

CHAPTER ONE

Introduction

1.1 Background:

Computers are not only for saving data and playing games. Computers have proven to have a more crucial role in society as they play as a mean for learning. Recent technological advancements have created the possibility of new ways of teaching and learning. The passive teacher-centered learning approach has now shifted its focus towards encouraging students to actively participate in their learning process.

Crystal (1997) explained that in the past, foreign language teaching depended on teaching techniques and teaching efficiency as teaching was active while learning was passive, while the active role is played by the learner.

Recently, developing a high learning efficiency using technology has been of main interest for many learning institutions. Nevertheless, taking full advantage of this potential requires considering the teaching/learning procedure in new ways as well as to master the technology itself. Today computers play a crucial role where they function as *'an added tool or resource, as a model or a real-world phenomenon or system, and as a training environment to prepare users for real-world tasks and experiences'* (Pennington 1996: 11). With respect to second/foreign language teaching and learning, Computer-Assisted Language Learning (CALL), is defined as 'the search for and study of applications of the computer in language teaching and learning' (Levy 1997: 1), offers an unrivalled range of

possibilities to provide learning experiences that are impossible without a computer.

1.2 Statement of the problem

Listening and speaking skills are an important area in foreign language learning. Mastering these communicative skills of English as a foreign language is a challenge for learners. According to Richard and Renandya, (2002:201), “A large percentage of the world’s language learners study English in order to develop proficiency in speaking”. Bearing in mind the fact that listening is often implied as a component of speaking that are often associated with each other.

Learning has been affected by modern technology .In the age of information, learners are exposed to different sources of information, and internet and available software had made a significant change in acquiring knowledge. This generation is largely connected with technology, Sudan is not an exception, and in this respect newspapers (e.g)have claimed that statistics show Sudan to have a leading number of users of the internet via mobile phone. According to Bax (2006) we have to take advantage of the possibilities offered by technology and move towards normalization of the situation when these technologies are used in our daily class work as naturally as a whiteboard or a course book. Unfortunately in Sudan the use of CALL in the tertiary level is almost missing. Consequently the importance neglectable has encouraged the researcher to investigate in this study the effect of using CALL in Sudanese class room setting for the learning of listening &speaking, hence an experiment will be conducted to test the difference in the students learning of the two skills.

1.3 Objectives

This study aimed to:

1. Discover the extent to which the application of Computer-Assisted Language Learning (CALL) in learning listening English as a Foreign Language (EFL) upon learners in Sudanese tertiary institutions using an experimental research design.
2. Measure the learning of speaking influences s English as a Foreign Language (EFL) upon learners in Sudanese tertiary institutions using an experimental research design.

1.4 Research Question:

In this study the following questions were raised:

1. To what extent does CALL promote the learning of listening among Sudanese undergraduate students?
2. How far can CALL promote the learning of speaking EFL among Sudanese undergraduate students?
3. To what extent can the use of CALL enhance the learning of English?

1.5 Research hypotheses

1. CALL promotes the learning of listening for students of EFL in university level.
2. CALL promotes the learning of speaking EFL for university level.
3. CALL promotes the learning of English language for university level students

1.6 Significance of the study.

The significance of this study is due to that it sets how to investigate the extent to which CALL effects the learning of both listening and speaking .Not to mention that it adopts an experimental design as far as listening & speaking is concerned which is a bit rare in Sudanese English Language research library. To benefit educators, teachers, and students.

The study presents statistical facts that measure the influence of technology in language learning in general and listening & speaking in particular .

1.7 Limits of the study.

This study is limited to the EFL students' listening and speaking skills through CALL in undergraduate level .This study was conducted in Sudan University of Science and Technology. Having the freshmen of the collage of languages ,English language students as its population. It is limited in investigate the usage of social media (whatsapp +facebook) and computers in the learning of listening & speaking.

1.8 Research Methodology:

The researcher followed the experimental design in this study. H.W Selger and Shohamy (2013:11) stated: "*The experimental approaches involve the control or manipulation of the three basic components of the experiment; the population, the treatment and the measurement of the treatment* ".Therefore the population of the study will be an experimental sample from students who are learning listening and speaking English through CALL. The learners were exposed to this modern language teaching method. The effectiveness of this method was measured through a two group design, a

controlled group and an experimental one (see H.WSelger &E.Shohamy2013).The subjects of the two groups were submitted to a pre-learning test and a final test (after the learners have completed the courses through CALL).Between the two tests the learning process was traced for each learner and assisted the learners while using CALL. Data obtained from testing results were treated statistically.

1.9 Summary:

This chapter is an introductory chapter that provides a description of the theoretical framework of the study with special focus on the statement of the problem, objectives, hypotheses, and methodology of the study.

Chapter Two

Literature Review

Part One: Theoretical Framework:

2.1 Review of Learning through Technological Gadgets:

Computers Assisted Language Learning (CALL), through its progression, followed a logical development that combines non-stop advances in technology to persistent shifts in the research of language learning and pedagogy (Wright, 2005). While advancements are being achieved in technology, research on impact of the use of computer in second language learning always shows positive evidences in the field (Hergesheimer and Tower, 2004).

According to Moras (2001) CALL programs have been used since the 1960s till now. The 55-year period can be generally divided into three main stages: behaviorist (CALL), communicative CALL, and integrative CALL (Warschauer & Healey, 1998).

2.1.1 The behavioristic phase (1960s).

This was based on the behaviorist theories of learning. This phase is represented by the audio lingual method of the 1960s and 70s. The mainframe was a tutorial system and was used mainly for extensive oral drills, explicit grammar instruction and translation tests (Ahmad, Corbett, Rogers, & Sussex, 1985).

It was mainly oriented towards oral drills and practice, with neither feedbacks, nor interactive components, because of the non-sophisticated mechanisms used at that time.

2.1.2 The communicative phase (1970s).

This phase was based on the communicative approach in teaching which became popular in the 1970s and 80s. Defenders of this methodology felt that the drill and practice projects of the earlier decade did not permit enough valid correspondence to be of much esteem. The focus in this phase was mainly put on using forms rather than drills (language games, reading and text reconstruction).

2.1.3 The integrative phase (1990s).

This phase is motivated by the multimedia computers and the Internet which combines texts, graphics, sound, animation and video. While computer technology has created a great impact on education, the debate on its role in teaching and learning is still not comfortably settled. Anderson (1991), gives the following warning: "technology is changing so quickly, it is our task as administrators or teachers to be aware of the waves, to look critically at them and judge how effective are these tools for teaching and learning".

2.1.4 Basic features of CALL.

The acronym CALL (Computer Assisted Language Learning) as stated by Chapelle (2001), was agreed upon at the 1983 TESOL convention to refer to the area of technology and second language teaching and learning.

CALL was defined by Levy (1997) as 'the research and study of applications of computer in language teaching and learning', but Beatty (2003) shows awareness in the changing nature of CALL, and defines it as 'any process in

which a learner uses a computer' resulting in the improvement of his/her language.

Originally, CALL is a program derived from computer assisted learning with the aim to provide a tutorial program of language learning (Hartoye, 2008), but Egbert (2004) adds that CALL allows language learning in any context with, through, and around computer technologies.

It is apparent from the definitions that the field of CALL involves the use of computer in language teaching and learning and its programs should entail different aspects of language learning processes via the computer. But CALL programs are necessarily determined by certain factors that shape the characteristics of any of its programs, such as;

1. The language taught (English, Arabic or others).
2. The writing system of the language (roman and non-roman characters).
3. The level of language being taught (from beginners to advance).
4. What to be taught (grammar, informal conversation, or pronunciation).
5. How it is to be taught.

2.1.5 Historical Perspective of CALL.

This is viewed from a historical perspective CALL and its origin can be traced back in the 1960s with introduction of the PLATO system (Programmed Logic for Automated Teaching Operations). PLATO was originally built by the university of Illinois and functioned for four decades, offering course work (elementary – university) to students, local schools,

and other tertiary institutions (Bitzor, 1960). At that time students worked on presentations and practices. Emphasis was mainly put on how to use the new technology rather the new technology's effects on learning.

Till late 1970s CALL projects were mainly confined to universities where computer programs were developed, but advances in size, and mobility of computer provided smaller, foster and powerful computers (Hanson – Smith, 2002).

That early CALL in the 1960s and 70s: considered with the dominants of the behaviorist theory of learning, as already mentioned at the beginning of this section, and was based mainly on them.. CALL Programs presented a stimulus to which the leaner had to provide a response. Programs of this phase entailed repetitive language drills presenting drills and non-judgment feedback (Taylor, 1998). The drill and practice models used the computer as a tutor or a vehicle for delivering instructional material to the learner (Ibid, 1980).

In that early phase of CALL's programs, the stimulus was in the form of a text presented on screen, and the only form in which the learner could respond was by entering an answer at the keyboard. One of the sophisticated systems was the PLATO system, which only ran on its own special PLATO hardware, including central computers and terminals. The PLATO system presented vocabulary, brief grammar explanation and drills (Rogers and Sussex, 1985). Higgins (1983) was among critics of that situation. They attributed it to Lack of imagination and skill on the part of programmers, a situation that was modified to a considerable extent by the publication of their influential seminal work which comprised an example of alternatives of

approaches to CALL. Higgins and Johns triggered the debate of the early 1990s over mastership or slavery of computer to be a replacement for teachers or be merely an obedient servant to students?' cited in (Hans – Smith, 2002).

That late 1970s and early 1980s behavioristic CALL was undermined due to rejection of behavioristic approaches to language learning at both theoretical and pedagogical levels and by the advent of PC which allowed a new range of possibilities.

Another critic of behavioristic CALL was Vance Stevens (2002) who contends that all CALL activities should be built on intrinsic motivation, and should work to foster interactivity, both learner-computer and learner-learner. Critics of behaviorism felt that the drill and practice programs did not allow communication (John Underwood, 1984). Underwood views that focus should move to use of forms rather than the form themselves. However, such debates paved the way to the second phase of CALL which was based on the communicative approach.

Throughout the 1980s CALL widened its scope by embracing the communicative approach and a range of new technologies. Hans – Smith (2002) attributes this progress to the change in our understanding to language teaching and learning which went hand in hand with the development of multimedia personal computer. Communicative approaches (Krashen, 1982). Content – based learning (Cantoni – Harvey, 1987), and task – based learning (Nunan, 1989) were all been enhanced by the use of computer.

In his acquisition – learning hypothesis, Krashen (1982) states that language acquisition, on the one hand, and learning on the other are separate processes. The first refers to the subconscious process children utilize in acquiring their first language, and the latter refers to the conscious process that results in knowing about language. Further, in his Monitor Hypothesis, Krashen views learning as having a single function in which it works as a monitor that makes changes in the form of our utterance, after it has been produced by the acquired system (Cited in Mitchell and Myles, 2013). According to Michel and Myles (Ibid, 2013) Krashen has been criticized for his vague definition of what constitutes conscious versus subconscious processes, as they are very difficult to test in practice. They also see Krashen's claim as problematic as learning cannot turn into acquisition. To them, language knowledge acquired or learned by these different ways cannot finally become integrated into a unified whole (Ibid, 2013). Controversy on whether different knowledge interacts or remains separate is still alive today (e.g., Towel and Hawkins, 1994).

Another feature of changes in language teaching and learning approaches is the content – based approach which according to Smith (2004) it refers to the combined study of language and subject matter with the form and sequence of language presentation required by content material, it means as Smith clarifies, the integration of content learning with the language teaching aims (Ibid, 2004).

Breen (2002) defines content as an element selected to be appropriate to overall aims of language curriculum within the syllabus design which involves, in addition to aims and content, methodology and evaluation.

Moreover, content has certain principles for its organization. Breen summarizes them as follows (Ibid, 2002);

1. Focus of knowledge and capabilities: to see whether priority is given to linguistic or communicative knowledge.
2. Selection of content: types of structure and vocabulary to be covered, and use of language or types of tasks to be selected.
3. Manageability: subdividing of content for ease of teaching and learning.
4. Sequencing of content: step – by – step progression always works in favor of removal of complexity while cyclic progression allows for revisiting and refining.

These four principles of organization are related to syllabus design (Breen, 2002) which has undergone a major change due to discontent with failure of learners in using the linguistic knowledge outside their classrooms. The focus moved to language use rather than formal aspects of language (Brumfit, and Johnson, 1979). Examples of this transition are apparent in functional syllabuses concentrating on particular purpose and needs of certain groups of learners – language knowledge and skills needed for academic or specific occupations (Trimble et al, 1978).

This evolution in language teaching and learning research contributed to wider development of communicative language learning. Awareness of the nature of language use in social situations helped creating two new directions in formal and functional syllabuses. Instead of asking about how linguists describe language, the two new directions moved towards psycholinguistic and educational accounts of how language learning is

actually undertaken by the learner (Breen, 2002). Breen (Ibid, 2002), attributes emergence of task - based syllabus to this orientation.

Task based learning comprises the sequence of communicative tasks to be carried out in the target language (Skehan, 2003). Nunan (1993), defines a communicative task as 'a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is particularly focused on meaning rather than form'. Not far from Numan's definition, J. Willis (1996), define it as an activity 'where the target language is used by the learner for communicative purposes in order to achieve an outcome', as any communicative event seems to bring about an outcome through the exchange of meanings.

Communicative CALL programs provide skill practicing in a non-drill format through language games, reading, and text reconstruction. In these programs the computer remains the "knower of the right answer", thus an extension of the computer as a tutor (Taylor and Perez, 1998). But, in contrast to the drill and practice programs, the process of finding the right answer involves a good amount of learners' choice, control and interaction.

Another model of communicative activities involves the computer as stimulus, e.g. programs that stimulate writing or discussion (Taylor and Perez, 1989). In this case the CALL activity does not only stimulate students to discover the right answer, but rather stimulates learners' writings, discussions or critical thinking. Discrete error analysis and feedback was a common feature of CALL, but the more sophisticated programs attempt to analyze learners' response, pinpoint errors and branch to help in remedial activities.

A third model of computers in communicative CALL involves computer as a tool (Brievley and Kemble, 1991; Taylor 1980). Here programs do not necessarily provide any language material, but enable the learner to understand and use the language.

There seems to be no absolute distinction between these models. The dividing line between behavioristic and communicative CALL involves not only which software to use, but also how the software is put to use (Hanson – Smith, 2002).

Technology – enhanced learning was also accompanied by an active theoretical share when Sydney Papert, inventor of the computer language logo, and others applied the principles of John Dewy and Piaget to the use of computer to CALL. Constructivism which involves the use of problem solving during tasks and projects, in addition to direct instruction by the teacher, implies learning by using the computer as a tool to explore simulated worlds, to build presentations and websites that reflect on personally engaging and significant topics, and to undertake authentic communication with other learners around the world (Hanson – Smith, 2002).

The constructivist theory goes along with current recognition in language learning of the need to entail higher cognitive processes in the learning task. Chamot and O'Malley (1990) call this the Cognitive Academic Language Learning Approach (CALLA), and view that cognitive approach handles the need of students to be aware of their own learning processes, and to arrange and build their learning themselves. The amount of information available electronically makes these cognitive demands for language students and

provides a rich setting for the authentic tasks that would promote language acquisition.

The challenge for advocates of CALL was to develop models that could help integrate the various aspect of language – learning, and this paved the way to the integrative CALL Phase. This Phase of CALL is based on multimedia and internet.

Multimedia CALL began in late 1980s and was well established by the mid-1990s. Its introduction meant that reading, writing, speaking and listening could be combined in a single activity with the learners' control of the path that one follows through the learning materials (Moras. 2001).

Early personal computers were incapable of presenting authentic recordings of the human voice, and easily recognized images, but this limitation was overcome by combining the personal computer and videodisc players which made it possible to combine sound, photographic – quality images and video recordings. The result was the development of interactive video discs for language learners. Multimedia allows a variety of media (text, graphic, sound, animation and video) to be accessed in a single computer. Resources are all linked together and learners can follow their path simply by pointing and clicking the mouse, what involves the notion of hypermedia.

According to Warschauer (1996), hypermedia is characterized with a number of advantages. First, it is an authentic learning environment, as listening is combined with seeing, which makes it, just like real life world. Second, skills are easily integrated. The variety of media makes it easy to combine reading, writing, speaking and listening in a single activity. Third, it encourages learners' autonomy, as learners have great control over their

learning, and they can go through their own pace individually or collectively. They can also go forward or backward to different parts of the program, concentrating on particular aspects and skipping other aspects. Finally, a major advantage of hypermedia is that it facilitates focus on the content, without sacrificing a focus on language form or learning strategies.

Despite these advantages, Warschauer (1996) sees that hypermedia of language learning encounters challenges represented in the problems that have appeared when applying multimedia in the language learning process. First, most teachers lack the training or the time to make even simple programs, let alone complex ones. This let the field open to commercial developers who often fail to base their programs an educational principle, in addition to high costs of developing quality programs.

A second problem is the limitation of today's programs. Computers are not intelligent enough to be truly interactive. Most hypermedia programs focus on grammatical correctness and over appropriateness. Language learning programs cannot diagnose learners' problems (e.g., pronunciation, syntax, or usage). Using multimedia may involve the integration of skills, but it seldom involves the integration of meaningful and authentic communication into all aspects of language learning (Ibid, 1996). Fortunately electronic communication and the internet made such integration possible by the arrival of World Wide Web (www) (Fox, 1998).

Public manifestation of internet goes back to 1970s, but its influence starts by the arrival of the WWW, a subletting of the internet accompanied by as communication (Warschauer, 1997).

Internet is an intrinsic motivating tool for learners, since it is a useful medium that enables them to connect with the world. Chinnery (2014) sees in it 'a virtual goldmine of activities' which allows unlimited chances for users. Levy and Stockwell (2006) categorize technologies used in these activities as being either tool or tutor.

The internet (WWW) gives learners access to a wide range of audience and authentic material, and the literature on its use suggests that it can be effective in increasing learners motivation and reducing learners anxiety (Le Loup and Ponteric, 2003), engaging learners (Egbert et al, 2011), promoting learners autonomy (Gonzalez ant St. Louis, 2012) and helping in retention especially when meeting certain criteria for perception of funny, strange interesting imagery (Mayer, 2009; Isola, et al, 2011).

With regard to the use of internet as a tutor, Chinnery (2014) branches its possibilities to be used to offer advance, facilitate analysis or run activities. Several sites serve in giving advice through presenting lessons on English language usage including grammar, vocabulary and idioms. These sites are mainly advice giving resources that learners can explore.

Likewise, analysis can be accessed in web-base texts and speech corpora and concordances where good opportunities or language analysis are allowed.

For activities, both traditional and modern activities are allowed. Activities as such from gap-fill, multiple choice, and matching exercises to the most sophisticated ones, where question are continually difficult (Ibid, 2014).

As a tool, internet is looked at as a catalyst to engagement and interactivity as stimulates creativity and fosters communication and collaboration ((Ibid, 2014). This ability to share both information and communication

strengthened Computer Mediated Communication (CMC), which is often used in collaborative learning (Joinso,2001).

Collaborative learning involves learners working with other learners on a joint project. Whereas tandem learning projects involve two learners. There are various formats to be used as factors, such as livemocha (livemocha.com) is a tandem - learning site that allows learners of different languages to teach one another their another tongues.

Despite these huge possibilities, there are certain obstacles that must be considered, e.g. technical and financial problems, as long waiting times to access information and costs related owning computers, programs, telephone lines and others. Also lack of training and digital illiteracy can lead to frustration.

Anyhow, the illiteracy of CALL suggests that the computer can serve as tutor and tool by the arrival of the internet and can also be a medium of global communication and source of unlimited authentic material, but as Garrete (1991) points out "the use of the computer does not constitute a method. It is a medium in which a variety of methods, approaches, and pedagogical philosophies may be implemented". Garrete here asserts that the effectiveness of CALL cannot replace the medium itself, but how it is put to use.

Warschauer (1996; 2000; 2004) revisited the history of CALL and its phases. He traced it, changing the names and dates of its phases. Structural CALL replaced behavioristic CALL which extends from 1970s to 1980s, Communicative CALL moves forward to cover the 1980s and 1990s, and integrated CALL moves forward to the 21st century.

