satisfied with the content of the training program whereas the technical agents, only 12% were satisfied with what they learnt during their English training. Indeed, software employees have claimed about the program because according to them the courses were general English. Trainers focused in their teaching on tenses, phonetics, proverbs and the tasks were generally focused on gap filling, sentence order, and so on that is why they have suggested that the program should be designed according to their needs.

► **The English training has helped me improve my performance at work**



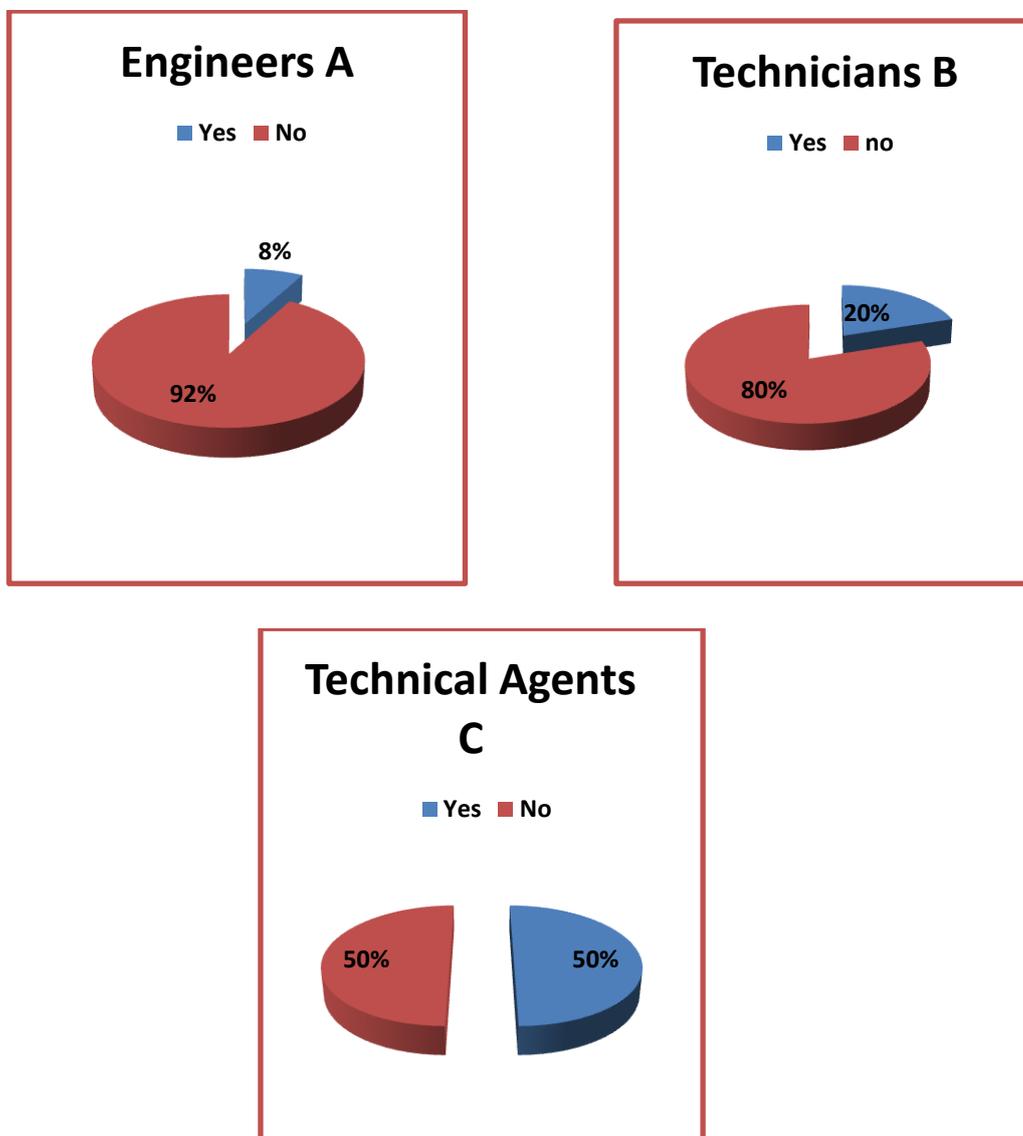
Pie - chart 4.11: Training Positive Effects on Employees' Performance

It is important to mention that workplace English training was common and helpful to the technical staff employees, yet each category had a certain amount of benefit. Engineers, for instance had the lion's share of that benefit because they had the opportunity to go abroad for training the technicians, on the other hand, had the chance to be trained by Chinese and Indian trainers who were knowledgeable in computer science and English language whereas the technical agents had a little benefit for they had been trained in English but since their work at the company was not dependent on using English, they could not realize any relation between what they learnt in English and what they improved as performance. Thus, implementing English in training the technical staff of L' Algeria

Telecom Company whether engineers, technicians or technical agents had some effects on their performance.

► **I would have the same output with no need to training**

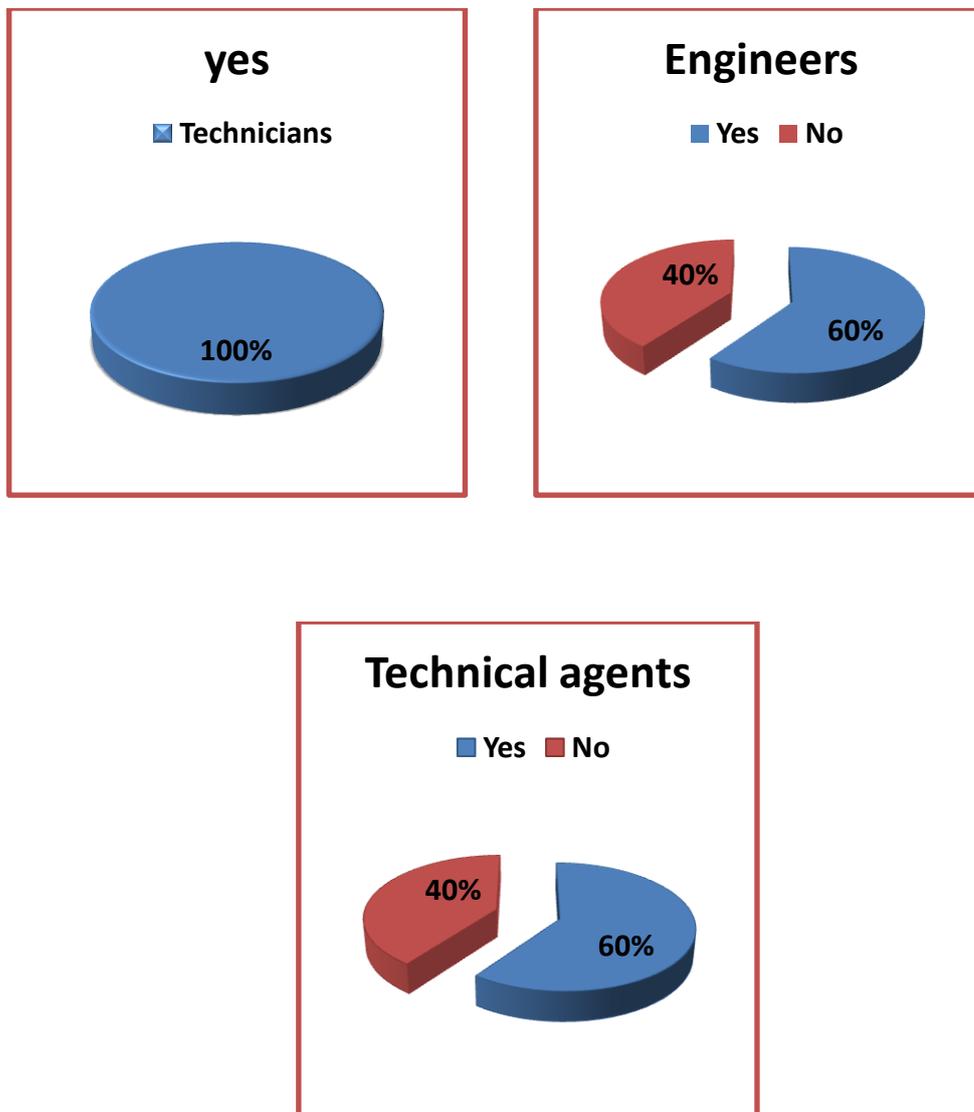
As figure A indicates, ninety two percent confirmed that without training they would not reach the same output which means that they considered training as an important factor in their work, the same opinion has been expressed by the technicians though with a lower percentage (figure B) but according to them, training has positively affected their output. Besides, half of the technical agents said that training is not crucial in their work and they would do the same with or without training. The next figures illustrate more.



Pie - chart 4.12: The Need to an English Training

► The availability of the up-date material is helpful

Working in AT company means using a variety of equipments particularly computers, in other words all the work of the employees who belong to the technical service is linked to the hardware. When a visit to the RADAR service was done, huge equipments were installed there yet it was not possible to take some pictures for the confidentiality of the work. Then, training these employees should crucially be related to the use of a set of equipments and this was what the respondents of this study have confirmed but each category needed certain hardware that suited their specialty at the workplace.

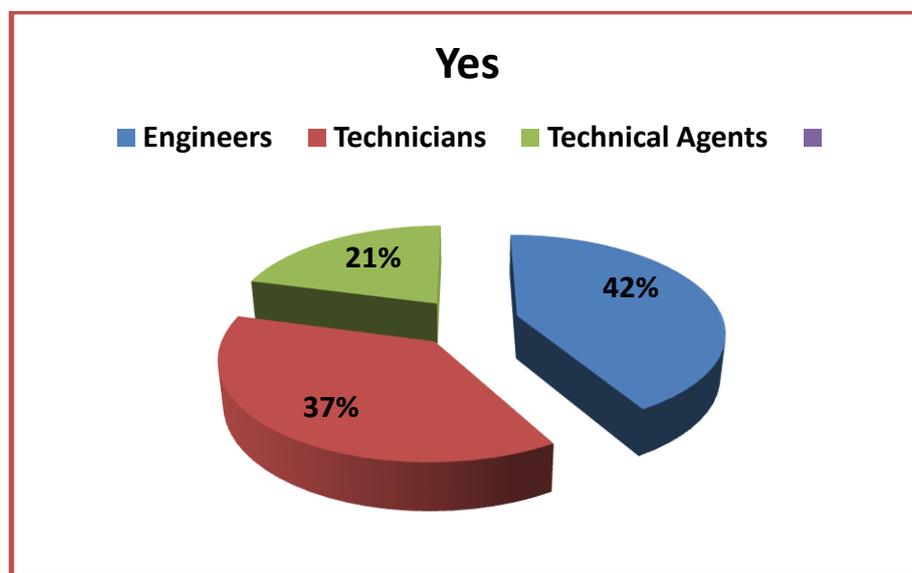


Pie - chart 4.13: The Availability of the Training Material

As the pie- charts demonstrate, about 60% of the engineers expressed their satisfaction about the materials available for their training in AT Company where as 40% required more sophisticated materials.

► **The training program is in line with the company's requirements**

The investigator tried to ask a similar question but from another angel. In fact, this question was previously addressed to the employees to get their personal point of view. Yet, this time the question addresses the company's demands from the respondents' opinions



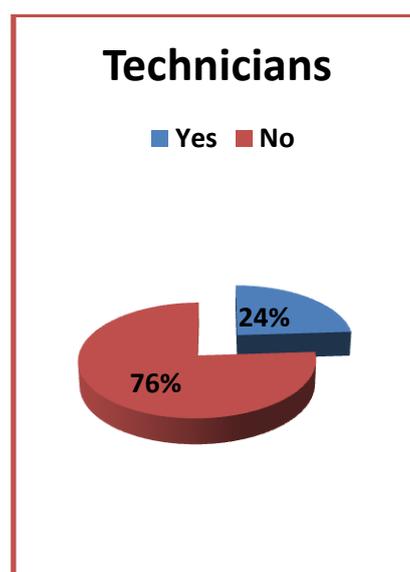
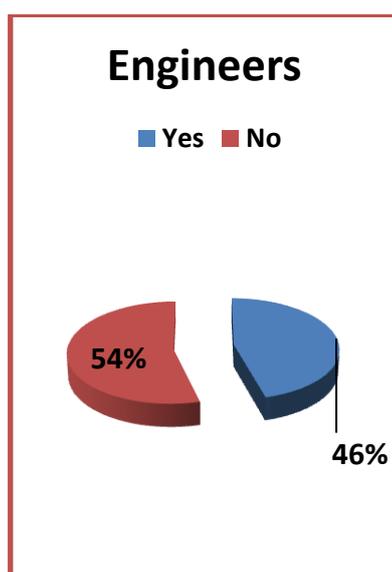
Pie - chart 4.14: The Suitability of the Training Program to the Company's Requirements

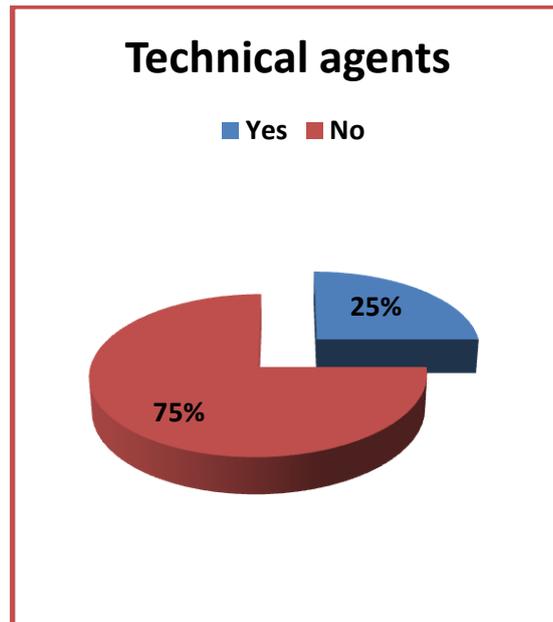
According to the engineers, about the half have confirmed that the program they have studied during their training was in line with the demands of their company and so did thirty seven percent of the technicians, however some technicians have claimed about the content of the program which was mainly general English as tenses, phonetics, proverbs and this content had no relation with their workplace requirements. For that reason, they have required for a program that suits their work and demands.

On the other hand, most of the technical agents have criticized the English training content; they said that it was not compatible with their needs. Indeed, they did not need English as agents but they were interested in learning this language because they knew that they were going to be technicians after graduation and they would certainly need English.

► The training program enables me to adapt with the new changes

As it is known that L'Algerie Telecom company is closely dependent on the technological progress that is to mean to catch the path with the world of Telecommunication and all the new strategies adopted by similar companies abroad, AT company should train its employees in order to keep up with the progress that takes place day after day. For that reason, asking the technical staff employees about the suitability of the training program was important. Besides, their responses varied from one category to another. Only forty six percent of the engineers (seven out of twenty four) confirmed that the training enabled them to adapt easily with changes that happened in matter of English use where as fifteen engineers (54%) expressed their dissatisfaction with the English program because, according to them, after several English trainings they are still unable to use English in both oral and written communication. On their side, 19 technicians (76%) complained about the English program and required for a new program that would enable them to master the four skills, on the other hand six technicians (with a percentage of twenty four percent) have argued that their adaptability to the changes that occur in the equipments they use was due to the training they undergo. For the technical agents, only twenty five percent said that the training program was suitable for them. Yet, it important to mention that this low percentage represented the agents who have undergone training because some of them have not benefited from in service training yet.

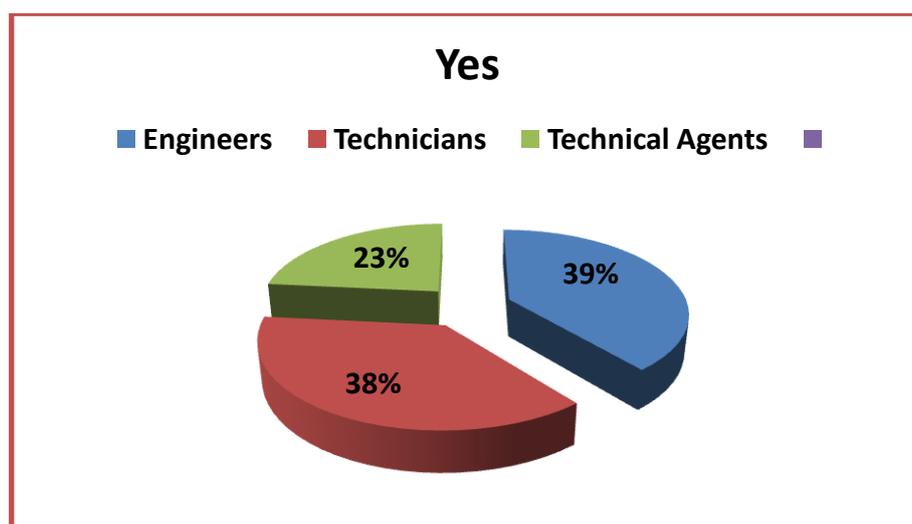




Pie-chart 4.15: The Effects of the Training Program on Employees Knowledge

► **I am more competent and efficient**

Any company has some strategic objectives in training its employees and so is the case of AT Company. Generally speaking, training employees means having competent, effective and productive staff. Therefore, AT company allocates large sums of money to train the technical staff employees in order to equip them with the needed competencies and performance their workplace requires and it is worth noticeable that the English language is crucial in their training.

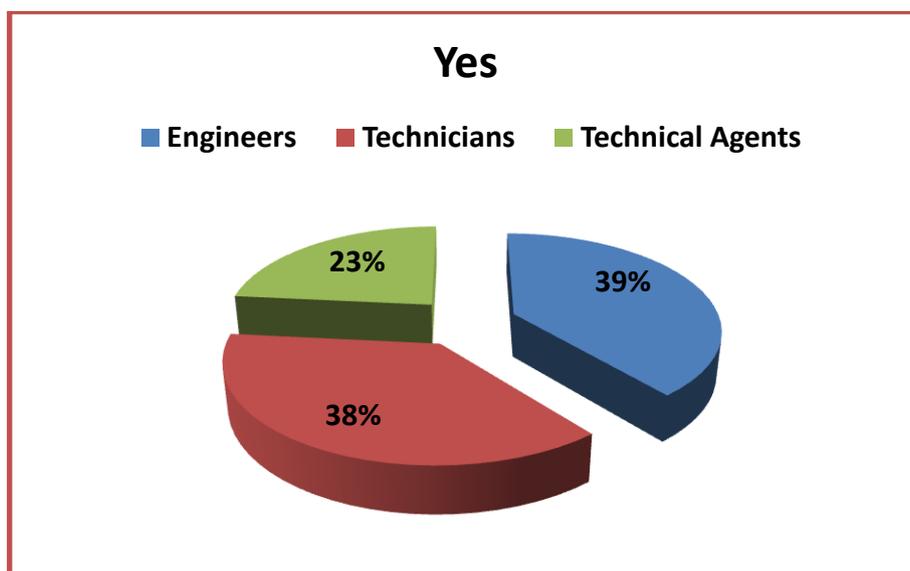


Pie - chart 4.16: The Effects of the Training on Employees' Competency and Performance

The previous figure clarifies that according to the engineers; thirty nine percent said that the raining helped them to be more competent and efficient for their company, the same for the technicians who have confirmed the same opinion with a percentage of thirty eight percent. Technical agents, on their side, confirmed the efficiency of the training with a percentage of twenty three percent.

► **The training has helped me identify my strengths and weaknesses**

This question was more psychological than technical because it addressed more the feelings of employees towards the training in matter of satisfaction or dissatisfaction



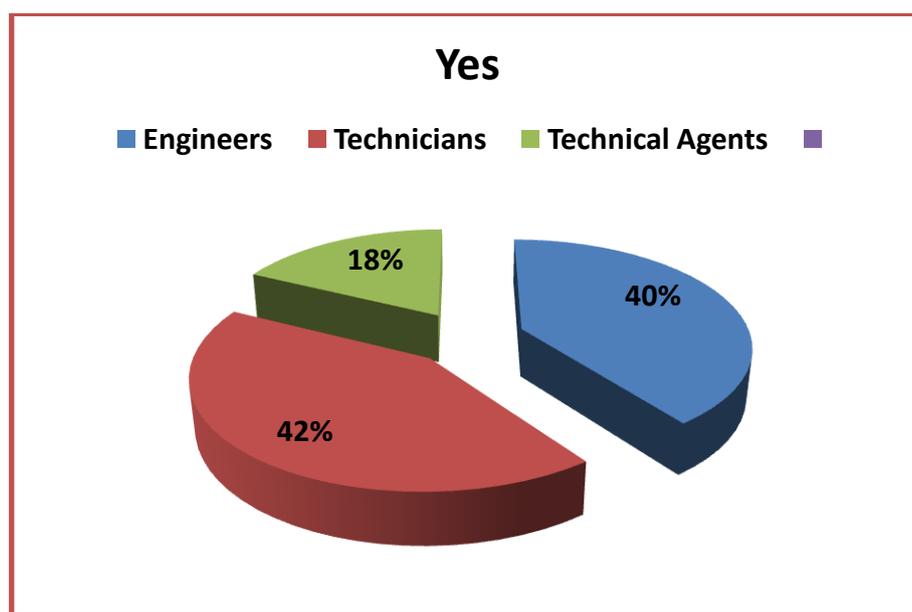
Pie-chart4.17: Positive Effects of the Training on Employees' weaknesses

Similar to the previous question, thirty nine percent of the engineers have argued that thanks to the training they undergo, they could identify their weaknesses particularly in English use and after several times of training they could overcome some like how to read a notice of equipment and apply the instructions whenever a problem occurs. Yet, they claimed that this was not enough and their needs were not completely fulfilled.

Technicians have also maintained the same response as for the previous question may be because both questions were interrelated whereas the agents have replied similarly as the previous question that is to mean only twenty three percent have confirmed that the training was helpful for them.

► My English skills are getting better and better

Indeed, this question seemed more important than the previous ones because it sum up and led the investigator to have a clear insight about the employees' opinion about the use of the English language (the core point of the present work). As the figure indicates, forty percent of the engineers have confirmed that there was a noticeable progress in their English skills particularly in the reading and the speaking ones and this was due to the ongoing training they underwent. Besides, sixty percent, though they agreed with their colleagues and confirmed that the English training was advantageous they demonstrated a clear demand for more effective English program that would help them improve their speaking and writing skills. More than the engineers, the technicians have argued with "yes" with a percentage of forty two percent because they have recognized an amelioration in their reading and their knowledge has been enriched with a repertoire of terminology in their field. Fifty eight percent of technicians required for more focus on the speaking and writing skills. Eighteen percent was the percentage of the agents who replied with "yes".

