

Sudan University of Science & Technology College of Graduate Studies



The Effect of Information Technology on English Language Learning and Teaching

أثر تقنية المعلومات على تعلم اللغة الإنجليزية والتدريس

A Thesis submitted to the College of Languages in Partial Fulfillment of the Requirements for the Master Degree in English Language

(Applied Linguistics)

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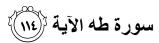
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إستهلال

قَالَ تَعَالَىٰ:

﴿ فَنَعَالَى ٱللَّهُ ٱلْمَلِكُ ٱلْحَقُّ وَلَا تَعَجَلَ بِٱلْقُرْءَانِ مِن قَبْلِ أَن يُقْضَى اللَّهُ ٱلْمَلِكُ ٱلْحَقُّ وَلَا تَعْجَلَ بِٱلْقُرْءَانِ مِن قَبْلِ أَن يُقْضَى إِلَيْكَ وَحْيُدُ وَقُل رّبِ زِدْنِي عِلْمًا ﴾

صدق الله العظيم



Dedication

Tosoul of my Parents.

To my brothers

Acknowledgements

Praise be to Allah, initially, and my Supervisor (*DR.NaglaTahaBashri*) I express my gratitude to those who assisted me, the library college of language and Education for their unlimited support and supplying me with references and secondary resources.

I also, convey my regards to the administrative and staff of English Department in Sudan University of science and technology, for their great assistance and allowing me to carry out this research.

My deep thanks, as well as everyone who advise me.

Abstract

The purpose of this study is to investigate the effect of information technology on English language learning and teaching. The researcher use descriptive analytic method. The data of the study was collected by the use of questionnaire tool which was addressed Sudanese universities teachers who represented the sample of the study. The respondents of the study were (40) teachers of English as a foreign language in universities of Sudan. The data which obtained was analyzed by using (SPSS) statistical package for social science. The main findings of research revealed that most of English language teachers have positive attitudes towards the use of technology in EFL learning and teaching as believe that technology is as a valuable as traditional learning methods. The second one technology provides teachers with up to date information. Third information technology is becoming a must in the field of learning English language. The researcher recommended that it to the ministry of education should to put the role of technology into considerations to be available in all universities and teachers of universities in Sudanshould be familiar with computer – assisted language teaching approach(CLT).

المستخلص

تهدف هذه الدراسة لتقصي أثر تقنية المعلومات في تعلم اللغة الانجليزية ، اعتمد الباحث علي استخدام المنهج التحليلي الوصفي . تم جمع البيانات عن طريق استخدام الاستبيان الذي استهدف اساتذة الجامعات السودانية الذين يمثلون عينة الدراسة . التي اشتملت علي اربعين استاذاً . تم تحليل بيانات الدراسة عن طريق استخدام الحزم الاحصائية للعلوم الاجتماعية . ومن اهم النتائج التي توصل إليها الباحث مايلي : ان استاتذة اللغة الانجليزية لديهم مواقف إيجابية تجاه استخدم تقنية المعلومات في تعلم اللغة الانجليزية كلغة اجنبية بيد انهم يؤمنون بأن تقنية المعلومات ذات قيمه مماثله للطرق التقليدية القديمة . ايضاً ان استخدام تقنية المعلومات تزود الاساتذة بمعلومات حديثة اضف الي ذلك ان تقنية المعلومات ذات ضرورة في مجال تعليم اللغة الانجليزية .

اوصى الباحث، وزارة التعليم العاليبتوفير اجهزة تقنية المعلومات في الجامعات السودانية ، كما يجب علي الاساتذة الالمام بمعرفة استخدام الحاسوبفي عملية تدريس مادة اللغة الانجليزية.