Box (2003) also offers a new evaluation and assessment to the history of CALL as opposed to the three phases of CALL identified by Warschauer. Box sees the history of CALL in terms of Restricted CALL, Open CALL, and Integrated CALL. Box argues that the term Restricted CALL is more comprehensive and flexible, since it allows reference not only to "Supposed underlying theory of learning, but also to the actual software and activity type in use at the respective time, to teachers role, and the feedback offered to students" which seem, relatively restricted (Bax, 2003), but not all were behaviorist.

Open CALL, according to Bax (2003), is more open in terms of feedback given to learners, software types and the role of the teacher.

Integrated CALL implies normalization, though Bax claims that integrated CALL does not exist then (2003), as the concept of normalization refers to the stage when the technology becomes embedded in every practice.

Another type of description to the history of CALL has been stated by Davies (1991). The first phase is called Dumb CALL, covering the period 1970s to 1980s. The term Dumb is used because at that time computers did not offer sound or video, in fact, they did not offer coloured text. The second phase is called Multimedia CALL (1990s to the present), the multimedia computers that appeared in the early 1990s were a major breakthrough to the field, soundcards were offered so that sound could be played and recorded within the computer itself. Images could be produced, though poorly at the beginning but has improved over time.

The third phase is the web CALL (1993 to the present day). Web CALL brought with it major changes. Traffic became two – way, quality of sound

and video important, and sharing and socializing via the web has become the norm for many people.

2.1.6 Second Language Acquisition (SLA) and CALL:

Second language acquisition is the study of how second language is acquired. It includes, according to Mitchell and Myles (1978), the learning of any language to any level, on condition that it takes place sometime later than the acquisition of the first language. In other words, it is any language other than the learner's 'native language' or 'mother tongue'.

SLA has developed research methodologies both quantitative and qualitative that can be applied to CALL (Larson – Freeman and Long, 1991), so SLA findings should be considered by CALL practitioners. Larson – Freeman and Long (Ibid, 1991) point out some factors that need to be considered when developing curricula and SLA materials which include;

1. The effect of deviant (ill – formed) input.
2. The role of conversation in developing syntax.
3. The input frequency (exposure to language) which affects the accuracy order (levels of correctness).
4. Input modification and SLA comprehension, the role of comprehensible input.

Another area of common interest is the difference between learners with regard to achievement of success. All factors, such as age, aptitude, motivation, attitude, personality, cognitive styles, hemisphere specialization, and learning styles, among others, have been studied and heavily searched (Wesche, 1981).

One of the problems of this area of SLA and CALL is the difficulty of measuring individual learner variables. It is agreed upon that language learning is a complex processes Larsen – Freeman and Long (1991) point out that more complex research design should be adopted. Language learning is generally eclectic in nature, no one theory covers all aspects of the learning process, and the same is true of CALL (Curtis et al. 2012).

2.1.7 CALL Material.

CALL material share many characteristics of non – CALL material (Levy, 1997). Materials can either be authentic, produced locally or commercially. CALL enables the integration of sound and video into courseware materials. It adds dynamic dimension that cannot be realized with a books.

Several frameworks have been proposed for CALL materials, but none has been formulated to catch the great qualities of CALL materials. There are four different types of knowledge that are necessary for the development of CALL materials: theory of instructional design, theory of language teaching, theory of language learning and knowledge of applicability of technology.

Theories of instructional design involve linking learning theories with the practice of building instructional systems (Gros et al. 2005). There are many different theories of language learning which include behaviourist, explicit learning, comprehension –based, communicative and humanistic approaches (Hubbard, &Levy 2006). The area of Second language acquisition (SLA) provides many of the theories of language learning. Knowledge of applicability of technology encompasses knowledge of the different types of technologies available and their intended processes. This includes awareness of the alternatives available, their pedagogical appropriateness.

2.1.8 Designing CALL programs.

There are many different start points for the design of a CALL program. These include theories of instruction, theories of learning, curriculum imperatives, experiments with a new technology, exercise, learning problems, language skills and the delivery of materials to a large number of students (Levy, 1997).

Some of the general elements in the CALL design process are;

- 1. Hardware:** In an ideal world, a CALL developer would be able to customize the hardware to the needs of the proposed system. The hardware decision is an important one as it can often determine what software is possible.
- 2. Software:** In CALL terms, software development can range from making minor modifications to an existing program, using an authoring package to writing a program from scratch in a High Level Language (HLL) (Ahmed et al. 1985).

Using an authoring package is much easier than programming with HLL. Authoring package are one of the easiest ways for language teachers to construct CALL programs (Ibid: 1985). Some packages have an authoring language with small set of instructions available to the users to produce CALL programs. A disadvantage of authoring tool is that the developer is tied into a particular structure and there can be a lack of flexibility.

HLLs (Underwood, 1984). Moreover they are difficult to learn and it usually takes longer to produce the desired outcome. However, the more recent authoring packages are quite flexible and accessible for language teachers,

with some providing access to scripting facility or allow the integration of HLL code. Usually there is some component that allows the incorporation of multimedia technologies into the application. One wide available option that is increasingly being used is the World Wide Web and markup languages such as HTML and XML. There are now many sophisticated packages that developers can use to develop creative pages to enhance the language process. (Bangs and Shield, 1999).

2.1.8.1 Authoring Packages:

It is obvious that not everyone will have a multidisciplinary development team at their disposal. Teachers often find commercially produced materials (both CALL and non-CALL) unsuitable in terms of pedagogic content. On the other hand, it is not feasible to convert content writers into programmers (Bangs and Shield, 1999).

One approach adopted is the use of authoring packages. Authoring packages enable teachers to develop CALL materials without having to learn how to program. Templates are provided which course developers can modify or populate with their own data. Web pages with various different language exercises and lessons can be created with authoring packages. A teacher can develop material that is locally relevant and based on student on student needs and importantly, can keep material up to date and add new material.

A part from the constraints that may be imposed by the authoring packages (e.g. what is doable given the design), there are other problems that may occur. Occasionally, due to the fact that authoring may be a new skill for the teacher, the material produced lack academic strictness, as most of the effort is spent on getting something produced. The final products are often text-

based and materials are mainly aimed to the lower proficiency levels. If something is produced in collaboration with an IT department, it will often be software driven. (Bangs and Shield, 1999).

The CALL author is not always to blame. It is technologically easier to produce text-based materials, as the integration of sound, images and video is often not straightforward. A lack of clearly defined theoretical framework robs the author his power when dealing with the IT department. Another problem that arises is that the knowledge gained and the materials produced often stay local. Even within the same university, there may be little sharing of CALL skills and resources produced. Materials are rarely used in other universities and often there is little or no impact at a higher level.

Bangs and Shield (1999) outline two projects that aim to solve this problem. The Open University has developed authoring tools that allow externally held resources to use a central engine. They use a combination of scripts, node labels and data, hyper linking and formatting to produce CALL materials. Content (sound, image, text) is separated from logic (scripts and templates). It is providing for Language tutors and Educational Development) (MALTED, 2000) project is a European-wide project that not only aims to provide user-friendly authoring tools, but also to avoid duplication of previous development efforts. An asset database is being set up so that CALL materials can be shared and reused. Curtis et al. (2012) point out that Call development requires capital investment, a system development approach (which is expensive) and that there is no guarantee of return.

2.1.9 Types of CALL programs and activities.

According to ICT4LT CALL programs include;

1. **CALL-specific software:** Applications designed to develop and facilitate language learning, such as CD-ROMs, web-based interactive language learning exercises and quizzes.
2. **Generic software:** applications designed for general purposes, such as word-processors (word), presentation software (PowerPoint), and spreadsheet (Excel). Web-based learning programs: online dictionaries, online encyclopedia, online concordancers, news/magazine sites, e-texts, web-quests, web publishing, blog, wiki, etc.
3. **Computer Mediated Communication (CMC) programs:**
synchronous – online chat; asynchronous – email, discussion forum and message board.

CALL activities include; multiple-choice & true/false quizzes, gap-filling exercise, matching, re-ordering/sequencing, crossword puzzles, games and simulations, writing and word-processing, concordancing, web quests, web publishing, CMC.

2.1.10 Whatsapp.

Whatsapp defined by its provider is an application for instant message exchange, videos and audio exchange. It's a cross-platform that may be used by smart phones, tablets and even computers. Groups of members from 2 up to 100 may be created by the application.

2.1.11 Facebook.

Facebook is a social networking website that allows the user to connect with others, share photos, videos, posts and comments.

2.1.12 CALL Evaluation.

In evaluating CALL program, factors such as the language aspect addressed for the learner to engage in during the CALL activity and the level of the language experience in CALL for L2 learning (Chapelle, 1997). Both factors are complex and require some discourse analysis, however, they reveal aspects that should be considered when evaluating CALL.

The following checklist is recommended by Ruschoff (2003);

- Functional aspects and content appropriateness need to be established.
- Linguistic aspects, both in terms of effective presentation of content and in terms of fruitful learner-software interaction, must be investigated.
- Learner and tutor satisfaction are further important issues with a given item of courseware are to be examined but difficult to measure.
- Guidelines for the most effective learning scenarios in view of different types of courseware need to be part of evaluation and testing, i.e. whether courseware is best used in a classroom setting, for self-study, or as part of a telecooperative learning scenario.

The success of CALL does not exist through a magic formula. Infact there are many factors and variables that need to be considered. The following general guidelines should be taken into account. (Ibid, 1998)

(i) Needs

- Appropriate expertise, hardware, software, administrative and technical supports (Felix, 2008).
- CALL practitioners need to keep abreast of development in related fields.
- Consideration to methodology and all the other elements applied in a non-CALL situation.
- Teacher training (McCarthy, 2005) (teachers are often more technophobic than their students).
- Student training (keyboard skills, navigation skills and general IT awareness (McCarthy, 2005).

(ii) Things not to do

- Do not assume that students are excited by CALL (McCarthy, 2005).
- Do not underestimate the confusion and disorientation that may be experienced by novices.
- Do not create unstructured materials (assuming that the students will figure it out.
- Do not just reproduce what could be in a book (Felix, 2008).

(iii) Things to do

- Place emphasis on interactive strategies for feedback and teaching (Felix, 2008).
- (For tutors) do include friendly discourse, different activities, cultural information, exercises with feedback, interactive exercises' and links (Felix, 2008).

- Provide a mental map of the site (unlike a book, the totality of a site cannot be easily viewed /grasped at once) (McCarthy, 2005).
- Promote self-regulated learning (Zhao et al, 2003).
- Be responsive to learners' needs, capabilities and interests (Zhao et. al, 2003).

Fox (1998) suggests attention to three basic elements in successful Internet activities; integration in the course, e.g. a pen-pal project along with a writing course, development of computer competence by teachers and students alike and active teacher involvement in guiding and supporting students to avoid frustration.

2.1.13 CALL advantages.

Many educators (Jonassen 1996, Salaberry 1999, Rost 2002 and Lai 2006) indicate that the current computer technology offers many potential advantages for second language learning. These advantages are as listed below;

1. Interest and motivation

Classic language teaching and learning can be monotonous, boring and even frustrating. Sometimes learners can lose interest and motivation in learning. CALL programmers can provide learners with ways to learn English through computer games, animated graphics, and problem solving techniques which can make drills more interesting (Ravichandran 2000).

2. Individualization

CALL allows learners to have non-sequential learning habit, they can decide on their own which skills to develop and which course to use, as well as the speed and level by their own needs.

A compatible learning style of learning and incompatible style for learners will cause serious conflicts for them. Computer can provide an exciting "fast" drill for one student and a "slow" for another.

3. Optional use of learning time

The time flexibility of using computer enables learners to choose appropriate timing for learning. Winter (1997) in Kilickaya (2007) stressed the importance of flexible learning, learning anywhere, anytime anyhow, and anything you want, which is very true for the web-based instruction and CALL. Learners are given a chance to study and review the materials as many times they want without limited time.

4. Immediate feedback

Learners receive maximum benefit from feedback only if it is given immediately. A delayed positive feedback will reduce the encouragement and reinforcement and a delayed negative feedback affect the crucial knowledge a student must master. Computer can give instant feedback and help the learners.

5. Error analysis

Computer database can be used by teacher to classify and differentiate the type of general error and error on account of the influence of the first language. A computer can analyze the specific mistakes that learners make and react in a different way from the teacher, which enable learner self evaluation and understand the rule behind the correct solution. (Ravichandran,2007).

6. Guided and repetitive practice

Learners have freedom of expression within certain bounds that programmers create, such as grammar, vocabulary, etc. they can repeat the content they want as many times as they wish. According to Ikeda (1999) in Kilickaya (2007), drill-type CALL materials are suitable for repetitive practice, which enable learners to learn concepts and key elements in a subject area.

7. Pre-determined to process syllabus

Computer enhances the learning process from pre-determined syllabus to an emerging or process syllabus. For example, a monotonous paper exercise of "fill-in the blanks" type can be made more exciting on the screen in the self-access mode, and learners may select their own material. Therefore CALL facilitates the synthesis of the pre-planned syllabus and learner syllabuses "through a decision-making process undertaken by teacher and learner together" (Breen 1986 in Ravichandran 2000).

2.1.14 CALL disadvantages.

Although there are many advantages of computer, the application of current computer technology still has its limitations and disadvantages. Some disadvantages of CALL are as follows;

- According to Ansel et al. (1992), the CALL program is different from traditional books that can be carried around and studied wherever and whenever they wish. School computers or language laboratories can only be accessed in restricted hours, so CALL program only benefits people who have access to computers.
- Increase of education costs.

Gips (2004) indicated that CALL will increase educational costs, since computers become a basic requirement for learners to purchase, as low-budget school and low income learners cannot afford a computer.

- Lack of trained teachers

It is necessary for teachers and learners to have basic technology knowledge before applying computer technology in second language teaching and learning. Therefore, computers will only benefit those who are familiar with computer technology (Roblyer 2003 in Lai 2006).

- Imperfect current CALL programs

At present, the CALL software mainly deals with reading, writing, and listening skills. There are some speaking programs developed recently, but their functions are still limited. Warschauer (2004) in Lai (2006) stated that a program should ideally be able to understand a user spoken input and evaluate it not just for correctness but also for 'appropriateness'. Speaking program should be able to diagnose a learner's problem with pronunciation, syntax, or usage and then intelligently decide among a range of options.

- Inability to handle unexpected situations

The learning situation that a second language learner faces are various and ever changing. Computers merely have artificial intelligence, and it cannot deal with learners' unexpected learning problem or response to learner's questions immediately as teachers do. Blin (1994) in Lai (2006) stated that computer technology with that degree does not exist and are not expected to exist quite a long time. In other words today's computer technology and its language learning programs are not yet intelligent enough to be truly interactive.

2.1.15 CALL and Listening.

According to Rost (2002), the term listening refers to a complex process that makes us able to understand spoken language. It is the channel in which we process language in real time. Lindsay and Night (2006) indicate that we carry out listening throughout our whole life.

Bueno and Mc Laren (2006) attribute complexity of listening to its psychological and social nature:

"Listening is a psychological phenomenon, which takes place on a cognitive level inside people's heads, and a social phenomenon, which develops interactively between people and the environment surrounding them... a complex process which needs to be understood in order to teach it..."

Listening is an important area in foreign language learning. It was first given recognition as a major component of language learning and teaching during the late –nineteenth – century Reform Movement (Rost, 2002), where research in second language acquisition (SLA) suggested that second language instruction should focus on learners listening comprehension (Krashen's comprehensible input). This school of thought manifested itself in the form of the comprehensible approach which proposed the following: Comprehensive abilities precede productive skills in second language learning;

1. Teaching of speaking skills should be delayed until comprehension skills are established.
2. Skills acquired through listening transfer to other skills.
3. Instruction should emphasize meaning rather than form.
4. Teaching should minimize learners stress.

Speech-processing research shows that listening involves two types of processing, 'bottom – up' in which listeners attend to data in the incoming speech signals, and 'a top-down' processing in which listeners use the previous knowledge to create meaning (Rost, 2002).

Richards (1990) sees in bottom – up processing a step of focusing on individual linguistic components of discourse and comprehension which is viewed as a process of decoding messages moving from phonemes to words, to phrases and clauses, besides other grammatical elements. Whereas, he views top-down processing as a focus on macro-features of discourse, such as speaker's purpose and the discourse topic. In top-down process comprehension viewed as a process of activating the listener's previous information and prior knowledge about the context and the topic for a full understanding of the message (Ibid, 1990).

Nunan (2001) describes listening as a six-stage process that comprises Hearing, Attending, Understanding, Remembering, Evaluating, and Responding. All stages take place in sequence and rapid successions.

Hearing comes as a response to sound waves stimulating the sensory receptor of the ear. Hearing is the perception of sound regardless of paying attention, as we have to hear to listen, but we need not listen to hear.

The second stage is attending, i.e. paying attention through selections focused upon by the brain. The brain screens stimuli and permits only few to come into focus.

The third stage is understanding. It involves analysis of meaning of what communicative events. Symbolic stimuli are not confined only to words.

The meaning related to these symbols is influenced by our past associations and the context in which the symbols take place.

The fourth step is remembering which combines both reception and interpretation besides storage of information in our minds.

The fifth step is evaluating, in which the listener evaluates the message that has been received. This step involves weighing evidence, sorting facts, and deterring extent of bias or prejudice in the message.

The final step is Responding, in which the speaker checks if the message has been received properly.

With regard to 'Bottom-up' and 'top-down' processes students tend to use a combination of the two, depending on the different purpose of their listening.

Brown and Yule (1983) identify two types of purposes when listening, and they label them as interactional and transactional functions. Learners use interactional language to socially interact with each other, and engage in transactional uses to develop new skills and construct new knowledge.

Likewise, Anderson and Lynch (1988) see the main transactional purposes in the use of language 'to achieve a successful transfer or exchange of information', and "to establish and maintain social contact" in the interactional.

Teaching listening should encompass a pattern that allows students the opportunity to listen actively and a teaching method that combines both purposes. Beano and McLaren Propose the following pattern (Beano and McLaren);

1. Pre-listening to establish a context. Here some activities are done with the purpose to prepare the students for what they will hear.
2. Listening to do the mentioned task or find answers. Intensive listening is provided to students accompanied by some activities.
3. Post-listening, here students are given the opportunity to check their answers to what they have been listening to.

However, there are two approaches to teaching listening skills, the total Physical Response (TPR) introduced by Asher in the 1960s and 1970s, and the natural approach developed by Krashen and Terrell (1983). The total Physical Response (TPR) is based on the theory which states that memory is enhanced through association with physical movement. TPR as an approach to teaching a second language is based, first and foremost a body movement and it is linked to physical actions which are designed to reinforce comprehension of particular basic items (Rodgers, Theodore. S, 2001).

Both the Natural and TPR approaches are supported by Krashen's Monitor Model of SLA and grouped within the comprehension approach.

With regard to CALL for listening skills with Total Physical Response, developed by Asher (1977), is frequently used as techniques rather than an approach. It focuses on mental activities. The use of CALL for listening skills through TPR is based on activities that include TPR groups and physical interaction in response to technical instructions received from the computer (Ibid, 2001).

On the other hand the Natural approach developed by Krashen and Terrell (1983), focuses on comprehensible input and the optimum affective state of

the learner. A potentiality of using CALL for listening skills with the Natural approach comprises of the following;

1. When using computer technology in teaching and learning listening skills, the computer allows teachers to add multisensory elements, text, sound, images, video, and animation, which provide meaningful contexts to facilitate comprehension.
2. Computers allow learners to hear the available input as many times as needed until they feel they understand it.
3. Multimedia programs can be designed to present material at different levels with adjustments in speed of delivery according to the learners needs.
4. Computers allow learners to develop their autonomy in reviewing and practicing materials as many times as they wish.
5. Computers can provide immediate non-judgmental feedback and additional assistance to learners, as they correct learner's errors without causing them embarrassment anxiety.