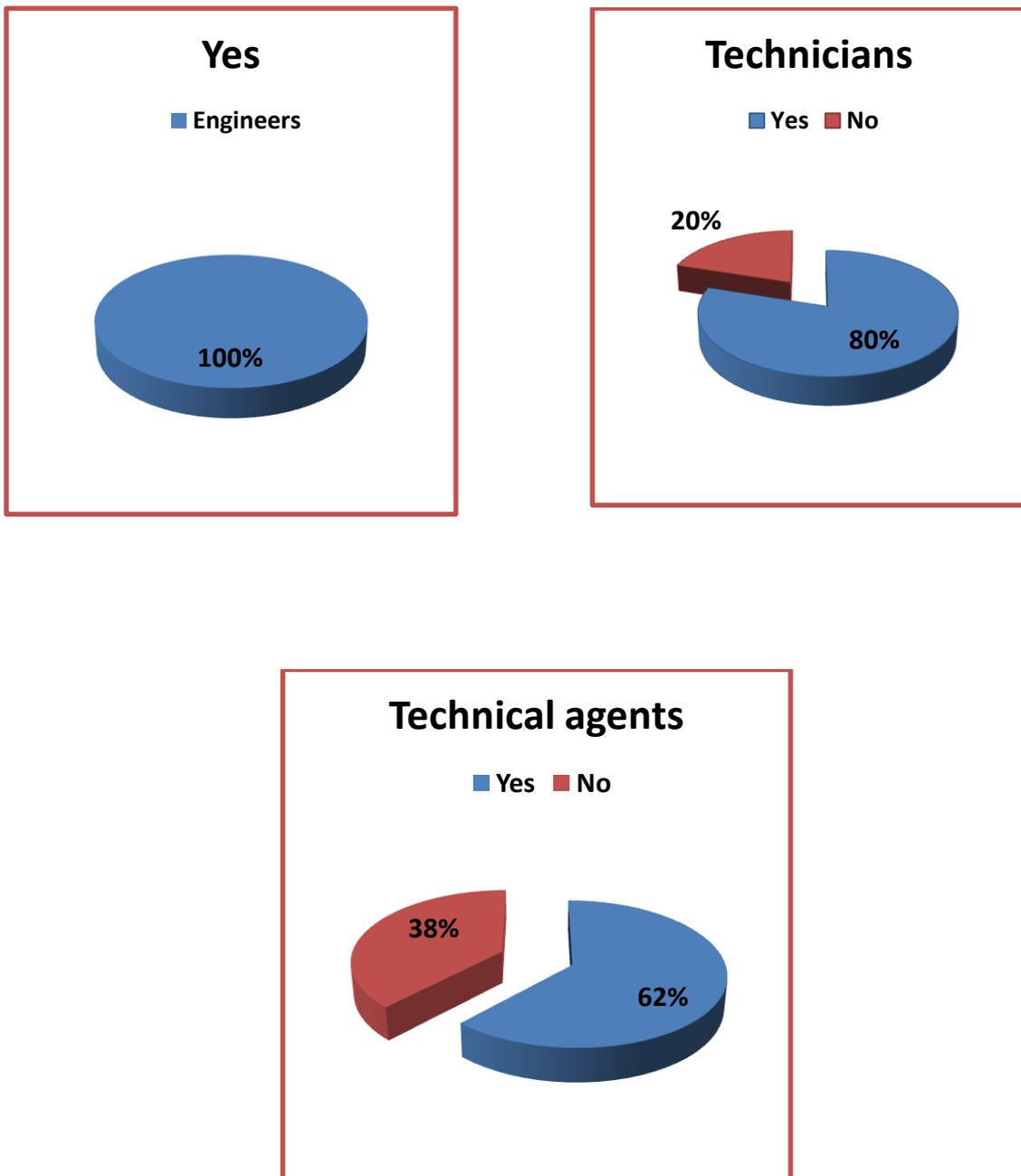


Pie - chart 4.18: The Effects of the Training on Employees English Skills

► I need further trainings to improve more competence

With a percentage of one hundred percent, the engineers have required for further trainings. This improves their interest and motivation in learning English because they were aware of the importance and the need for English language in workplace. Most of the technicians have also demanded more training with a percentage of sixty two percent

because, according to them, it was very beneficial whereas sixty two percent of the agents have demonstrated their interest in having more training about the English language.



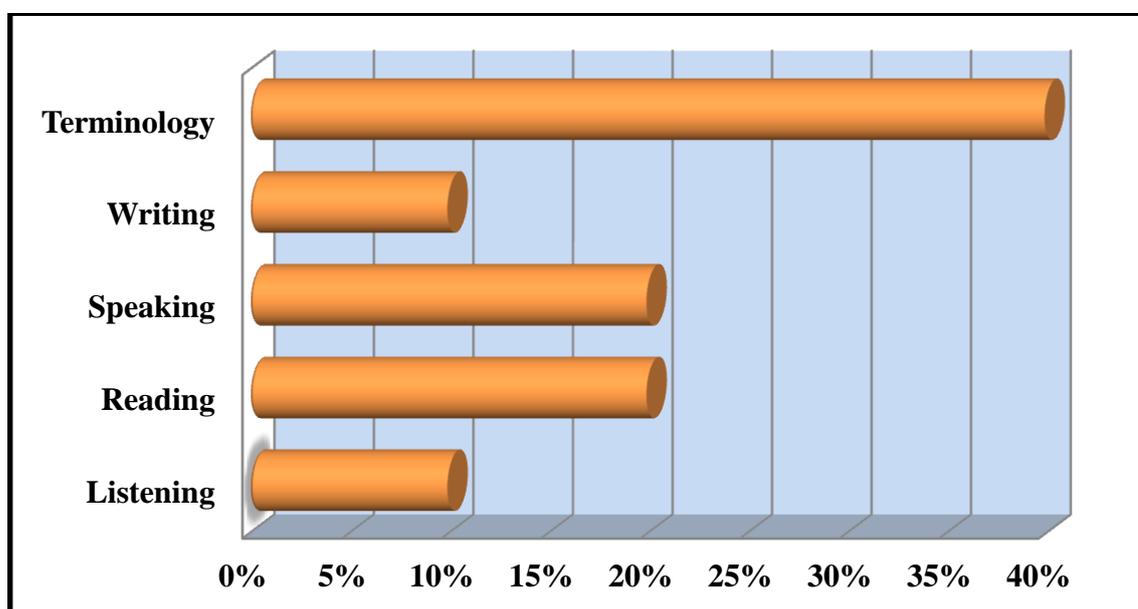
Pie - chart 4.18: The Need to more Trainings

► During your training, your trainer gives more importance to what skill

Having an objective to develop employees' English skills played a crucial role in the trainer's success. Hence, knowing what skill(s) was needed for the workplace requirement was considered as a first step towards a successful training. As For the case of the technical staff in AT Company, the respondents' answers varied from one category to another

because since the tasks differed and the requirements differed, too then the need for a certain skill more than another also differed from one category to another. Engineers, for instance, have shown more need for the English terminology and then the reading was as important as the speaking skill because as they were supposed to go abroad for training, they needed to improve their oral English for interaction and the same for the reading skill since they needed to understand what was implemented in the catalogues. At a lower level, the engineers have shown their need for the listening and writing skills. The next bar graph illustrates more.

► **Engineers**

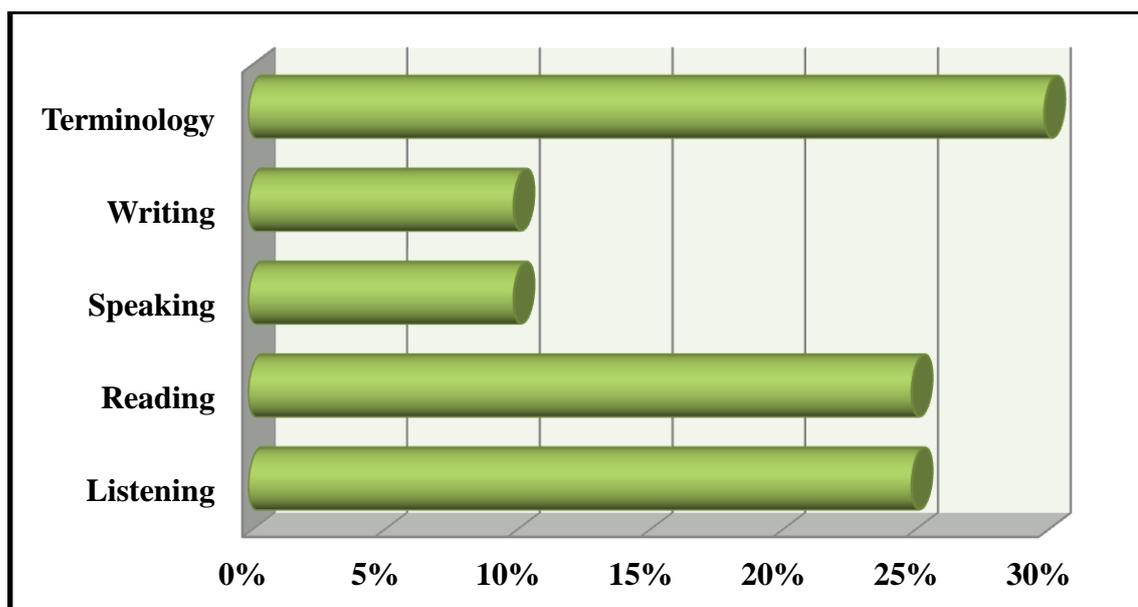


Bar - graph 4.7: Engineers' most needed English skills

During their training, the trainer has focused more on the speaking and writing skills in addition to learning terminology. Therefore, AT engineers have noticed that their trainer(s) focused more on the reading skill through reading statements, texts, notices, proverbs ...etc and the speaking skill through the workshops they were asked to do in order to present their work orally. Moreover, their training program was rich of tasks related to the practice of terminology either through gap filling or defining (a full table of terminology will be inserted in the appendices) whereas, the listening and writing skills were less important because at the workplace, engineers do not need to listen nor to write English. Therefore, it was obvious that the trainer was competent in his teaching. Through his focus on some skills more than other skills which means that his teaching reflected an effective pedagogy.

► Technicians

On their side, technicians and advanced technicians were mainly concerned with detailed and complex maintenance of technical equipments. Hence, they needed much more to enrich their terminology in order to be able to know when reading any catalogue or guide to understand the instructions of using the equipment appropriately. Thus, the reading and speaking skills needed improvement. Then, writing and speaking skills were required but at a lower level. The next bar graph explains more.



Bar - graph 4.8: Technicians' most needed English skills

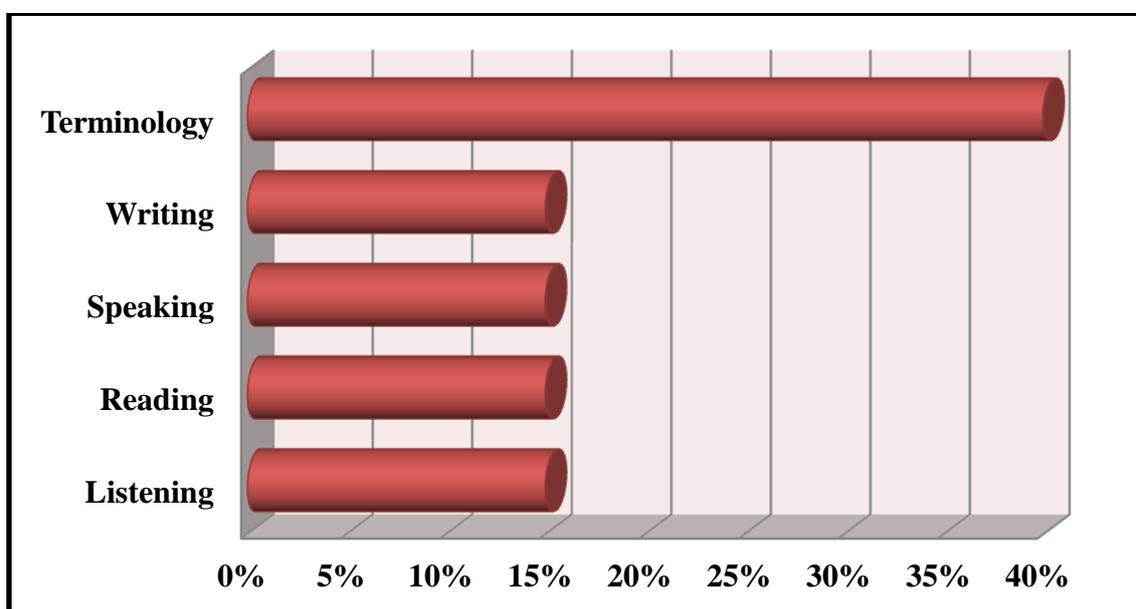
As far as the technicians were concerned, they differed from the engineers in that their work was based on the use of equipment; whenever there was an installation of new equipment or there was a need to repair them, technicians performed the operations. For that reason, their training program was more focused on the reading skill.

Yet Reading without understanding certain terms caused them a problem in reading the different catalogues and perform the instructions, so they faced difficulties in doing their work well. In addition to reading, the listening skill was also, though less, given importance so as to practice pronunciation because they said that if they could not know the right pronunciation of vocabulary they would not differentiate the meaning and this affects their reading skill. Besides, teaching terminology had the highest percentage. However, the technicians required for more focus on the speaking skill because, according to them, they needed English improvement for graduation and they knew that being

competent in English was no more a choice, it was one of the criteria required for telecommunication software employees.

► Technical Agents

Technical agents, on the other hand, were more concerned with practical side since their tasks were limited to doing simple maintenances of cables and circuits under the guidance of the engineers. Hence, this category of respondents could not improve any skill at the workplace but learning new terminology (40%). Yet, it is important to mention that technical agents have shown a remarkable desire to learn English so as to ameliorate their English level. The next bar graph illustrates more.



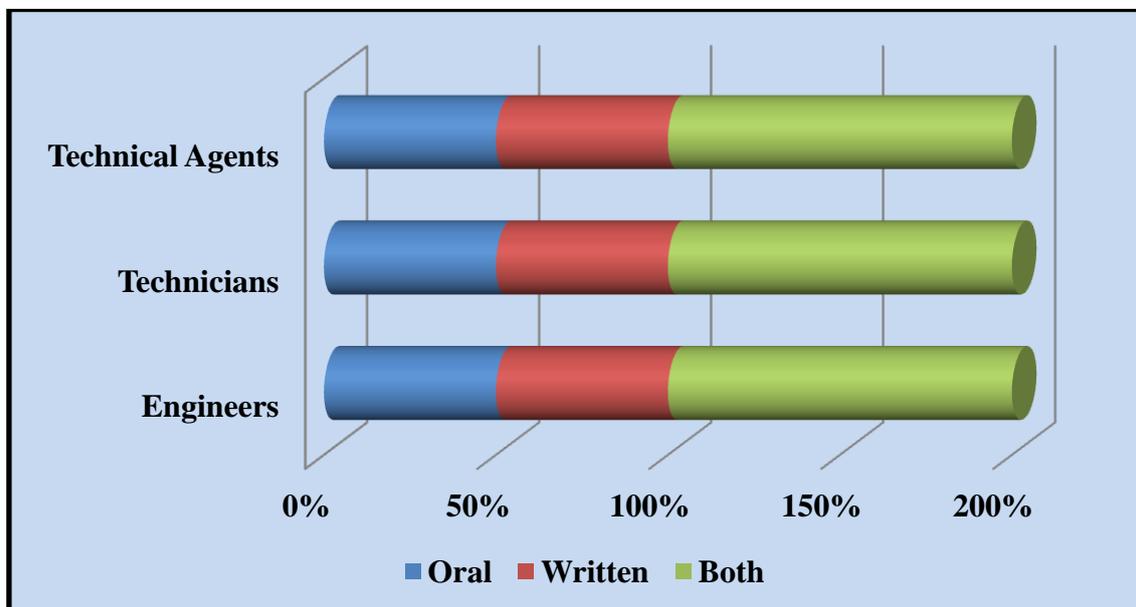
Bar - graph 4.9: Technical Agents' most needed English skills

Technical agents, on their side, have argued that their trainer(s) focused more on teaching them terminology meanwhile, there was a certain balance between the four skills (15% for each) because, according to them when they listened to their trainer's questions they responded orally and then read and wrote down their tasks. Yet, they have complained about the content which was not specific to their needs and field of expertise.

► As a trainee, you are tested in

As far as the assessment process which was the target beyond training AT technical employees, it was split into two assessments: oral and written as an ongoing testing throughout their training period. Then, the final exam comprised both oral and written. All

the respondents had confirmed that their work has been evaluated in the same way. The trainer(s) asked them to apply, install or repair any damage and explain for his/her mates orally. This fell into the box of oral evaluation or they sometimes did in written and by the end of their training, all the trainees were asked to write reports about what they have done.



Bar - graph 4.10: Integrating Oral and Written in Assessing the Respondents

The bar graph indicates that testing the engineers, the technicians or the technical agents was based on either oral or written during their period of training which they called (control continue) and by the end of the training, they sat for both oral through oral presentations and written through writing reports and these latter were later on sent to the responsible in charge of their training in order to analyse the feedback of the trainees and then evaluate the training outcomes.

► **The results that you get are**

	Acceptable		Good		Very good	
	N	%	N	%	N	%
Engineers	05	2.083	15	0.625	04	0.166
Technicians	08	0.320	16	0.640	01	0.040
Technical Agents	09	0.750	03	0.250	00	00

Table 4.9: Respondents' Assessment Results

The table shows that most of the respondents got either acceptable or good feedback from their assessment. Only four engineers said that they could have very good results because they were already holders of a competency certificate in English. In addition, one technician who had a good English competency (holds UFC certificate in English) could improve very good results.

h) Other suggestions

Last but not least, the investigator preferred to end the questionnaire with an open-ended question to give the target respondents the opportunity to express themselves (they were allowed to write in any language). To give their suggestions could be a closing point for the respondents, but it could be an opening point for other researches in a field which so far needs more researches. The respondents offered the following suggestions as wants and desires:

- ♣ More and further English training would help them improve their competencies at their workplace.
- ♣ The trainers has to involve the trainees through conducting training needs analysis.
- ♣ The training program should not be purely technical so that they can be competent.
- ♣ The training program should be both practical and theoretical.
- ♣ The trainer(s) should master speaking the English language because they faced problems in understanding the Chinese and the Indian trainers who are not native speakers.
- ♣ More coordination and cooperation between the trainers, trainees and managers at the workplace would lead to a more satisfactory feedback.

4.4.3 Documentation Review in AT Company

As L'Algerie Telecom company management is dependent on the technological development and the company is working in convention with HUWAWEI as a main supplier of the equipments, it is clear then that English does exist in the archival documentation of the company. Some of archival documents in which English has gained a prominent are as follow:

♣ **Installation guides:** as has been previously mentioned that all the equipment that are available in AT company are originally HUWAWEI made then the installation guides which are provided with the equipments are written in English like USER'S MANUAL,

QUICK INSYALLATION GUIDE OF MAIN BOARD and PIN HEADER EASY INSTALLATION GUIDE. Therefore, using these catalogues requires from the engineers and technician an English competence to read, understand and apply the instructions of these guides.

♣ **Email as an archival network data sources:** through an insight in the sent and received messages between the different centers of AT company and the directorate. Yet, it is not a matter of knowledge it is simply that employees in charge of sending and receiving messages are familiar with some vocabulary which is common in messaging like (files, documents, well received, password, subscriber, etc ...). It is important to mention that privacy of messages prevented the investigator to get a whole message and insert it as an example.

♣ **Information System Interface (ISI):** the ISI of AT Company is found in the catalogue that the company publish every year. This catalogue contains all the new changes that AT company adopt and/adapt in the matter of management. In the latest published catalogue of AT company for instance there are some English concepts stated in English and explained in French like “ Ethernet, FE (Fast Ethernet), GE (Giga Ethernet), ISUP (ISDN User Part) and MPLS (Multi Protocol Label Switching) which are found in (Catalogue d’Interconnexion d’Algerie Telecom 2018/2019 p 5-6).

♣ **The CRM TTT Training Material:** A guide provided by HUAWEI in order to train AT employees. This guide contains a training program written at 100% in English, the last edition was published in 2018 and it is directly addressed to AT employees who are concerned with the training. This guide is entitled “HUAWEI NGBSS Solution Overview”, it implies a set of objectives among which are:

- √ Outline the features of HUAWI NGBSS Solution.
- √ Describe the Main Function of NGBSS System.
- √ Describe the Main Components of NGBSS System.

It is divided into five chapters:

- √ An Overview of the Adopted System.
- √ Market Performance and Reference Cases.
- √ Introduction of the CRM Sub-system.
- √ Introduction of the CBS Sub-system.

√ Introduction of the Other Sub-system.

The content is full of abbreviations some of which will be mentioned in the references of the current thesis. Moreover, some pages will be scanned in the references, too. In addition to the courses, there are also some tasks some of which are about:

√ **THINK:** they include a variety of comprehension questions about the course content.

√ **MAKE:** trainees are asked to present some process of different important operations.

√ **DEFINE:** they are asked to define some important key words concerning different settlements.

4.5 Conclusion

To conclude, the present chapter was an attempt to analyse the data collected using four instruments, two semi-structured interviews, a questionnaire and documentation review. The findings have revealed that English is one of the languages adopted by AT Company as it is used by the employees at the workplace and it is implemented in their workplace training. Yet, the lack of an appropriate English training program lies as an obstacle for the employees to improve their English competencies though they have demonstrated a high motivation and desire to learn English language. As far as the documentation is concerned, English for Specific Purposes has found a place among the documentation of the target company which ensures the reliability of the present research work through triangulation. The next chapter will offer some fruitful suggestions in order to pave the way for further researches in the field of telecommunication particularly in our homeland Algeria.

Chapter five

Chapter Five

Recommendations and Suggestions

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5.1. Introduction

The present chapter consists of a summary of the study followed by a discussion of the research findings. Then, research contributions are provided followed by recommendations and suggestions in order to improve respondents' English knowledge, skills and performance at their work place. This chapter also suggests a new and applicable training model to be adopted in addition to a syllabus design and then it paves the way to further researches to carry on the same path for better solutions in the future.

5.2. Summary of the Study

It is worth noticeable to mention that the use of English for Specific Purposes (ESP) has invaded all the fields that are related to technology such as the Telecommunication field as a strategic field in Algeria. Employees of L'Algerie Telecom Company (AT) in Saida for instance are using English for Specific Purposes (ESP) in addition to the French language which is recently known as a dead language. Moreover, talking about technology is directly related to English language. Though, the research has shown that the software employees undergo different types of training yet they still face difficulties that is why a deep and rapid reform in the training program is crucially required in training AT employees particularly the engineers, technicians and technical agents who are working in the technical body of the company.

The present research work aimed to explore two main points: a) the need to use English for Specific Purposes (ESP) by software employees in L'Algerie Telecom company (AT) in Algeria as a whole and in Saida as a case study b) to check whether ESP is well implemented in training these employees regarding the trainers' qualifications, the training program and the employees' satisfaction then what obstacles the trainees face during their training. The study was conducted in Telecommunication field because investigators, particularly English researchers, have never investigated in this sector (according to the manager) though AT company is recently noticing a remarkable change in strategy to update its management to the progress of technology and to catch-up the path with the external environment of the telecommunication companies in the developed countries particularly with the English language which has at last been recognized as an important factor to success. Furthermore, talking about Telecom company management means talking about Information and Communication Technology (ICT) for the work of technical staff (the target respondents) is deeply related to ICT.

Hence, the research work comprised three angles: training EVP trainees who are supposed to work in L'Algerie Telecom as technicians and technical agents after graduation and this was previously studied in details. That is to mean that the present study is continuity in order to get a whole and complete investigation. The second angle was teaching EST students in the Computer Science department particularly those who are supposed to work in AT company as engineers and advanced technicians and this issue was studied in chapter two in order to have an insight on whether EST students studied English for Science and Technology or not. The third and major angle aimed to highlight two main points. The first perspective was whether employees in the technical body of AT Company needed to use English at the workplace. On the other hand, the need to integrate English in training the technical staff in AT company which include engineers, technicians and technical agents that is in-service training. The next figure illustrates the three focal points in conducting the present investigation.

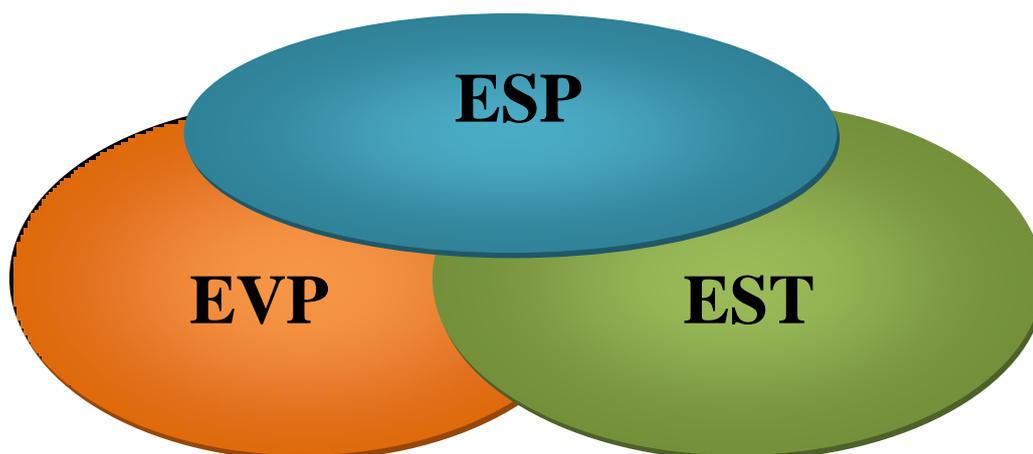


Figure 5.1.: The three Main Elements of the Study

For the methodology, a descriptive analytical case study was conducted and as the study was limited to L'Algerie Telecom Company so the case was single. Indeed, single case study seemed appropriate for this work in matter that data collected was much richer than using other experimental designs. Furthermore, an important factor to take into consideration was the context (Yin, 2003). In fact, the context of the present work was represented by a group of employees (technical staff) within an organization (AT ,company) and this assured what was argued by Yin; if the investigator wants to study one single thing (a person from a group) or a single group (a group of people) then a single

case study is the best choice (Yin, 2003). On the other hand, the respondents made up three categories: engineers, technicians and technical agents which enabled the researcher to look at subunits within this case study (Yin, 2003). Furthermore, case study is more suitable for real-life situations and this helped the investigator to get a deep understanding of the subject matter Dyer & Wilkins (1991).