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Table of Terms

Abbreviations	Terms
IT	Information Technology
CALL	Computer Assisted Language Learning
EFLT	English Foreign Language Teaching
EFL	English Foreign Language
SLA	Second Language Acquisition
PC	Personal Computer
ELT	English Language Teaching
CMC	Computer-Mediated Communication
MALL	Mobile- Assisted Language Learning
TELL	Teaching English Language Learning
ICT	Information Communication Teaching
IL	Inter-Language
L2	Second Language
CAI	Computer-Assisted Instruction

Chapter One

Introduction

Chapter One

Introduction

1-0 Background

In the era of using technology is barely in the whole domains of life. It becomes a must to utilize it appropriately in English language Learning and Teaching. English is vital or as the language of the world due to its uses which classified it as one of the important language in the globe. Sudan is one of the former British colonial countries in Africa. English language was adopted for a long time as the official language as well as educational means (medium) for some time. Moreover, the word technology is heard, nothing would come first to one's mind other than computer and its various applications. As Hanson-smith (2011) states, personal computer (PC) an important device for language learning and teaching and, particularly after emergence of the internet- website in the world, which has created incredible opportunities for teachers to strengthen their knowledge, both by "individualizing practice and by tapping into global community for other teachers "(cited in carter and Nunan, 2002, p 107). Computer- assisted language learning (CALL) researchers addressed different areas of interest. (Thornton and Dudely, 1997) compared computer use with other technology, e.g. computer-based listening activities and audio-taped materials in traditional labs. They investigated how computer strengthening the instructed acquisition .Above all, the researcher recognize the extent of success of technology in the learning and finally analyzes to reach considerable findings to be used in measuring the degree of the learning achievement.

1.1 Statement of Problem

In fact, Information Technology plays prominent role in teaching and learning English language. The researcher assumes that there is a topic requires a study, that is to say the has clear effect of Information Technology (IT) on English language learning and teaching. Therefore, to check the reality of that and in the Sudanese teaching foundations, the researcher is conducting this study.

1.2Research Significance

By conducting this study, the researcher proposes that this work will add to credit of English Language Teaching (ELT) a lot of information and data that can help in the advancement and development of this field. Moreover, the research contributes to the syllabus design, support them, with useful and fruitful ideas for the sake of give-and-take in this field. In addition to that, what have been mentioned, this humble research possibly conveys tips of knowledge to the international society working in the field of language education and pedagogy. Above all, this study will probably inspire the policy makers in the ministries of education and may benefit them by introducing prolific suggestions and opinions to make decisions and take positions.

1.3Research Questions

The general question that this research poses is:

Is there a measurable degree to investigating the effect when English language exposed to the learners using information technology?

But here is to operationalize this general question into context, as well as can have other more specific sub-questions as follows:

1- What is the mutual relationship between IT and ELT?

- 2- Why does Information Technology use have better effect on English language teaching and learning process?
- 3- To what extent is Information Technology effective and successful inadvancing English language teaching and learning?

1.4Research Hypotheses

This study hypothesizes the following assumptions and claims:

- 1) There are mutual relationship between Information Technology and ELT.
- 2)Information Technology causes better influence on English language teaching and learning process
- 3) Information Technology is considered more effective in ELT field.

1.5Research Objectives

The main objective that this research focuses on:

- -To investigate the relationship between Information Technology and English language teaching.
- -To investigate the cucess that positively affect on English language learning process.
- -To investigate the degree of effectiveness and success when usingInformation Technologyin English language teaching and learning.

To concentrating on that objective or target, the researcher will do the best to collect data from references, journals, magazines, or any useful report in order to achieve this target.

1.6 Research Methodology

The researcher uses the descriptive analytical method in order to fulfill the data collection process. The instrument of data collection is a questionnaire for the teachers of English as a foreign language in Sudanese University (Sudan university of Science and Technology, Alnelein and Bhri university. To analyze the data the researcher is going to use SPSS .computer program .

1.7 Research limits

Limit of the study:

This study will be limited to investigation into the effect of information technology on English language learning and Teaching it well be carried out in Sudanese University, teachers of English language in Sudan university, Alnelein and Bhri university as a sample. This study has been conducted during the academic year 2016- 2017.