2.1.16 Assessing Listening.

There is more than one method to assess listening. These methods aim to back learners rather than examining them. A common method of assessment is based on the common European Framework. Through this type of evaluation, teachers can measure students' level according to the following criteria;

Table 2.1 CEF: Levels for evaluating Listening Proficiency

<i>Overall Listening Comprehension (CEF)</i>	
C2	Has no difficulty in understanding any kind of spoken language, whether live or broadcast, delivered at fast native speed.
C1	Can understand enough in follow extended speech on abstract and complex topics beyond his/her own field, through he/she may need to confirm occasional details, especially if the accent is unfamiliar. Can recognize a wide range of idiomatic expressions and colloquialisms, appreciating register shifts. Can follow extended speech even when it is not clearly structured and when relationships are only implied and not signaled explicitly. Can understand standard spoken language, live or broadcast, on both familiar and unfamiliar topics normally encountered in personal, social and academic or vocational life. Only extreme background noise, inadequate discourse structure and/or idiomatic usage influence the ability to understand.
B2	Can understand the main ideas of propositionally and linguistically complex speech on both concrete and abstract topics delivered in a standard dialect, including technical discussions in His/her field of specialization. Can follow extended speech and complex lines of argument provided the topic is reasonably familiar, and the direction of the talk is sign-posted by explicit markers.
B1	Can understand straightforward factual information about common everyday of job related topics, identifying both general messages

	<p>and specific details, provided speech is clearly articulated in a generally familiar accent.</p> <p>Can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. including short narratives</p>
A2	<p>Can understand enough to be able to meet needs of a concrete type provided speech is clearly and slowly articulated.</p> <p>Can understand phrases and expressions related to areas of most immediate priority (e.g. very basic personal and family information, shopping, local geography, employment) provided speech is clearly and slowly articulated.</p>
A1	<p>Can follow speech which is very slow and carefully articulated, with long pauses for him/her to assimilate meaning.</p>

Teachers also use other methods, as giving tests at the end of each unit, give listening comprehension tasks, class exams, or example exercises which involve understanding, memory and retention.

McLaren and Madrid (1996) propose a listening activity that evaluates students' listening comprehension, as shown below:

Table 2.2 Listening comprehension activity.

<p>Te students hear:</p> <p>Britain: cool and windy. Average temperature 12 degrees.</p> <p>France: warm and sunny. Average temperature 18 degrees.</p> <p>Germany: it's raining and cold. Average temperature 6 degrees.</p> <p>Holland: it's windy and cloudy; average temperature 10 degrees.</p> <p>Belgium is very similar: it's rainy and cool and the average temperature is 11 degrees.</p> <p>But in Spain it's hot and sunny. The average temperature is 22 degrees.</p> <p>Ireland: very wet, but warm: temperature 17 degrees.</p> <p>Greece: very hot and sunny, like Spain: temperature 25 degrees.</p> <p>Portugal: wet and cool: temperature 14 degrees.</p>
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(McLaren and Madrid 1996, Making Progress 2: Workbook, P45)

Another example is the filling in test by Madrid and McLaren (1995):

Table 2.3 Madrid and McLaren Listening Tests Listen and Tick.

DRINKS	CLIVE		AMY	
		Coke		Lemonade
	Orange juice		Water	
	Tea		Milk	
FOOD	Sandwiches		Chocolate	
	Crisps		Cakes	
	Sweets		Peanuts	

(Madrid and McLaren 1995: 44)

One of the best ways of assessment is students' self-report and the Common European Framework which establishes six levels to do it.

1. A1. I can recognize familiar words and very basic phrases concerning myself, my family and immediate concrete surrounding when people speak slowly and clearly.
2. A2. I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local area, employment). I can catch the main point in short, clear, simple messages and announcements.
3. B1. I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.
4. B2. I can understand extended speech and lectures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.
5. C1. I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signaled explicitly. I can understand television programmes and films without too much effort.
6. C2. I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.

2.1.17 CALL and speaking:

Studies in second language use have shown the kinds of problems second language learners' face, in order to communicate, and the skills they need to overcome. Hence, speaking is looked at in the large context of communication with the focus on the ability to take messages, negotiate meaning and produce comprehensible output (Bialley, 1990). This view recognizes the interactive nature of listening and the crucial role of negotiating meaning in order to produce comprehensible speech.

Swain (2008) argues for the importance of comprehensible output that requires the learners to negotiate meaning, formulate and test hypotheses about the structure and function of the language they produce. In this way, when non-native speakers receive feedback from their interlocutors showing non-clarity of message, they revise their speech and clarify their meaning. Through this process of adjusting their language output, they make their messages more comprehensible and thus, learners improve the accuracy of their language production.

Speaking is generally viewed as the most important skill among other language skills. But, in fact, the most recurrent complaint on the part of learners is that, despite the years they spend in learning English, they cannot speak it (Bailey and Seavage, 1994).

People need to speak in different daily situations. They spend most of their time interacting with each other, and each of these situations requires different speech acts according to their different purposes which need conveyance of different meanings (Harmer, 2007).

When teaching speaking teachers should draw on more than one approach, and use a variety of instructional tools, such as audiotapes, videos and multimedia computer technology, to meet the different needs of the learners. For beginner learners the teacher may use the audio lingual method (ALM), the total physical response (TPR), the natural approach, the silent way, and suggestopedia. As for more advanced levels of instruction communicative language approach (CLT) may be used with the task – based approach as well.

In second / foreign language classroom, the CALL creates situations that stimulate interest, enhances interaction, facilitates collaboration among students, permits rich learning experience for all students, and strengthens their communicative skills (Borras, 2015; Cameron, 2002). CALL speaking activities are still in its beginning compared to those in reading, writing, and listening.

In fact, application of CALL in teaching and learning speaking is mainly determined by the nature of speaking itself. According to Pennington (1995), spoken language competence covers two aspects, the learning how to differentiate and produce sounds of language and link them together in fluent strings of sounds comprising syllables, words, phrases and longer utterances, and decoding of individual sounds (Phonemes). Meaningful aspects refer to learning how to build as well as to decompose grammatically coherent utterances and to link them to communicative functions according to rules of pragmatic appropriateness in a given speech community (Gong, 2002).

The major application of CALL in the mechanical dimension is in pronunciation. New multimedia products incorporate extensive texts, graphics, animation, audio, and digitized audio or video clips. With some software, computers can produce relatively natural speech from individual phonemes stored as digital codes that are strung together as the user types on the keyboard (Healey, 1999).

CALL also offers software that provides diagrams and video clips or animation of the speakers' mouth in motion while pronouncing sounds and words. With such programs learners can be familiar with the target sounds and can differentiate between them.

Speech recognition technology, the ability of machine to process spoken input and to respond (Healey, 1999), enables CALL software to include active participation in speech production, oral reading, and limited conversation in the range of language activities available to students.

By combining speech recognition technology used to convey speech problems and now applied in second / foreign language learning for phonetic analysis or training, a computer system can give learners real – time feedback with clear and interpretable visual images on the learner's performance in pronunciation (Ibid, 1999).

According to Mostow & Aist (1999), pronunciation assistance by computer falls into three general approaches;

1. Visual feedback systems that provide a visual representation of a student utterance.
2. Acoustic template – based systems that metals students' speech against a template.

3. Model – based systems that evaluate students' speech. One of the greatest advantages of the application of CALL on pronunciation without fear of the number of repetitions needed for full comprehension or accuracy of production. Furthermore, according to Kataoka (2000), learners' anxiety about phonetic inaccuracies are greatly reduced, while learners can always adjust their own pace of learning.

Due to the complexity of natural spoken language the applications of CALL in developing speaking competence in meaningful dimension is currently realized by the stimulations CALL environment creates. However, computers lack the intelligence of understanding, producing and responding to natural rapid speech on unexpected topics. What CALL can do well at present is the setting up of an environment that encourages learner to speak and create a micro-world in which they can communicate in the target language, both on-and-off-line. This stimulated world makes a life of its own, and can make communication within that context seem authentic (Pennington, 1995).

Fortunately, as CALL develops, communicative technology is rapidly growing. SKYPE, a method of making phone calls through computer using a system that enables people to exchange face –to- face oral communication, allows its users to connect audio and video from all parts of the world. Users can see each other via video and use audio to communicate, the only requirement is a good internet connection and a SKYPE account.

Discussion forums can also be used in the development of learners' speaking skills. Pennington (1995) argues that the development of 'conversation – like written discourse' in e-mail might have 'a carryover to spoken language'.

Phinney (1995) points out that more students are likely to participate in an on – line classroom as several students can be writing their contributions at the same time.

2.1.18 Assessment of Oral Production.

Assessment of learners' speaking skills is always done by humans who maybe sometimes highly subjective. Speaking as listening has its own methods of assessment. The common European Framework (CEF) describes students' levels in the same way as in listening classification:

Table 2.4 CEF:Levels for evaluating Speaking Proficiency

Proficient	C2	<ul style="list-style-type: none"> • Can understand with ease virtually everything heard. • Can summarize information fro different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. • Can express him/herself spontaneously, very fluently, very and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	<ul style="list-style-type: none"> • Can understand a wide range of demanding, longer texts, and recognize implicit meaning. • Can express him/herself fluently and spontaneously without much obvious searching for expressions. • Can produce clear, well-structured, detailed test on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices.
Independent	B2	<ul style="list-style-type: none"> • Can understand the main ideas of complex text on both concrete and abstract lopes. Including technical discussion in his/her field of specialization. • Can interact with a degree of fluency and spontaneity

		<p>that makes regular interaction with native speakers quite possible without strain for either party.</p> <ul style="list-style-type: none"> • Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	<ul style="list-style-type: none"> • Can understand the main points of clear standard input on familiar matters regularly encountered in work, school leisure, etc. • Can deal with most situations likely to arise while travelling in an area where the language is spoken. • Can produce simple connected text on topics which are familiar or of personal interest. • Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinion and plans.
Basic	A2	<ul style="list-style-type: none"> • Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). • Can communicate in simple and routine tasks requiring simple and direct exchange of information on familiar and routine matters. • Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	<ul style="list-style-type: none"> • Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. • Can introduce him/herself and others and can ask and

	<p>answer questions about personal details such as where he/she lives, people he/she knows and things he/she has.</p> <ul style="list-style-type: none"> • Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.
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Some authors such as Witt and Young (2002) describes a system focused on measuring pronunciation quality of non-native speakers at the phone level which locates pronunciation errors, assess how close to native speakers, and identify systematic difference when compared to pronunciation dictionaries.

Harris and McCann's (1994) threefold categorization examines informal, formal, and self-assessment of speaking activities. Most informal assessment takes the form of student's observation and monitoring of activities as they take place in the classroom. Observed information needs to be recorded from the part of the teacher in a way that provides some sort of consistency. Harris and McCann (1994) provide their scale in the following table.

Table 2.5 Harris and McCann's Scale:

5	Speaks fluently	Almost no errors
4	Speaks quite fluently	Some errors
3	Some difficulty in speaking	Many errors
2	Difficulty with speaking	Almost incomprehensible
1	Unable to use language	Incomprehensible

With regard to formal assessment, it takes the form of tests that involves more structured planning, design, and management. Test formats differ according to the type of tasks on which tests are built. Harris and McCann

(1994) offer test classifications including a summary of their advantages and disadvantages:

Table 2.6

TEST FORMAT	PROS	CONS
Free interviews (students chat in groups or as individuals).	Realistic and reduce stress for students.	Very difficult to rate performance (personality factor). Need to maintain conversation at same time as rating.
Picture description (using photo or drawing).	Give tester time to listen and students something concrete.	Artificial task and there is no interaction.
Information transfer (information gap through notes or pictures).	Realistic – need for communication. Tests key interactive strategies.	Can be problems when one student is a lot weaker than the other, if in pairs.
Role – play: students assume roles with or without cued information.	Excellent for testing interaction and commonly used task in most materials.	Can test the ability to act.
Oral presentations: Students prepare and give short talks.	Realistic and give the tester time to assess performance.	No interaction and can be highly stressful – not suitable for younger students.

Self – assessment in speaking activities is a difficult area, hence Rocio (2012) suggests certain steps that should be followed to achieve that;

1. Establish a set of criteria so that everyone knows beforehand what he/she is going to reflect on;
2. It is better to ask students to reflect on their achievements and the inadequacies they perceive rather than asking them to give themselves marks;
3. Self-assessment should take place immediately after completion of the task, although audio and video recording may prove a real help.
4. It is important to complement self-assessment results with the teacher's information from observations and tests feedback.

So far relevant literature on the usage of CALL in the classroom setting has been covered, stating the different stages of the learning process while applying CALL in the teaching of listening and speaking.

Part Two: Previous Studies:

This section of the study reviews analytically the previous related studies. They are classified as follows;

2.2.1 Studies that test CALL in Learning Reading and

Writing:

This study was conducted by Osama Mudawe Nurain, in 2008 titled Effect of Web-Based Instruction on Promoting EFL Students' Reading and Writing Skills at University Level in Sudan, a PhD awarded from Sudan University of Science and Technology . This study endeavored to explore the potential outcomes offered by the mix of the Web-Based Instruction with the

strategies of teaching English at university level and its impact on developing EFL students Reading and writing skills. The key objective of the exploration was to investigate the issue of utilizing online assets and materials to improve showing procedures and conveying of courses materials. The significance of the research lies in the fact that, the applications of web-based instructions for improving teaching strategies have drastically altered the ways in which English language should be taught. The research adopted the empirical methods in which two different kinds of treatments have been implemented with two different groups (Control & Experimental) at three universities: Sudan University of Science and Technology, Gedaref University and University of Gazira. The principle result produced from the investigation made, demonstrated that there are factually critical contrasts between the two gatherings regarding their accomplishments in the support of exploratory gathering. The discoveries urged the specialist to recommend that online materials and assets ought to be generally coordinated alongside the techniques for instructing English to achieve the fancied results. The analyst firmly suggested that CALL ought to be taught as a particular course for EFL understudies at Sudanese colleges.

Which is quite an exaggeration as CALL is classified under the language learning umbrella away from the needs of a general English language learner.

2.2.2 Studies that Investigate Learning Grammar through CALL:

This study was authored by Eyiuche Ifeoma Olibie, in 2010, titled Using Computer assisted language learning to improve students of English language achievement in universal basic education for a PhD degree from

the Federal College of Education(Technical)Asaba, Delta State, Nigeria .The studies significance is in that it tried to figure out whether PC helped dialect learning (CALL) would enhance understudies' accomplishment in English linguistic use more than Customary English Dialect Direction (CELI).

The methodology followed in this study was a quasi-experimental method including four in place classes of junior optional III understudies. Two of the classes were arbitrarily doled out to the test bunch while the other two were haphazardly doled out to the control bunch. Sentence structure capability tests were utilized to gather information. The study, went on for 8 weeks, used the PC for the trial aggregate and printed writings for the control bunch. Information was examined utilizing mean and standard deviation scores. The discoveries uncovered that CALL had a general beneficial outcome on understudies' accomplishment in English dialect more than CELI.

Although this study deals with a crucial subject, but considering the variable number of dialects in English it's not clear which ones the researcher is addressing.

2.2.3 Studies that arise the usage of software in teaching & learning

A PHD study entitled, A study of language learning achievement differences between students using the traditional language laboratory and students using computer-assisted language learning courseware, by Joseph Harmon Avent from the University of Georgia in 1993.The significance of this study is due to that it developed courseware for language learning, and evaluated

this courseware .The researcher intelligently was by using this courseware, administering student testing, and analyzing test results using quantitative methods.

The first finding was that there was no interaction between type instruction and ability group.

The second finding was that there was interaction between type instruction and ability group.

Finally, there was a comparison of the performances by the same individuals on two different vocabulary measures. The first tested items that had been taught by computer. The second tested vocabulary items that had not been taught by computer. The mean scores were significantly higher for computer taught items than for non-computer taught items. Again there was no indication of interaction between type instruction and ability group.

Inspite the great work done in this study, the study doesn't declare the points of weakness in the developed courseware that failed to affect the learning ability of the students.

Another recognized study in this area was a PHD titled" Instructional Technology and The Post-Test Results of College Learners", submitted July 2011.

The significance of this study lies in the fact that it investigates a common computer program widely used in teaching .the researcher The goal of the study was to analyze learning results between a first-year English as a useless taught with the PowerPoint programming application and a comparative first-year ESL class taught with a customary instructional methodology and materials.

The method followed in this study was a quasi-experimental research design, which is a suitable choice for such research topics. The study involved 40 participants enrolled in first-year ESL courses.

The study resulted that learners' perceptions regarding the engagement ability and clarity of instruction delivered with the PowerPoint presentation software had improved. Testing also showed that learning outcomes by learning styles and gender between and within the experimental and control groups were not statistically different. Recommendations include more research encompassing a longer treatment period as well as more research evaluating the influence of PowerPoint and other technologies on the learning styles.

2.2.4 Research of CALL in Teaching Listening and Speaking.

This study is an MA titled "An Experimental Study of Corrective Feedback on Synchronous Oral Computer-Mediate Communication", authored by Katia R. Monteiro, from California State University in 2012. This study is significant due to that it investigated the effectiveness of metalinguistic feedback and recasts and the effect of form-focused instruction (FFI) in the development of implicit and explicit knowledge in video conferencing by partially replicating a study performed in a classroom setting.

The researcher followed an experimental design in her study as pretest/posttest/ were conducted posttest design was adopted with three groups: FFI plus recasts, FFI plus metalinguistic feedback, and FFI-only. Participants were 42 Brazilian English as a foreign language learners and the target structure was regular simple past.

The results indicated that FFI plus feedback had an advantage in the development of implicit knowledge, while both FFI plus feedback and FFI alone helped develop explicit knowledge. However, group differences were not found. The results also indicated that the different treatments did not affect differently below-average scorers and above average.

Unfortunately the researcher has not suggested further research in the area adopting different methods to test Oral Computer Mediated Communication.

The second study conducted by Eman Mohammed Hashim in 2006, titled “The importance of using online English language education sites in improving both listening and speaking skills as evaluated by the secondary schools teachers and supervisors viewpoints in Jeddah”, submitted as an MA. This study is significant as it aimed at recognizing the importance of using online English language education sites in improving both listening and speaking skills as evaluated by the secondary schools teachers and supervisors viewpoints in Jeddah, also aims at recognizing the difference between the study sample viewpoints about this type of using as evaluated by the following variables (age, educational level, job, experience years, courses).

However the researcher followed the descriptive method in her research along with to answer questions (interviews) in the wake of utilizing the SPSS, number-crunching mean, mono-distinction investigation. The study sample was (344) female teachers and (26) female supervisors. The questionnaire was the data collection tool. The study sample has statistically indicative positive response towards using online English language in

listening and speaking. The study also found that positive response regarding the desire of female students in using online English language.

In spite of the large number of participants in the questionnaire (study tool), I believe adopting a descriptive method was accurate, such research should apply a quantitative approach.

The third study was a paper by Lan Luu Thi, from University of Auckland (New Zealand) titled “Adopting CALL to Promote Listening Skills for EFL Learners in Vietnamese Universities”, published in 2013.

The importance of this extraordinary study was in the fact that it investigated the extent to which Computer-Assisted Language Learning (CALL) activities influence academic listening skills of English as Foreign Language (EFL) learners, as well as teachers’ attitudes towards computer use and their computer skills in language teaching in Vietnamese tertiary institutions.

The methodology followed by the researcher as a quasi-experimental design. The study was conducted in two phases, the Baseline and Intervention, the latter sustained over three months. The treatment sample of this study consisted of four teachers of listening and their students (in total approximately 100). The teachers were invited to a training workshop on computer skills, and received online resources for their teaching supplements. The intervention classes were taught with these supplementary online resources while the comparison classes (the other four classes) were supplemented with extra listening books selected by their teachers.

The results showed that there was a difference between the listening scores of the students in the intervention classes compared those of the comparison students. The teachers showed changes in their attitudes towards computer

use, and gained better skills in selecting effective sources from the Internet for listening instruction.

The fourth study was a paper entitled “Voice Blog: An Exploratory Study of Language Learning”, 2009.

The importance of this study is that it provides a theoretical and a pedagogical foundation for the premise that extensive practice on blogs can constitute an integral part of instruction, and that blogs enable students to structure their thoughts and to make them publicly available in a way that is rarely possible in other media.

The method used was two data collection procedures;

1. a survey of student attitudes towards the use of voice blogs.
2. Retrospective interviews with students.

Results of this study reveal that students went through a series of blogging stages, including conceptualizing, brainstorming, articulation, monitoring, and evaluating, and used a wide variety of strategies to cope with blogging-related difficulties. In addition, students perceived blogging not only as a means of learning, but also as a means of self-presentation, information exchange, and social networking. Furthermore, the findings suggest that blogs constitute a dynamic forum that fosters extensive practice, learning motivation, authorship, and development of learning strategies.