In this vein, Creswell (2013:97) argues

“The case study method explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) overtime, through detailed, in-depth data collection involving multiple sources of information ... and reports a case description and case themes”

A combination of quantitative and qualitative approaches was adopted to collect the needed data. In other words a mixture of qualitative and quantitative methods (mixed method) was compulsory in order to gather academic and occupational data about AT employees English needs at the workplace and check whether they are satisfied with the English program they learnt in their in-service training.

Hence, four research questions were investigated in this work. Research question 1 concerned the type of English that AT employees needed to use at the workplace whereas research question 2 aimed to consolidate the first research question because if the use of English by AT employees was crucial then it is important to know whether they needed an English training or not. If they respond with “yes”, then there is a confirmation for the previous question and this paves the way to ask further questions. Yet, if the response is “No”, this means that there is a rejection for the first research question and the investigator may just report what he/she has discovered.

Research question 3, as an extension, aimed to highlight the suitability of the English training that AT employees underwent on one hand and on the other hand whether it enabled them to cope with any technological change in their company. The last research question was specifically stated to shed light on AT employees’ professional and psychological side. In other words, this question aimed to know in what way and to what extent the English training affected the respondents’ competencies, motivation and satisfaction. The next figure illustrates the grading of research questions in this study

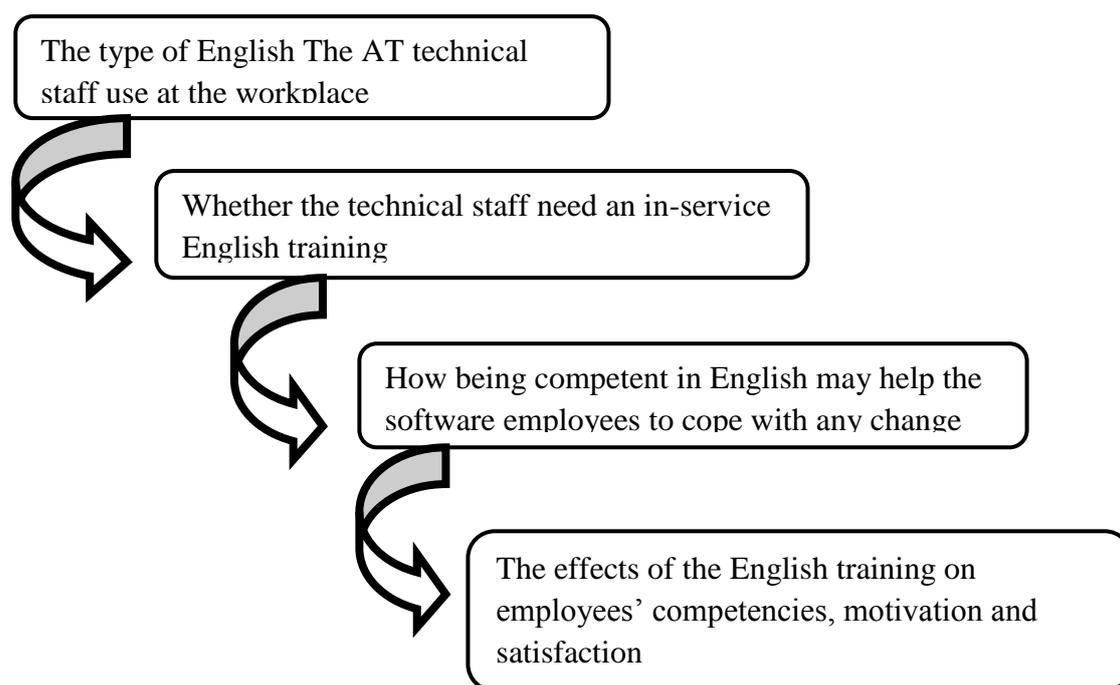


Figure 5. 2: The Grading of Research Questions

From the figure above, it can be noticed that the research questions of the investigation in hand are graded from the general to the most specific which represent the process of the deductive approach. The deductive approach which comprises theory, hypothesis, observation and confirmation Trochim & Donnelly, (2008) seems appropriate for the situation and context of this investigation.

As far as the instrumentation is concerned, a triangulation was needed to assure reliability. Therefore, four instruments were used to gather data: a) semi-structured interview was conducted with the responsible in charge of training employees in the target company b) another semi-structured interview was conducted with the employee trainer in order to have a deeper insight on the lacks of the English training if there were any and to shed light on the trainees needs and wants c) a questionnaire was addressed to the technical staff including engineers, technicians and technical agents and c) an insight on the administrative documents (of course what was allowed from the responsible) in order to check whether English for Specific Purposes was used in the training documents of AT company. Triangulation, in this case study, helped obtain much information about a subject that has long been unknown for people and this was another advantage for this research. According to Dyer & Wilkins (1991), the selected issue is important when the researcher is

able to understand the context of the subject in matter and describe it well that it can be understandable for the readers. Stake (1995), on the other hand, explains that case study is strong when it is easy for the readers to implement the findings of the study in their own situations. Indeed, the readers of the present investigation may be the managers of AT companies throughout Algeria.

5.3. A Discussion of the Research Findings

According to the current work, the analysis of data has revealed the following findings:

- ◆ The technical staff in AT company in Saida need to use English at the workplace.
- ◆ Since the setting is technical, the English used is English for Specific Purposes.
- ◆ English is, in addition to French, needed in the management of the equipment of the company.
- ◆ The target employees under-go an in-service English training.
- ◆ Implementing English in the training help employees improve their professional competencies and cope with any technological change that may occurs in their company.
- ◆ The respondents of the present work undergo three different types of trainings a) at the workplace b) in the institute c) abroad. Yet, they have complained about some difficulties and shortcomings among which:

√ The program that is taught in the institute is not specifically designed to satisfy the employees needs though teaching takes place and employees learn new things. Yet, it is still, according to them, too general. For example, they said that they learn different tenses of English like the simple tenses, the perfect tenses and the continuous tenses in addition to phonetics and issues as describing. Nevertheless, terminology takes the lions share. What employees lack in such in-service training is to improve their communicative skills.

√ Employees face difficulties with the Chinese and Indian trainers who are supposed to train them at the workplace. These trainers work is provided by the main partner of AT Company which is HUWAWEI. However, these non-native speakers speak incomprehensible English which stands as an obstacle for the employees as trainees to catch what they say. Moreover, their teaching is purely technical.

√ Training abroad is the most beneficial for the employees. However, this type of training is not offered to any employee that is to mean the choice of the employees is

sometimes unfair. Moreover, training abroad last for nine months and this period is too long for an employee to spend far from his/her family.

√ The lack of a suitable English program in the training their colleague undergo with them.

◆ Technical agents, in particular, said that their English competence remained the same which means that they are unsatisfied with what they learn during their training in matter of English skills and competencies.

◆ Technical agents cannot transfer what they learn academically to their occupational context which requires the design of a new program.

◆ The employees showed that their English skills were equally low. They complained about their low competency in the speaking and listening skills, they may understand simple descriptions with simple vocabulary. Yet, they cannot do it themselves. Employees also showed a low proficiency in the writing skill though this skill is not as needed as reading in their occupational context, it seems important to them.

◆ Indeed, what was surprising is the high degree of employees motivation in undergoing English training because they are aware of the importance English language plays in their occupational context, however being not satisfied with what they learn in their training may turn their motivation to aversion.

5.4. Recommendations and Suggestions

Actually, engineers, technicians and technical agents in AT Company undergo different types of workplace trainings in which three different methods are applied. The first method is learning through the on-the job training done by the HUAWEI trainers and through which the employees learn how to do the task while performing it. Such workplace training intends to improve the employees' professional skills. Yet, the means of communication between trainer and trainee which is the English language seems to be the obstacle that employees face during their training.

The second method is informational learning. This method is done through the discussion and guidance of employees and the colleague who is supposed to be their trainer. This latter is believed to be the most efficient way through which trainees can improve their knowledge and skills. Yet, the lack of a suitable training programs lies as difficulty for the trainer to fulfill her colleagues' needs, wants and interest.

The third and last method is training abroad. Unfortunately, only few employees could have the opportunity to undergo such training and we did not have the opportunity to meet

them. All what was said about this type of training was that the program was purely technical and trainees who got benefit from this kind of training were qualified in English.

Actually, each type of training AT employees undergo has proved advantages and has shown disadvantages among which the most important issue that the present study treats; it is the lack of an appropriate academic program. Yet, to reach a fruitful solution for such a serious problem it needs first to be studied in details and from different angles and perspectives. Then, a set of questions which need answers, explanations and clarification are asked so as to set up a background from which an effective program can be suggested ; what does a workplace training mean? What benefits does it bring to employees and their company? On what basis a training program should be designed?

5.4.1. Interpretations of Workplace Training

Accordingly, training employees at the workplace has gained the lion share of researches intention during the last few decades. In fact, training means the updating of employees knowledge and skills in order to improve their performance at their workplace. Several definitions have been stated by scholars such as Dale S. Beach who has defined training as *“the organized procedure by which people learn knowledge and /or skill for a definite purpose”*

On their side, David and Stephen see that training refers to *“A learning experience in that it seeks a relatively permanent change in an individual that will improve his or her ability to perform on the job”* (David & Stephen, 1989). In the same vein (Noe, Hollenbeck, Gerhart & Wright) define training as *“A planned effort that facilitates the learning of job-related knowledge, skill and behavior by employee”* (Noe et al, 2008).

What can be noticed from the previous definitions is that all scholars agree on that training employees' main targets are to enhance or update their knowledge and skills. Indeed, increasing employees' knowledge, skills and performance has been one of the fundamental strategies for companies in order to improve the quality of services they provide their clients with in order to gain their satisfaction and then ensure more and more success. Because training has been a crucial element for the development of the organization, scholars have used training and development interchangeably.

Krample and Pace, for instance, define training and development as the management of knowledge in order to strengthen employees' performance and to enhance the

organization's productivity Krempel & Pace (2001). Swanson and Holton, on the other hand, see that training and development is the process of developing knowledge and expertise that are related to employees' work in order to improve their performance (Swanson & Holton, 2001) while Goldstein and Ford affirm that training and development means acquiring new skills, rules, concepts and attitudes that enable employees improve their performance at their workplace (Goldstein & Ford, 2002). Nevertheless, training is distinct from development in both meaning and learning contexts. The next two tables clarify more.

Training	Development
<ul style="list-style-type: none"> • Training refers to learning new skills and enhancing knowledge in order to do job tasks appropriately. 	<ul style="list-style-type: none"> • Development is more concerned with developing employees' attitudes
<ul style="list-style-type: none"> • Training is specifically targeted to employees' skills 	<ul style="list-style-type: none"> • Development is generally aimed at the growth of the executives
<ul style="list-style-type: none"> • Training has short-term objectives like improving professional performance 	<ul style="list-style-type: none"> • Development has long-term objectives such as building future competencies
<ul style="list-style-type: none"> • Training is job centered in intentions 	<ul style="list-style-type: none"> • Development is career centered in intentions
<ul style="list-style-type: none"> • Training depends on the trainer's role and work 	<ul style="list-style-type: none"> • Development depends on the employee's awareness in accordance to the executive role in motivating employees

Table 5.1: Distinction between Training and Development

As the table above indicates, development encompasses training. That is to mean that after several and repeated successful trainings, development objectives may be attained. As for learning contexts, training differs from development in matter of

Learning contexts	Training	Development
<ul style="list-style-type: none"> • Intended for 	Operatives	Executives
<ul style="list-style-type: none"> • Focus on 	Job in hand	Future jobs
<ul style="list-style-type: none"> • Frame 	Individual employees	Groups or organization
<ul style="list-style-type: none"> • Target 	Current skills	Future work needs

• Initiate from	Management	The individual
• Content	Specific job tasks	General knowledge
• Time scope	Immediate feedback	Long term feedback

Table 5.2: Difference between Training and Development in Learning Contexts

From the table above, it is clear that in terms development is general whereas training is more specific. In other words, training concerns more employees than developments which concerns organizational demands.

From a historical perspective, training has been recognized as an important and needed strategy since world war II though it was conducted for the first time long time ago (since the 1800s). Since then, training employees has noticed a continuous and remarkable change in implementation, integration and ways of conducting. After the appearance of computerization, training has been crucially demanded by firms for the following reasons:

- ▶ The change that occurred in the organizational environment due to the use of technology.
- ▶ The invention of the technological equipments and the diversity among the same equipment
- ▶ Training helped creating good relations among employees in order to overcome their weaknesses at the workplace.
- ▶ To fill the gap between employees' needs with their jobs requirements on one side and their organization's demands on the other hand.
- ▶ After being assigned to a higher rank, employees had to be trained.

5.4.2. Benefits of Workplace Training

Due to the positive outcomes training at the workplace has brought to many companies, it has been considered as an important strategy in the management of the stakeholders. This way, both employees and company can get various benefits. Yet, what are the main benefits workplace training may ensure?

√ For employees

Accordingly, employees who are known as human resources represent the focal factor that help the organization realize its short term and long term objectives. Yet, this cannot be reached unless employees are potentially improving new knowledge, good skills, professional performance and positive attitudes. All these characteristics can be reached

through in-service training. Besides, employees can realize many benefits as Cole has stated some of them:

▶ Due to workplace training, employees may have high moral; that is to mean they may be both more motivated and more confident.

▶ Training enables employees to reduce waste; in other words they are well trained to make better economic use of the equipment and this is the case of AT employees.

▶ Trained employees feel that they are more secured and this results in less labor turnover and absenteeism.

▶ It is noticeable that telecommunication is in a continuous and rapid change. Hence good workplace training helps employees acquire new skills and abilities in order to adjust to new situations.

▶ Trained employees get benefit from promotions and increased pay.

▶ Training provide employees with high qualifications.

To sum up, the more employees are trained and involved in the training process the better the management will be.

√ **For company**

▶ Competent human resources that leads to employee retention by the organization. Hence, there would be a stability in the organizational environment.

▶ More improved quality of products or service and this would help the organization gain more customers.

▶ An increase in the productivity of the organization which results in high sales and then high salary for the employees.

In short, training employees at the workplace is no more a waste of time as some managers still think. Whatever the type of training adopted is, it has become a MUST in any organizational context. In this vein, Hentit Nabila states that the training “may be pre-service or in-service, in special institutes or with E-learning solution” Hentit Nabila (2015:54)

As far as AT Company is concerned, it is not a matter of just training employees yet, the training process, in order to be effective, requires a good and qualified trainer, a manager that gives more importance to provide the needed material, the suitable timing, the suitable English program that suits employees’ demands and the core element which is the employees. Nabila adds “the aim is not looking only at the language, but also at becoming more effective in learning this language” Hentit Nabila (2015:54)

5.4.2.1. Trainer's Role

Actually, the telecommunication field is deeply related to the use of the Internet, then training employees there requires a good training based on providing the trainees with a flexible learning. As a matter of fact, the trainer has a set of roles (he) has to play in order to attain the desired objectives. Indeed, there is a similarity between the teacher and the trainer in that they both work in a teaching/learning context yet what differs is the age of the learners (young/adult) and the environment (class/workplace). Therefore, the trainer, more than the teacher's tasks, has extra tasks to do. It was previously mentioned in this investigation that the ESP teacher's role should vary from researcher to syllabus-designer and material-provider to collaborator, teacher and evaluator (Dudley Evans & St John (1998). Besides, the trainer has to master a set of skills and competencies in order to integrate ICT in his teaching. Hence,. In the same view, Santandreu (2009: 20-21) suggests the following roles for a good teacher/trainer:

► **Information Consultant:**

- Search for the needed information
- Give the trainees the support (websites) to access information
- Adopt and adapt the learning context (e.g. the media)

► **Course Planner:**

- Diagnose both individual and group work
- Search, select, filter and organize the technological content

► **Syllabus Designer:**

- Design the syllabus
- Design a learning content that comprises IT
- Integrate ICT as a basic element

► **Manager:**

- Manage the training environment
- Provide a suitable teaching/learning atmosphere

► **Life Long Trainer:**

- Keep contact with company environment
- Collaborate with other trainers to share experiences

► Resource Facilitator:

- Search for varied contents
- Adapt the course content to the level of the trainees

► Developer, Adapter and Material Creator:

- Design, provide and use the material for a virtual environment
- Prepare the suitable tasks for such an environment

► Trainee's Motivator:

- Encourage trainees to seek for knowledge
- Motivate them to realize new tasks and foster discoveries
- Support them during their learning process

► Task Developer

- Train learners to use the technological devices effectively and efficiently
- Encourage them to use ICT in their learning
- Help them in the resolution of technical problems that are related to ICT

► Group Collaborator:

- Encourage trainees to collaborate with each other
- Encourage them to work in groups

► Academic Supervisor:

- Ask the trainees to prepare written academic projects
- Supervise them and provide them with feedback

► Evaluator:

- Evaluate trainees' oral and written practice
- Encourage them do peer-evaluation and self-evaluation

5.4.3. Criteria of Designing a Workplace Training Program

On the other hand, getting benefits from workplace training is not limited to employees only, the company or organization also gets a number of benefits among which are the following:

- ▶ Training employees embitter their performance at the workplace and this leads to increase the productivity of the company.
- ▶ It also insures the company's ability of competitiveness and keep a good position with similar companies.
- ▶ Positive effects of employees' performance on organizational performance (Guest, 1997; Swart & Duncan, 2005).
- ▶ Training outcomes reveal employees feedback and then help their organization know whether they are highly qualified or they need molding in matter of skills, performance and attitudes.
- ▶ Training employees help them perform well and this facilitates for the company reach both short term and long term goals.
- ▶ Training the employees by involving them in the process of planning and undergoing training creates a positive relationship between employees and their company which results in improving good performance.

The above stated benefits are some of so many benefits that any company can achieve from training its employees. Therefore, training is no more an operation but a policy and a strategy that needs planning. A good planning insures a beneficial training and then positive outcomes for both employees and company.

For the present case, training software employees to improve their English knowledge, skills and competencies requires a good and detailed program. The planning of the English program should firstly be based on the needs of the staff and secondly on the demands of the company and since the tasks that are related to the target employees are completely related to computer science then a set of measures should be taken as bases to launch an effective English program, the measures are as follow :

- a) Training this sample should be based on Information Communication Technology (ICT).
- b) A task-based program derived from ICT is going to be suggested.
- c) An adoption of an effective program that foreign AT companies use in training their employees and that program has improved successful outcomes.
- d) Increasing employees' motivation, competence and satisfaction in order to ensure good performance at the workplace. The next figure illustrates more

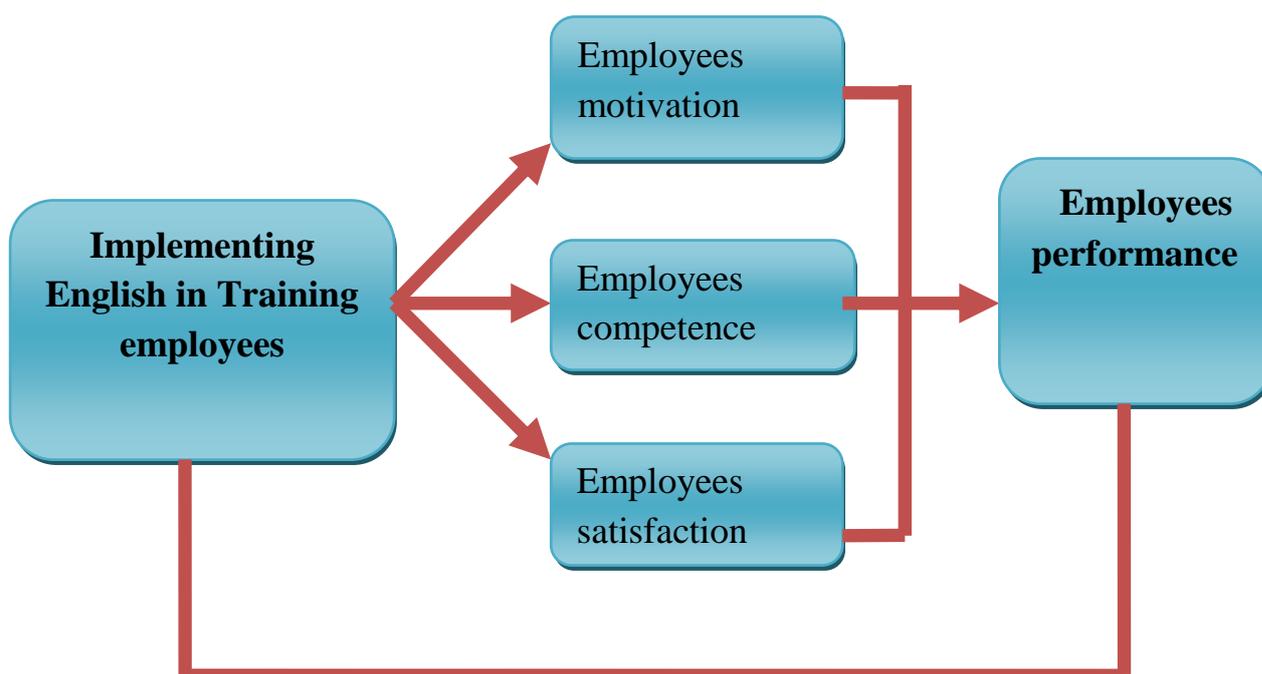


Figure 5.3: The Conceptual Research Framework of the Study

However, before starting applying these three strategies, a needs analysis is crucially important at the start and the employees must be involved as a partner. Needs analysis, as Brieger claims « *will set out to identify the range of general and specialist language knowledge required together with general and professional communication skills* » (Brieger, 1997 , cited in Dudley-Evans and St John, 1998 :58).

In the same perspective, Richards and Schmidt (2010) state that needs analysis is

The Process of determining the needs for which a learner or a group of learners require a language and arranging the needs according to priorities. Needs analysis makes use of both subjective and objective information

Basturkman (2010 : 19) clarifies the definition and confirms that

Needs analysis in ESP refers to a course development process. In this process the language and skills that the learners will use in their target professional or vocational workplace or in their study areas The information obtained from the process is used in determining and refining the content and method of the ESP course

The next figure illustrates a sample of successful needs analysis for AT employees

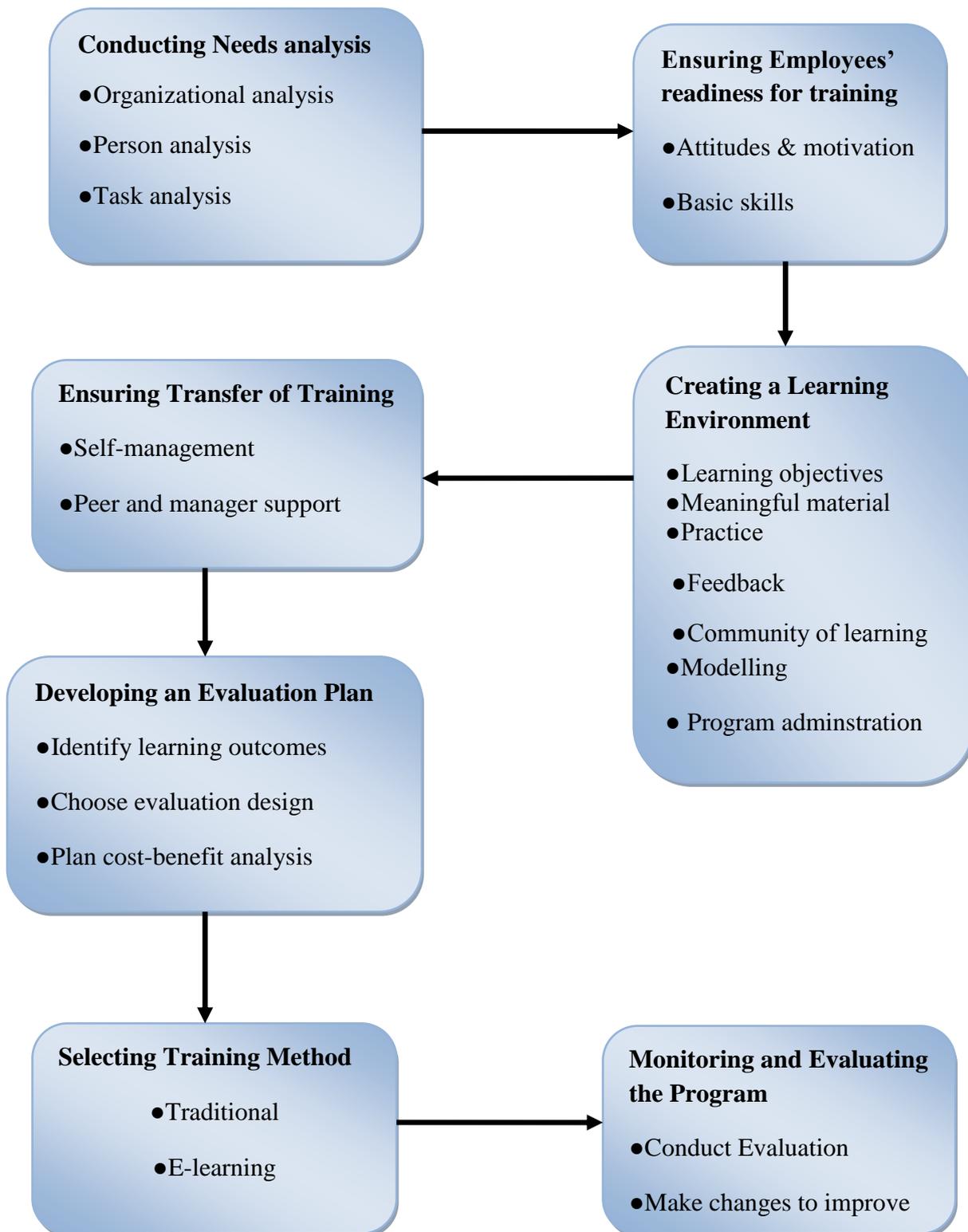


Diagram 5. 1: Needs Analysis in an Organizational Setting

Modified from an Internet site

As the figure above indicates, to conduct needs analysis in an organizational setting it requires a set of steps that are compulsory. Firstly, assess the needs according to the organizational context, the employees or the tasks that are related to them. Secondly, to ensure that the employees who are concerned with the training are ready for that training. In other words, whether they demonstrate high motivation and positive attitudes towards the training. Thirdly, the need to create a suitable environmental setting for the training through stating the objectives to achieve, the needed materials, designing the program and adopting the suitable type of evaluation. Fourthly, deciding about the form of the training; whether individual, in pairs or in groups.