Chapter Two Literature Review

CHATER TWO

Literature Review and Previous Studies

PART ONE

2.0 Introduction

In this chapter the researcher wants to explain and discuss the issue of how technology is actually having an effect in process of learning English language. As well as going through investigating and analyzing the theoretical study of this issue, in finding solid ground about the complication of this issue, especially in Sudanese university to establish green lines of questions and hypotheses which set in the previous chapter

2.1 The definition of Information Technology

The term Information Technology in Longman Dictionary of contemporary English, Fifth Eddition (LDCE5) person Education limited (2009) is defined the study or use of electronic process for gathering and storing information and making it available using computer applications. As a result, computer –assisted language learning (CALL) is succinctly defined in a seminal work by levyc (1997:p.1) as the search for study of application of the computer in language teaching and learning CALL embraces a wide range of information and communications technology application and approaches to teaching and learning foreign language from the (traditional,) drill and practice programs that characterized CALL in the (1960s) and 1970s to more recent manifestation of CALL, e.g as used in avitual learning environment and reb-based distance learning. It also extend to use of corpora concordancers, interactive white broads, Computer-mediated Communication (CMC), language learning virtual world, and mobile-assisted language learning (MALL).

The term CALL Computer assisted Language Learning instruction was in before CALL, reflecting its origins as a subset of the general term CAI (computer-assisted instruction). CALL fell out of favor among language teacher however, as it appeared to imply a teacher-centred approach (instructional) .CALL began to replace CALI in the early 1980s (Davies and Higgins 1980:p.3) and it is now incorporated into the name growing number of professional associations world wide. An after retineterm, technology—enhanced language learning (TELL), also emerged around the early 1990s e.g the TELL consortion project, university of hull.

The current philosophy of CALL puts a strong emphasis on `student centered materials that allows learners to on their own. CALL is essentially a tool that help teachers to facilitate the language learning process. It can be use to reforcewhat has already been learned in the class room or as are medial tool to help learners who require additional support. The design of CALL materials generally takes into consideration principles of language pedagogy and methodology, which may be derived from different learning theories (e. g, behaviorist, cognitive, constructivist) and second language learning theories such as Stephens krashens, monitor hypotheses.

2.2 History of CALL Programs

CALL data back to the (1960s), when it was first introduced on university mainframe computers. The PLATO projects, imitated at the university of Illinois in (1960s), is an important landmark in the early development of CALL (Marty 1981). The advent of the Microcomputer in the late (1970s) brought computing witin the range of a wider audience, resulting in aboom in the development of CALL programs and a flurry of publications of books on CALL in the early (1980s).

There have been several attempts to document the history of CALL . Sanders (1995) covers the period from the mid- (1960s) to the mid- (1990s), focusing on CALL in North America .Butler – Pascoe (2011) looks at the history of CALL from a different points of view, namely the evaluation of CALL in the dual fields of educational technology and second/ foreign language acquisition and the paradigm shifts experienced along the ways.

2.3 CALL programs typology and phases

During (1980s) and (1990s), several attempts were made to establish a CALL typology. A wide range of different type of CALL programs was identified by Davis and Higgins (1985)Jones and Fortescue (1987), Hardisty and windeatt (1989), and lery(1997:pp-118ff). these include gap filling and cloze programs, multiple- choice programs, free-format (text-entry) programs adventure and simulation, action mazes sentence-programs in which the learners has to reconstruct a whole text. Warschauer (1996) and waschaure&healey (1998) took a different approach. rather than focusing on the typology of CALL, they identified three pedagogical and methodology approach: Behavioristic CALL: conceived in (1950s) and implemented in (1970) and (1980). Communicative CALL: (1970s) to (1980s) Integrative CALL: embracing multimedia and the internet (1990s). Most CALL programs in warschaure and healey's first phase, behavioristic CALL (1960s to 1970s), consisted of drill and practice materials in which the computer presented a stimulus and the learners provided a response . At the first, both could be done only through the text. The computer would analyze student input and give them feedback, and more sophisticated programs would read to student's mistakes by branching to help screen and remedial activities . Second phases : describe by warschaure and healey communicative CALL, is based on the communicative approach that became prominent in the late (1970s) and (1980s) (underwood 1984). in communicative approach the focus is on using the language rather than analysis of the language and grammers is taught implicity rather than explicitly. The phases of CALL by warschaure and healey, integrative CALL, starting from the (1990s), fried to address criticisms of the communicative approach by integrative the teaching of language skills into takes or projects to provide direction and coherence. It also coincided with the development of multimedia technology (provided text, graphics, sound and animation) as well as computer—mediated communication (CMC). In late publication warschaure change the name of the first phase of CALL from behaviouristic CALL to structural CALL and also revise the dates of three phase (warschaure 200): Structural CALL: (1970s) to (1980s). Communicative CALL: (1980s) to (1990s).