2.2.5 CALL and learner’s attitude.

The first study in this area was by Abdurrahman G Almekhlafi, entitled , "The effect of computer assisted language learning (CALL) on United Arab Emirates English as a foreign language (EFL) school students’ achievement

and attitude." The study was a paper published in 2006. This study's significance lies in the fact that it investigated the effect of CALL on elementary pre-school students' improvement in English as a foreign language (EFL).

The researcher followed an experimental design to conduct his study as eighty students were selected and divided into two groups: 40 participants presented the control group while 43 represented the experimental group.

A questionnaire was distributed to check the students' attitudes towards CALL.

Results have shown a significant difference between users of CALL and non users in favor of the experimental group. As for the questionnaire, students of the experimental group had positive attitudes towards CALL. Results of the study have proved evidence of the effect of CALL on learning English as a Foreign Language.

The second study entitled "The Effect of a CALL Program on Jordanian Sixth-Grade Students' Achievements", a paper authored by Ruba Fahmi Bataineh and Nedal Awwad Bani Hani, published in 2011.

The importance of this study is due to that it examined the potential effect of a computerized instructional program on Jordanian sixth-grade students' achievement in English.

The methodology followed in this study was an experimental one, as four instruments were utilized: a pre-post achievement test, a student opinionnaire, a teacher opinionnaire and an observation checklist.

The findings reveal a statistically significant difference in student achievement in favor of the experimental group, which teachers and students have positive attitudes towards computer use, and that teachers are committed to computer use in language teaching, more so for those with a computer background.

These studies had different objectives using different methods and tools, though they all share the investigation of CALL in the learning of English as a foreign language.

Thus all of them agreed that CALL promotes learning of English, except for the study presented by Kátia R. Monteiro that did not find any difference in the two groups performance before and after the experiment.

The studies adopted an experimental design or a quasi-experemental design except for the study by Eman Mohammed Hashim that adopted a descriptive method.

The difference between these studies and this one here is that in this study the researcher examines the effect of CALL in learning both listening & speaking differently .As listening is tested in four stages; listening for general information (comprehension), listening for details,listening for specific information and cloze listening. Whereas speaking is tested in means of accuracy and fluency.

The present study also adopts a different limitation as its studies the effect of CALL in learning listening and speaking in tertiary level in Sudan. Also this study presents a language learning use for social media web sites and applications.

Chapter Three

Research Methodology

In this chapter the researcher presents the most crucial part of the study, the methodology followed to answer the research questions. To be more specific, this chapter provides a detailed description of the study design, subjects, the tools used for collecting data and the method used for analyzing the collected data.

3.1 The Study Methodology.

In this study as stated in chapter one the aim was to examine the learning of both listening and speaking through CALL among tertiary Sudanese students at Sudan University of Science and technology. To achieve that an experimental approach was conducted to study the effect of CALL in the learning of both skills.

As the case is in experimental designed research the population was exposed to a pre-test and a post one after the experiment took place.

3.2 Population and Sample.

The population of the study is first year students taking English as this major in the Faculty of Languages at Sudan University of Science and Technology; in the academic year 2014/2015. The total number is 113 students. All these students share the same mother tongue and are taught by the same teachers. These students had already studied courses that were supposed to have provided them with the necessary information about listening and speaking

skills. They had studied courses such as: "Listening and Speaking" and "oral communication skills". The objectives of these courses were to develop both listening and speaking. In listening, the students practiced listening skills such as: identifying main idea and their supporting details, skimming, scanning and guessing the meaning of unfamiliar words.

The students were previously divided into two groups by the Head of the English department A and B .Group A was served as the control group and group B as the experimental group .All students agreed to participate voluntarily in the study .The course for the two groups was taught in the same classroom and time of the day one group studied at Sundays while the other at Mondays. The experimental group was taught by using computers and technical devises in addition to the use of social media applications such as Skype and Whatsapp.

The following table shows the design;

Table 3.1 Experimental design table

	Assignment	Pre-stimulus measurement	Stimulus	Post –stimulus measurement
Group A (experimental group)	R	O1A	X	O2A
Group B (control group)	R	O1B	Time →	O2B

As A=the experimental group, B= the control group, O1pre-test and O2 is the post-test.

If we name the change in the experimental group by C (O2A-O1A) ,and that in the control group C1,then C1-C gives an estimate of the test stimulus

3.3 Data Collection Instruments:

As the study follows an experimental design the research tool is the pre experiment test and a post experiment test .The research population was divided into two groups a control group and an experimental group .Each group has a number of 50 students .The researcher set the two tests that where validated by experts. The tests took place considering the experts notices and advice.

3.4Tools:

The tool used in this study was two tests for each skill i.e listening and speaking as following:

3.4.1 Listening pre and post tests:

The listening tests were adapted from Anglia Examinations England. Anglia Examinations has been based in Chichester, England, since 1993. Anglia offers a comprehensive and structured programme of assessing English language competence, from beginner through to full competence as an expert user. This Step-by-Step approach to testing encourages and motivates students to make clear and effective progress.

3.4.1.2 Validity and Reliability of the Listening Test:

The final draft of the test was validated as it had been piloted by experts in both English language and Education experts in assessment. Suggestions and opinions of the experts were considered to modify the test version.

The reliability of the constructs was measured at an aggregate level; the Cronbach alpha test was used on SPSS 15 for Windows (Pallant 2005; Aron *et al.* 2005), and the test result had a good internal consistency with the alpha coefficients of .87.

The tests consisted of four parts the first part was to assess the listening for specific information , the second part was to test to listen for general information , the third was to listen for details .the last part was a cloze test question (dictation)which generally tests the ability to understand context and vocabulary.

3.4.2 Speaking pre and post test:

The speaking test as the listening test validity was checked by experts for approval. It was then piloted and its reliability checked .Five students from the Collage of Education were chosen to do the speaking test twice within one week. They were asked to speak about themselves in a maximum of three minutes time .Their results were recorded and analyzed statistically to test the reliability .Comparing the means of the two tests which scored 2.72 for the first test and 2.75 for the second it was clear that no statistic difference was noted ,indicating the reliability of the speaking test.

Table 3.2

Test	Mean
Test(1)	2.72
Test (2)	2.75

The test consisted of three optional parts as the students were asked to speak about one of the topics read in a three minutes period of time . The researcher adapted the IELTS exam criteria to evaluate the students performance .The criteria involves fluency ,lexical recourses (vocabulary),grammatical range and accuracy, and pronunciation ,grammar and pronunciation represents accuracy. The expression of the speaking test results was as ordinals in six levels from excellent to failure .

3.5 Procedures of the experiment.

To conduct the experiment the researcher began by testing the students in both skills Listening and Speaking .The pre-test took place after the division of the students into a group of two and after the setting of the experiment was settled .The listening test was an hour test that took place in one sitting room for each group at a time. Whereas for the speaking test the researcher was assisted by three teachers to test the students speaking in which each student would enter the test room individually.

To conduct the experiment the researcher taught the course of Listening & Speaking differently .As the population was divided into two groups as mentioned before a control group and an experimental one, the experimental group was exposed to CALL .The experimental group learned Listening and Speaking using computers. The group also used the popular communication

application whatsapp to exchange communication, practice listening and speaking, and share their oral production with the members of the group. A facebook group as created to be a meeting forum. While the controlled group learned Listening and speaking through a traditional method.

As the class where the course took place was a traditional unequipped one, researcher had the students use their personal computers, laptops, pads and smart phones during the course to proceed the experiment .they could get a soft copy of the course book and it's audio. A whatsapp group was created which facilitated learning at times other than the time fixed in the class timetable. Students could collaborate, record this own voices while practicing the tasks and sharing their production electronically with their group members. In times the electricity power failed us to continue in others technical issues as low internet connection would occur thus the process went on.

After 13 weeks the semester ended and the post-test took place .The test was as in the pre-test for both skills Listening and Speaking ,and for both groups .The same procedures followed in the pre-test were followed in the post test thus with different tests .

3.6 Data Analysis Procedures:

3.6.1 The listening test consisted of four parts described as follows:

Table 3.3

SKILL	QUESTION	SCORE	TOTAL
Listening for specific information	Part one from b-f	5marks for each	20
Listening for general information	Part two from 1-10	3marks for each	30
Listening for details	Part three from 1-10	3marks for each	30
Dictation (cloze test design)	Part four 10 blank spaces	2marks for each	20
TOTAL SCORE			100

After the test was marked, the data was collected and coded to be analyzed using the SPSS package to obtain the frequencies percentages and t-test. The speaking test was marked as mentioned before in 3.4.2.. The speaking tests as the listening was statistically analyzed using the SPSS package focusing on frequency and percentage.

Summary :

This chapter reviews the research methodology, revealing the research procedures and tools used in data collection ,beside the method used for treating the collected data.

Chapter Four

Data Analysis, Results, Discussion and Interpretation

This chapter presents the analysis of data obtained from experiment, teachers questionnaire, pupils questionnaire, and classroom observations.

4.1 Analysis of the experiment

This chapter includes the statistic analysis of the data collected from the experiment which was a pre and post test for listening and speaking .It also discussion and interpretation of those results.

After conducting the two tests, gathering the data, the researcher used the SPSS program to analyze it. The analysis was in terms of frequency and percentage to declare the samples performance. The t-test was used to investigate significant difference in the students' performance before and o after the test for each variable.

4.2.1 Verification of Hypotheses:

CALL promotes the learning of listening for students of EFL in university level.

Does CALL promote the learning of:

Listening for general information in English as a foreign language.

Listening for specific information in English as a foreign language.

Listen for details in English as a foreign language.

The following statistic results represent answers to the first research question.

Control group statistic results.

4.3.1 Listening results

Table 1.4: t-test results

	Sig.
Pair 1 listen4details - P_listen4details	.000
Pair 2 listen4general - P_listen4general	.160
Pair 3 listening4specific - P_listening4specific	.001
Pair 4 Listening cloze - P_listening cloze	.000

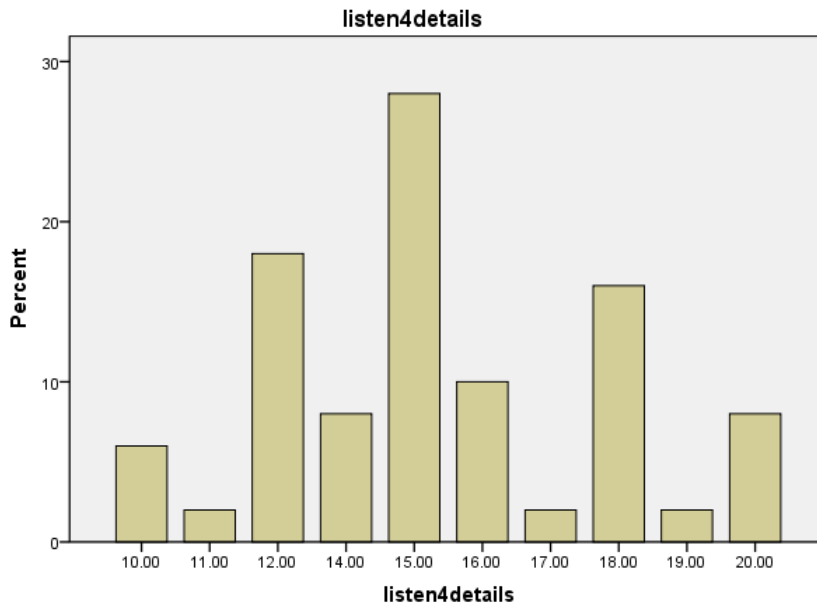
According to statistics if the significance(sig.) in the t-test is less than .05 it has statistic significance .As it appears in the table.(1.4)the variables listening for details and listening for specific information scored significance less than .05 which means there was significant difference in the students' performance in the pre and post tests. While in the question that required listening for general information sig.scored .160 which indicates that there was no difference in the students' performance in the pre and post test .The table also shows that the students performance was different in the two tests as sig .for the listening cloze variable was .000.

4.3.2 Listening pre test results.

Listening for details:

	Frequency	Percent	Valid Percent	Cumulative Percent
10.00	3	6.0	6.0	6.0
11.00	1	2.0	2.0	8.0
12.00	9	18.0	18.0	26.0
14.00	4	8.0	8.0	34.0
15.00	14	28.0	28.0	62.0
Valid 16.00	5	10.0	10.0	72.0
17.00	1	2.0	2.0	74.0
18.00	8	16.0	16.0	90.0
19.00	1	2.0	2.0	92.0
20.00	4	8.0	8.0	100.0
Total	50	100.0	100.0	

Table(2.4)



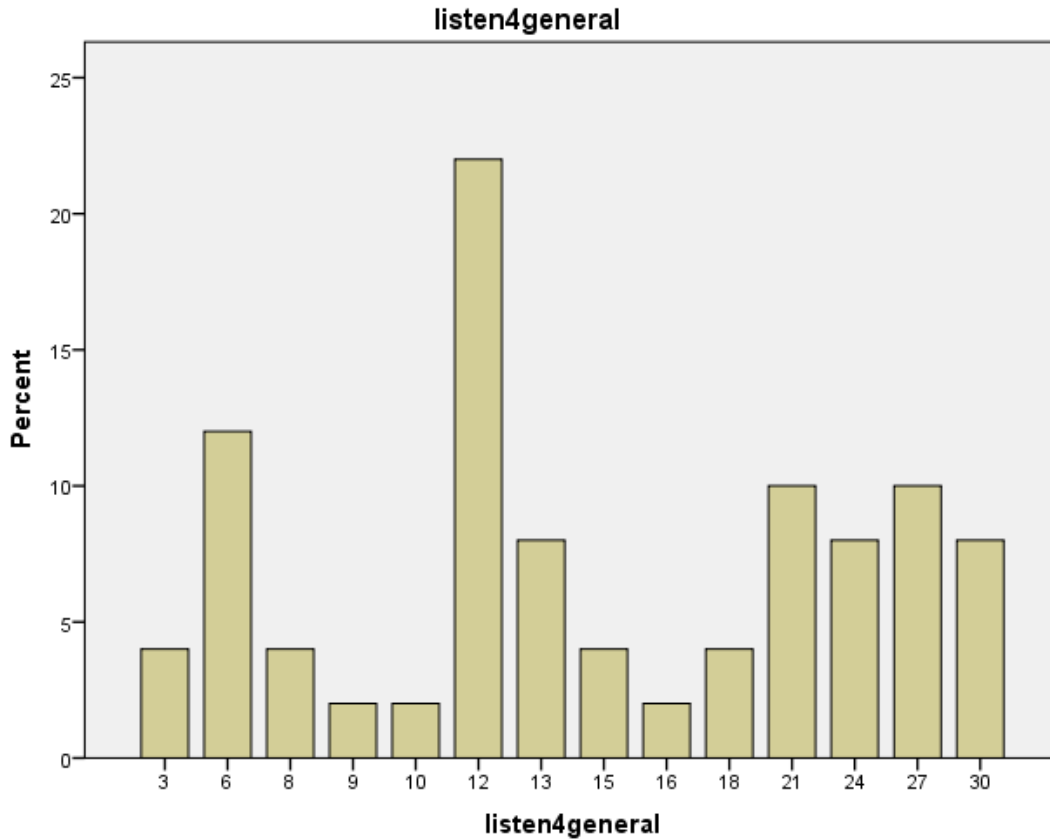
Figure(1)

Table(2.4) shows the frequencies ,while figure(1) shows percentages for the variable listening for details ,which indicates that34%of the students scored less than 10 which was the required mark to pass ,while 66% scored more.

Listening for general information:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3	2	4.0	4.0	4.0
6	6	12.0	12.0	16.0
8	2	4.0	4.0	20.0
9	1	2.0	2.0	22.0
10	1	2.0	2.0	24.0
12	11	22.0	22.0	46.0
13	4	8.0	8.0	54.0
15	2	4.0	4.0	58.0
16	1	2.0	2.0	60.0
18	2	4.0	4.0	64.0
21	5	10.0	10.0	74.0
24	4	8.0	8.0	82.0
27	5	10.0	10.0	92.0
30	4	8.0	8.0	100.0
Total	50	100.0	100.0	

Table (3.4)



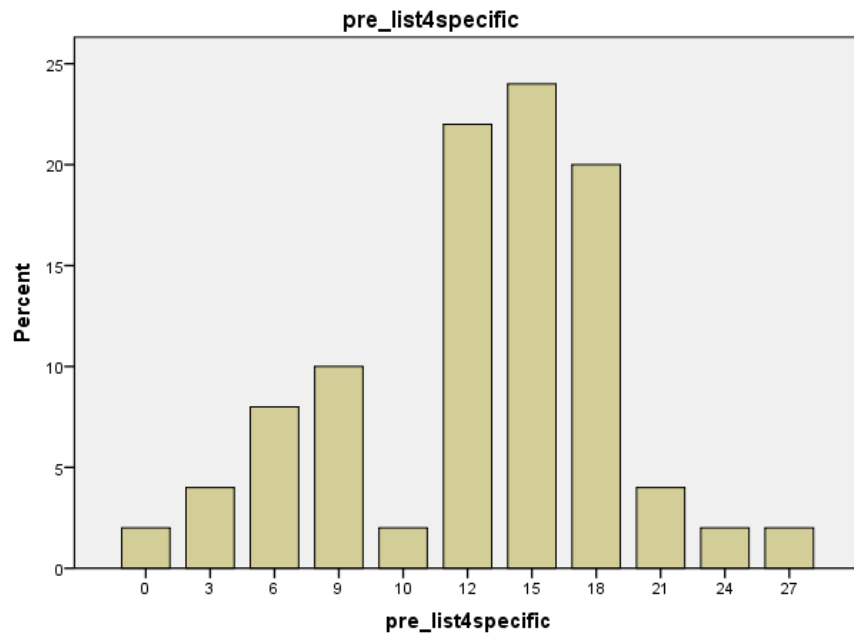
Figure(2)

Table(3.4) shows the frequencies ,while figure(2) shows percentages for the variable listening for general information , which indicates that 54%of the students scored less than 15 which was the required mark to pass ,while 46% scored more.

Listening for specific information:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 6	3	6.0	6.0	6.0
9	5	10.0	10.0	16.0
12	15	30.0	30.0	46.0
13	1	2.0	2.0	48.0
14	1	2.0	2.0	50.0
15	9	18.0	18.0	68.0
18	10	20.0	20.0	88.0
21	5	10.0	10.0	98.0
27	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table (4.4)



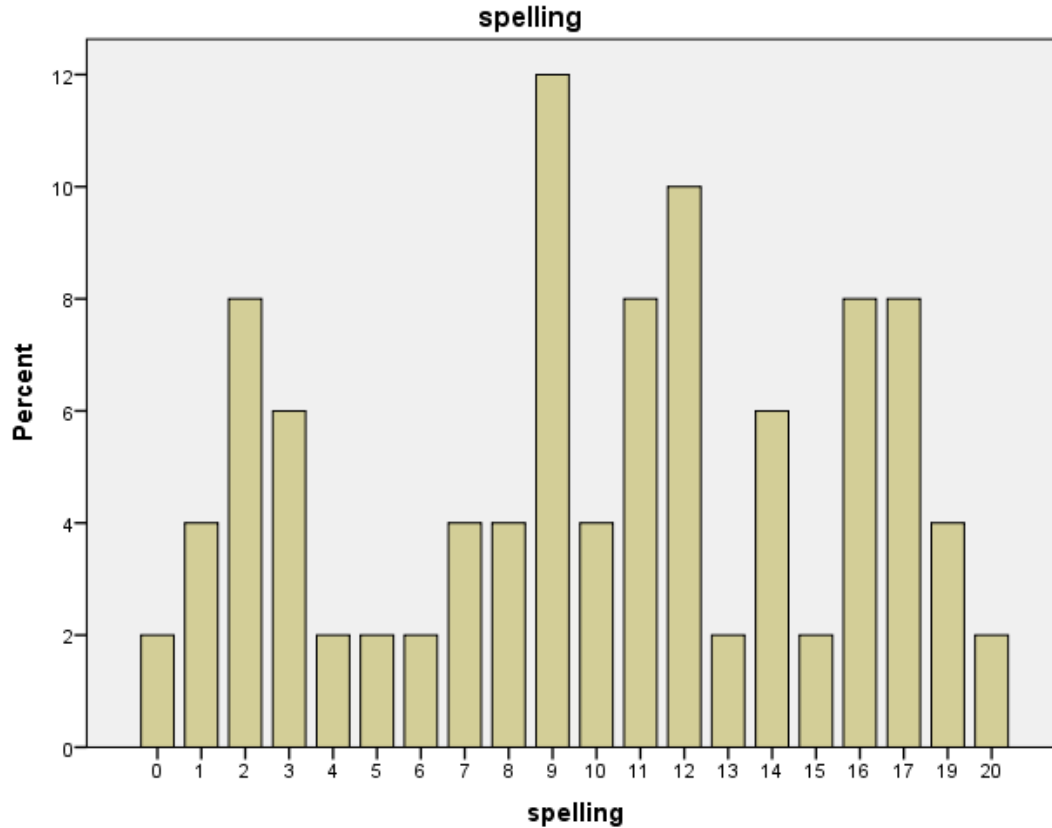
Figure(3)

Table(4.4) shows the frequencies ,while figure(3) shows percentages for the variable listening for specific information , which indicates that 50% of the students scored less than 15 which was the required mark to pass ,while only 50% scored more.