The next step is designing the evaluation plan which would help assess the learning feedback of the trainees and analyse the cost-benefits of the organization. After selecting the type of the training to undergo whether traditional or E-learning training, monitoring and evaluating the whole program is the final step. During this step, the designers and trainer scan and evaluate the whole training program they have adopted and then decide about the changes to be made in order to improve the next training program.

As mentioned previously, the suggestions stated above need explanations and to start some questions require answers some of which are: what is ICT? How can learning ICT serve the needs of both the trainees and the company? And what benefits can teaching ICT bring? All these questions will be studied in details.

5.5. Definition of Information Communication Technology (ICT)

ICT or Information Communication Technology refers to the use of the digital technology comprising tablets, mobile phones, computers, etc to do the work. In this vein, Sakar (2012) gives a simple definition and states that « Information and Communication Technology consist of the hardware, software, networks and media for collection, storage, processing, transmission and presentation of information (voice, data, text, image) as well as related services » (Sakar, 2012 : 32). From another side, Marcelle argues that ICTs are « a complex and heterogeneous set of goods, applications and services used for producing, processing and transforming information » (Marcelle, 2000 :1).

Therefore, ICT use in the occupational setting helps enhance their technical abilities, performance and professional skills including English skills since it dominates the fields of Information and Communication Technology. On the other hand, ICT stands as an

umbrella of two components as Sakar (2012 :30-31) states « ICT s can be divided into two components : Information and Communication Infrasructure (ICI) and Information Technology (IT). The former refers to physical telecommunication system and network (cellular, voice, mail, radio & television) while the latter refers to hardware and software of information, collection, storage, processing and presentation »

From what has been explained, it is now clear that ICT is crucially required in training AT employees since their work is completely connected to ICT. Actually, ICT can serve AT employees in enhancing their English competency because who does not have a background in English cannot master ICT. Therefore, having an English competency would facilitate for the employee to be competent in using ICT at the workplace. Moreover, integrating ICT in training AT employees would help the organization to have a high quality of workers which leads to increase its productivity. Hence, learning ICT would lead to hit two birds with a stone ; having competent employess and increase the revenue of the company.

5.5.1. The Most Needed English language Skills

Although the respondents explained that they needed to master the four skills, the investigator recognized that it was a way to express their interest to learn English language. Besides, it was understood from the obtained findings that there was a crucial need for the reading skill in their occupational context. Indeed, it was clear from the interview results and the questionnaire responses that reading was more needed at the workplace particularly for engineers and technicians who are supposed either to read notices and instructions in English or to translate them in order to apply them on the equipments for that reason, one of the most important points to take into consideration in training these employees is to train them how to read, understand and interpret the content of an English passage. To do so, they should acquire the cultural and linguistic knowledge of English context in text related to their field of expert Fernandez Guerra (2014).

a- The Need to Integrate Translation

Translation, on the other hand, is considered as “the fifth skill” that AT employees ought to master. Though, it had been rejected in teaching for a long time as it was considered as Grammar Translation Method tool, translation has come back to surface during the last few decades due to the rapid spread of English for Specific Purposes in all fields. Particularly after researchers in the field of teaching have recently recognized that

there is a relationship between translation and foreign languages teaching (House, 2001; Colina, 2015)

Therefore, integrating translation in training AT employees would certainly have positive effects on the psychological side of the trainees since it is seen as a facilitator component within learning ESP. Indeed, translation may be introduced through teaching terminology as a starting phase then trainees may be exposed to translate a statement and then a short passage from and to English. Hence, translation is a more practical task than theoretical and it is more useful in promoting reading comprehension and improve their English writing.

b- The Need for an Appropriate Academic Program

The questionnaire which was addressed to the employees revealed that there was complaining about the training program which was not alienated to their occupational needs though a well designed English program would help the respondents overcome their weaknesses as it aims to improve the following:

- √ Consolidating syntax and grammatical structures through tasks.
- √ Enriching the general English repertoire with more vocabulary and acquire more specific concepts in the field of telecommunications.
- √ Practice of reading, analysis and synthesis of various media on telecommunications.
- √ Practice of oral presentation and description of materials.
- √ Describing programs and their functions.
- √ Writing e-mails, summarizing texts and writing final reports.

From another side, employees complaints maybe because of the lack of Needs assessment from one side and the lack of implementing an effective training model though there are several models (which have improved successful results and outcomes) that are adopted by different organization all over the world. Hence, the target of the present study is to adopt one of these models and adapt it to suit the context of the respondents and their workplace environment.

5.6. The Most Practical Training Models

Throughout the last decades, training has attracted the attention of experts in many fields such as industry, business, management, engineering, accounting, ...etc and due to

the distinct environment of each field, different types of training models have been created, adopted and adapted. The most famous and successful models are stated below:

- ADDIE Model
- Instructional Systems Design Model
- Human Performance Technology
- Performance-Based Training Design
- Kirkpatrick's Evaluation Model

Each model of the stated training models has advantages and limitations, then a definition for each type is stated in addition to the benefits and the drawbacks it brings to both employees and their company then what seems perfect for the target company which is L'Algerie Telecom will be selected. The models are studied one by one as follow:

5.6.1. Instructional Systems Design Model (ISDM)

Instructional Systems Design, which acronymed (ISDM), is a kind of training which starts by applying various types of assessments in order to establish a number of determined goals. These goals are established to address the outcomes of the final evaluation of the workplace training. The next table indicates the benefits and the limitation this model may bring after it is being implemented.

Benefits	Limitations
<ul style="list-style-type: none"> ▶ Implies effective and functional instructions. ▶ provides accordance among objectives, tasks and assessment during the training. ▶ Ensures effective learning. ▶ Realize systematic framework. 	<ul style="list-style-type: none"> ▶ Very linear ▶ is not fruitful in every context and for every problem ▶ Consumes time to implement ▶ Requires many resources.

Table 5.3: Advantages and disadvantages of ISD Model

5.6.2. Human Performance Technology (HPT)

Human Performance Technology or in short HPT tends to compare between the present and the desired levels of employees on the one hand and the organizational performance on the other hand. The comparison helps identify and determine and build the gap between the

two levels. Then, if it is done successful the training process is designed and developed. Moreover, for this type of training, evaluation is done at three phases: formative evaluation, intermediate evaluation and final evaluation. As any other type of training, Human Performance Technology has positive and negative sides.

Benefits	Limitations
<ul style="list-style-type: none"> ▶ Helps improve employees' performance. ▶ Specifies the needed requirements to develop and promote employees ▶ Has a systematic evaluation 	<ul style="list-style-type: none"> ▶ Is costly ▶ Is considered as a performance appraisal system by most organizations and not an improvement system ▶ Is seen as an imposed training by employees ▶ Trainees are themselves responsible for implementing and assessing the effectiveness of the performance.

Table 5.4: Advantages and disadvantages of HPT Model

5.6.3. Performance-Based Training Design (PBT D)

Like the previous stated models, Performance-Based Training Design aims mainly at improving employees' performance at their workplace. This model comprises seven elements that make up the framework of the training design Purcell (1989). The components are:

√ **Program description** implies the purpose for which the program is created, the level of the trainees for whom the training program is designed, the length that suits the period of training, the setting in which the training takes place and the type of the trainees who will undergo the training.

√ **Content analysis** refers to the specific content that is intended to be taught. It focuses on the behavior and cognitive behaviours of the trainees Purcell (1989)

√ **Content selection** indicates the needed information by the trainees (what they want to know) in addition to the variety of the process (es) to be used in training.

√ **Content sequencing** refers to the strategy to be used in teaching. In other words the sequencing of the instructions from the beginning to the end of the training sessions. For

instance, in computer science field, the trainee should learn how to operate a computer before learning how to maintain a database with a computer.

√ **Lesson structuring** comprises the timing of each session.

√ **Lesson delivery formatting** refers to the way the lesson is taught and feedback is conducted (methods, materials). This simply means the lesson plan.

√ **Evaluation feedback procedures development** is done through different means such as self-checks, questionnaires or observation.

The main purpose is to determine whether the lesson has been well structured or it needs some changes. The next table indicates the advantages and disadvantages of this model.

Benefits	Limitations
<ul style="list-style-type: none"> ▶ Has clear objectives and outcomes. ▶ Increases the awareness of the trainees' expectations. 	<ul style="list-style-type: none"> ▶ The possibility of the failor to attain the learning objectives in case trainees are not motivated learners.

Table 5.5: Advantages and Disadvantages of PBT Model

5.6.4. Kirkpatrick's Evaluation Model

Kirkpatrick's evaluation Model was established for the first time in 1959 by Donald Kirkpatrick, then it was updated in 1975 and once again in 1993. In 2016, it was introduced by Donald's son and his wife in a book entitled "Four Levels of Training Evaluation" in which, the authors suggested four basic levels to apply this type of training: Reaction, Learning, Behavior and Result. The next table introduces the main aspects of this training in matter of advantages and drawbacks

Benefits	Limits
<ul style="list-style-type: none"> ▶ Evaluates both classroom training and e-learning ▶ Provides an effective structure and process to evaluate trainees' learning ▶ Gives managers a clear insight on what should be kept modified or 	<ul style="list-style-type: none"> ▶ Time consuming ▶ Costs money ▶ Demands too much efforts ▶ Is not successful if the managers do not apply it seriously ▶ May result in a financial loss if it is not

<p>changed.</p> <p>► Offers a deep understanding of the effects of all types of learning.</p>	<p>evaluated</p>
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Table 5.6: Advantages and Disadvantages of Kirkpatrick Model

According to Branch and Merrill (2011), in order to be applicable any suggested training model should consist of the following points:

- Clear and well defined objectives
- Feedback that can be measured, reliable and valid
- Empirical data that should serve a basis for the whole process
- Team work that is required for the designing phase.
- Real-life behaviors of the trainees so that they can be able to solve real-life problems

Each model is explained next in details and then it would easy either to adopt and adapt one or some of the models for the case of the software employees of AT Company (the case of the present research) or suggest a new model that would be inspired from the previous models with some new changes.

5.6.5. ADDIE Model

ADDIE is an acronym that stands for five concepts:

- √ Analysis
- √ Design
- √ Development
- √ Implementation
- √ Evaluation

Indeed, ADDIE refers to the five stages that make up the training process. From the name itself, it can be understood that each stage is classified in that clear order so that it cannot change position. That is to mean, if we refer to stage three in ADDIE, we then talk about development and we do not talk about any other stage. Besides, these five stages make a circular pattern so that when applying them in training employees, they may be repeated several times till the employee reaches his target. Hence, when the required feedback is attained, then the final target of the training process is reached. The next figure shows how ADDIE model is shaped

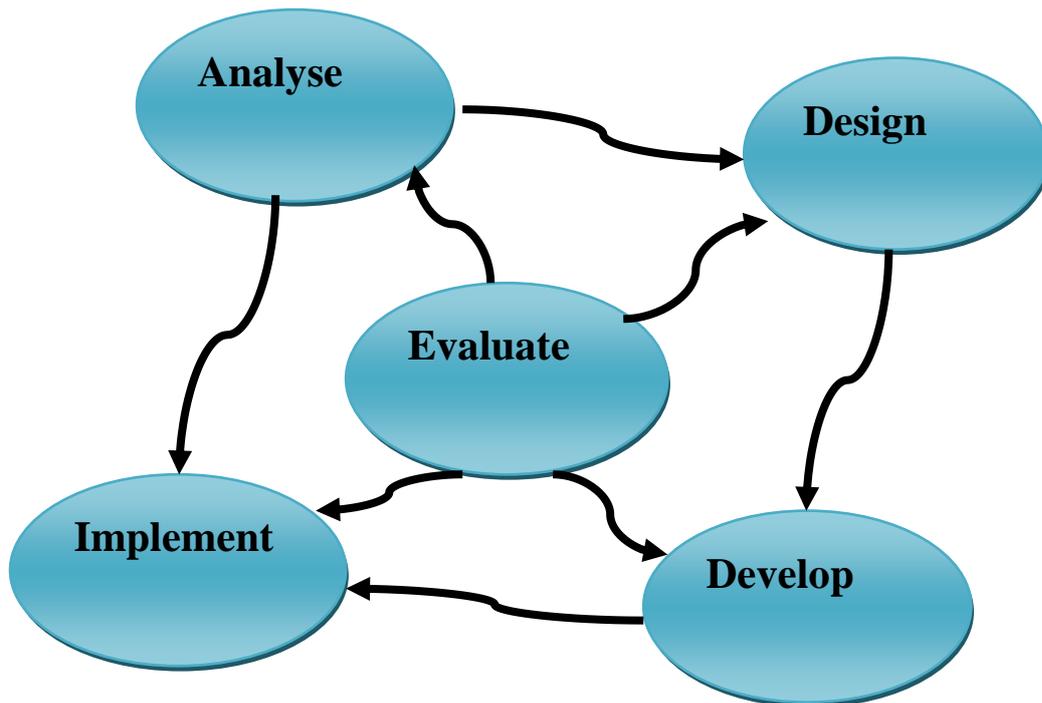


Figure 5.4: The Five Stages of ADDIE Training Model

From the figure above, it is clear that the first four stages which are analysis, design, development and implementation are followed by each other whereas the fifth stage which is evaluation is located in the center and has a relation with all the other stages this means that each stage can be evaluated on its own and this is called formative evaluation. Besides, there is another evaluation that is done by the end of the training that is to mean when the four phases are done, this evaluation is called summative evaluation. Yet, what each stage mean?

- **Analysis** is the first stage that trainers/designers step towards creating a training program. In this phase, it is very important to put some questions as background in order to launch the model in the right way, the questions are:

Why is training needed?

Who is supposed to be trained?

What should be the content of the training program?

Where will the training take place?

When will the training take place?

How will the training be processed?

Therefore, asking such questions may facilitate gathering the needed content in order to set up the suitable needs analysis that would be conducted with the employees as a first step.

- **Design**, which is supposed to be the second step, means to be aware about the reason for which the workplace training is designed. In other words, it helps create the blue print in order to build the courses outlines.

- **Development** refers to the phase in which the training is developed out either through an e-learning or a face to face learning or a video learning course. Hence, using these three ways of training, employees would learn different organizational processes, systems, policies and skills.

- **Implementation** is the practical phase, it refers to the performance of the training towards the target audience which is the employees.

- **Evaluation**, which means the assessment of all what has preceded, helps know whether it works or not. It does not evaluate the employees only but it also assesses the training courses as well. In addition to the evaluation, there is also the matrices matter which shows the period the training has lasted, what the employees have acquired during the training period and whether the training which has been offered to the employees is useful and up to their jobs or not.

From another perspective and in order to better explain the ADDIE training, we need to know what ADDIE is not. Indeed, ADDIE is not a process, it is rather a basic work that can be processed in many different ways but it depends on the field it is used for. In fact, there is process for every single project. As for AT Company, it needs a specific process different from other processes but has the same common background which is ADDIE. Moreover, the choice of ADDIE model has not been randomly done. Indeed, there are a number of factors, stated by scholars, and that helped the researcher in her choice:

According to Culatta and Kearsley (2019a), instructional design models are considered as guidelines or frameworks adopted by organizations in order to make up the process of creating the training programs and activities as practice for the benefit of the employees. In fact, the ADDIE model is seen as the best known compared with all the other models..

Besides, Gagne, Wager, Golas & Keller (2005) argue that ADDIE is an iterative or circular process that is advantageous because of its flexibility. In other words, this model

may change according to the needs of each instructional design. They add that ADDIE may be used as a chain where the end of each phase becomes the beginning of the next phase which means that it can be used in sequences (moving forward or backward). As far as the evaluation phase is concerned, ADDIE comprises two types of evaluations:

- **Formative Evaluation** which occurs after each phase so as to evaluate the outcomes of that phase and
- **Summative Evaluation** that occurs at the end of the design project in order to examine the effectiveness of the overall process.

The next figure illustrates what has been explained

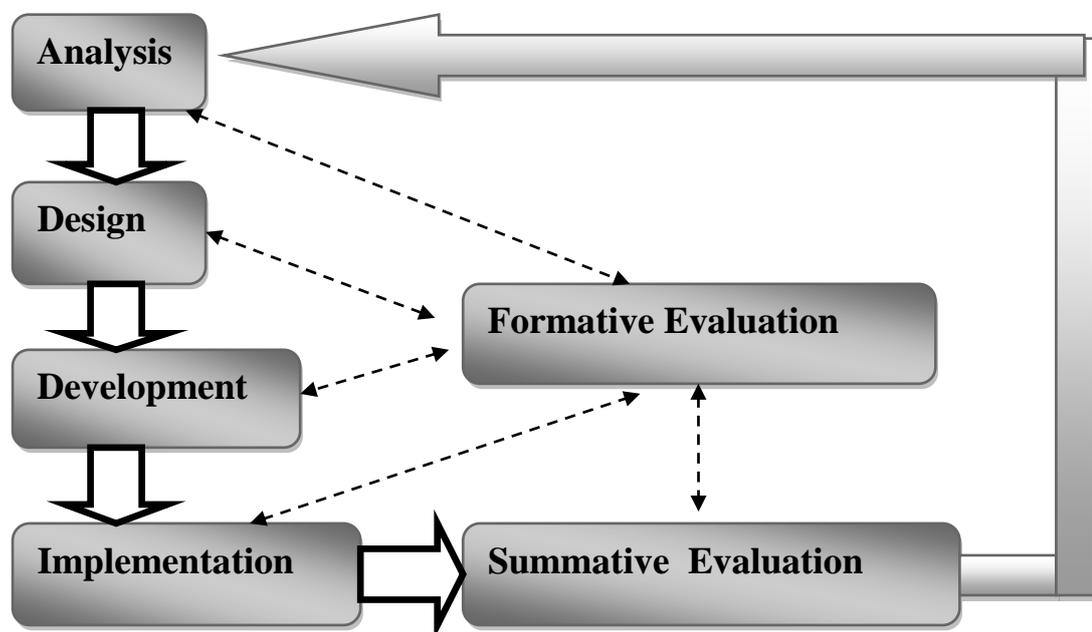


Figure 5.5: Formative and Summative Evaluation in ADDIE Model

From the figure above, it is clear that ADDIE is more advantageous than other models in that the user can evaluate each phase aside using formative evaluation and then ensures the progress of the project phase by phase (Molenda, 2003) and by the end of the process a summative evaluation can be done to test the whole process.

5.6.5.1. History of ADDIE Training Model

Indeed, ADDIE has existed since World War II when the “US military faced the need to rapidly train large numbers of people to perform complex technical tasks from field-

stripping a carbine to navigating across the ocean, to building a bomber” (Culatta, 2018). ADDIE was then inspired from the stimulus-response approach which was established by B.F Skinner and which was based on the theory of Operant Conditioning.

Hence, training people was done by breaking large tasks into sub-tasks which were taught in isolation and with a direct reward performance was successfully reached. This training protocol demonstrated that learners could master their tasks so long as enough repetition and feedback was made available (Culatta, 2018). After WW II, the use of this model switched to business through workplace trainings and teaching as a model for teaching multi-step processes such as the Center of Educational Technology at Florida State University in 1975. Today, the ADDIE model is known, as Culatta (2018) argues

the generic process traditionally used by instructional designers and training designers. The five phases – analysis, design, development, implementation and evaluation – represent a dynamic, flexible guideline for building effective training and performance support tools

Therefore, ADDIE seems a good model to be adapted and adopted for the sake of training AT engineers, technicians and technical agents in order to ensure effective and successful English workplace training. Next is the fruit of the study in hand, it is a full syllabus design which is suggested to be tried in L’Algerie Telecom Company of Saida for the benefit of the software employees.