- Integrative CALL: (2000) on words.
 Box (2003) took issue with warschaure&healey (1998s) and warschaure (2000) and proposed these three phases:
- 1. Restricted CALL mainly behaviouristic: (1960s) to (1980s).
- 2. Open CALL I,e –open terms of feedback given to students, software type and the role of the teacher, and including stimulations and games; 1980s to 2003 (I,e the date of box's article.

3. Flash cards:

Abasic use of CALL is in vocabulary acquisition using flash card which require quite simple programs such as programs often make use of spaced repetition, atechnique whereby the learner is presented with vcaburaryiteams that need to be committed to momery at increasingly longerintervalsunti-long-term retention is achieved, which have designed

2.4Software design and pedagogy

Above all, careful consideration must be given to pedagogy in design CALL software, but publishers of CALL software tend to follow the latestfrend, regardless of its desirability. Morever approaches to foreign languages are

constantly changing dating back to grammar translation, through the direct method; audio-lingualism and avariety of other appearches to the more recent communicative appearch and constructivism (deco 2001).

It's all too easy when designing CALL software to take the comfortable route and produce asset of choice and gap-filling exercises using a simple authoring tool (Bangs 2011), but CALL is much more than this: stepp—Greany (2002) for e.g describes the creation and management of an environment incorporating a constructivist and whole language philosophy.

According to constructivist theory, learners are active participants in tasks in which they (construct) new knowledge derived from their prior experience — whole language theory embrace constructivism and postulates that language learning more from the whole to part, rather than building sub—skills to lead toword the higher abilities of comprehension, speaking and writting.

Language acquisition is an active process in the learner focus on cues and meaning and makes intelligent guesses .addition demands are placed upon teachers working in atechnological environment incorporating constructivist and whole language theory . The development of teacher's professional skills must include new pedagogical as well as teaching and management skills .

Regarding the issue of teacher facilitation in such an environment, the teacher has akey role, to play, but there could be a comflict between the aim to create an atmosphere for learner independence and the teacher's natural feeling responsibility. In order to avoid learner's negative perception, Stepp—Greany points out that it's especially important for the teacher to continue to address their needs, especially those of low—ability learners. (37)

2.5 CALL Programs multimedia

Teaching language have been avoid users of technology for avery long time . gramophone record were among technological aids to be used by language teachers in other to present student with recording of native speaker's voices , and broadcasts from foreign radio stations were used to make recordings on reel – to – reel tope recorders .Also classroom language activities , includes side m , film – strip , video , cassette recorder and DVD players .

In the early 1960s, integrate courses (which were often described as multi – media) began to appear.

During the 1970s and 1980sstandard micro-computers were in capable of producing sound and they had porgraphicscapability. this time represented a step backwords for language teacher's who by this time had become accustomed using arrange of different media in the foreign language classroom .the arrival of the multi-media computer in early 1990s was therefore a major break through as it enabled text, images, sound and video to be combined in one device and the integration of the four basic skills of English language, listening, speaking, reading and writing (Davies 2011:section 1). E.g of CALL programs that were published on CD - ROM and DVD from the mid -1990s on words are described by Davies (2010: SECTION 3). After that multimedia become to appear in educational institution . while multimedia facilities over many opportunities for language learners with integration of text, images, sound and video these opportunities have often not been fully utilised one of the main promises of CALL is ability to individualise learning but, as with language labs that introduced into educational institutions in the 1960s and 1970s, the use of multimedia centers has often developed into rows of students all doing the same drills (Davies 2010: section 3.1).