Cloze listening

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	2.0	2.0	2.0
	1	2	4.0	4.0	6.0
	2	4	8.0	8.0	14.0
	3	3	6.0	6.0	20.0
	4	1	2.0	2.0	22.0
	5	1	2.0	2.0	24.0
	6	1	2.0	2.0	26.0
	7	2	4.0	4.0	30.0
	8	2	4.0	4.0	34.0
	9	6	12.0	12.0	46.0
	10	2	4.0	4.0	50.0
	11	4	8.0	8.0	58.0
	12	5	10.0	10.0	68.0
	13	1	2.0	2.0	70.0
	14	3	6.0	6.0	76.0
	15	1	2.0	2.0	78.0
	16	4	8.0	8.0	86.0
	17	4	8.0	8.0	94.0
	19	2	4.0	4.0	98.0
	20	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table(5.4)



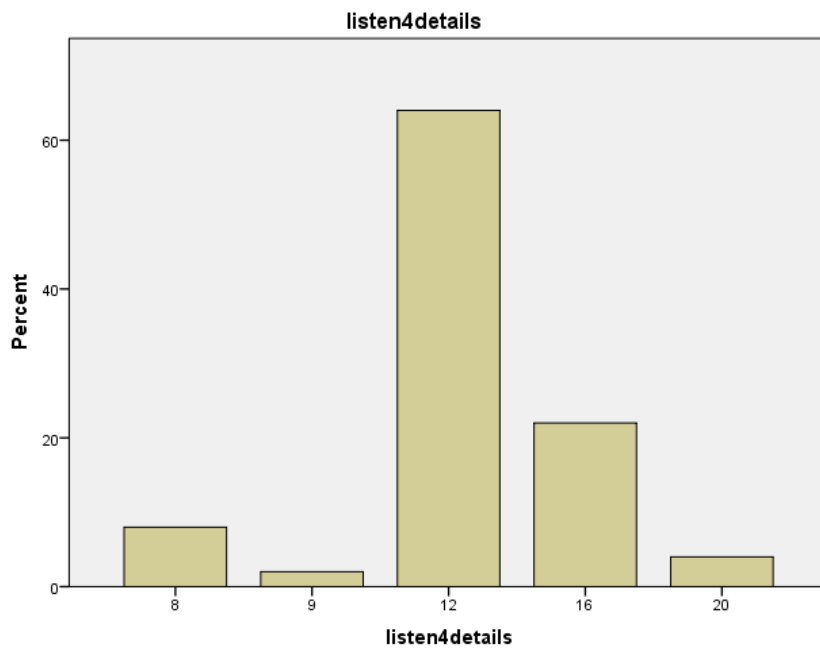
Figure(4)

Table(5.4) shows the frequencies ,while figure(4) shows percentages for the variable listening cloze(spelling), which indicates that46%of the students scored less than 10 which was the required mark to pass ,while 54% scored more.

4.3.3. Control group listening Post test results :
Listening for details:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 8	4	8.0	8.0	8.0
9	1	2.0	2.0	10.0
12	32	64.0	64.0	74.0
16	11	22.0	22.0	96.0
20	2	4.0	4.0	100.0
Total	50	100.0	100.0	

Table (6.4)



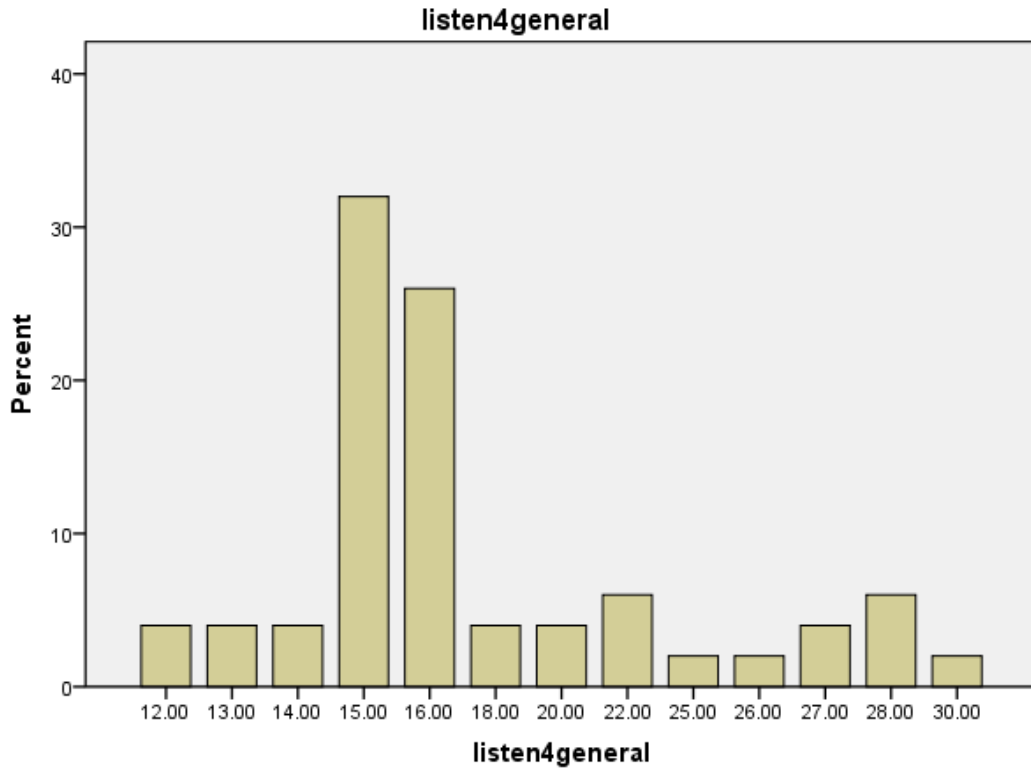
Figure(5)

Table(6.4) shows the frequencies ,while figure(5) shows percentages for the variable listening for details, which indicates that 10%of the students scored less than 10 which was the required mark to pass ,while 90% scored more.

Listening for general information:

	Frequency	Percent	Valid Percent	Cumulative Percent
12	2	4.0	4.0	4.0
13	2	4.0	4.0	8.0
14	2	4.0	4.0	12.0
15	16	32.0	32.0	44.0
16	13	26.0	26.0	70.0
18	2	4.0	4.0	74.0
20	2	4.0	4.0	78.0
22	3	6.0	6.0	84.0
25	1	2.0	2.0	86.0
26	1	2.0	2.0	88.0
27	2	4.0	4.0	92.0
28	3	6.0	6.0	98.0
30	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table (7.4)



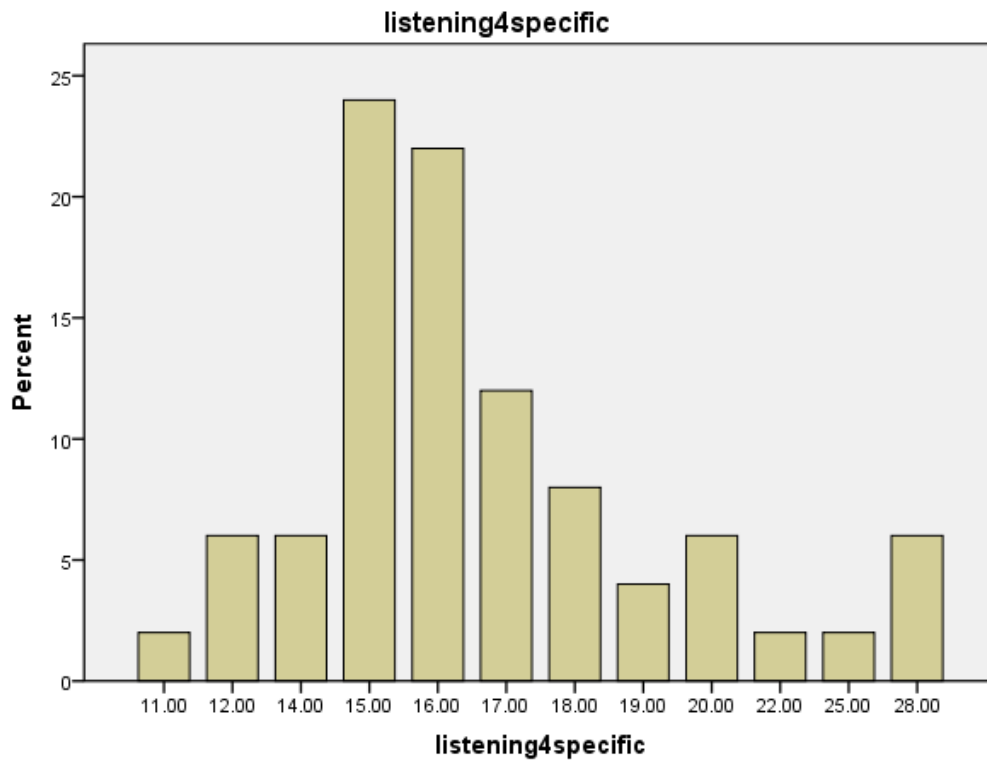
Figure(6)

Table(7.4) shows the frequencies ,while figure(6) shows percentages for the variable listening for general information , which indicates that 12% of the students scored less than 15 which was the pass mark while,88% scored more.

Listening for specific information:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 11.00	1	2.0	2.0	2.0
12.00	3	6.0	6.0	8.0
14.00	3	6.0	6.0	14.0
15.00	12	24.0	24.0	38.0
16.00	11	22.0	22.0	60.0
17.00	6	12.0	12.0	72.0
18.00	4	8.0	8.0	80.0
19.00	2	4.0	4.0	84.0
20.00	3	6.0	6.0	90.0
22.00	1	2.0	2.0	92.0
25.00	1	2.0	2.0	94.0
28.00	3	6.0	6.0	100.0
Total	50	100.0	100.0	

Table (8.4)



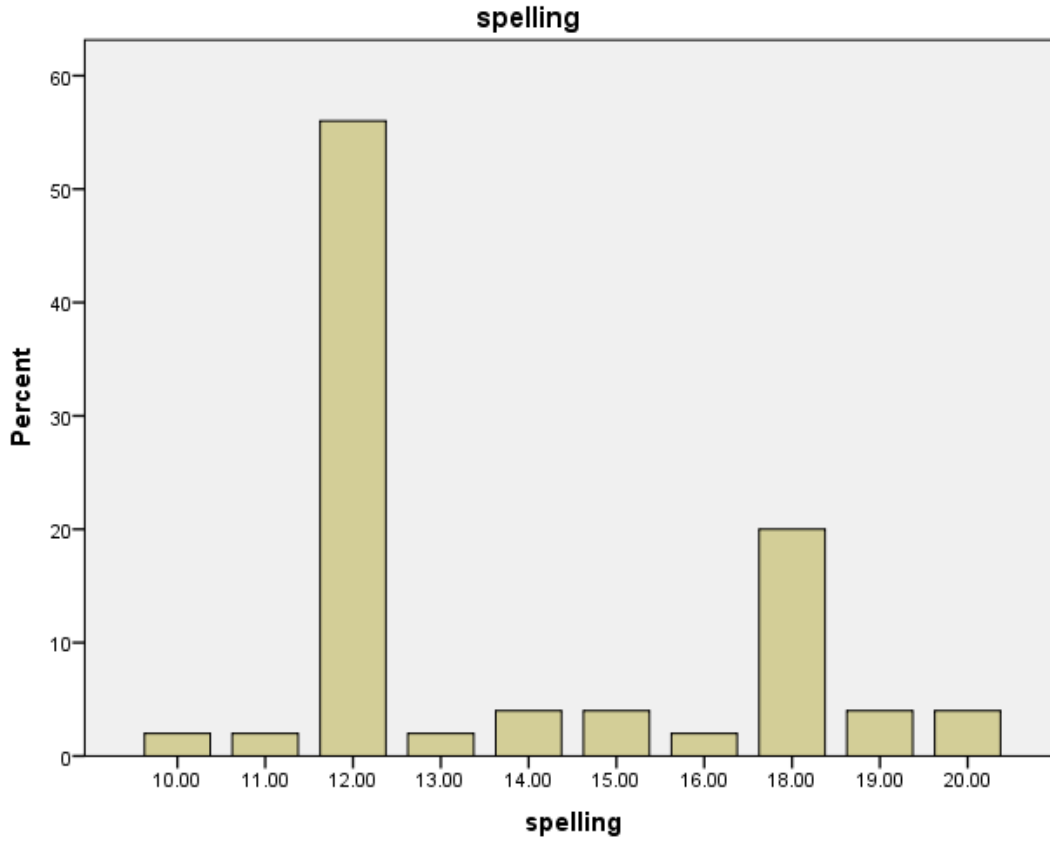
Figure(7)

Table(8.4) shows the frequencies ,while figure(7) shows percentages for the variable listening for specific information , which indicates that 14% of the students scored less than 15 which was the pass mark while,86% scored more.

Cloze listening :

	Frequency	Percent	Valid Percent	Cumulative Percent
10.00	1	2.0	2.0	2.0
11.00	1	2.0	2.0	4.0
12.00	28	56.0	56.0	60.0
13.00	1	2.0	2.0	62.0
14.00	2	4.0	4.0	66.0
Valid 15.00	2	4.0	4.0	70.0
16.00	1	2.0	2.0	72.0
18.00	10	20.0	20.0	92.0
19.00	2	4.0	4.0	96.0
20.00	2	4.0	4.0	100.0
Total	50	100.0	100.0	

Table (9.4)



Figure(8)

Table(9.4) shows the frequencies ,while figure(8) shows percentages for the variable cloze listening (spelling) , which indicates that all the students scored more than 10 which was the pass score .

4.4 Control group Speaking tests statistic results :

	Sig.
Pair 1 vocabulary & poyo	.002
Pair 2 grammar & program	.011
Pair 3 pronunciation & propro	.029
Pair 4 fluency & profluency	.050

Table (10.4)

T-test for results of the control group speaking tests show that all the variables have scored equal to or less than 0.5 sig.score ,which indicates that there is significant difference between the students performance in the pre and post test .

4.4.1.Control group speaking Pre test results:

Vocabulary					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very good	8	16.0	16.0	16.0
	Good	25	50.0	50.0	66.0
	Poor	16	32.0	32.0	98.0
	Pass	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table (11.4)

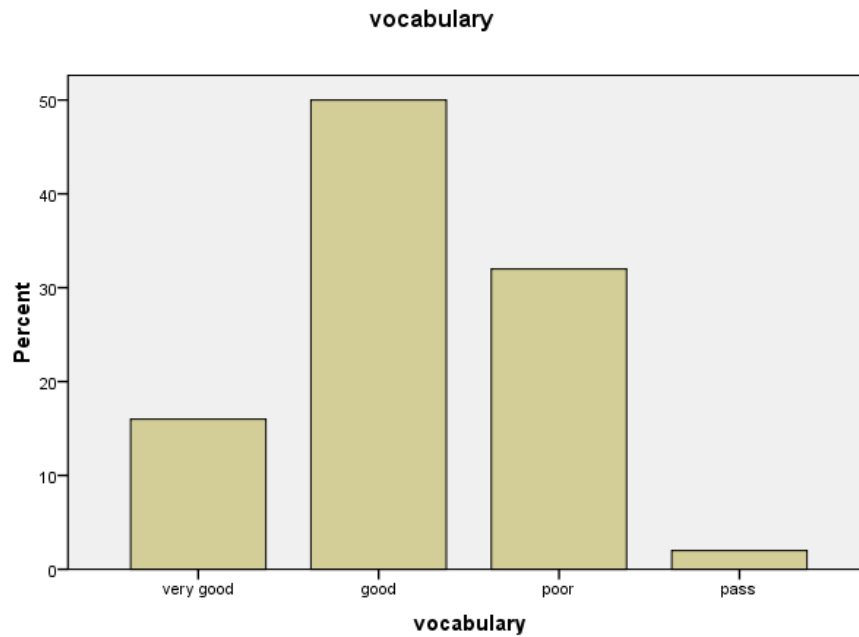


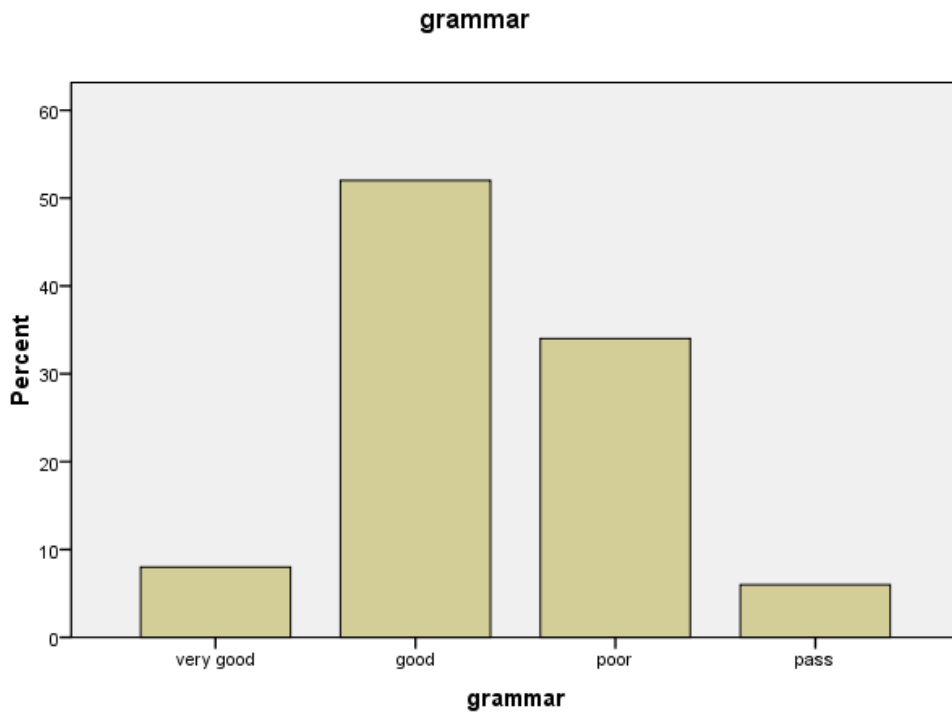
Figure (9)

Table(11.4) shows the frequencies ,while figure(9) shows percentages for the variable vocabulary, which indicates 32%of the students failed while 68% succeeded .