5.7. Designing an English Syllabus

As ADDIE is considered as an instructional design which employs a process-based approach Molenda (2015), it is adopted in this investigation so that AT employees improve their English skills at the workplace. Hence, the choice to adopt ADDIE for software employees would be beneficial for them as this model is more learner-centered than teacher-centered Peterson (2003). Learners are more involved in all the phases of ADDIE. Starting from the analysis phase in which the trainees conduct an assessment of their needs and decide about the choice of the content of the syllabus their trainer is going to design later. This way, the trainees are highly considered in the syllabus design. Indeed, the design of the syllabus which is supposed to cover various aspects such as courses content, learning objectives, final goals, needed material and assessment. Next figure shows the basis on which syllabus designed should be based

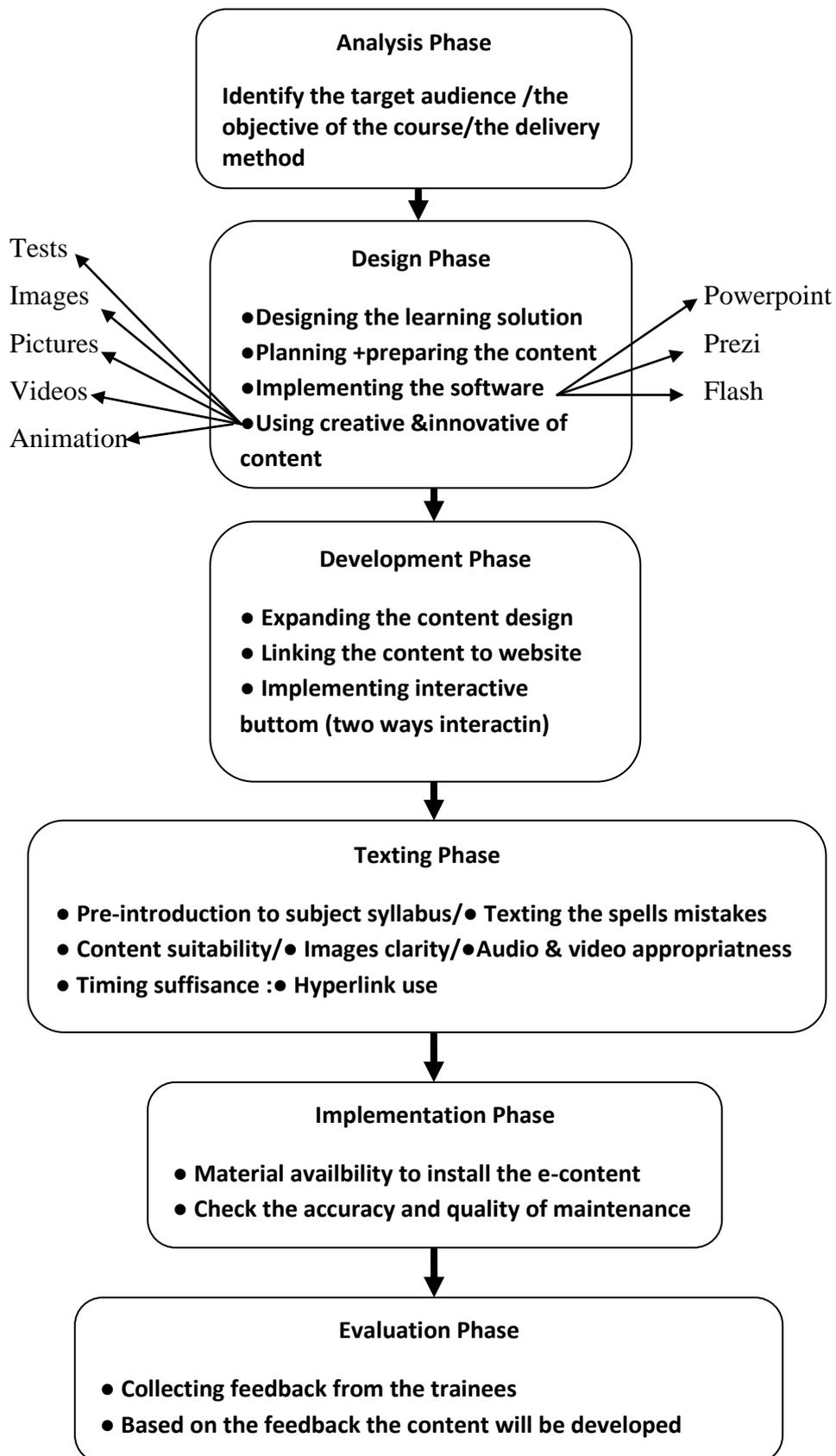


Diagram 5.1: Syllabus Development Based-on ADDIE Model (Aldoobie 2015)

As far as AT employees are concerned, since the course book is available (CRM TTT Training Material), it needs to be adapted according to trainees needs and demands then a set of courses should be developed from the designed syllabus. The courses also need to be planned according to the leaning objectives, that is to mean the choice of the content and the tasks which should be varied within the same course and from one course to another course In short, the major aim of designing the syllabus is to enable the trainees to acquire knowledge in their field of expert and improve their English skills so as to be competent in both spoken communication and written communication in the Telecommunication field

5.7.1.Designing an English Course

The figure below represents a sample of course design

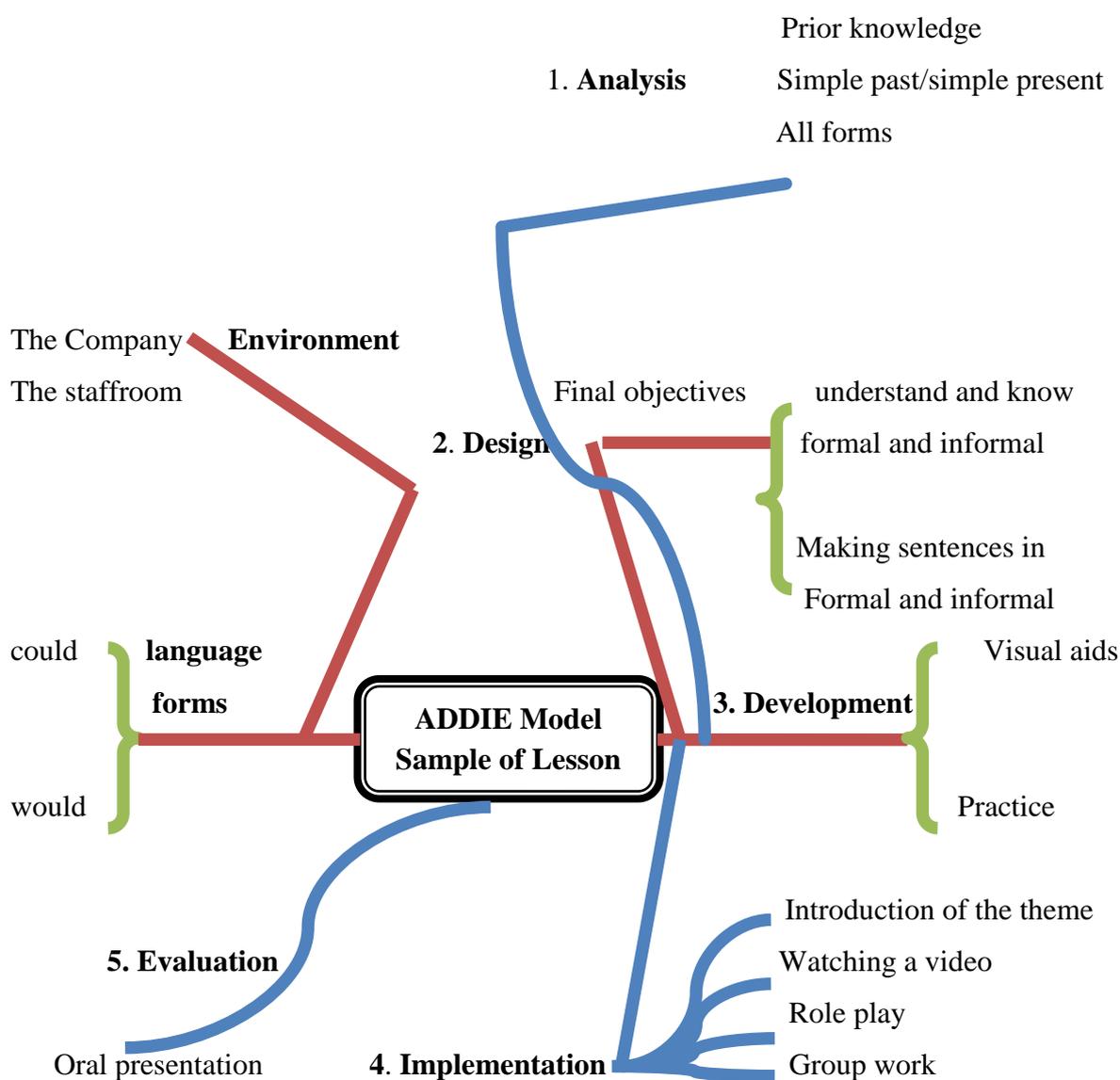


Figure 5.6: A Sample of Lesson Plan for AT Software Employees (adapted from the internet)

After the syllabus skeleton has been defined and illustrated in the previous figure, it is also necessary to highlight the lesson plan which is equally important for the trainers of AT employees so as to overcome any difficulty that may occur during the training course.

After having suggested an outline of both syllabus design and lesson plan based on ADDIE model, it is important to point out the implementation of both written communication and spoken communication within the syllabus content. Indeed, both types of communication may appear in isolation or together in different forms such as formal lectures, business letters, notes, messages, computer dialogues, etc. Hence, it is of crucial importance to integrate both spoken and written communication in teaching AT software employees. One may ask what is spoken or written communication useful for in the case of the respondents of the present investigation.

5.7.1.1 Written Language

This type of communication refers to the transfer of any information written or documented such as memos, business letters, reports, research papers, etc. Hence, written communication is generally needed when either conveying a message and this requires careful care about the content. In other words, one has to be competent to write a clear and correct message or receiving a message and this requires reading it repeatedly till the message is understood. In the case of software employees, to improve their English written communication they should have competency of two skills: reading skill and writing skill. Next table demonstrates some fruitful tips for the respondents of the present investigation in order to improve effective reading and writing skills.

Reading skill	Writing skill
<p>Be able to</p> <ul style="list-style-type: none"> ● Read and understand any passage ● Grasp the main ideas ● Decode the key words ● Analyse the whole and detailed meaning ● Interprete the passage in their own ● Summarise the passage in their own ● Report the general ideas of the passage 	<p>Be able to</p> <ul style="list-style-type: none"> ● Use short and familiar terms ● Use short sentences and paragraphs ● Use technical words with caution ● Use active voice ● Avoid unimportant terms ● Avoid discriminatory words ● Practise more task-based approach

Table 5.7: Main tips to develop Employees' Reading and Writing Skills

5.7.1.2 Spoken Language

Actually, spoken communication is the transfer of information between two or more persons by means of verbal or visual materials for example oral presentations, debates, discussions, speeches etc. Therefore, effective spoken communication at the workplace may be helpful when AT engineers participate in international conferences or when their company organizes a conference in which foreign participants take part. Moreover, engineers may be asked to do oral presentations in seminars or meetings which requires a good communication in the form of two ways or face to face. To enable the employees to improve good spoken communication requires the competency of two skills : listening skill and speaking skill. The next table shows some fruitful tips in order to ameliorate AT software employees listening and speaking skills

Listening skill	Speaking skill
<p>Be able to</p> <ul style="list-style-type: none"> ● Listen to telephone conversations + practice ● Listen to face-to-face conversations + practice ● Listen to an expert instructions + apply ● Listen to the trainer + practice <p>listening comprehension</p> <ul style="list-style-type: none"> ● Listen to a colleague + do the tasks ● Watch and listen to a native speaker (use of video) 	<p>Be able to:</p> <ul style="list-style-type: none"> ● Memorize a dialogue between AT employee and client ● do Role play ● Report about a presentation ● Do an oral presentation ● Ask questions to a native speaker ● Respond to others' questions ● Comment on others' work (when someone solve a technical problem)

Table 5.8: Main Tips to Develop Employees' Listening and Speaking Skills

5.8. Suggestions of Syllabus Design and Effective Tasks

As has been mentioned before, the telecommunication stakeholders in Algeria have at last made a call for English workplace training for the benefit of their software employees. Yet, the lack of an appropriate English program lies as an obstacle to get a satisfactory feed-back from the trainees. Thus, this research work intends basically to suggest a suitable English syllabus design based on trainees needs, wants and interest on the one hand and

useful for the company benefits on the other hand. It is followed by a set of effective tasks as practice to reinforce their English skills and enrich their English knowledge.

Accordingly, English in telecommunication requires learning both general and specific (technical) issues so that the trainee may be able to express him/herself in English and use correct technical terms.

Next, an English syllabus is suggested comprising files, topics, language forms, competencies and professional skills, tasks and visual aids. The topics were adopted from (silohelp.com/telecommunication-engineering-course-design) and then adapted.

File	Topic	Competencies & professional skills	Tasks for oral & written practice	Language forms	Supports
01	Transmission of information electronically	<ul style="list-style-type: none"> • Be able to judge the suitability of the various services and standards of electronic information • Be able to analyse a case study, investigate alternatives, and formulate and justify the chosen solution • Be able to learn & apply the Operating Support Systems (OSS), cable services and IP multimedia systems 	<ul style="list-style-type: none"> • Multiple choice + justification (oral) • Analyse the given case then suggest a similar one (written) • Look at the chart, read the instructions then apply (practical) • Send a message through (face book & twitter) 	<ul style="list-style-type: none"> • Simple present (all forms) • Discourse markers • Cause & effect (because, as, since, so, as a result) • Pronunciation (s/z/iz) 	<ul style="list-style-type: none"> • charts • texts • PCs • Board
02	The cellular concepts	<ul style="list-style-type: none"> • Be able to learn, understand & explain expressions and vocabulary 	<ul style="list-style-type: none"> • Use the dictionary to find the definitions/ equivalentents or 	<ul style="list-style-type: none"> • Active and passive voice • Prefixing adjectives (dis, 	<ul style="list-style-type: none"> • charts • websites • texts

		<p>related to techniques & technologies used in telecommunication</p> <ul style="list-style-type: none"> • Be able to use vocabulary of high speed communication technologies • Study theoretical requirements of telecommunication technologies and services 	<p>antonyms (oral)</p> <ul style="list-style-type: none"> • Seek relevant information on the web (written) • Compare and contrast (components, services, items) 	<p>un, in, il, ir, im)</p> <ul style="list-style-type: none"> • Suffixes (full, less) • The imperative (review, advice, recommendation, instruction) • Pronunciation (t/d/id) 	<ul style="list-style-type: none"> • audios
03	Cellular mobile Networks	<ul style="list-style-type: none"> • Be able to understand & interpret information networks • Be able to present & explain how to specify, build & manage a telecommunication network • Be able to select & recommend the appropriate technology for a given situation • Study the VPN (Virtual Private Network) 	<ul style="list-style-type: none"> • Express the ideas in your own words (oral) • Turn the diagram into a passage & vice versa (written) • Make recommendations and instructions 	<ul style="list-style-type: none"> • phrasal verbs • Sequencers (first, next, ...) • “ing” form after verbs • Silent letters (k/w/l/b/n) 	<ul style="list-style-type: none"> • Emails • videos • PCs
04	Mobile & wireless communication	<ul style="list-style-type: none"> • Be able to evaluate and describe main 	<ul style="list-style-type: none"> • Describe the following protocols (oral) 	<ul style="list-style-type: none"> • Comparative & superlative (short, long & 	<ul style="list-style-type: none"> • Texts • Charts •

		<p>mobile protocols</p> <ul style="list-style-type: none"> • Be able to compare & contrast aspects of mobility such as hand-off and roaming • Be able to evaluate & discuss advantages & drawbacks of the wireless application protocols (WAP) and (MAP) • Be able to explain the theoretical principles of mobile & wireless networks 	<ul style="list-style-type: none"> • Fill in the following figure, diagrams (written) • Read the passage then analyse the process, discuss and evaluate (state the positive and negative aspects) • Send SMS & MMS 	<p>irregular adj)</p> <ul style="list-style-type: none"> • Comparative of equality (as...as/ not as... as) • Comparison & contrast markers (like, unlike, in contrast to, ..) • Sentence order • Number of syllabus (in verbs, nouns & adjectives) 	<p>pictures</p>
05	Cellular broadband wireless systems (3G-4G)	<ul style="list-style-type: none"> • Be able to review and report on cellular systems: OFMD, MIMO, GSM, EDGE and WiMAX • Be able to read & understand passages about access to technologies (WIFI/3G/WiMAX) • Be able to report on mobile & satellite communication systems 	<ul style="list-style-type: none"> • Direct & reported speech • Text analysis & interpretation • Documenting a figure on the website 	<ul style="list-style-type: none"> • Compound nouns & adjectives • Collocations • Abbreviations • Simple past (all forms) • Chronology • Stress on the (first, second² third syllabus) 	<ul style="list-style-type: none"> • Texts • videos • PCs • Charts

Table 5.9: A Sample of Syllabus Design for AT Software Employees

The following tasks are retrieved and adapted from the magister dissertation; Kherraz (2015).

Task one: Rewrite the parts of the sentences in italics using an appropriate form to hook up and any other words that you need:

a. I've bought my PC. *Do you mind if I plug it in?*

.....

b. We have eighteen *computers connected to the internet.*

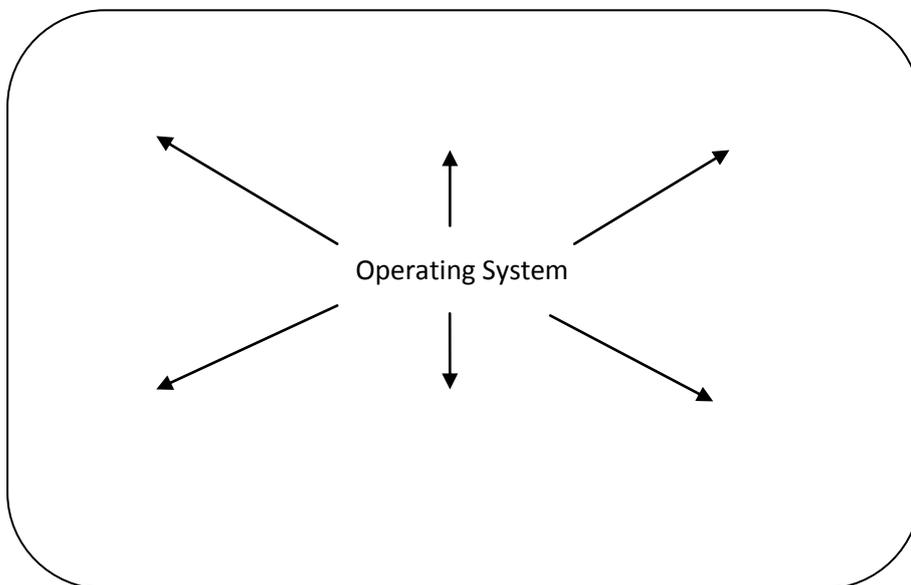
.....

c. I heard *he had connected a tape recorder to the telephone* so he could record calls.

.....

Task two: Fill in the blanks with the right item

Application – printer – mouse – monitor – keyboard – disk drive



Task three: Reply to the following statements using the verb bring forward, one of the phrases and any other words that you need:

By two weeks to Monday to 2 o'clock to March 17th

a. I thought the meeting was on Wednesday not Monday.

It was first planned for Wednesday, but

b. We're supposed to be having a training session at 4 o'clock, but the training room is being used, can't we

c. I'd prefer to have the interview before I go on holidays next month.

Why don't you see if you can

d. I thought they had arranged the sales conference for March 24th.

They have now

Task four: The following parts make up a business letter, but they are in disorder.

Try to put them in the right order:

This letter has been revised so many times by Mr. Thomas that it has been all mixed up, and his word processor has failed to recognize it. Arrange the letter so that everything is in the right place:

Charles Nelson

WIDGETRY LTD

6 Pine Estate, Westhorne, Belfurdshire, UB1822BC
Telephone 901723456 Telex 238 WID Fax 901767893

I look forward to hearing from you

Your ref. MS/wd/22/88
Our ref. JB/MS/48/88

James Bowers, Sales Manager,
Electroscan LTD Orchard Road
Estate, Oxbridge UB8410SF

Thank you for your letter,
I am afraid that we have a
problem with your order

Production Manager

6 June 2019

Mr. Bowers

Unfortunately, the manufactures of the part you wish to order have advised us that they cannot supply it until September. Would you prefer us to supply a substitute, or would you rather wait until the original parts are again available ?

Task five: Read the following text (loud reading)**Employee Training and HR Development**

You are a DIY person and you want to find out everything about starting and operating business. There are so many resources out there and you are overwhelmed by the amount of information you need to absorb. Besides, which sources are reliable? After you swim through a sea of 'useful' tips, how do you put them into action?

The quality of employees and their development through training and education are major factors in determining long-term profitability of a small business. If you hire and keep good employees, it is good policy to invest in the development of their skills, so they can increase their productivity.

Training is often considered for new employees only.

Task six: Label the different part in the next figure

Italics / subscript / bold /superscript / underline / strikethrough

Dealing with AC Power

AC values are started in **rms** values and power which you calculate for **rms** values, is referred to as average power. (The Source of Power by L. M. Willis)

If you apply an AC current across a resistance only, the voltage and current are in phase and you can use E^2/R to calculate the circuit power. To calculate ~~calculate~~ the power factor (PF), you must deal with both apparent power (P_1) and true power (P_1)

5.9. Conclusion

The present chapter is the last part in the present investigation. The research work aimed at investigating the integration of English for Specific Purposes in training the employees of L'Algerie Telecom in Saida, Algeria namely the Software engineers, technicians and technical agents who are working in the technical service of the company. As it is the closing chapter, the investigator tried to end her research with some recommendations and suggestions that may serve other researches in the field of integrating ESP in training employees in the Telecommunication sector.

General Conclusion

General Conclusion

Due to the wide and rapid spread of English for Specific Purposes (ESP) throughout all fields, some strategic domains have been highlighted particularly with the appearance of computerization. Among these fields the telecommunication domain which has at last noticed a remarkable shift towards integrating ESP in training its employees. The present investigation has shed light on the need to integrate ESP in training employees in L'Algerie Telecom Company in Saida, Algeria which is one of the strategic companies in the economic sector while ESP was previously limited to the higher educational context only.

It is important to mention that the present work is a continuation of previous research. At the beginning, the study was intended to study the use of English by AT technicians who have graduated from the National Specialist Institution for Vocational Training (CFPA) Kada Benammar in Saida on the one hand and if these technicians are offered a training at the work place. Besides, the actual study aims to further investigate the need to use English language by engineers (who have graduated from computer science department in Dr. Moulay Tahar university in Saida), technicians and technical agents who are in charge of the work in the technical service of the company but each have different tasks to accomplish.

Therefore, the context represents an overall investigation that compiles two critical respondents: EST students and AT engineers added to EVP trainees and AT employees some of whom have already been informants in the previous study. What is advantageous is that a single case study is more reliable when it is conducted at two different periods of time. Hence, this can ensure a high quality and rigor particularly with single case study as the current one. The first investigation was conducted in 2014. That is to mean five years between the two investigations is sufficient to reveal reliable findings.

Indeed, employees who are known as human resources were considered as an element of productivity like the materialized resources. Yet, during the last few decades particularly after the emergence of computerization and the high competitiveness between companies throughout the world, managers have at last realised that human resources are the key success that ensure good benefits for any organization this means not any people but the right people who are well trained for their jobs and who are skillful, competent and can

improve high performance in their tasks. Therefore, training has become not only a process but a strategy.

From another perspective, managers began to notice that the use of computerization has imposed the need to learn English even for those countries which have adopted French as first foreign language such as Algeria the fact that led managers of different companies to integrate English for Specific Purposes in training their employees. Among these companies is L'Algerie Telecom Company which is supposed to provide its clients with internet access. Then, it is clear that AT employees need to improve their English knowledge at the workplace namely those who work in the technical service of the company or as they are known as software employees.

It is important to mention that the present work is the first to highlight the use of ESP in the telecommunication field (according to the manager of l'Algerie Telecom in Saida) ; no similar works have been tackled in such a setting. Moreover, what was advantageous for this investigation was the results which revealed that though ESP is integrated in training software employees in AT company but it was not appropriately applied because the trainers used inadequate methods to teach this approach as a result they failed to fulfill the trainees English needs. Another reason for this failure is the lack of an appropriate English program which is considered as a road map in their teaching. Therefore, training AT employees was done for the sake of training with no objectives nor intentions to ameliorate these trainees English level.

As it was mentioned in the general introduction, the current study was based on a triangulation of three focal approaches :

- English for Vocational Purposes (EVP) which concerned AT employees who have graduated from the Vocational Institute Kada Benammar in Saida and who are recruited technicians or technical agents.
- English for Science and Technology (EST) which concerned AT employees who have graduated from Computer Science department in Dr. Mouley Taher University in Saida and who are recruited as engineers.
- English for Specific Purposes (ESP) which is integrated in training AT software employees (mentioned above) at the workplace.

Therefore, based on the target aim of the present investigation, the following research points were developed as research questions

- The type of English (the approach) AT employees need to use at the workplace.
- Whether the software staff need a workplace training in which English for Specific Purposes is integrated as a subject matter.
- The reason for which implementing ESP in training AT employees is crucial.
- In what way English training can affect employees' competencies, motivation and satisfaction.

Based on these points, the following hypotheses were suggested

- The type of English which is required in training AT software employees depends on the requirements of the workplace that is to mean the organizational context on the one hand and employees' needs on the other hand.
- Since the tasks, that are related to the target respondents, are completely connected to information and communication technology, then English is crucially demanded in their training in order to be able to do an effective work.
- Human resources play an important role in increasing the organization's benefits whatever its investment is. Thus AT technical staff, after an effective English training, can cope with any change that may occur at the level of the management. In other words, companies in different fields are heading towards implementing English in training their employees because they are aware that English is a need for both their management and their human resources.
- In the case of AT company, the employees are aware of the importance English language can play in developing their organization which would positively affect its productivity and this would result in their personal benefit such as high salary, rewards and promotions. Hence, to offer these employees a good and effective English training would certainly have positive impacts on their competencies, motivation and satisfaction.

Indeed, the purpose of the study in hand was to shed light upon a field that has never been considered in the land of researches which are concerned with language use. Having a sight on employees' English level confirmed that for employees in the technical service

of the company who are engineers, technicians and technical agents have demonstrated different levels of competency of English. As it was mentioned before that the engineers have graduated from the university whereas the technicians and technical agents have graduated from the institute which means two distinct backgrounds of English competency.

Therefore, AT managers were asked to improve their employees' English skills through an effective English training particularly after their company had signed a convention with the foreign multinational technology company « HUAWEI » in order to provide them with trainers in their field of expertise which means that the interaction between those trainers and AT employees would be in English. Yet, the employees have complained about the mismatch in teaching/learning they faced with their trainers. In other words, it was difficult for them to understand and grasp the meaning for the low level of English they have and because the trainers are not native speakers which means different pronunciation and intonation. In this vein, the present investigation was conducted in order to find a fruitful solution for that mismatch the fact that led the investigator to search for a successful training model to adopt and adapt for the sake of AT employees.