2-6 Self-access language learning centers

In self access language learning, or independent learning centers, focus is on developing learner autonomy through varying degree of self- directed learning, as opposed to (or as a complement to) classroom learning. In many centers learners accures materials and manage their learning independently, but they also have access to staff for help. Many self-access centers are heavy users of technology and an increasing number of them are now offering online self-access learning opportunities.

2-7Internet

The emergency of the world wide web (now known simply as the web) in the of 1990s marked a significant change in the use of communications technology for all computer users. Email and other forms of electronic communication had been in existence for many years, but the launch of mosaic, the first graphical browser in 1993s brought about a radical change in ways in which we communicate electronically. The launch of the web in the public of arena immediately to attract the attention of language teachers. Many language teachers where already familiar with the concept of hypertext on stand-alone computer, which made it possible to set it non-sequential structured reading activities for language learner's in which they could point to items of text or images on a page displayed on the computer screen and branch to any other page e:g in also-called" stack " as implemented in the HyperCard program on apple mac computer. The web took this one stage further by creating a worldwide hypertext system that enable the user to branch to different pages on computer anywhere in world simply by pointing and clicking at apiece of text or an image. This opened up and a student's that could be used in a variety of ways (Davies 2010) list over 500 websites, where links to online exercise can be found, a long with links to online dictionaries and encyclopedias,

concordancers, translation aids other miscellaneous resources of interest to the language teachers and learner.

2.8The effect of CALL in Language Learning and Teaching

The question of the effect of CALL in language learning and teaching has been vaised at regular intervals ever since computers first appeared in educational institutions (Daies&Hewe 2011:section 3). A distinction needs to be mode between the impact and the effect of CALL .Impact may be measured quantitatively and qualitatively in terms of the uptake and use of (ICT) in teaching English foreign languages, issues of a availability of hardware and software, budgetary considerations, internet access, teachers and learners attitudes to the use of CALL, changes in the ways in which languages are learnt and taught, and paradigm shifts in teachers and learners roles.

Effective, on other hand, usually focuses on assessing to what extent (ICT) more effective way of teaching English foreign languages is compared to using traditional methods – and this is more problematic as so many variables come into play. Worldwide, the picture of the effectiveness of CALL is extremely varied. Most developed nations work comfortably with the new technologies, but developing nations are often best with problems of costs and broadband connecting. Evidence on the effectiveness of CALL – as with the effectiveness of CALL – is extremely varied and many research questions still need to be addressed and answered. Hubbard (2002) presents the results of a CALL research survey that was sent to 125 CALL professionals from around the world asking them to articulate a CALL research question they would like to see answered.

Acrucial issue is the extent to which the computer is perceived as taking over the teachers role. Warschuare (1996:p-6)perceived the computer as playing an "intelligent" role, and claimed that a computer program "should ideally be able

to understand a users spoken input and evaluate it not just for correctness but also for appropriateness. It should be able to diagnose a students problems with pronunciation, syntax, or usage of options. Warschuares high expectations in (1996) have still not been fulfilled, and currently there is an increasing tendency for teachers to go down the route proposed by Jones, making use of a variety of new tools such as corpora and concordances, interactive whiteboards and applications for online communication.

2-9 The Processes of Learning Second Language Acquisition

This section considers a number of key cognitive processes involved in L2 acquisition. I have divided these into Micro-processes and Macro – processes.

2-9-1 Micro-processes

The Micro-processes I will considered are (1) attention (2) integration and restructuring (3)Monitoring.

Attention: Initially, the role played by attention in L2 acquisition was conceptualized in terms of "consciousness". As we have already seen, Krashen (1981) characterized the process responsible for the acquisition of implicit knowledge as an unconscious one and that responsible for the "learning" of explicit knowledge as a conscious one. Mclaughlin(1990s),hawever, viewed such adistinction as untenable on the grounds that the extend to which processes are conscious is not amenable to empirical study. Other SLA researchers, however, have been, happy to grapple with the construct. In particular, Schmidts contributions (1990,1994,1995,a 2001) have done much to give clarity to the role of consciousness. Schmidts in (1994) distinguished four senses of consciousness, first, there is as intentionality. That is, learners can set out to learn some element of the L2 deliberately. This sense of "conscious" then classified "intentional" and incidental, learning. Second there is consciousness as attention, irrespective of whether acquisition takes place intentionally, or