Grammar

	Frequency	Percent	Valid Percent	Cumulative Percent
Very good	4	8.0	8.0	8.0
Good	26	52.0	52.0	60.0
Pass	3	6.0	6.0	66.0
Poor	17	34.0	34.0	100.0
Total	50	100.0	100.0	

Table (12.4)



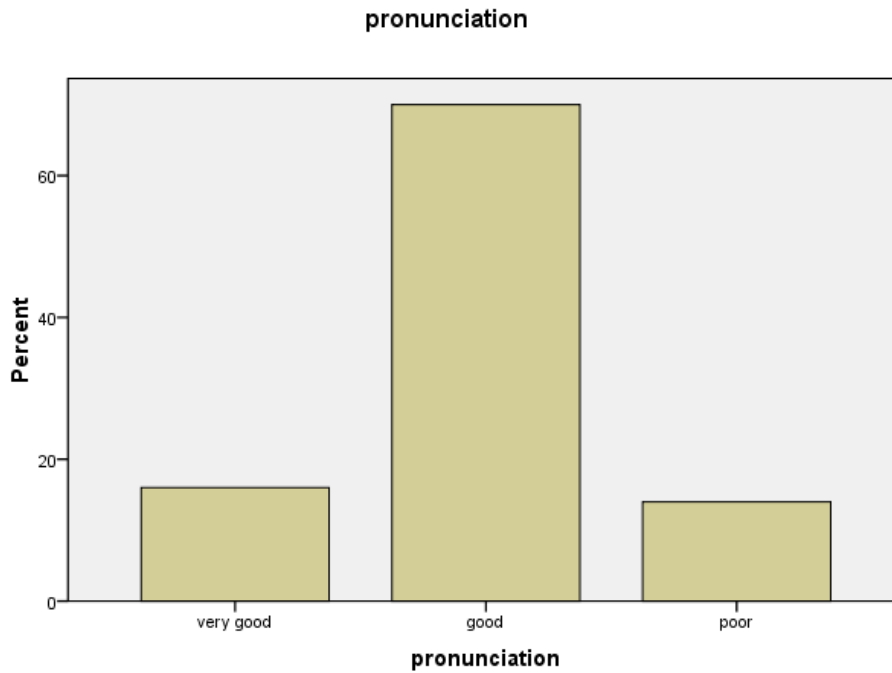
Figure(10)

Table(12.4)shows the frequencies while figure(10)shows percentages for the variable grammar as we find that 34% of the students failed while 66% passed.

Pronunciation

	Frequency	Percent	Valid Percent	Cumulative Percent
Very good	8	16.0	16.0	16.0
Valid Good	35	70.0	70.0	86.0
Poor	7	14.0	14.0	100.0
Total	50	100.0	100.0	

Table (13.4)



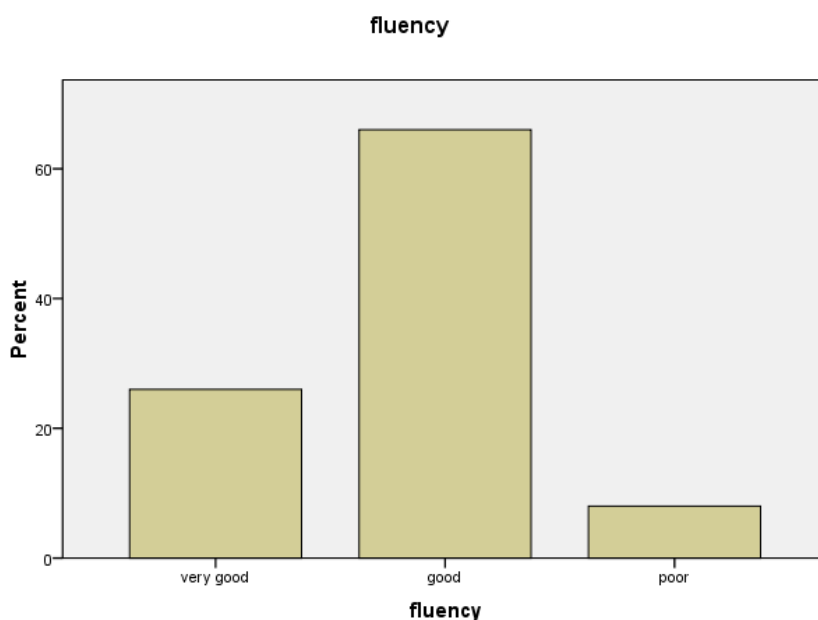
Figure(11)

Table(13.4)shows the frequencies while figure(11)shows percentages for the variable pronunciation as we find that 14% of the students failed while 86% passed .

Fluency

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very good	13	26.0	26.0
	Good	33	66.0	92.0
	Poor	4	8.0	100.0
Total	50	100.0	100.0	

Table (14.4)



Figure(12)

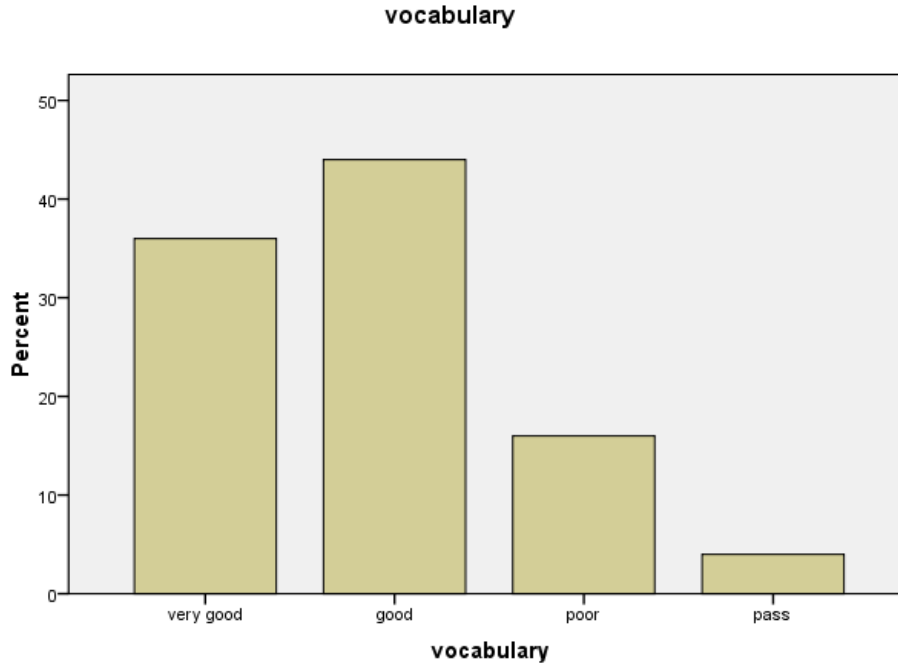
Table(14.4)shows the frequencies while figure(12)shows percentages for the variable fluency as we find that 8% of the students failed while 92% passed .

4.4.2 Control group speaking Post-test results:

Figure(13)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very good	18	36.0	36.0	36.0
Good	22	44.0	44.0	80.0
Poor	8	16.0	16.0	96.0
Pass	2	4.0	4.0	100.0
Total	50	100.0	100.0	

Table (15.4)



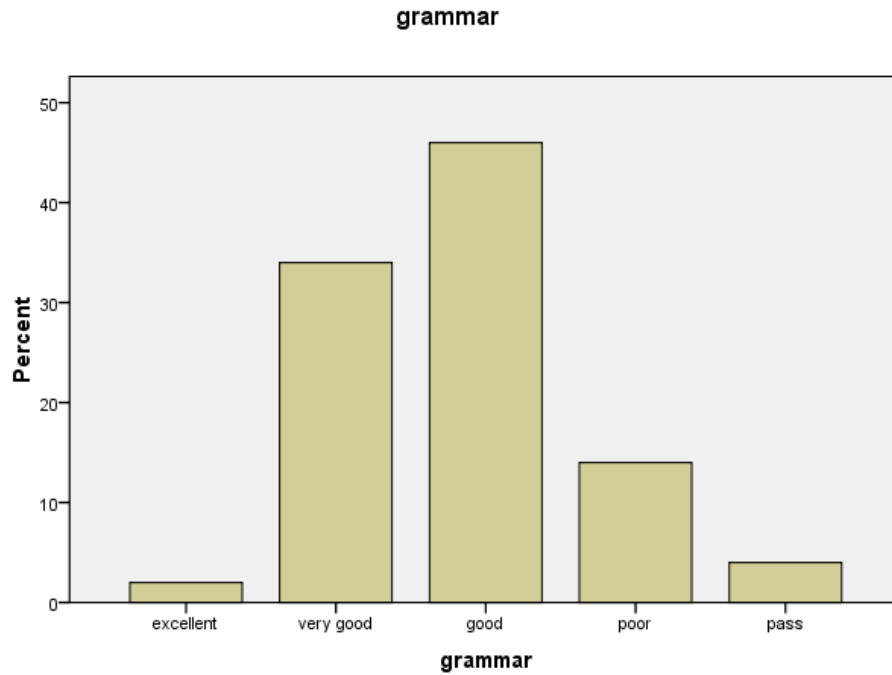
Figure(13)

Table(15.4)shows the frequencies while figure(13)shows percentages for the variable fluency as we find that 16% of the students failed while 84% passed.

Grammar

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid excellent	1	2.0	2.0	2.0
Very good	17	34.0	34.0	36.0
Good	23	46.0	46.0	82.0
Poor	7	14.0	14.0	96.0
Pass	2	4.0	4.0	100.0
Total	50	100.0	100.0	

Table (16.4)



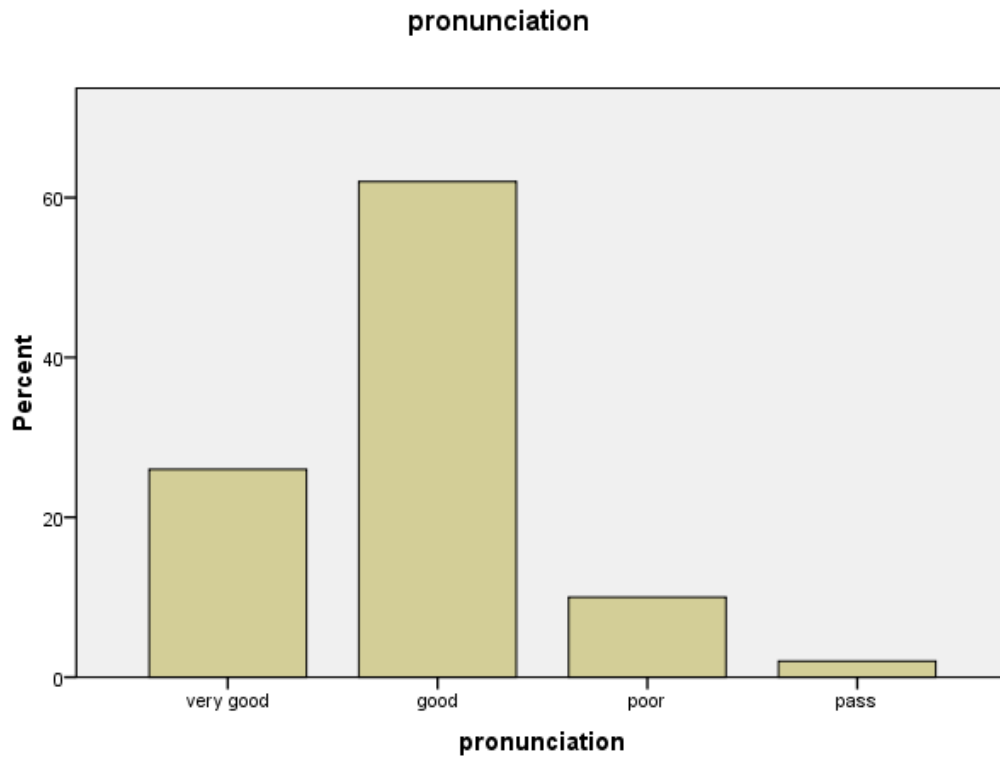
Figure(14)

Table(16.4)shows the frequencies while figure(14)shows percentages for the variable grammar as we find that 14% of the students failed while 86% passed .

Pronunciation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very good	13	26.0	26.0	26.0
Good	31	62.0	62.0	88.0
Poor	5	10.0	10.0	98.0
Pass	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table (17.4)



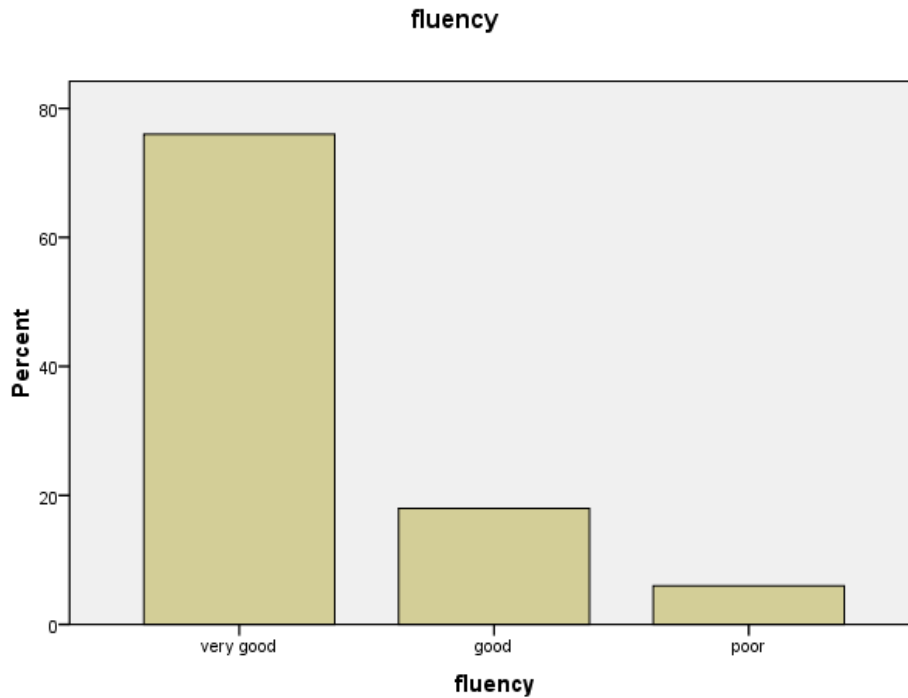
Figure(15)

Table(17.4)shows the frequencies while figure(15)shows percentages for the variable pronunciation as we find that 10% of the students failed while 90% passed .

Fluency

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very good	38	76.0	76.0	76.0
Good	9	18.0	18.0	94.0
Poor	3	6.0	6.0	100.0
Total	50	100.0	100.0	

Table (18.4)



Figure(16)

Table(18.4)shows the frequencies while figure(16)shows percentages for the variable fluency as we find that 6% of the students failed while 94% passed .

4.5. Discussion of the control group listening and speaking skills results:

As explained in 4.1.1results show difference in students results in the two tests .the control group have been taught the Listening & speaking course traditionally in a traditional classroom setting. Results show how the rate of failure has decreased an all variables as more students passed the question and less failed to do so.

4.6 Experimental Listening tests statistic results:

T-test results:

	Sig
Pair 1 listen4details - P_listen4details	.435
Pair 2 listen4general - P_listen4general	.004
Pair 3 listening4specific - P_listening4specific	.226
Pair 4 Listening cloze - P_listening cloze	.010

Table(19.4)

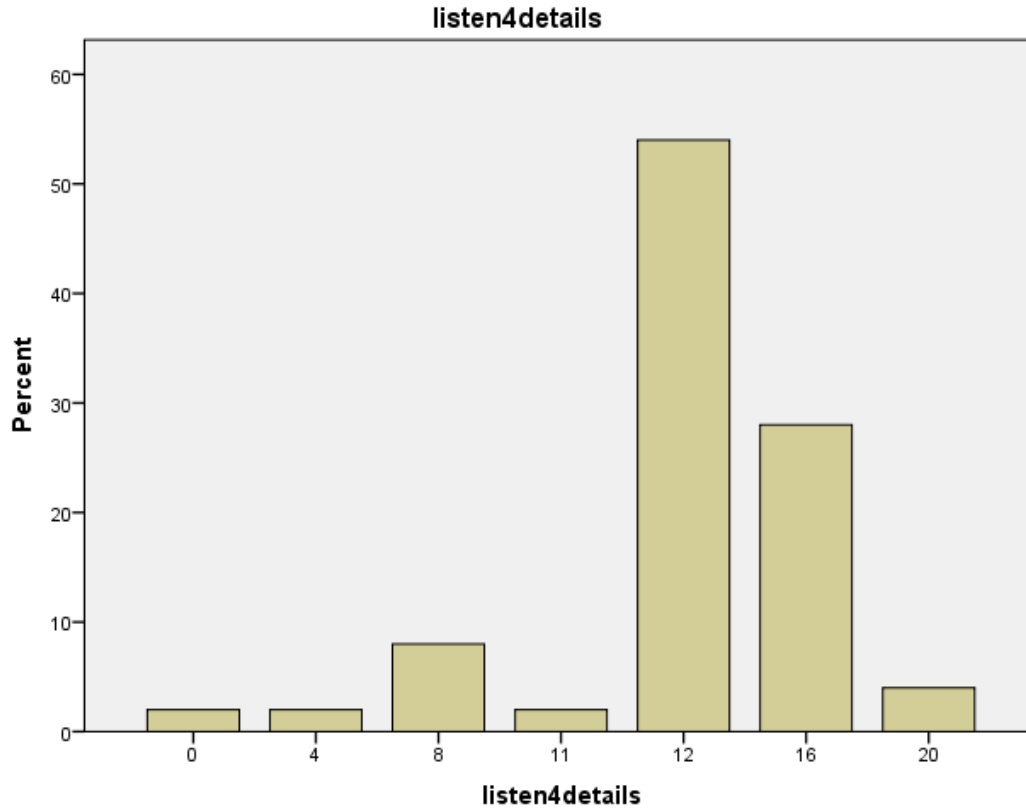
According to statistics if the significance(sig.) in the t-test is less than .05 it has statistic significance .As it appears in the table(19.4)the variables listening for details and listening for specific information scored significance more than .05 which means there was no difference in the students' performance before and after the experiment.while in the question that required listening for general information sig.scored .004 which indicates that there was a difference in the students' performance before and after the experiment .the table also shows that the students performance was different after the experiment from before as sig .for the listening cloze variable was .010

4.6.1 Experimental group listening pretest results :

Listening for details

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0	1	2.0	2.0	2.0
4	1	2.0	2.0	4.0
8	4	8.0	8.0	12.0
11	1	2.0	2.0	14.0
12	27	54.0	54.0	68.0
16	14	28.0	28.0	96.0
20	2	4.0	4.0	100.0
Total	50	100.0	100.0	

Table(20.4)



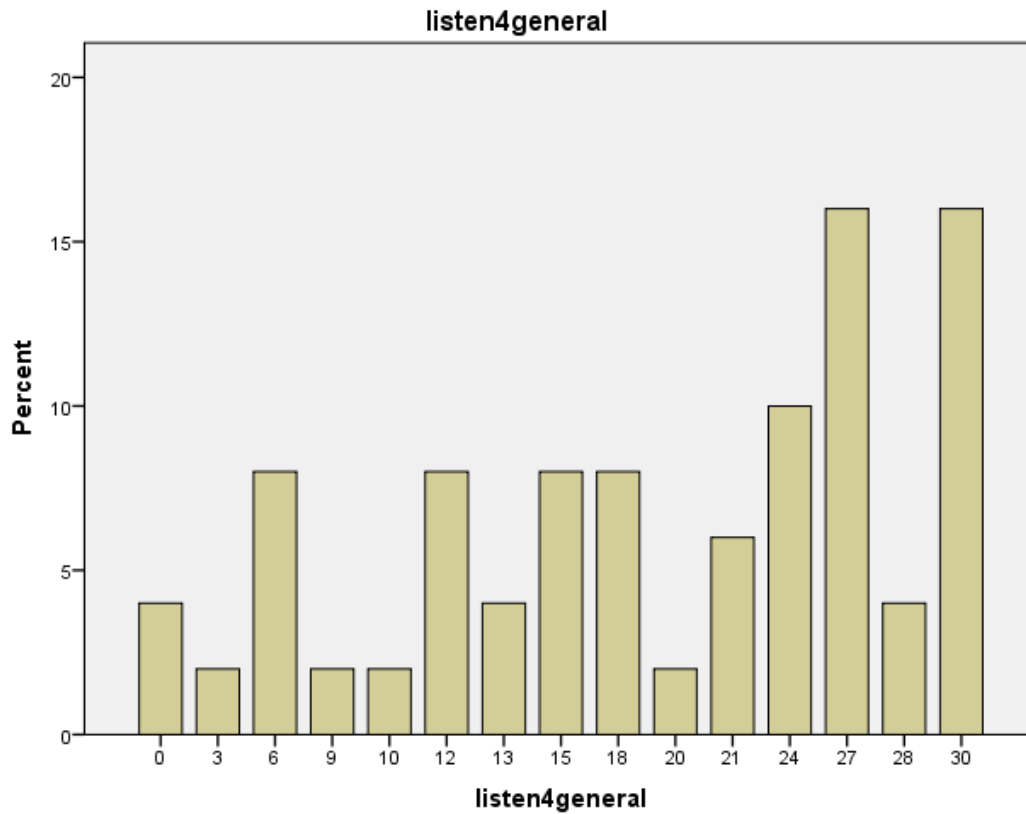
Figure(17)

Table(20.4) shows the frequencies and figure (17) percentages for the variable listening for details, which indicates that 12% of the students scored less than 10 which was the required mark to pass ,while 88% scored more.