At last, « ADDIE » was selected as a training model for the target context of this investigation. The choice has been done after a long period of research in the area of training models that have been tried in different organizational settings all over the world. Yet, each model has improved advantages and at the same time it has resulted in some disadvantages. It is worth noticeable that one of the major factors that encouraged many companies to adopt the « ADDIE » model is that it has improved good outcomes for many organizations though it has, in some cases, resulted in few shortcomings.

Accordingly, ADDIE model is one of the instructional models that provide designers with guideline and framework so as to plan their training carefully. As for the context of the present research, ADDIE seems appropriate for the training of AT technical staff because it has the following criteria :

- ♣ It requires clear and well-determined objectives.
- ♣ It results in measurable, valid and reliable outcomes.
- ♣ It is empirical.
- ♣ It requires team work during the designing phase.

- ♣ It is based on real-life behaviors in order to solve real-life workplace Problems. Thus, it is more practical than theoretical

Moreover, ADDIE model is advantageous for AT staff for it represents a circular pattern that comprises five steps : analysis, design, development, implementation and evaluation. These five steps can be applied repeatedly till the trainees who are the engineers, technicians and technical agents of l'Algerie Telecom Company reach their satisfaction and improvement level on their side and be able to improve their language skills, competencies and good performance for the benefits of their company on the other side.

As for the present study, what has been observed is firstly the absence of conducting needs analysis for the target respondents though they have demonstrated high motivation and interest to learn English for Specific Purposes and they have shown different needs. Unfortunately, the English courses they studied were designed according to the trainers points of view. In fact conducting needs analysis is beneficial even for the trainers because they are, indeed, analyzing the current background of the trainees. In other words, analysing employees' needs enable the trainers to get a direct sight in trainees' English knowledge, their level, skills and competencies and to what extent their previous English training was successful this means what worked and what did not. Thus, conducting needs analysis in ADDIE model is like the launching point for a workplace training because it is considered as the most important phase in the training process.

Secondly, in order to succeed in conducting a workplace training, the program must carefully be designed which was not the case for the present study. It was noticeable that the program was not designed to fulfill the trainees expectations neither in content (what to teach) nor in methodology (how to teach) and this was the common remark that the respondents have stated. In deed, the first step to design any training program, designers should put some bases on which they can plan an effective content that should first meet the trainees' needs, wants and interest, these bases are as follow :

- ♣ Who is going to be trained ?
- ♣ What will the training be about ?
- ♣ When is the training going to take place ?

- ♣ Where is it going to take place ?
- ♣ What are the objectives of the training (ontext) ?
- ♣ How is the training going to be undergone (methodology)?

Therefore, it is clear that the bases stated above will respond to the employees' demands in AT Company if they are well designed and implemented. Besides, the sampling of the present study is relatively small and limited to AT Company in Saida ; about sixty one software employees but if the it is generalised to other AT Companies throughout Algeria the sampling size will be larger. Hence, the present research may serve further researches in the future focusing on effective ways of testing, for instance which means quantitative studies. Moreover, there has been a remarkable neglect of implementing a real teaching of ESP in the Algerian unversities and institutions to prepare learners for furture organizational settings though the ministry of higher education has recently sent a note in which the minister requires from the teachers to encourage their students to prepare their dissertations and theses in English and submit in English, too. Yet, this would need to encourage teachers first to learn ESP and be competent with all its implications.

Last but not least, the present modest work may hopefully serve as an opening door to a new area where ESP is crucially required ; it is the workplace in the Algerian economic setting. Thus, future researchers may turn attention to more fruitful solutions to implement English for Occupational Purposes so that to meet the new challenges and realise a higher standard of ESP in the Algerian economic sector.

Definition of Key Concepts

For more clarification the key concepts are defined as follow

1. Communicative Skills: communication is the ability of sharing information, messages and ideas with others in a particular time and place (from sender to receiver and vice versa). Communication implies verbal, written and non-verbal communication. In the context of workplace, business communication is one of the challenges that employees ought to master. Good communication skills are vital in helping employees to work effectively. In other words, employees in any organization should be able to give and receive information as to convey ideas and opinions with people around them.

To succeed in business communication, employees need to develop a set of skills in both communicating to others and learning how to interpret the information received from the others. Employees, in L'Algerie Telecom for instance, are not required to possess technical knowledge only but also be equipped with the relevant soft skills for effective workplace communication competency.

Talking about business communication competency means to master language skills; speaking, listening, reading and writing which enable the employee to master both oral communication and written communication.

2. Competency: Spencer and Spencer (1993) define competency *“as an underlying characteristic of an individual that is causally related to criterion referenced effective and or superior performance in a job or a situation”*, they also add *“competencies are skills and abilities of things you can do –acquired through work experience, life experience, study or training”*.

According to OECD (Organisation for Economic Co-operation and Development, 2002)

“A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilizing psychological resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency that may draw on an individual’s knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating”

3. Development: is the process by which the employee may advance in ones experience, skills and attitudes in order to become successful element in his or her organization. Development, then, refers to all activities which improve job performance, skills, knowledge and personal and mental attitudes.

4. Employee: means an individual who has been hired by an employer to do a specific job. Indeed, this employee is hired after having done an application or interview process and getting acceptable results. One of the main criteria the employee must have is his or her good qualification to do a certain job.

5. Human Resources: Human Resources are people investment within business and organization. They are concerned with all the policies and practices that include selecting suitable and required candidates, orienting new employees, planning, training, managing salaries, providing employees benefits and rewards as Dessler states « *HRM is the policies and practices involved in carry out the people or human resource aspects of a management position, including recruiting, screening, training, rewarding and appraising* » Gary Dessler (2006, p.4).

6. In- service Training: Training in the work place is the most important factor that influences employees' abilities, skills and attitude. It also helps employees to be up-date with the advance of technology through their ability to handle the functions of newly introduced technical equipment. In this vein, Beach (1980) states that "*Training is the organized procedure by which people learn knowledge and /or skills for a definite purpose*". On their side, David and Stephen (1989) define training as "*A learning experience in that it seeks a relatively permanent change in an individual that will improve his or her ability to perform on the job*" In Telecommunication sector, for instance, employees need proficiency in specific skills to function well and this cannot be achieved only through in-service training.

7 Performance: Performance is the matter of what employees can achieve and how they achieve it. Performance means the effective use of the needed skills, knowledge and competencies. According to Armstrong, performance is simply behavior and result (Armstrong, 2006:p.497-498).

8. Software Employees: first, software is a set of instructions, called a program, which tells a computer what to do. Then software employees are those employees whose work is concerned with computers, applications and computer science programs. They are supposed to apply the

principles of software to the design, development, maintenance, testing and evaluation to the computers software.

9. Vocational Training: is training for a specific career or trade; it focuses on practical applications of skills. Therefore, vocational training provides a link between education and the working world. In Algeria, Vocational Training is part of the education system..The main concern of the training process is to integrate trainees into the educational and skills levels and paths. Vocational Training helps learners function well in a work place.

References

References

- Alderson, C., & Urquhart, A. H. (1984). Introduction: What is reading? In C. Alderson, & A. H. Urquhart (Eds), Reading in a foreign language. London & New York: Longman
- Aldoobie, N. (2015). ADDIE Model. American International Journal of Contemporary Research. 5(6). University of Northern Colorado: Retrieved from http://www.aijcnrnet.com/journals/Vol_5_No_6_December_2015/10.pdf
- Allen, J. P. B. (1984). General Purpose Language Teaching: A Variable Focus Approach. Brumfit. C. J. (Ed): np
- Allen, J. P. B. & Widdowson, H. G. (1974). Teaching the Communicative Use of English. International Review of Applied Linguistics, XII(1)
- Anthony, L. (1997). Defining English for Specific Purposes and the Role of the ESP Practitioner (<http://www.Antlab.sci.waseda.ac.jp/abstracts/aizukiyo97.pdf>)
- Anthony, L. (1997). English for Specific Purposes: What does it mean? Why is it different? ONCUE, 4(3rd Ed)
- Armstrong, M. (2006). A Handbook of Human Resource Management Practice. (10th Ed), Kogan Page Publishing: London.
- Armstrong, M. (2016). Strategic Human Resource Management (6th Ed). Kogan page: limited
- Atkinson, P., & Coffey, A. (1996). Making Sense of Qualitative Data: Complementary Research Strategies. London: Sage
- Atkinson, P. Coffey, A. (1997). Analysing documentary realities. In D. Silverman (Ed), Qualitative research: Theory, method and practice, London: Sage.
- Belchor, D. (2009). English for Specific Purposes in Theory and Practice. Retrieved from <http://www.press.umich.edu/titleDetail> Dex.do?id=770237. Michigan ELT
- Barber, C. L. (1962). Some measurable characteristics of modern scientific prose. In J. M. Swales (Ed) (1988), Episodes in ESP: A Source and Reference Book on the Development of English for Science and Technology. New York: Prentice-

Hall.

- Barnard, R. & Zemach, D. (2003). Materials for Specific Purposes. In Tomlinson, B. (ed). *Developing Materials for Language Teaching*, London: Continuum.
- Basturkmen, H. (1988). *Case Study Research in Education*. San Francisco: Jossey Bass
- Basturkmen, H. (1989). *Case study research in education – A qualitative approach*. San Francisco: Jossey Bass.
- Basturkmen, H. (1998). Refining procedures. A needs analysis project at Kuwait university. *English Teaching Forum*, 36(4), 2-9.
- Basturkman, H. & Elder, C. (2004). The Practice of LSP. In A. Davies & C. Elder (Eds): *The Handbook of Applied Linguistics*, Oxford: Blackwell, 672-694.
- Basturkman, H. (2006). *Ideas and Options in English for Specific Purposes*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Basturkman, H. (2010). *Developing Courses in English for Specific Purposes*. Basing Stock: Palgrave Macmillan.
- Bassey, M (1999). *Case Study Research in Educational Settings*. Buckingham: Open University Press
- Benyelles, R. (2009). *Teaching ESP at Post Graduation Level: The Case of First Year Graduate Students of Economics at Abou Bakr Belkaid University*. Tlemcen; PhD Thesis. University of Tlemcen Algeria
- Bhatia, V. K. (1993). *Analysing Genre: Language Use in Professional Settings*. London: Longman, Cambridge University Press
- Billingsley, J. M. & Poole, M. S. (1986). Organisational groups in conflict: a case study of conflict interaction from a rules perspective, *The Organisational Communication Division of the International Communication Association 36th annual Meeting*: Chicago.
- Black, S. & Yasukawa, K. (2013). Distributing the pedagogical status quo: LLN and vocational teachers working together. *Pedagogies: An International Journal*, 1(1), 44-59

- Bolitho, R. (1990). An eternal triangle? Role of teacher, learner and teaching materials in A communicative approach. In S. Anivan (Ed). Language Teaching Methodology for the nineties. Singapore: SEAMEO Regional Centre.
- Boxal, P. & Purcell, J. (2016). Strategy and HRM. New York and Basing Stock, UK: Palgrave Macmillan.
- Branch, R. & Merrill, M. D. (2011). Characteristics of instructional design models. In R. A. Reiser & J. V. Dempsey (Eds). Trends and issues in instructional design and Technology. Upper Saddle River, NJ: Merrill: Prentice Hall
- Brieger, N. (1997). Teaching Business English Handbook. York: York Associates Publications
- Brown, H. D. (2007). Principles of Language Learning and Teaching. USA: Longman.
- Brown, J. S. (2008). Foreword: Creating a culture of learning. In Liyoshi, T. and Kumar, M.S.V. Opening up education: The collective advancement of education through open technology, open content, and open knowledge. The MIT Press: Cambridge, Massachusetts and London, England
- Brown, J. D. (2009). 'Open-Resource Items in Questionnaires' In: Heigham, J. & Crocker, R., (Eds) Qualitative Research in Applied Linguistics: A practical Introduction. New York: Palgrave. Macmillan
- Brumfit, C. J. (1979). The Communicative Approach to Language Teaching, pp.31. London: O.U.P
- Burns, R. B. (1997). Introduction to Research Methods. (3rd Ed) , Addison Wesley Longman Australia: South Melbourne
- Carlile, O., Jordan. A & Stack, A . (2008). Approaches to Learning: A guide for teachers. Maidenhead, UK: Open University Press.
- Carter, D. (1983). Some Propositions about ESP. The ESP Journal. 2, 131-137
- Carver, D. (1983). Some Propositions about ESP. The ESP Journal, 131-135.
- Chambers, F. (1980). A Re-Evaluation in Needs Analysis in ESP. The ESP Journal, 1(1): 25-33

- Chems, A. (1976). The Principles of Sociotechnical Design. *Human Relations* 29(8), 783-792
- Clegg, C. W. (2000). Sociotechnical principles for system design. *Applied Ergonomics* 31(5), 463-477
- Cohen, L. & Manion, L. (1980). *Research in Education*. Routledge: London
- Cohen, L., Manion, L. & Morrison, K. (2000). *Research Methods in Education*. (5th Ed), Routledge Famer,: London.
- Colina, S. (2015). *Fundamentals of translation*. Cambridge, England: Cambridge University Press
- Corbetta, P. (2003). *Social Research Theory. Methods and Techniques*. SAGE.
- Cook, V. (2002). *Linguistics and Second Language Acquisition*. New York: St. Martin's Press
- Corder, S. P. (1973). *Introducing applied linguistics*. Middlesex, Penguin.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd Ed). Los Angeles: Sage.
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research* (4th Ed). Boston, MA: Pearson Education
- Creswell, J. W. (2013). *Qualitative inquiry and research design: choosing among five approaches* (3rd Ed). Thosand Oaks, CA: Sage
- Crystal, D. (1995). *The Cambridge encyclopedia of the English language*. Cambridge: Cambridge University Press.
- Culatta, R. (2018a). ADDIE model. Retrieved September 7, 2018, from <http://www.instructionaldesign.org/models/addie/>
- Culatta, R. (2018b). History of instruction design. Retrieved September 7, 2018, from <http://www.instructional design.org/%20history/>

- Culatta, R. & Kearsley, G (2019). Instructional Design Models. Instructionaldesign.org,
Available: <http://www.instructionaldesign.org/models/>
- Crystal, L. (1995). The Cambridge Encyclopedia of the English Language. Cambridge:
Cambridge University Press
- Cummin, J. (2008). (Eds). Encyclopedia of Language and Education (vol. 5: Bilingual
Education, (2nd Ed). New York: Springer.
- Dale, S. Beach. (1980). Personnel, Macmillan: New York
- Dalton, P. C. (2011). Content and Language Integrated Learning: From Practice to
Principles. Annual Review of Applied Linguistics (31), 183
- Darke, P., Shanks, G. & Broadbent, M. (1998). Successfully Completing Case Study
Research: Combining Rigour, Relevance and Pragmatism. Information System
Journal, 8(4), 273-289
- David, A & Stephen, P. (1989). Personal/Human Resource Management. Prentice Hall of
India: New Delhi.
- Davies, A., & Currie, W. (1971). Aptitude and Nativeness, paper prepared for the BAAL
Conference: University of Essex.
- Dessler, G. (2006). A Framework for Human Resource Management. (4th Ed). New
Jersey: Pearson Prentice Hall
- Dessler, G. (2013). Human resource management, (13th Ed), pearson.
- Denzin, N. K. (1978). The Logic of naturalistic inquiry. In N. K. Denzin (Ed).
Sociological methods: A sourcebook. New York: Mc Graw-Hill
- Denzin, N. K. & Lincoln, Y. S.(2011). Introduction: The discipline and practice of
qualitative research. In N. Denzin & Y. Lincoln (Ed), The Sage handbook of
qualitative research. Los Angeles, CA: Sage
- Dickinson, L. (1991). Self-instruction in Language Learning. Cambridge: Cambridge
University Press.
- DiNapoli, R. (2001). The power of dramatizing case studies in ESP. The Journal of the

- Imagination in Language Learning and Teaching, VI.
<http://www.njcu.edu/cill/vol6/index.html> (retrieved on February 2019)
- Donna, S. (2000). *Teach Business English*. Cambridge: Cambridge University Press
 - Dorneyer, Z. (2003). *Questionnaires in Second Language Research: Construction, Administration, and Processing*. Lawrence Erlbaum Associates, Mahwah
 - Dorneyer, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
 - Dudley-Evans, T. & St John, M. J. (1988). Recent Developments in ESP: The trend to greater specialization. In M. L. Tickoo (Ed), *ESP: State of the Art*, Singapore: SEAMEO Regional English Language Centre
 - Dudley-Evans, T. (1998). An Overview of ESP in 1990s. Paper presented in the Japan Conference on ESP. Fukushima
 - Dudley-Evans, T. (1998). *Developments in English for Specific Purposes: A Multidisciplinary Approach*. Cambridge: Cambridge University Press.
 - Dudley-Evans, T. (2001). Editorial. *English for Specific Purposes*, 20, 311-312.
 - Dyer, W. G., & Wilkins, A. L. (1991). Better Stories, Not Better Constructs, To Generate Better Theory: A Rejoinder to Eisenhardt. *Academy of Management*.
 - Ehrman, M. E., & Oxford, R. L. (1995). Cognition plus: correlated of language learning success. *Modern Language Journal*, 79 (1), 67-89
 - Ehrman, M. E., & Oxford, R. L. (1990). Adult Language Learning styles and strategies in an intensive training setting. *Modern Language Journal*, 74 (3), 311 -327
 - Ehrman, M. E. (2003). A brief overview of individual differences in second language learning, in *System*, 31: 313-330
 - Eisenhardt, K. M. (1989). Building Theories from CSR. In the *Academy of Management Review*. Vol (14) pp 532-550

- Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford: Oxford University Press
- Ellis, M & Johnson, C. (1994). *Teaching Business English*. Oxford: Oxford University Press.
- Ellis, M. & Johnson, C. (2002). *Teaching Business English*. Oxford: Oxford University Press.
- Emory, C. W. & Cooper, D. R. (1991). *Business Research Methods*. Boston: Irwin.
- Ewer, J. R., & Lattore, G. (1969). *A Course in Basic Scientific English*. Londres: Longman
- Fang, X. (2016). Challenges and Opportunities for Vocational College English Teaching in the Context of MOOC, *Higher Education of Social Science*, 10(3),2
- Feagon, J. R. , Orum, A. M. & Sjoberg, G. (1991). *A case for the Case Study*. Hill: University of North Carolina Press.
- Fernandez, G. A. (2014). The Usefulness of Translation in Foreign Language Learning: Students' Attitudes, in *International Journal of Language and Translation Studies*. 2(1), 153-170.
- Fino, M. & Brumfit, C. (1983). *The functional-notional approach: from theory to practice*. New York: Oxford University Press.
- Finocchiaro, M. & Brumfir, C. (1983). *The Functional-Notional Approach: From Theory to Practice*. Oxford: Oxford University Press.
- Fiorito, L. (2005). *Teaching English for Specific Purposes (ESP)*. Retried from: <http://www.usingenglish-for-specific-purposes-esp.html> (October 2020)
- Flowerdew, J. (1997). Reproduction, Resistance and joint Production of Language Pwer. A Hong Kong Case Study, *Journal of Pragmatics* 27, 315-337
- Flowerdew, J. & Peacock, M. (2001). *Research Perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press.

- Flowerdew, L. (2013). Needs Analysis and Curriculum Development in ESP. In B. Paltridge & S. Starfield (Eds). *The Handbook of English for Specific Purposes* (1st Ed) pp: 326
- Ford, A. & Peat, F. (1988). The role of language in science. Retrieved from www.f davidpeat.com/bibliography/essays/lang.htm.
- Frendo, E. (2007). *English for Accounting*. Oxford: Oxford University Press
- Fung, L. Y. (2014). Socio-historical Background of English for Specific Purposes and Applicability of Dudley-Evans and St John's Theory on Two Diploma English Courses at an Australian-based University in Malaysia. Retrieved from http://www.researchgate.net/publication/265729549_Socio-
- Gagne, R. M., Wager, W. W., Golas, K. C. & Keller, J. M. (2005). *Principles of Instructional Design* (5th Ed). California: Wadsworth.
- Garcia, P. (2002). An ESP program for union members in 25 factories. In T. Orr (Ed). *English for Specific Purposes*. Alexandria, VA: TESOL
- Garcia, M. P. (2000). *English for Specific Purposes: Discourse Analysis and Course Design*: Servicio Editorial de la Universidad del Pais Vasco.
- George, A. & Bennett, A. (2005). *Case Studies and Theory Development in the Social Sciences*. Cambridge, Mass: MIT Press.
- Gilbert, N. (2008). *Researching social life*. (3rd Ed). London: Sage Publications.
Retrieved from <http://www.uk.sagepub.com/books/Book231777/title>
- Grinnell, R. M. (1981). *Social work research and evaluation : Quantitative and qualitative Approaches* : Western Michigan University.
- Guest, D. (2007). *Human resource management and performance : still searching for some answers*. Hum Resour Manag J
- Guibert, T. (1978). *Human Competence: Engineering Worthy Performance*. New York: McGraw-Hill.
- Gillham, B. (2000). *Case Study Research Methods*. London: Continuum.

- Grillet, A. J. (1989). Designing an ESP Course: English Language Support for Further And Higher Education. *Journal of Further and Higher Education*, 13(2), 92-104
- Goldstein, L & Ford, J. K. (2002). *Training in Organization: Needs Assessment, Development and Evaluation*. CA: Wadsworth.
- Gordon, S. (1994). *Systematic Training Program Design: Maximizing Effectiveness and Minimizing Liability*. Englewood Cliffs, NJ: Prentice Hall
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth Generation Evaluation*. News berry Park Sage.
- Guba, E. G. & Lincoln, Y. S. (1994). Competing Paradigms in qualitative research. In N. K. Denzin, and Y. S. Lincoln (Eds) *Handbook of Qualitative research*. Thousand Oaks, CA.
- Guest, D. E. (1997). Human resource management and industrial relations. *Journal of Management Studies*. 24(5), 503-521
- Halliday, M . Melcintosh, A . & Strevens, P . (1964). *The Linguistics Sciences and Language*. Teaching, London: Longmans
- Halliday, M.A. K. & Martin, J. R. (1993). *Writing science. Literacy and discursive power*. London: the Falmer Press.
- Halliday, M. A. K. (1973). *Explorations in the functions language*. London: Edward Arnold
- Hamp-Lyons, L. (2001). English for academic purposes. In R. Carter & D. Nunan (Eds), *The Cambridge guides to teaching English to speakers of other languages*. Cambridge: Cambridge University Press.
- Harding, K. (2007). *English for Specific Purposes*. Oxford: Oxford University Press
- Harmer, J. (1983). *The Practice of English Language Teaching*. Essex: Longman
- Harmer, J. (2001). *The Practice of English Language Teaching*. London: Longman.
- Harrison, R. (2000). *Employee Development*, Silver Lakes, Pretoria: Beekman Publishing.

- Hentit, N. (2015). English for Specific Business Purposes: The Teachers' Content and Context Acquisition. The Case Study: ESBP Teachers in Oran. Magister Dissertation.
- House, J. (2001). Translation quality assessment: Linguistic description versus social evaluation. *Meta*, 46, 243-257
- Hutchinson, T. & Waters, A. (1978). English for Specific Purposes: A Learning- Centred Approach. Cambridge: Cambridge University Press.
- Hutchinson, T. & Waters, A. (1981). Performance and competence in English for Specific Purposes. *Applied Linguistics*. 2(1), 57-69
- Hutchinson, T. & Waters, A. (1987). English for Specific Purposes. Cambridge: Cambridge University Press
- Hutchinson, T. & Waters, A. (2002). English for Specific Purposes: Shanghai: Shanghai Foreign Language Education Press
- Hutchinson, T. & Waters, A. (1992). English for Specific Purposes: A Learning-Centred Approach. Cambridge: Cambridge University Press
- Hyland, K., & Hamp-Lyons, L.. (2002). EAP: issues and directions. *Journal of English for Academic Purposes*. 1(1), 1-12.
- Johnson, R. B. (2006). New directions in mixed methods research. *Research in the Schools*. 13(1): Retrieved from <http://msera.org/rits-131.htm>.
- Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. (2007). Toward a definition of Mixed Methods Research. *Journal of Mixed Methods Research*, (1), 112-133
Retrieved from: <http://dx.doi.org/10.1177/1558689806298224>
- Jordon, R. R (1997). English for Academic Purposes: A Guide and Resource Book for Teachers. Cambridge: Cambridge University Press
- Komarova, & Lipgart, A. A. (1994). What is the English We Teach? Retrieved from <http://www.unav.es/espSig/komarova1.htm>
- Kandil, A. (2002). Needs analysis and the Arab learners. *TESOL Arabia*. 10 (2).
Retrieved from <http://ilearn.20m.com/articlesactr.html#ahmad>

- Kennedy, C. H & Bolitho, R. (1984). *English for Specific Purposes*. London: Mc Millan Press. Ltd.
- Kherraz, M. (2015). *The Importance of Language Needs from Training to Professionalism. The case of L'algerie Telecom-Saida*. Magister dissertation.
- Krempel, S. F & Pace, W. R. (2001). *Training across Multiple Locations: Developing a System that Works*. San Francisco: Berrett Koehler Publishers Inc.
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners*(3rd Ed.). New Delhi: Sage Publications.
- LeCompte, M. D., & Schensul, J. J. (1999a). *Analyzing and interpreting ethnographic data*. Book five of the ethnographer's toolkit. J. J. Schensul & M. D. LeCompte (Eds). Walnut Creek: CA. Altamira Press, A division of Sage publications.
- LeCompte, M. D. & Schensul, J. J. (1999b). *Designing and conducting ethnographic research*. In M. D. Le Compte & J. J. Schensul (Eds), *Ethnographer's toolkit* (1). Walnut Creek, CA: Sage.
- Lindahl, K. (2015). *Vocational English in Policy and Practice*. Licentiate thesis, University of Gatenburg. Retrieved from <http://bit.ly/2gz4VTV>
- Lind, M. R. (1994). *A Newtonian metaphor for organizational change*. IEEE Transactions of Engineering Management, 41(4), 375-383
- Long, M. H. (1985). *Input and Second Language Acquisition Theory*. Input in Second Language Acquisition, edited by S. Grass and C. Madden. Rowley, Mass: Newbury House
- Lorenzo, F. (2005). *Teaching English for Specific Purposes: Usingenglish.Com*. Retrieved from <http://www.usingenglish.com/teachers/articles/teaching-english-for-specific-purposes-esp.html> (October, 2019)
- Mackay, R. & Mountford, A. (1978). *English for Specific Purposes: A Case Study Approach*. London: Longman.
- Mackay, R., & Mountford, A. (1978). *English for Specific Purposes: A Case Study Approach*. London: Longman

- Marcell, G. M . (2000). Gender, justice and information and communication Technologies(ICTs).Retrievedfrom:<http://www.un.org/womenwatch/daw/csw/marcelle.htm>
- Marcell, G. M. (2000). Transforming information and communication technologies for gender equality. Retrieved from:
<http://www.undp.org./gender/resources/mono9.pdf>
- Marshall, C., & Rossman, G. B. (1989). Designing qualitative research. Newbury, Park, CA: Sage
- Martin, W. (2012). Performance Management and Analytics, Retrieved from
<http://www.wolfgang-martin-team.net/BI-BPM-SOA-php>.
- Maxwell, J. A. (1992). Understanding and validity in qualitative research. Harvard Educational Review 62(3), 279-299
- Maxwell, J. A. (1996). Qualitative Research Design: An interactive Approach. Thousand Oaks, CA: Sage Publications.
- Mc Daniel, C & Gates, R. (1991). Contemporary Marketing Research. West, St Paul. MN
- Mc Daniel, C. & Gates, R. (2005). Marketing Research, (6th Ed), Ed. John Wiley and Sons: USA.
- Mc Donough, J. (1984). ESP in Perspective: A Practical Guide. London: Collins ELT
- Mc Donough, J. & Mc Donough, S. (1997). Research methods for English language teachers. London: Arnold
- Miliani, M. (1994). English for Specific Purposes: Seminar presented in Magister Course. I.L.E: Tlemcen
- Miliani, M. (1985). Course Design: An Experiment: UNESCO ALSIED6LSP Newsletter, Vol 8(2), pp 21: LSP Center, CBS: Denmark
- Merriam, S. B. (1998:202). Qualitative Research and Case Study Applications in Education. San Francisco: Jossey-Buss.
- Merine, A. (2019). Needs Analysis of Communication Skills of Hotel Receptionists and

- Future Steps towards Possible Solutions: The case of Sheraton, Royal and Meridien in Oran. Doctoral Dissertation
- Mikkelson, B. (2005). *Methods for Development Work and Research: A New Guide for Practitioners* (2nd Ed). Sage Publication: India Pvt Ltd.
 - Miles, M. B., & Huberman, M. A. (1994). *Qualitative Data Analysis: An Expanded Source Book* (2nd Ed). Sage Publication: London
 - Molenda, M. (2003). In search of the elusive ADDIE model. *Performance improvement*, 42 (5), 34-37
 - Molenda, M. (2015). In search of the elusive ADDIE model. *Performance Improvement*, 54 (2), 40-42
 - Munby, J. (1978). *Communicative Syllabus Design*. Cambridge: Cambridge University Press.
 - Munteanu, C. (2011). Showing Off your mobile device: Adult literacy learning in the classroom and beyond. *Proceedings of the 13th International Conference on Human-computer Interaction with mobile devices and service*. New York: Association for Computing Machinery
 - Naiman, N., Froelich, M., Stern, H. H. & Todesco, A. (1978). *The Good Language Learner*. Research in Education Series, No. 7, Toronto: Ontario Institute for Studies in Education.
 - Neuman, W. L. (2000). *Social research methods qualitative and quantitative approaches* (4th Ed), Allyn & Bacon: Needham Heights
 - Neuman, W. L. (2009). *Social Research Methods: Qualitative and Quantitative Approaches*, (7th Ed), Pearson Education: Chandler
 - Nisbet, J., & Watt, J. (1984). *Case Study*. London: Harper & Row.
 - Noe, R., Hollenbeck, J. R., Gerhart, ..B. & Wright, P. M. (2008). *Human Resource Management Gaining a Competitive Advantage*. New York: McGraw-Hill

- Noe, R. A. (2017). Employee training and development, (7th Ed), Burr Ridge, IL: McGraw-Hill
- Norris, D. F., & Moon, M. C. (2005). Advancing e-government at the grassroots: Tortoise or hare? *Public Administration Review*, 65(1), 64-75
- Nunan, D. (1988). *Syllabus Design*. Hong Kong Oxford: Oxford University Press.
- Nunan, D. (1991). Communicative Tasks and the Language Curriculum. *TESOL Quarterly*, 15 (2) 228
- Nunan, D. (1992). *Research Methods in Language Learning*. Cambridge: Cambridge University Press
- Nunan, D. (1998). *The Learner Centered Curriculum*. Cambridge: Cambridge University Press
- Nuttall, C. (1982). *Teaching Reading Skills in a Foreign Language*. Heinmann
- Orum, A. M., Feagin, J. R. & Sjoberg, G. (1991). Introduction: The Nature of the Case Study, in *A Case for the Case Study*, (Ed) J. R. Feagin, A. M. Orum & G. Sjoberg, The University of North Carolina Press. Chapel Hill: USA
- Paltridge, B. (2012). *Discourse analysis. An Introduction* (2nd Ed). London: Continuum. Google Scholar.
- Paltridge, B., & Strafield, S. (2013). *The Handbook of ESP*. UK: Wiley-Blackwell
- Parker, J. & Harris, M. B. (2000). The purposes of a syllabus. *College Teaching*, 50(2), 55-61
- Pasmore, W. A. (1988). *Designing Effective Organizations. The Socio Technical Systems Perspectives*. Wiley Series on Organizational Assessment and Change, New York: John Wiley
- Patton, M. Q. (1987). *How to Use Qualitative Methods in Evaluation*. California: SAGE
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*, Sage. Newbury Park: CA
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. (3rd Ed), SAGE

Publications Inc, Thousand Oaks, CA

- Perry, J. L., & Denziger, J. N. (1980). The adoptability of innovations: An empirical assessment of computer applications in local governments. *Administration and Society*
- Pervan, G. & Mainbo, H. (2005). Designing a case study protocol in IS research, in Chau, P.Y.K, (Ed). *The Ninth Pacific Conference on Information Systems*, Jul 7th, 2005, University of HongKong: PACIS.
- Peterson, C. (2003). Bringing ADDIE to life: Instructional Design at its Best. *Journal of Educational Multimedia and Hypermedia*, 12(3). Retrieved from <http://www.learntechlib.org/p/2074/>
- Platt, J. (1996). *A History of US Sociological Research Methods 1920-1960*. Cambridge: Cambridge University Press.
- Prabhu, N. S. (1987). *Second Language Pedagogy*. Oxford: Oxford University Press
- Price, A. (2007). *Human Resource Management in Business Context*. (3rd Ed). London: Thomson Learning
- Purcell, J. (1989). The impact of corporate strategy on human resource management. In J. Storey (Ed). *New Perspectives on Human Resource Management*. London: Routledge.
- Purcell, D. J. (1989b). *Performance-Based Instructional Design*. New York: Glencoe/McGraw-Hill School Publishing Company.
- Ragin, C. C. (1993). Introduction to qualitative comparative analysis. In T. Janoski & A. Hicks (Eds.), *The comparative political economy of the welfare state*. New York: Cambridge University Press
- Richards, J. C. (2005). *Professional Development for Language Teachers: A Description and Analysis*: Cambridge University Press.
- Richards, J. C., & Schmidt, R. (2010). *Longman Dictionary of Language Teaching and Applied Linguistics* (4th Ed). London: Longman
- Ritcherich, R. (1972). *A Model for the Definition of Language Needs of Adults Learning*

- a Modern Language. Strasbourg: Council of Europe
- Ritcherich, R. & Chancerel, J. L. (1980). Identifying the needs of adults learning A foreign language. Oxford: Pergamon Press
 - Ritcherich, R. & Council of Europe. (1983). Case studies in identifying language needs (1st Ed). Oxford: New York: Published for and on the behalf of the Council by Pergamon Press
 - Robinson, P. C. (1980). ESP (English for Specific Purposes). Oxford: Pergamon Press.
 - Robinson, P. (1988). Academic Writing Process and Product, ELT Documents. Google Scholar
 - Robinson, P. (1991). ESP Today: A Practitioner's Guide. Hemel Hempsted, UK: Prentice Hall International (UK) Ltd
 - Robinson, P. (2002). Learning conditions, aptitude complexes and SLA: A framework for research and pedagogy. In P. Robinson (Ed). Individual differences and instructed language learning. Amsterdam: John Benjamin
 - Robinson, P. (1991). ESP Today: A Practitioner's Guide. New York: Prentice Hall.
 - Robson, C. (2002). Real World Research, London : Blackwell.
 - Rossman, G. B. & Wilson, B. L. (1985). Numbers and words : Combining quantitative and qualitative methods in a single large-scale evaluation study. Evaluation Review, 9(5), 627-643
 - Sakar, S . (2012). The Role of information and communication technology (ICT) in higher education for the 21st century. The Science Probe, 1(1), pp. 30-40.
 - Sarker, S. I. (2013). Classical and Neoclassical Approaches of Management: An overview. IOSR. Journal of Business and Management 14(6), 1-5
 - Santandreu, C. D. (2009). The Language Clinic project at City University of Hong Kong: An outcome-based English mentoring scheme. In Proceedings of the . International Conference on Education and New Learning Technologies. Spain: Barcelona

- Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research Methods for Methods for Business Students*. England: Pearson Education Limited
- Schleppegrell, M. & Royster, L. (1990). *Business English: An International Survey, English for Specific Purposes* (9, 3-16)
- Scrivener, J. (2005). *Learning Teaching*. Oxford: MacMillan.
- Seaman, C. B. (1999). *Qualitative Methods in Empirical Studies of Software Engineering* IEEE. *Transactions on Software Engineering*, 25(4), 557-572.
- Selinker L., Trimble, M & Trimble, L. (1976). *Presuppositional rhetorical information In EST discourse*, *TESOL Quarterly*, 10(3), 281-290
- Selinker, L., Lackstorm, J & Trimble, L. (1973). *Technical rhetorical principles and Grammatical choice*. *TESOL Quarterly*, 7(2), 127-136.
- Shurtz, N. W., & Derwing, B. L. (1981). *The Problems of Needs Assessment in English for Specific Purposes: Some Theoretical and Practical Considerations*. In R. Mackay & J. D. Palmer. (Eds). *Language for Specific Purposes Program Design and Evaluation* (pp. 29-45). Rowley, MA: Newbury House
- Siggelkow, N. (2007). *Persuasion with case studies*. *The Academy of Management Journal*, 50(1), 20-24.
- Simons, H. (2009). *Case study research in practice*. Los Angeles, CA: Sage.
- Smith, R. E. (1988). *The logic and design of case study research*, *The Sport Psychologist*.
- Spencer, L. & Spencer, S. M. (1993). *Competence at Work*. New York: Wiley.
- Stake, R. E. (1994). *Case studies*. In N. K. Denzin & Y. S. Lincoln (Eds) *Hand book of qualitative research*. London: Sage Publications.
- Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage
- Stake, R. E. (1981). *Case Study Methodology in Educational Evaluation*. Minnesota Research and Evaluation Centre
- Stake, R. E. (1994). *Case studies*. In N. K. Denzin, & Y. S. Lincoln (Eds), *Handbook of*

- qualitative research (1st Ed). Thousand Oaks, CA: Sage.
- Stake. R. E. (2006). Multiple case study analysis. New York: Guilford Press.
 - Strevens, P. (1964). The linguistic sciences and language teaching. London: Longmans
 - Strevens, P. (1977). Special Purposes Language Learning. A Perspective Survey Article. *Language Teaching & Applied Linguistics Abstracts*, 10.
 - Strevens, P. (1980). Teaching English as an International Language. Oxford: Pergamon Press
 - Strevens, P. (1988). ESP after Twenty Years: A Re-Appraisal. In Tickoo M. (Ed). *ESP: State of the Art (1-13)*, Singapore: SEAMEO Regional Centre.
 - Swales, J. (1971). *Writing Scientific English*. Nelson.
 - Swales, J. (1985). *Writing Scientific English: A Textbook of English as a Foreign Language for Students of Physical and Engineering Science*. USA: Thomas Nelson and Sons.
 - Swales, J. M. (1990). *Genre Analysis*. Cambridge: Cambridge University Press.
 - Swales, J. M. (2001). EAP-related linguistic research: An intellectual history. In J. Flowerdew & M. Peacock. (Eds), *Research perspectives on English for academic purposes*. Cambridge: Cambridge University Press.
 - Swanson, R. A & Holton, E. F. III (2001). *Foundation of Human Resource Development*. San Francisco: Berrett Koehler.
 - Swart, J . (2005). *Human resource development: strategy and tactics*. Oxford: Elsevier/ Butterworth-Heinemann
 - Swart, W. & Duncan, S. (2005). A methodology for assuring the quality of human performance. *International Journal of Computer Integrating Manufacturing*, 18(6), 487-497
 - Sykes, W. (1990). Validity and reliability in qualitative market research: A review of the Literature. *Journal of the Market Research Society* 32 (3), 289-328
 - Sykes, W. (1991). Taking stock: issues from the literature on validity and reliability in

- qualitative research. *Journal of the Market Research Society*. 33(1), 3-12
- Thornhill, A., Lewis, P., Millmore, M. & Saunders, M. N. K. (2000). *Managing Change: A Human Resource Strategy Approach*, Harlow, Financial Times PrenticeHall
 - Trimble, L. (1985). *English for Science and Technology: A Discourse Approach*: Cambridge University Press
 - Trimble, L. (1994). Review: Taking the social turn: Teaching writing post-process. *College Composition and Communication*, 45(1), 108-11
 - Trochim, W. M. K. & Donnelly, J.P. (2008). *The Research Methods Knowledge Base*. (3rd Ed). Atomic Dog, Mason, 56-65.
 - Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge, MA: Harvard University Press.
 - Vogt, W. P. (1999). *Dictionary of Statistics and Methodology: A Non-Technical Guide for the Social Sciences* (2nd Ed). London: Sage Publications.
 - Vogt, K. & Kantelinen, R. (2013). Vocationally oriented language learning revisited. *ELT Journal*, 67(1), 62-69
 - West, R. (1994). Needs analysis in language teaching. *Language Teaching*, 27(1), 1-19
 - West, R. (1998). ESP-State of the art. Retrieved from www.man.ac.uk/CELSE/esp/west.htm
 - Widdowson, H. D. (1975). EST in theory and practice. In *English for Academic Purposes*. London: British Council, ETIC Occasional Paper. Google Scholar.
 - Widdowson, H. G. (1979). *Explorations in Applied Linguistics*. Oxford: Oxford University Press
 - Widdowson, H. G. (1981). *English for Specific Purposes: Criteria for Course Design*. *English for Academic and Technical Purposes*, 1-11
 - Widdowson, H. G. (1990). *Aspects of language teaching*. Oxford: Oxford University Press
 - Widodo, H. P., & Pusporini, R. (2010). *Material design: English for Specific Purposes*. In

- H. P. Widodo & L. Savova (Eds). *The Lincoln guide to materials design in ELT* Muenchen: Lincoln Europe.
- Widodo, H. P. (2014a). Contextually framing the Design of ESP Materials: Vocational English Reading Tasks. In H. Emery & N. Moore (Eds), *Teaching, Learning And Researching Reading in EFL* (pp. 140-163). Dubai, UAE: TESOL Arabia
 - Widodo, H. P. (2014b). Methodological considerations in Interview Data Transcription. *International Journal of Innovation in ELT and Research*, 3(1). 101-107
 - Widodo, H. P. (2015). Engaging students in literature circles: Vocational English reading Programs. *The Asia-Pacific Education Researcher*. 25(2).
 - Widodo, H. (2016). *Teaching English for Specific Purposes (ESP): English for Vocational Purposes (EVP)*. *English Language Teaching Today: Linking Theory and Practice*
 - Wilkins, D. (1972). *Linguistics in Language Teaching*. London: Arnold
 - Wright, P. & Geroy, D. G. (2001). Changing the mindset: the training myth and the need Forward-class performance. *International Journal of Human Resource Management*, 12, 4, 586-600
 - Yalden, J. (1987). *Principles of Course Design for Language Teaching*. Cambridge: Cambridge University Press
 - Yin, R. (1984). *Case study research*. Beverly Hills, CA: Sage
 - Yin, R. (1989). *Case study research: Design and methods*. London: Sage Publications
 - Yin, R. (1993). *Applications of case study research*. Newbury Park, California: Sage.
 - Yin, R. (1994). *Case Study Research: Design & Methods* (2nd ed). Beverly Hills, CA: Sage Publishing
 - Yin, R. (2002). *Case Study Research, Design and Methods*, (3rd Ed). Newbury Park: Sage Publications
 - Yin, R. (2003). *Case Study Research Methods*. Thousand. Oaks: Sage Publications
 - Yin, R. (2009). *Case study research: Design and methods* (4th Ed). Thousand Oaks,

CA: Sage

- Yin, R. (2014). Case study research: design and method. Thousand Oaks: California SAGE.
- Young, P. V. (1992). Scientific Social Surveys and Research. (4thEd). New Delhi: Prentice Hall of India Pvt. Ltd.

Appendices

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Appendix 01
Interview 'a'

1. Who are currently working in the technical service of the company ?
2. How many engineers, technicians and technical agents are there ?
3. What are the functions and tasks related to each of them ?
4. Do you offer them in-service training ?
5. Do all of them get benefit of the workplace training ?
6. Do they benefit from the same type of training ?
7. What are the types of training you offer them ?
8. How often do employees undergo training ?
9. How long does each type last ?
10. What are the languages required in each training ?
11. What type of English is implemented in each type of training ?
12. Is there a specific program for each type of training ?
13. What skills are most focused on in each type of training ?
14. How do you select employees to undergo workplace training ?
15. What learning opportunities may the employees get from their training ?
16. Do you think that one day English will be prominent in AT Company management ?

Appendix 02

Interview 'b'

Section one :

a. About the trainer :

1. In which field are you specialised ?
2. What are your professional qualifications ?
3. How long have you been working in that specialty ?
4. How about your English level (competencies) ?
5. Do you have any certificate to train AT employees ?
6. From where did you get it ?
7. How long have you been a trainer in AT Company in Saida ?
8. On what criteria have you been selected as a trainer ?
9. Have you been trained for this sake ?
10. Who have trained you to be a trainer ?
11. What have you studied during your training ?

b. About the employees :

1. What kind of English are you training the software employees in ?
2. Do you use translation in your teaching ?
3. Are the employees interested in learning English ?
4. How is your interaction characterised with the trainees (particularly you are a colleague to them) ?

c. About the training :

1. Do you conduct needs analysis with the trainees ?
2. What kind of English they require for their training ?
3. What strategies do you adopt in you teaching ?
4. What methods do you use in training the employees ?
5. What are the skills you focus more ?

Section two :

D. About English language :

1. Does the training timing suit the employees ?
2. Is the needed material available ?
3. What type of material do you need for the workplace training ?
4. Is there an English program ?

E. About assessing :

1. Do you conduct an aassessment with the trainees ?
2. In what skills do you assess the trainees ?
3. What the difficulties you face during the training ?
4. Do you want to carry on training the software employees ?
5. What do you suggest for a better English training in AT Company in Saida ?

Appendix 03
Software Employees
Questionnaire

Dear sir/madame

We are conducting a research on the integration of ESP (English for Specific Purposes) in the workplace trainings that you undergo. We would love to ask you some questions to know your opinion about the way you learn ESP with all its implications (timing, materials, program, etc.). This will help us suggest new and effective strategies for the development and improvement of teaching/learning ESP at your workplace trainings.

Section one : Respondents' Personal Information

1. Please tick

- I am female male
- I am > 30 30-40 40-50 50 <
- My post in AT Company is :
- I have been working in the company for :
 > 10 years 10-20 20-30 30 <

Section two : Respondents' English competencies

1. What is your level actually in ?

	Little competence			Moderate competence			Much competence		
	M	S.D	Per	M	S.D	Per	M	S.D	Per
Computer Science competence (PC & software use)									
Programming competence									
English competence (technical)									

- b. The method used in training is good
- c. The training program is relevant to my work
- d. The English training has helped me improve my performance at work
- e. I would have the same output with no need to training
- f. The availability of the up-date material is helpful
- g. The training program is in line with the company's requirements
- h. The training program enables me to adapt with the new changes
- i. I am more competent and efficient
- j. The training has helped me identify my strengths and weaknesses
- k. My English skills are getting better and better
- l. I need further trainings to improve more competence

6. During your English training, the trainer focuses, in her teaching, more on (classify the skills using percentages)

Listening% Reading% Writing% Speaking%

Terminology%

7. Your trainer's assessment is done in: oral written or both

8. Your results are: acceptable good very good

9. If you have any suggestions, you are welcome

.....

.....

.....

.....

.....

Thank you for your collaboration

2. Es que vous rencontrez des difficultés a comprendre les termes en Anglais (dans les guides) ?

Oui

Non

3. Es que vous utilisez des termes en Anglais lorsque vous rencontrez des empannes de l'équipement ?

Oui

Non

4. Es que vous avez besoin d'apprendre la terminologie de la communication et de l'information en Anglais ?

Oui

Non

Section 03 :

1. Es que vous faites des formations d'amélioration ?

Oui

Non

2. Quelle sont les langues agrees ? Arabe Français Anglais

3. Vous faites une formation en Anglais parce que :

	Tout a fait d'accord	Plutôt d'accord	Plutôt pas d'accord	Pas do tout d'accord
Ca vous interesse				
Afin d'améliorer votre competence professionnelle				
La formation est obligatoire				
Pou une augmentation de salaire				

4. Quelle genre de formation vous faites ?

- Dans l'entreprise
- Presence a des conferences, des foires et des ateliers
- Formation planifiée par l'autoformation
- Formation a l'étranger
- Dans un institut

5. A propos du formation d'Anglais d'Anglais

	Tout a fait	Pas tout a fait
La formation m'a aide a améliorer mes compétences en Anglais		
La méthode utilisée dans la formation est bonne		
Le programme d'Anglais est pertinent pour mon travail		
La formation m'a aide a améliorer mes performances		
Je peux avoir le même résultat sans formation		
A l'aide de la formation, je suis bien oriente		
Le matériels dont on a besoin est disponible		
Le programme de la formation est aligne avec les objectifs de mon entreprise		
Je suis plus productif et efficace		
La formation m'a permit d'identifier mes force et mes faiblesse		
Mes compétences en Anglais s'améliorent de plus en plus		
Je demande plus de formation en Anglais		

6. Quand vous faites votre formation en Anglais, votre formateur donne plus d'importance a : (veuillez les classer par pourcentage)

L'orale : écouter % parler%

L'ecrit : lire % Rediger%

Apprendre la terminologie

7. Les testes et les evaluations sont bases sur : l'ecrit % L'orale%

Les resultats que vous obtenez sont : acceptables bons tres bons

8. D'autres suggestions a faire :

.....