Listening for general information:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	4.0	4.0	4.0
	3	1	2.0	2.0	6.0
	6	4	8.0	8.0	14.0
	9	1	2.0	2.0	16.0
	10	1	2.0	2.0	18.0
	12	4	8.0	8.0	26.0
	13	2	4.0	4.0	30.0
	15	4	8.0	8.0	38.0
	18	4	8.0	8.0	46.0
	20	1	2.0	2.0	48.0
	21	3	6.0	6.0	54.0
	24	5	10.0	10.0	64.0
	27	8	16.0	16.0	80.0
	28	2	4.0	4.0	84.0
	30	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

Table(21.4)



Figure(18)

Table(21.4) shows the frequencies and figure(18) percentages for the variable listening for general information, shows that 30% of the students failed, while 8% scored the pass mark which was 15 and 62% scored over that.

Listening for specific information:

	Frequency	Percent	Valid Percent	Cumulative Percent
6	3	6.0	6.0	6.0
9	5	10.0	10.0	16.0
12	15	30.0	30.0	46.0
13	1	2.0	2.0	48.0
14	1	2.0	2.0	50.0
Valid	15	18.0	18.0	68.0
18	10	20.0	20.0	88.0
21	5	10.0	10.0	98.0
27	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table(22.4)

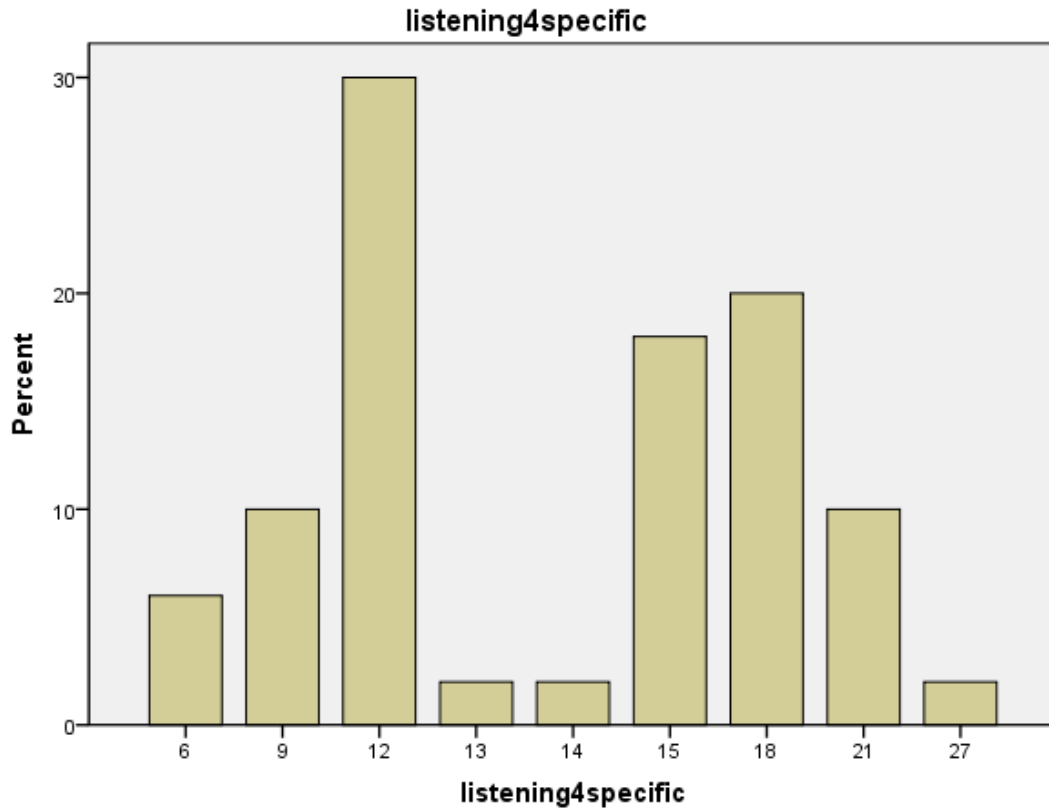


Figure (19)

The table and chart (22.4) shows the frequencies and figure (19) percentages for the variable listening for specific information, as we find that 50% of the population scored less than 15 which was the passing degree where as 18% scored 15 ,and 50% scored from 15 above.

Listening cloze:

	Frequency	Percent	Valid Percent	Cumulative Percent
0	3	6.0	6.0	6.0
2	1	2.0	2.0	8.0
3	1	2.0	2.0	10.0
5	1	2.0	2.0	12.0
6	3	6.0	6.0	18.0
7	1	2.0	2.0	20.0
8	1	2.0	2.0	22.0
9	2	4.0	4.0	26.0
10	2	4.0	4.0	30.0
11	4	8.0	8.0	38.0
12	9	18.0	18.0	56.0
13	7	14.0	14.0	70.0
14	2	4.0	4.0	74.0
15	4	8.0	8.0	82.0
16	2	4.0	4.0	86.0
17	2	4.0	4.0	90.0
18	3	6.0	6.0	96.0
19	1	2.0	2.0	98.0
20	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table (23.4)

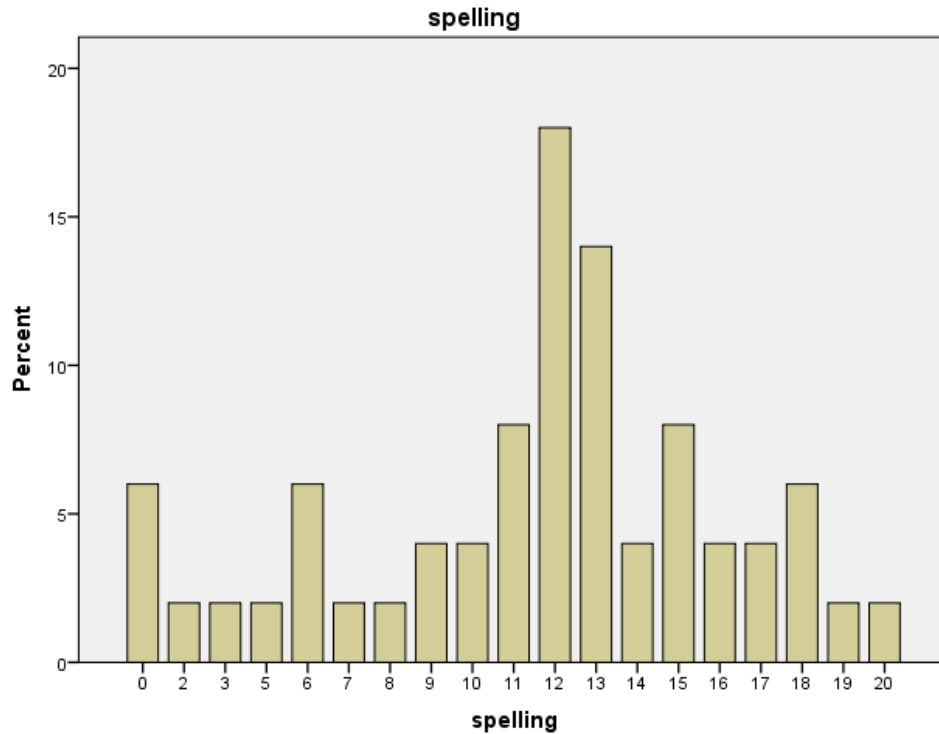


Figure (20)

The frequency table (23.4) and the figure (20) for the variable listening cloze shows that 26% of the population scored less than 10 which was the passing degree. While 74% scored 10 and above.

4.6.2 Experimental group listening post test results :

Listening for details:

	Frequency	Percent	Valid Percent	Cumulative Percent
10.00	18	36.0	36.0	36.0
12.00	9	18.0	18.0	54.0
15.00	12	24.0	24.0	78.0
16.00	3	6.0	6.0	84.0
18.00	8	16.0	16.0	100.0
Total	50	100.0	100.0	

Table (24.4)

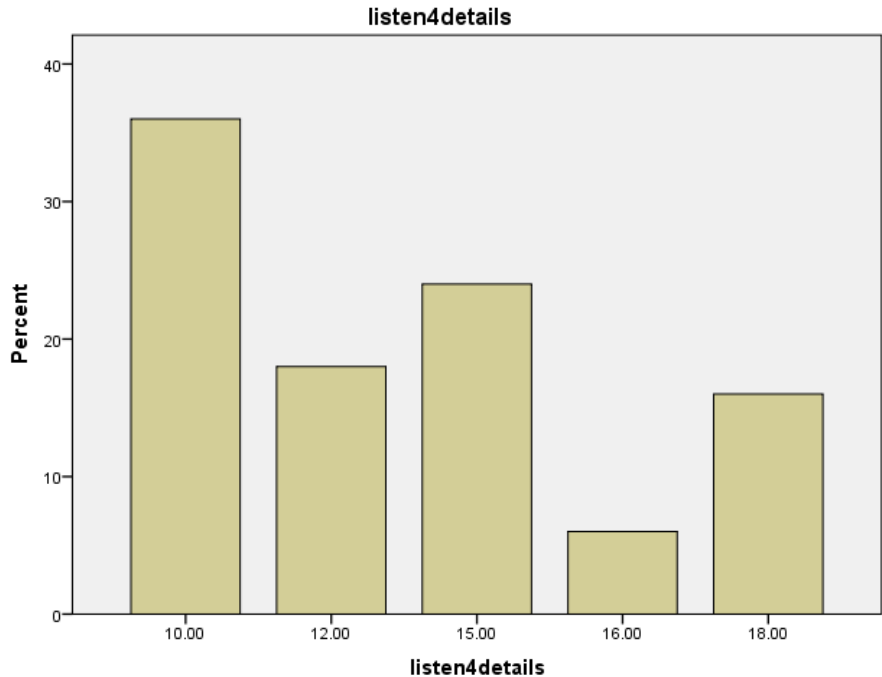


Figure (21)

The frequency table (24.4) and the percentage figure (21) for the variable listening for details shows that 36% of the students scored the pass score which was 10, while 64% scored more than 10.

Listening for general information:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 10.00	1	2.0	2.0	2.0
12.00	6	12.0	12.0	14.0
14.00	3	6.0	6.0	20.0
15.00	23	46.0	46.0	66.0
16.00	5	10.0	10.0	76.0
17.00	2	4.0	4.0	80.0
18.00	7	14.0	14.0	94.0
20.00	1	2.0	2.0	96.0
21.00	1	2.0	2.0	98.0
22.00	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table (24.4)

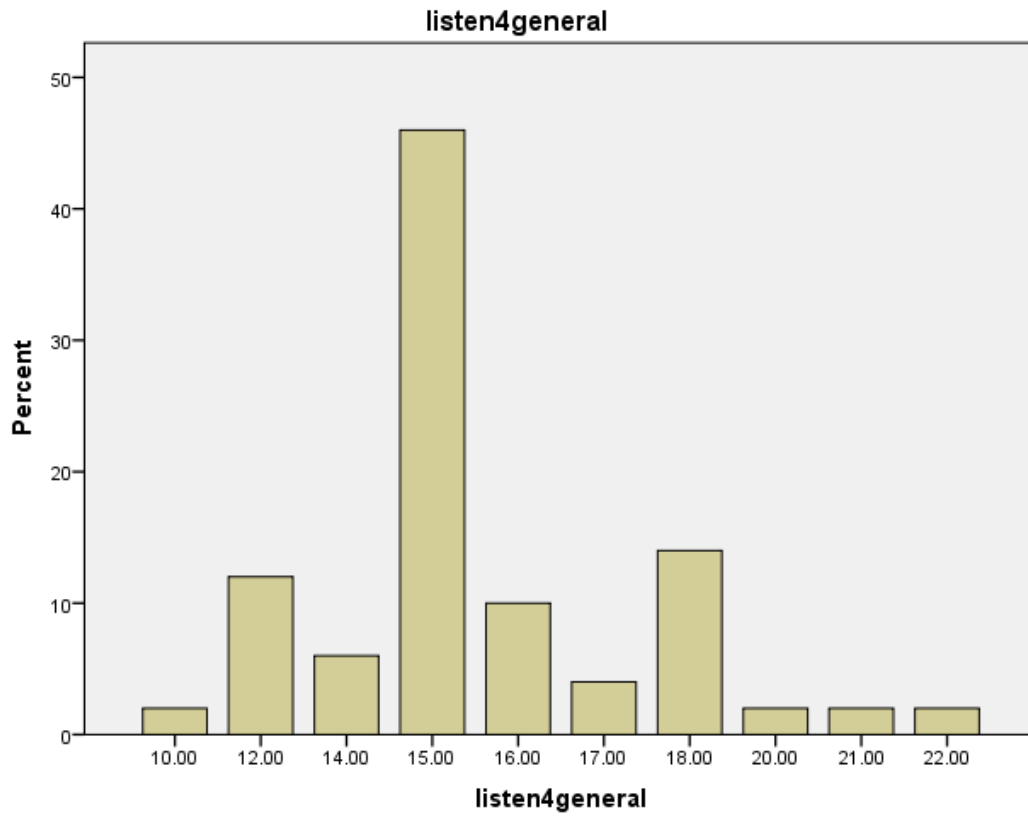


Figure (22)

The frequency table (24.4) and percentage figure (22) for the variable listening for general information shows that 18% of the students failed to answer the question, while 46% of the students scored 15 which was the pass mark, and 34% scored more than 15.

Listening for specific information:

	Frequency	Percent	Valid Percent	Cumulative Percent
.00	1	2.0	2.0	2.0
10.00	3	6.0	6.0	8.0
12.00	4	8.0	8.0	16.0
14.00	7	14.0	14.0	30.0
15.00	14	28.0	28.0	58.0
16.00	8	16.0	16.0	74.0
Valid 17.00	3	6.0	6.0	80.0
18.00	6	12.0	12.0	92.0
20.00	1	2.0	2.0	94.0
22.00	1	2.0	2.0	96.0
26.00	1	2.0	2.0	98.0
28.00	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table (25.5)

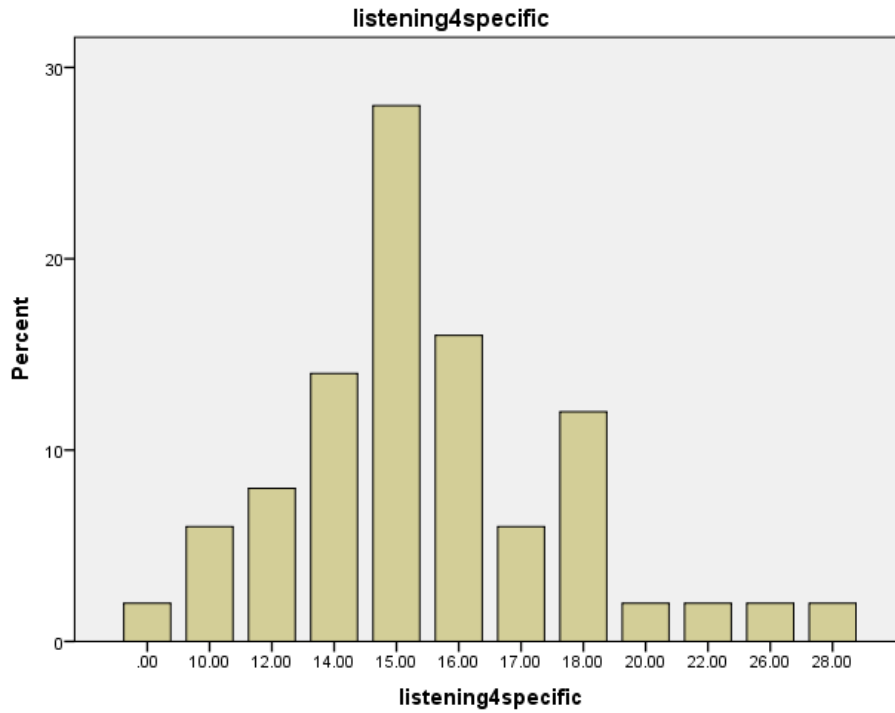


Figure (23)

The frequency table (25.5) and figure 23 for the variable listening for specific information shows that 30% of the students scored less than 15 which was the pass score of the question ,28% of the students scored 15,while 38% scored more than 15.

Cloze listening :

	Frequency	Percent	Valid Percent	Cumulative Percent
.00	1	2.0	2.0	2.0
10.00	5	10.0	10.0	12.0
12.00	21	42.0	42.0	54.0
14.00	3	6.0	6.0	60.0
Valid 15.00	6	12.0	12.0	72.0
16.00	3	6.0	6.0	78.0
18.00	8	16.0	16.0	94.0
20.00	3	6.0	6.0	100.0
Total	50	100.0	100.0	

Table (26.4)

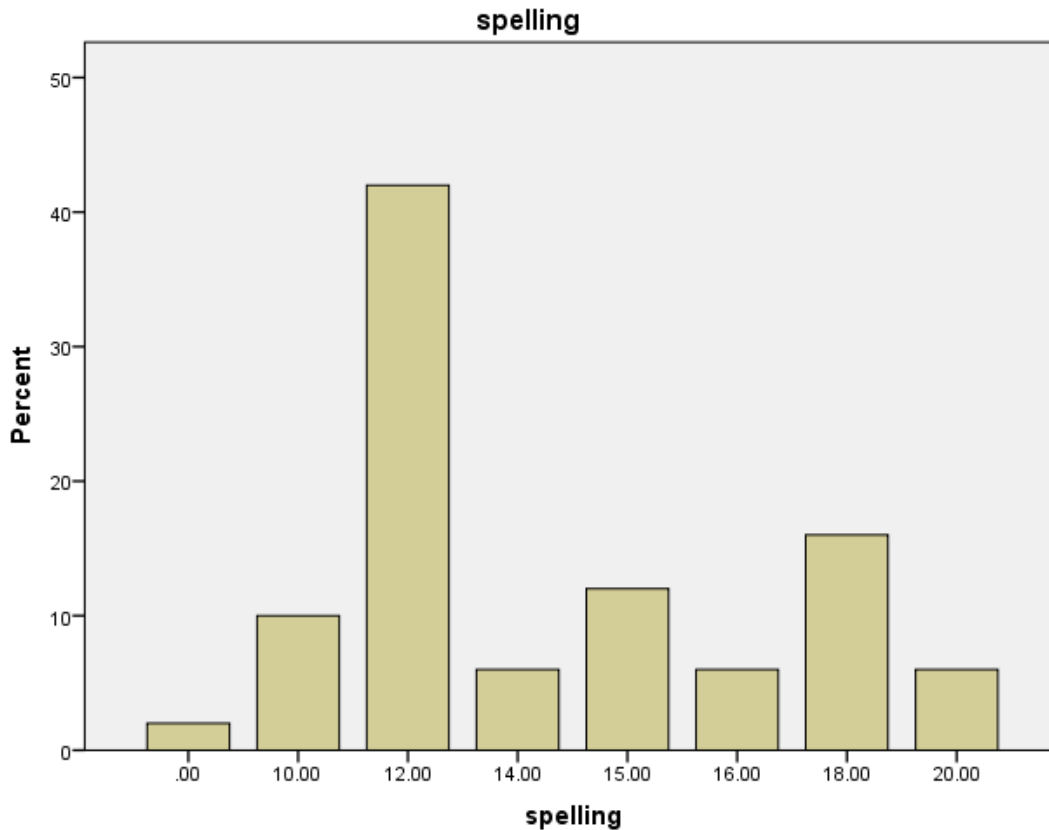


Figure (24)

The frequency table (26.4) and the percentage figure (24) for the variable spelling shows that 10% of the students scored 10 which is the pass mark and 88% scored above

4.7. Discussion of the experimental group listening tests results

As mentioned in 4.5.1 we see that there was change in the students' performance regarding listening for general information as those who scored from 15 above in the pre-test were 70% of the students, while 80% did in the post test, i.e. more students reasonably managed to answer this question.

As for the listening cloze question which was the spelling all the students passed marking from 10 above in the pre-test, thus 26% scored 10 and 74% scored more while in the post test 98% of the students passed, as 10% of

them scored 10 while 88% scored above i.e. their was a better performance in the post test.

The remaining two variables ;listening for details and listening for specific information did not score any difference in the students results in the pre and post tests .

4.8. Answering the second research question :

The following statistic results represent the answer for the second research question :

Does CALL promote the accuracy of:

a- pronunciation in during speaking EF?

b- grammar during speaking EFL?

c- fluency in speaking EFL?

d- vocabulary in speaking EFL?

4.9 .Experimental group speaking tests statistic results :

T-test results:

Speaking	Sig.
pre_voc-post voc	.020
pre_gramm-post gramm	.010
pre_pronu-post pronun	.001
pre_fluency-post fluency	.0010

Table(27.4)

According to table (27.4)all the variables for the speaking tests both before and after the experiment show statistic significance ,as the sig. score for all of them was less than .05.

4.9.1 . Experimental group speaking pre-test results:

Vocabulary

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very good	2	4.0	4.0	4.0
Good	13	26.0	26.0	30.0
Poor	24	48.0	48.0	78.0
Pass	11	22.0	22.0	100.0
Total	50	100.0	100.0	

Table(28.4)

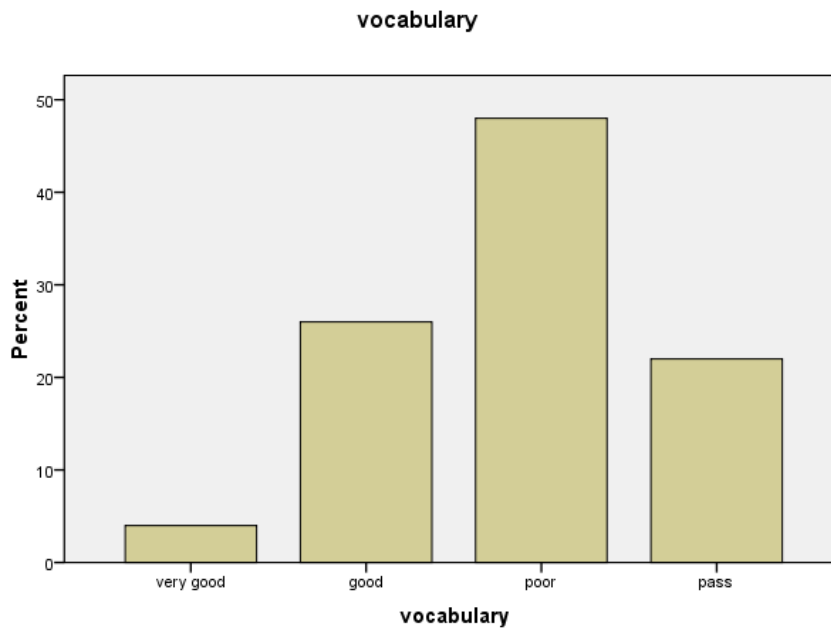


Figure (25)

Table(28.4) shows the frequencies and percentage figure (25) for the variable vocabulary, as we find that 4% of the students performance was very good, 26% performed good, 48% were poor and 22% only passed according to estimates of the sample size.

Grammar

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very good	2	4.0	4.0	4.0
Good	24	48.0	48.0	52.0
Poor	19	38.0	38.0	90.0
Pass	5	10.0	10.0	100.0
Total	50	100.0	100.0	

Table(29.4)

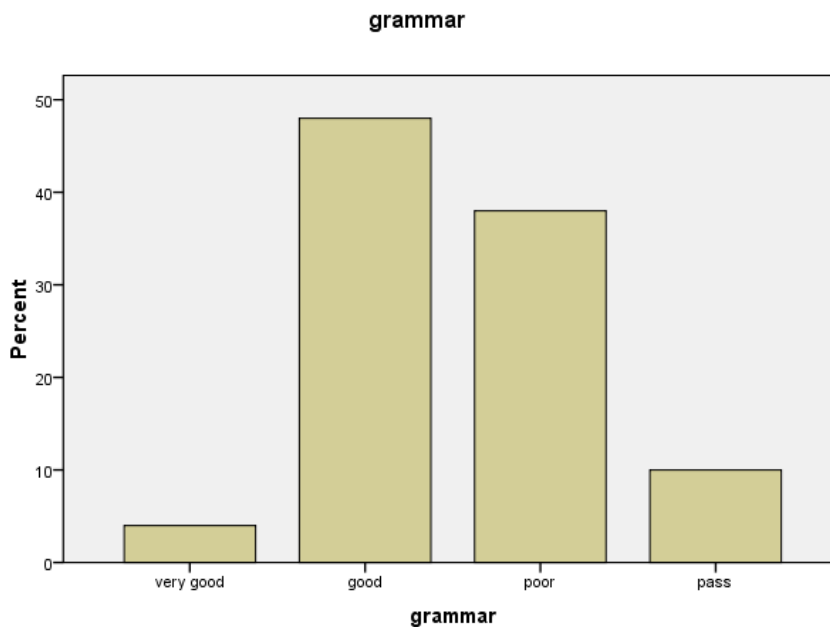


Figure (26)

Table(29.4) shows the frequencies and percentage figure (26) for the variable grammar, as we find that 4% of the students performed very good, 48% performed good, , 38% were poor and 10% only passed according to estimates of the sample size.

Pronunciation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	1	2.0	2.0	2.0
	very good	1	2.0	2.0	4.0
	Good	25	50.0	50.0	54.0
	Poor	19	38.0	38.0	92.0
	Pass	4	8.0	8.0	100.0
	Total	50	100.0	100.0	

Table(30.4)

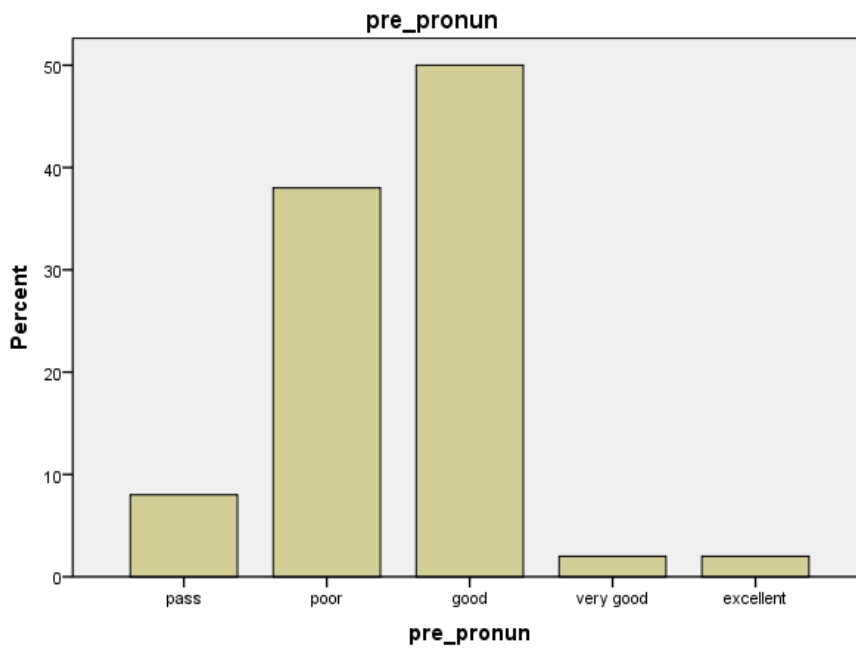


Figure (27)

Table(30.4)shows the frequencies and percentage figure (27) for the variable pronunciation, as we find that 2% of the students performance was excellent , 2% performed very good, 50% were good , 38% were poor and 8% only passed according to estimates of the sample size.

Fluency :

		Frequency	[Percent	Valid Percent	Cumulative Percent
Valid	Pass	5	10.0	10.0	10.0
	Poor	16	32.0	32.0	42.0
	Good	27	54.0	54.0	96.0
	very good	1	2.0	2.0	98.0
	Excellent	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table(31.4)

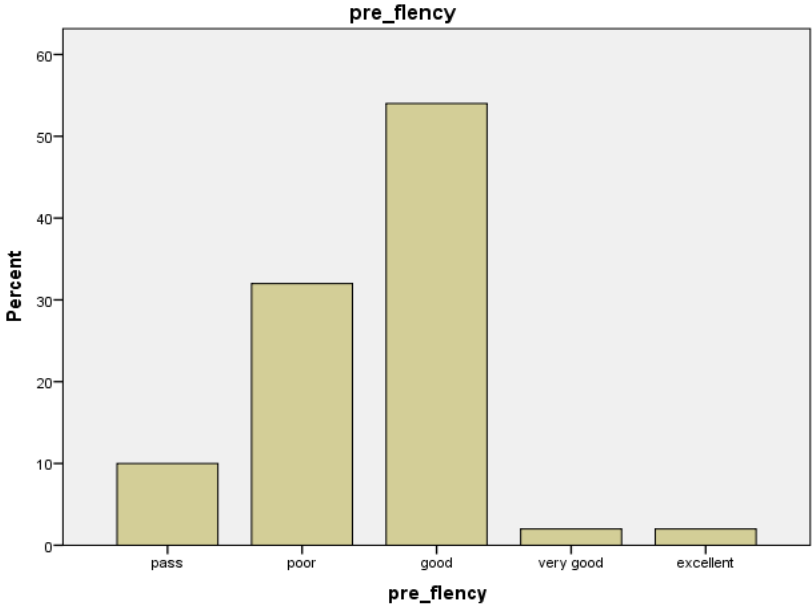


Figure (28)

Table(31.4) shows the frequencies and percentage figure (28) for the variable fluency, as we find that 2% of the students performance was excellent , 2% performed very good, 54% were good ,32% were poor and 10% only passed according to estimates of the sample size

4.9.2 Experimental speaking post test results:

Vocabulary					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very good	29	58.0	58.0	58.0
	Good	18	36.0	36.0	94.0
	Poor	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

Table (32.4)



Figure(29)

Table(32.4) shows the frequencies and percentage figure (29) for the variable vocabulary, as we find that 58% of the students performed very good, 36% performed good, and 6% was poor according to estimates of the sample size

Grammar					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	1	2.0	2.0	2.0
	very good	8	16.0	16.0	18.0
	Good	29	58.0	58.0	76.0
	Poor	12	24.0	24.0	100.0
	Total	50	100.0	100.0	

Table(33.4)

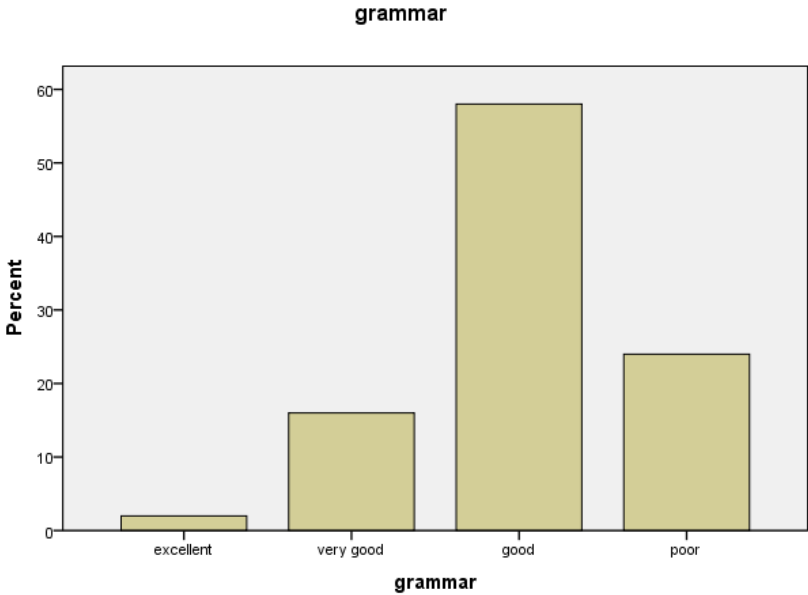


Figure (30)

Table(33.4) shows the frequencies and percentage figure (30) for the variable grammar, as we find that 2% of the students performance was excellent 16% was very good, 58% was good, and 24% was poor according to estimates of the sample size.

Pronunciation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very good	13	26.0	26.0	26.0
Good	31	62.0	62.0	88.0
Poor	5	10.0	10.0	98.0
Pass	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table(34.4)

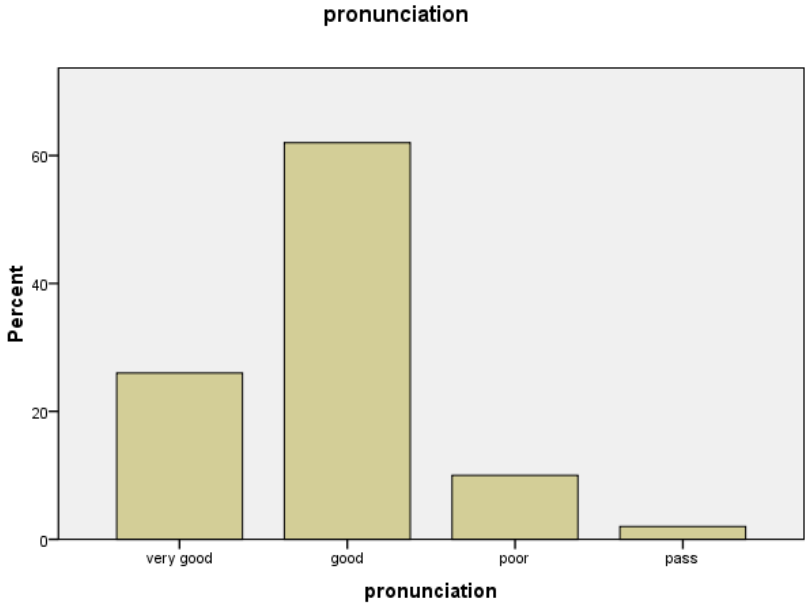


Figure (31)

Table(34.4) shows the frequencies and percentage figure (31) for the variable pronunciation , as we find that 26% of the students performance was very good, 62% performed good, 10% were poor and 2% only passed according to estimates of the sample size.

Fluency

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid very good	38	76.0	76.0	76.0
Good	9	18.0	18.0	94.0
Poor	3	6.0	6.0	100.0
Total	50	100.0	100.0	

Table(35.4)

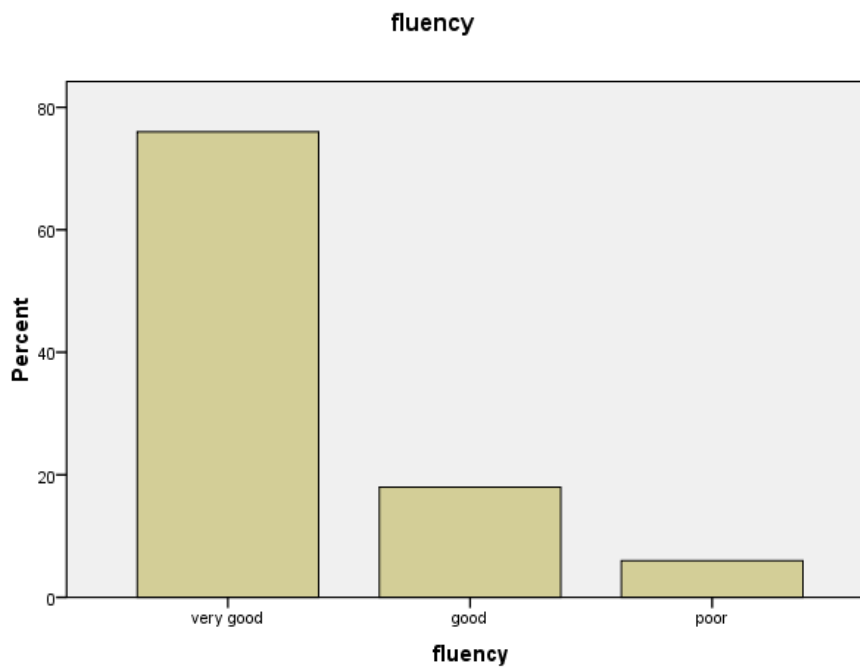


Figure (32)

Table(35.4) shows the frequencies and percentage figure (32)for the variable fluency , as we find that 76% of the students performance was very good, 18% were good, and 6% were poor according to estimates of the sample size

4.9. Discussion of the experimental group speaking tests

results:

As mentioned in 4.8.1the statistics show significant change in all the tested variables concerning speaking.

Vocabulary results for the pre test show that 48%of the students was poor ,while only 6% scored a poor degree in the post test.22%of the students only passed conversely no pass degree was scored in the post test.As26% of the students scored a good degree ,on the other hand 36% scored the same degree in the post test. Only 4% of the students level was very good in the pre test where as 58%scored very good in the post test .

Grammar results show that in the pretest 38%of the students performance was poor opposite to 24%of the students in the post test.10%of the students in the pretest scored a pass, no pass degree was scored in the post test. Students that scored a good degree were 48% in the pretest and 58% in the post test. In the pretest the highest level scored was very good scored by 4% of the students, while in the post test 16% scored very good and 2% scored an excellent degree.

Pronunciation results show that those who scored a poor degree in the pretest were 38% of the students ,where as only 10% scored a poor degree in the post test . 8% of the students scored a pass conversely only 2% scored a pass in the post test. Those who obtained a very good level in the pretest were 2% and the highest score rated was excellent scored by 2% of the

students .in the other hand no excellent degree was scored in the post test, but 62% of the students scored a good score and, 26% scored a very good one.

Finally fluency results show that 32% of the students scored a poor result in the pretest opposite to only 6% in the post test. 10% of the students scored a pass conversely no pass score was recorded in the post test. While 54% of the students scored a good degree in the pretest ,18% scored the same degree in the post test. Although 2% of the students scored a very good score in the pretest and 2% also scored an excellent degree ,76% of the students scored a very good score in the post test.

Chapter Five

Conclusion ,Findings ,Recommendations and Suggestions

5.1 Introduction:

The current study shed the light on the learning of two of the language skills; listening and speaking, through technology. As this era has been greatly influenced by technological development which changed the way we communicate it definitely has its effect upon the way we learn . As Bates and Sangra, (2011) say that *“We need to use technology as an integral part of our teaching and learning activities ...we need to think about how technology could be used for personalizing learning and increasing motivation, work to be shifted from teacher to learner”* p. 235.

The study questions were :

Does CALL promote the learning of listening EFL in four degrees; listening for general information,listening for specific information,listening for details and cloze listening .

The second question was if CALL promotes the learning of fluent and accurate speaking of EFL.

To answer these questions precisely an experimental design was adopted . to apply the design the population was divided into two groups ;a control group and an experimental one.

The population were students of tertiary level in Sudan University of Science and Technology Collage of Languages ,first year students of English.

The researcher is the class teacher of the subject listening and speaking therefore she conducted the experiment herself .The experiment was conducted by teaching the experimental group using computer devices ,Whatsapp and Facebook. The group used the popular communication application Whatsapp to exchange communication, practise listening and speaking ,and share their oral production with the members of the group. A Facebook group as created to be a meeting forum. While the controlled group learned Listening and speaking through a traditional method .the control group was taught using the traditional teaching method.

The two groups were tested before and after the experiment .The tests results were treated statistically using the SPSS program .

5.2 Findings :

The researcher has found that :

- 1-The use of computers and technology(social communication applications) promotes the learning of listening for general information while learning ELF ,in the tertiary level.
- 2- The use of computers and technology promotes the learning of cloze listening while learning ELF ,in the tertiary level.
- 3-CALL and social communication applications contribute in the learning of vocabulary , while learning to speak ELF ,in the tertiary level.
- 4- CALL and social communication applications contribute in the learning of grammar , while learning to speak ELF ,in the tertiary level.

5- CALL and social communication applications contribute in the learning of pronunciation , while learning to speak ELF ,in the tertiary level.

6- CALL and social communication applications contribute in the learning of fluency , while learning to speak ELF ,in the tertiary level.

5.3 Recommendations:

1-Language teachers should change their teaching methods to match today's learners abilities ,interests and needs

2-Internet social media programs and applications should be adopted in the teaching of EFL.

3-Learners should be given a pace during their learning period in collage to learn autonomously.

4-Curriculum design and development should be associated with the rapid development in technology and its communicative usage.

5- Faculty should obtain continuous career development training to follow up with their learners needs, interests and abilities .

6-Sudanese universities should develop and encourage virtual class teaching and learning as it saves time money and efforts.

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