.....

.....

.....

.....

Appendix 05

Authorisation

M^{me} Leharriaz 190 khroua
Enseignante a Dr. Mouley Tahar
Université de Saïda
Grade (MAA)

Fait a Saïda le 08/04/2019

Objet: Demande d'aide

Madame,

Je suis doctorante en Anglais Technique
actuellement inscrite en 1^{ère} année a L'Université
Djillali Liabes, Sidi Bel Abbès. Le thème que je suis
en train d'étudier est précisément concerné par votre
entreprise. Donc j'ai le plaisir de vous demander
de m'aider a faire des interviews et de demander
aux employés de remplir quelques questionnaires.

Veuillez agréer, Madame, en D'expression de
mes sincères salutations.

L'intéressée



Saisi le 22-05-2019



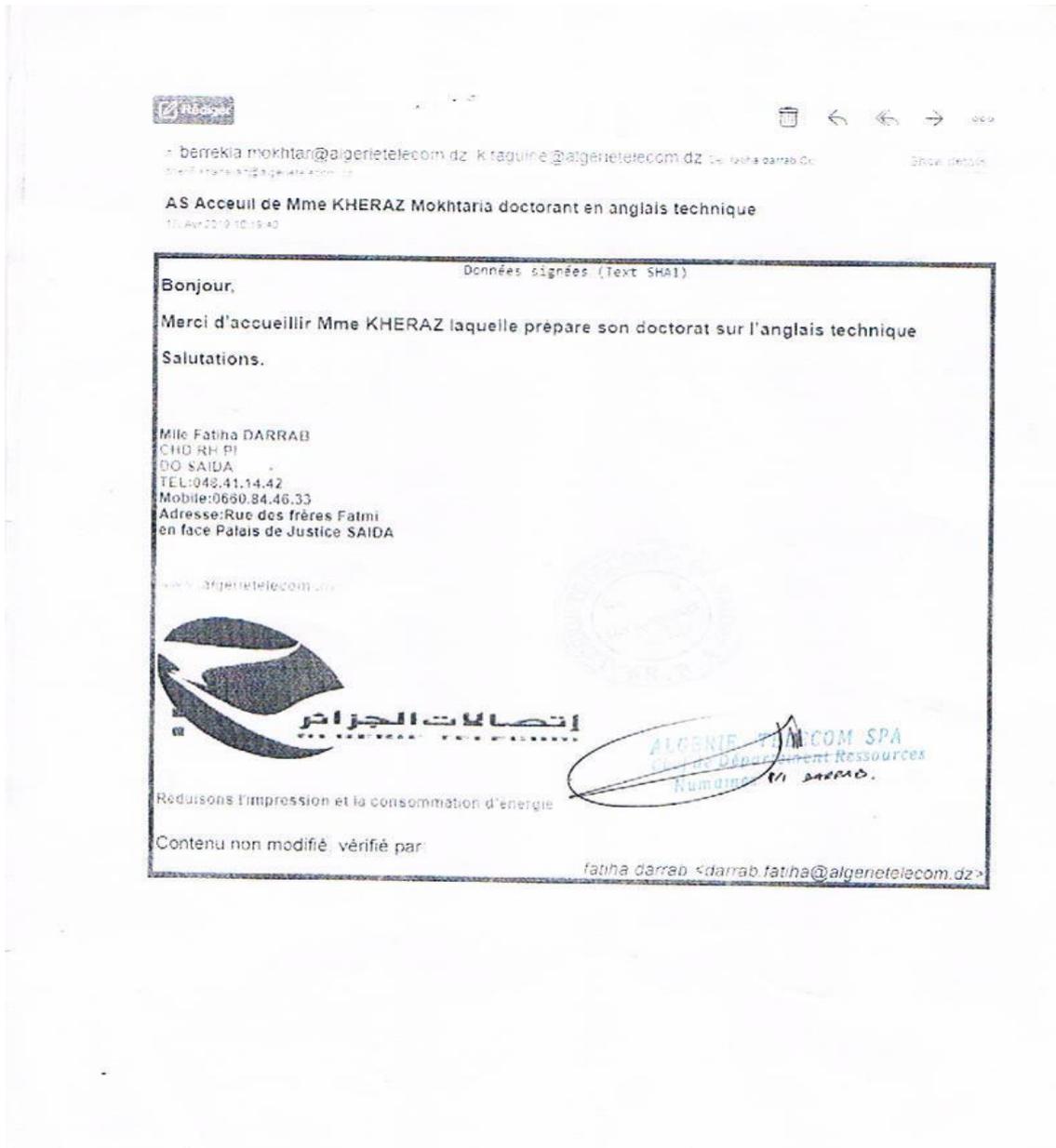
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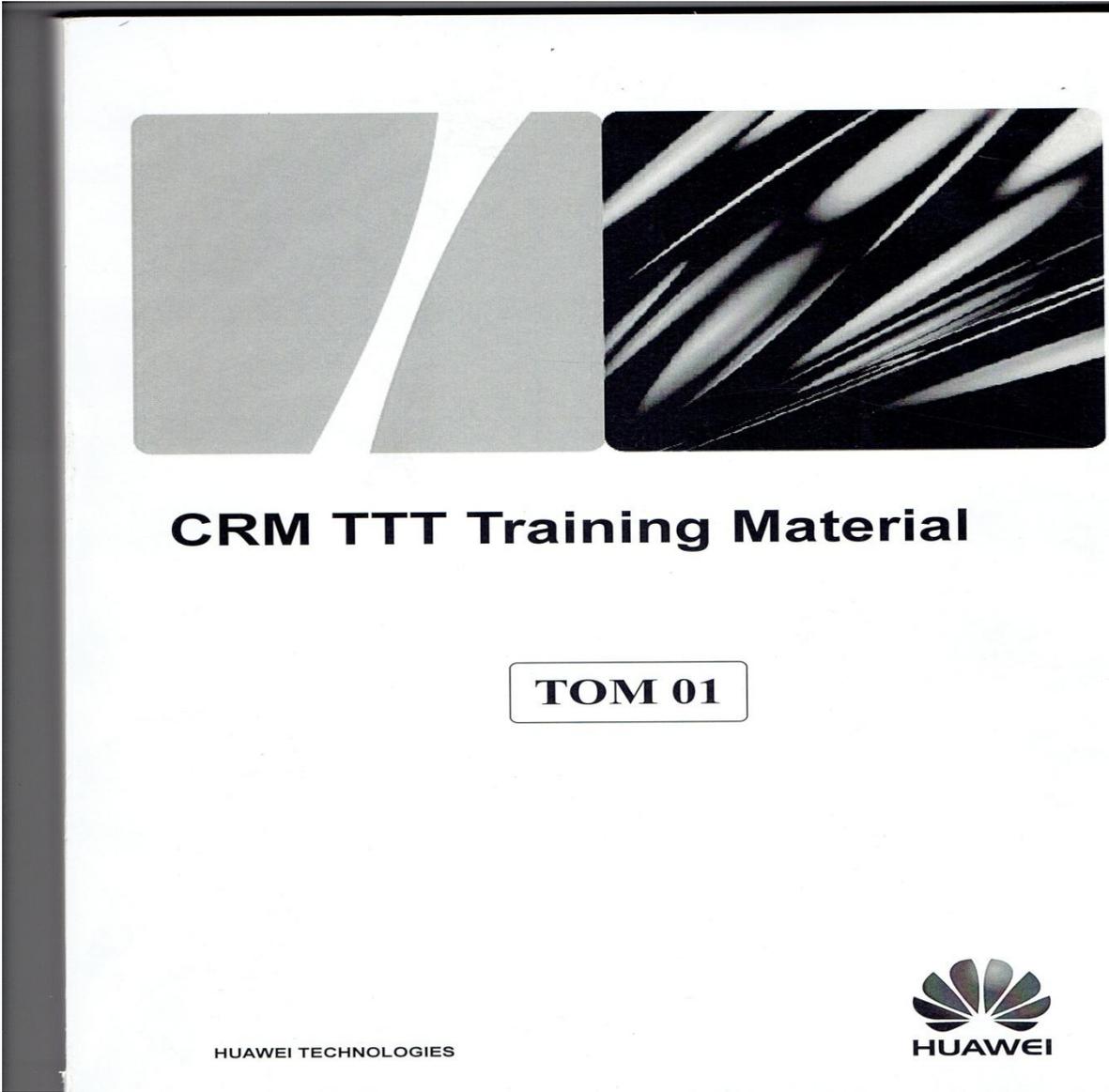


Appendix 06

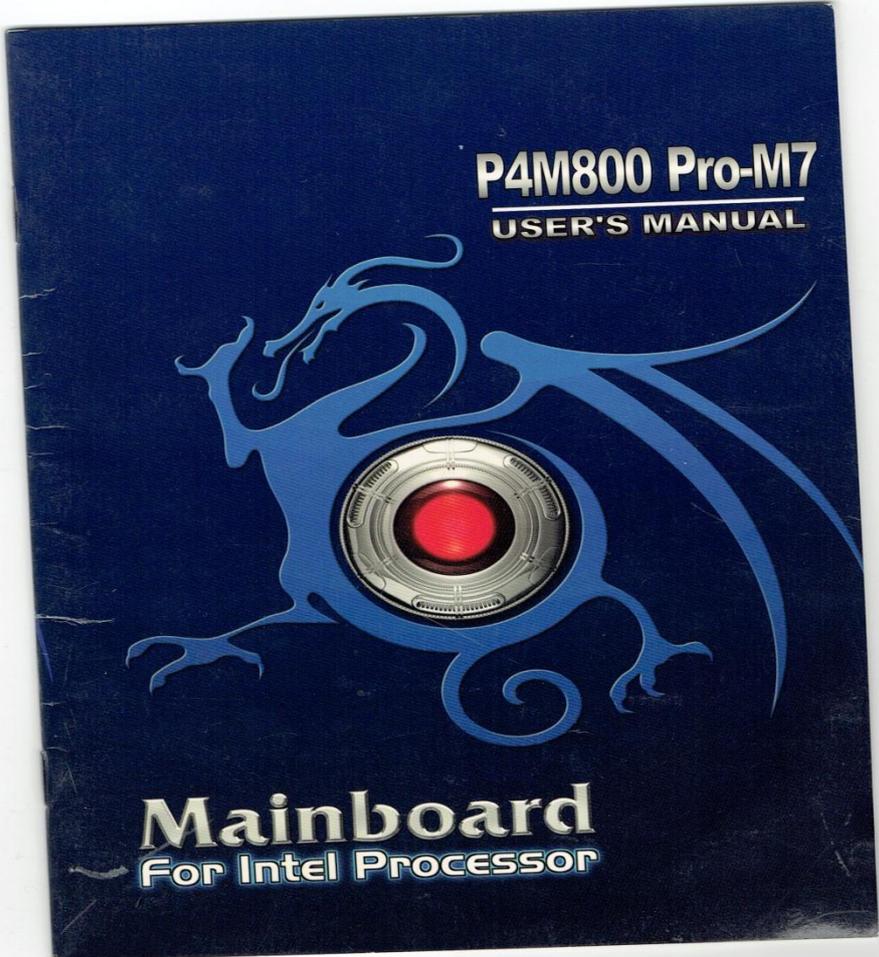
AT Company Permission

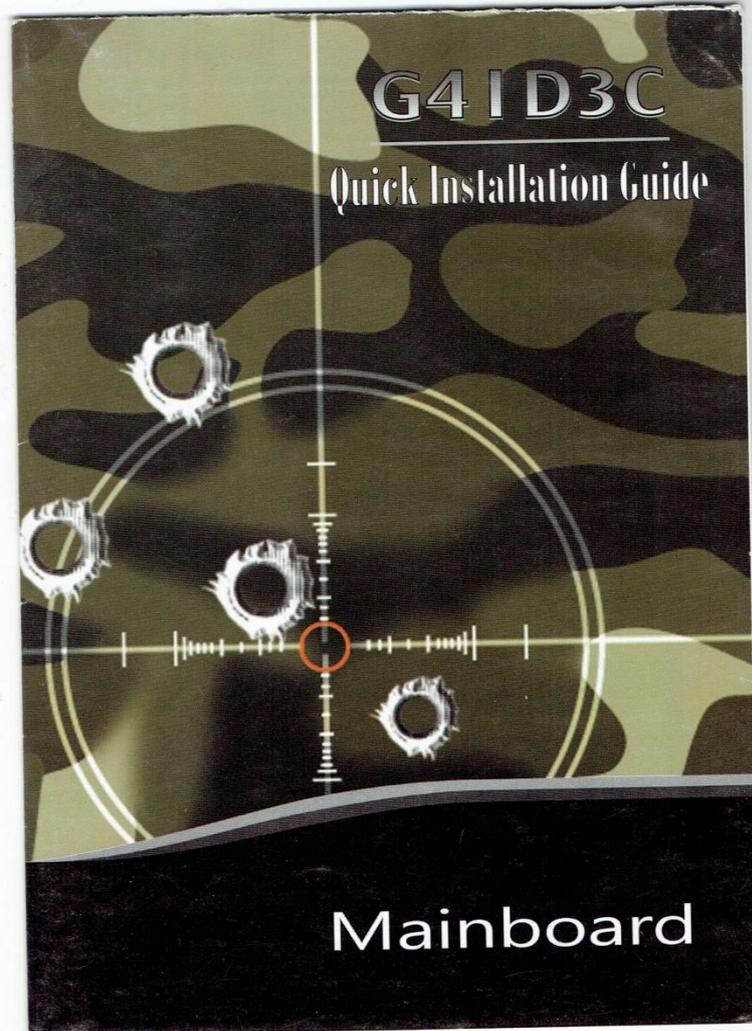


Appendix 07
English Training
Book



Appendix 08
Employees English
Guides





Appendix 9
AT Company
Equipments



Huawei Modem



Huawei wifi modem



Huawei wifi router

Appendix 10
Telecommunication
Vocabulary (Glossary)

Retrieved from : fcc.gov/general/glossary=telecommunications-terms

Word	Definition
Access Charge	A fee charge subscribers or other telephone companies by a local exchange carrier for the use of its local exchange networks
Analog Signal	A signaling method that uses continuous changes in the amplitude or frequency of a radio transmission to convey information
Bandwidth	The capacity of a telecom line to carry signals. The necessary bandwidth is the amount of spectrum required to transmit the signal without distortion or loss of information. FCC rules require suppression of the signal outside the band to prevent interference
Broadband	Broadband is a descriptive term for evolving digital technologies that provide consumers a signal switched facility offering integrated access to voice, high-speed data service, video-demand services, and interactive delivery services
Calling Party Pays	A billing method in which a wireless phone caller pays only for making calls and not for receiving them. The standard American billing system requires wireless phone customers to pay for all calls made and received on a wireless phone
Cellular Technology	This term, often used for all wireless phones regardless of the technology they use, derives from cellular base stations that receive and transmit calls. Both cellular and PCS phones use cellular technology
Closed Captioning	A service for persons with hearing disabilities that translates television program dialog into written words on the television screen
Commercial Leased Access	Manner through which independent video producers can access cable capacity for a fee.
Common Carrier	In the telecommunication arena, the term used to describe a telephone company
Communications Assistant	A person who facilitates telephone conversation between text telephone users, users of sign language or individuals with speech disabilities through a Telecommunications Relay Service (TRS). This service allows a person with hearing or speech disabilities to communicate with anyone else via telephone at no additional cost

Community Antenna Television (CATV)	A service through which subscribers pay to have local television stations and additional programs brought into their homes from an antenna via a coaxial cable
Cramming	A practice in which customers are billed for enhanced features such as voice mail, caller ID and call-waiting that they have not ordered
Dial Around	Long distance services that require consumers to dial a long distance provider's access code (or « 10-10 » number) before dialing a long distance number to bypass or « dial around » the consumer's chosen long-distance carrier in order to get a better rate
Digital Television (DTV)	A new technology for transmitting and receiving broadcast television signals, DTV provides clearer resolution and improved sound quality
Direct Broadcast Satellite (DBS)	A high powered satellite that transmits or retransmits signals which are intended for direct reception by the public. The signal is transmitted to a small earth station or dish (usually the size of an 18-inch pizza pan) mounted on homes or other buildings
Email	Also called electronic mail, refers to messages sent over the internet. E-mail can be sent and received via newer types of wireless phones, but you generally need to have a specific e-mail account
Enhanced Service Providers	A for-profit business that offers to transmit voice and data messages and simultaneously adds to the messages it transmits. Examples include telephone answering services, alarm/security companies and transaction processing companies
En Banc	An informal meeting held by the commission to hear presentations on specific topics by diverse parties. The commissioners, or other officials, question presenters and use their comments in considering FCC rules and policies on the subject matter under consideration
Frequency Modulation	A signaling method that varies the carrier frequency in proportion to the amplitude of the modulating signal
Global Positioning System	A US satellite system that lets those on the ground, on the water or in the air determine their position with extreme accuracy using GPS receivers
High Definition Television	An improved television system which provides approximately twice the vertical and horizontal resolution of existing television standards. It also provides audio quality approaching that of compact discs
Interactive Video Data Service	A communication system operating over a short distance, that allows nearly instantaneous two-way responses by using a hand-held device at a fixed location. Viewer participation in game shows, distance learning and e-mail on computer networks are examples
Instructional Television Fixed Service	A service provided by one or more fixed microwave stations operated by an educational organization and used to transmit instructional information to fixed locations

Landline	Traditional wired phone service
Land Mobile Service	A public or private radio service providing two-way communication, paging and radio signaling on land
Low Power FM Radio	A broadcast service that permits the licensing of 50-100 watt FM radio stations within a service radius of up to 3.5 miles and 1-10 watt FM radio stations within a service radius of 1 to 2 miles
Low Power Television	A broadcast service that permits program origination, subscription service or both via low powered television translators. LPTV service includes the existing translator service and operates on a secondary basis to regular television stations. Transmitters output is limited to 1.000 watts for normal VHF stations and 100 watts when a VHF operation is on an allocated channel
Must-Carry (Retransmission)	A 1992 Cable Act term requiring a cable system to carry signals of both commercial and noncommercial television broadcast stations that are « local » to the area served by the cable system
Network	Any connection of two or more computers that enables them to communicate. Networks may include transmission devices, servers, cables routers and satellites. The phone network is the total infrastructure for transmitting phone messages
Number Portability	A term used to describe the capability of individuals, businesses and organizations to retain their existing telephone numbers and the same quality of service- when switching to a new local service provider
Open Video Systems	An alternative method to provide cable-like video service to subscribers
Operator Service Provider	A common carrier that provides services from public phones, including payphones and those in hotels/motels
Paging System	A one-way mobile radio service where a user carries a small lightweight miniature radio receiver capable of responding to coded signals. These devices, called « pagers » emit an audible signal, vibrate or do both when activated by an incoming message
Personal Communications Service	Any of several types of wireless, voice and/or data communications system, typically incorporating digital technology. PCS licenses are most often used to provide services similar to advanced cellular mobile or paging services. However, PCS can also be used to provide other wireless communications services, including services that allow people to place and receive communications while away from their home or office, as well as wireless communications to homes, office buildings and other fixed locations
Prescribed Interexchange Charge (PICC)	The charge the local exchange company assesses the long distance company when a consumer picks it as his or her long distance carrier
Roaming	The use of wireless phone outside of the « home » service area defined by a service provider. Higher per-minute rates are usually charged for calls made or received while roaming.

	Long distance rates and a daily access fee may also apply
Satellite	A radio relay station that orbits the earth. A complete satellite communications system also includes earth stations that communicate with each other via the satellite. The satellite receives a signal transmitted by an originating earth station and retransmits that signal to the destination earth station(s). Satellites are used to transmit telephone, television and data signals originated by common carriers, broadcasters and distributors of cable TV program material
Satellite Home Viewer Improvement Act of 1999	An act modifying the Satellite Home Viewer Improvement Act of 1988, SHVIA permits satellite companies to provide local broadcast TV signals to all subscribers who reside in the local TV station's market. SHVIA also permits satellite companies to provide « distant » network broadcast stations to eligible satellite subscribers
Satellite Master Antenna Television (SMAT)	A satellite dish system used to deliver signals to multiple dwelling units (e.g., apartment buildings and trailer parks)
Scanner	A radio receiver that moves across a wide range of radio frequencies and allows audiences to listen to any of the frequencies
Service Plan	The rate plan you select when choosing a wireless phone service. A service plan typically consists of a monthly base rate for access to the system and a fixed amount of minutes per month
Service Provider	A telecommunications provider that owns circuit switching equipment
Slamming	The term used to describe what occurs when a customer's long distance service is switched from one long distance company to another without the customer's permission. Such unauthorized switching violates FCC rules
Spectrum	The range of electromagnetic radio frequencies used in the transmission of sounds, data and television
Subscriber Line Charge (SLC)	A monthly paid fee by telephone subscribers that is used to compensate the local telephone company for part of the cost of installation and maintenance of the telephone wire, poles and other facilities that link your home to the telephone network. These wires, poles and other facilities are referred to as the « local loop » the SLC is one component of access charges
Tariff	The documents filed by a carrier describing their services and the payments to be charged for such services
Telecommunications Relay Service (TRS)	A free service that enables persons with TTYs, individuals who use sign language and people who have speech disabilities to use telephone services by having a third party transmit and translate the call
Telephony	The word used to describe the science of transmitting voice over a telecommunications network
TTY	A type of machine that allows people with hearing or speech disabilities to communicate over the phone using a keyboard and a viewing screen. It is sometimes called a TDD

Unbundling	The term used to describe the access provided by local exchange carriers so that other service providers can buy or lease portions of its network elements, such as interconnection loops, to serve subscribers
Universal Service	The financial mechanism which helps compensate telephone companies or other communications entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular and high costs areas, and to public institutions. Companies not consumers, are required by law to contribute to this fund. The law does not prohibit companies from passing this charge on to customers
Very High Frequency	The part of the radio spectrum from 30 to 300 megahertz, which includes TV Channels 2-13, the FM broadcast band and some marine, aviation and land mobile services
Video Subscription	An audio narration for television viewers who are blind or visually disabled, which consists of verbal descriptions of key visual elements in a television program, such as settings and actions not reflected in dialog narration are inserted into the program's natural pauses, and are typically provided through the secondary audio programming channel

Appendix 11
AT Company



Appendix 12
Huawei Company



Summary

The present investigation aims at shedding light on integrating English for Specific Purposes (ESP) in the workplace training that software employees undergo in Algeria Telecom Company in Saida, Algeria. Its main objective is to investigate whether the software employees namely the engineers, technicians and technical agents in the target company are satisfied with their English training in matter of material availability, program suitability and timing and if the English training help them improve their English competencies and performance in their organizational setting. Hence, a descriptive case study was conducted so as to suggest an effective English program for the benefit of both the software staff and their organization Algeria Telecom Company.

الملخص

تهدف هذه الدراسة إلى تسليط الضوء على ضرورة إدراج اللغة الانجليزية لأغراض خاصة في تكوين المهندسين ، التقنيين و الأعوان التقنيين العاملين في الشركة الوطنية للاتصالات بسعيدة الجزائر. إن الهدف الرئيسي لهذا البحث هو دراسة مدى رضا الطاقم التقني للشركة عن التكوين المخصص لهم باللغة الانجليزية بما في ذلك توفر الوسائل التعليمية و برنامج يتماشى مع احتياجاتهم مع التوقيت المناسب إضافة إلى ذلك فعالية هذا التكوين في تحسين كفاءاتهم واداءهم في مكان العمل. بالتالي تم دراسة حالة وصفية و بناءا على النتائج تم اقتراح برنامج مناسب باللغة الانجليزية لفائدة كلا من العمال التقنيين و مؤسستهم شركة اتصالات الجزائر.

Résumé

Cette recherche a pour but l'étude d'intégrer Anglais de spécialité dans le cadre de formation programmée aux ingénieurs, techniciens et agents techniques qui représentent le staff technique dans Algérie télécom a Saida, Algérie. L'objectif principale est de savoir si le staff technique est satisfait par cette formation en terme de la disponibilité du matériels, un programme d'Anglais adapte a leur besoins, le timing et surtout si la formation en cours permettrait d'améliorer leur compétences et performance. Pour cela, une étude de cas descriptive a été menée a fin de suggérer un programme d'Anglais pour le bénéfice du staff technique ainsi que leur entreprise ; Algérie Telecom.