incidentally, learners need to pay conscious attention to form. Increasingly, SLA researchers, have moved away from debating the role of consciousness to examining how attention functions in L2 acquisition. In making sense of the different positions that have been advanced, it is helpful to distinguish a number of different sense of attention. Eysenck (2001), for example, pointed out that its primary use in cognative psychology, is to refer to selectivity in processing. He then distinguished focused attentions which is studied by asking participants to attend to only one of two or more input stimuli, and divided attentions which is studied by requiring to attend simultaneously to two or more input stimuli. With this important distinction in mind, we will examine how different SLA researchers have theorized the role of attention, starting with Schmidt.

2-9-2Schmidts Noticing Hypothesis

Schmidts Hypothesis originated in the record of his experience of learning L2 portugues in Brazil (Schmidt&Frota 1986). Schmidt kept adiary to establish which features in the input he had consciously attended to his output was the examined to see to what extent the noticed forms turned up in communicative speech. In early every case the forms that Schmidt produced were those that he noticed people saying to him. Conversly, forms that were present in comprehensible input did not show up until they had been noticed. Whereas Schmidts earlier publications discussed noticing in terms of "consciousness" in his (2001) article he directly addressed the nature and role of "attention" in this article, he made the following claim... the concept of attention is necessary in order to understand virtually every aspect of second language acquisition, including the development of interlanguages (IL) over time, variation within (IL)at particular points in time the development of L2 fluency, the role of individual differences, such as Motivation, Aptitude, and learning strategies in

L2 learning, and the ways in which negotiation for meaning and all forms of instruction contribute to language learning.

2-9-3 Tomlin and Villas theory of Attention

In an article that has had considerable input on SLA, Tomlin and Villas (1994), drawing on the work of Posner&Petersen (1990)presented avery different views of the role of attention in L2 acquisituon. They distinguished three kinds of attentional processes ... (1)alertness, which involves a general readiness to deal with increasing stimuli and is closely related to learners affective/motivational state, (2) orientation, which entails the aligning of attention on some specific type or class of sensory information at expense of other, (3) detection, when the cognative registration of a sensory stimuli takes place. It is during the last of these processes that specific exemplars of language are registered in memory.

Tomlin and Villas then went on to make two claims, both of which have subsequently attracted opposition. The first claim is that detection can take place without alertness and orientation, in other words learners can register an input feature even when they are not in an ideal state to attend and their attention is not focused on the feature in the question. Second claims is all three attentional processes esses can acquire without awareness. They commented "awareness" requires attention, but attention does not require awareness.

2-9-4 Vanpattens input processing theory

In (1996) input processing Theory is based on the standard information processing view point. Namely, working memory is limited in capacity (at least in terms of each modality), making it difficult for learners to attend concurrently to different stimuli in the input. He identified "detection as the key intentional process, noticing that detecting one bit of the information can interfere with the detection of others by consuming available recourse in working memory. Thus,

for Vanpatten, the main issues how learner allocate attentional resources during online processing and in particular what causes them to detect certain stimuli in the input and not others. He formulated a number of input processing principles to explain learnersattentional priorities. Vanptten has continued to work on these principles over time, modifying they slightly and adding to them in subsequent publications. Vanpttens input processing principles owe much to his (1990a) study. This addressed the key question What happens when learners are asked to attend to meaning and form together or just to meaning and form? The study asked learners to listen to text in Spanish under four conditions. In one task, the learners were instructed to listen for content only. In second task, they listened for content and word "inflection" making acheak mark each time it occurred .in the third task, they heard the definit article "La" . In four task , they listen for content and checked each time they heard the verb morpheme- "n". Vanptten reported asignificant difference on the comprehension scores (derived from asking students to recall the text) for tasks one and two on the one hand and tasks three and four on the others. There was no difference between the scores for task one and two or for tasks three and four. Vanpttencocluded that meaning and form compete for learners attentional that only when learners can understand input easily are they able to attend to form. Vanpttens results were replicated in astudy based on areading text by Wong(2001).

2-9-5 Robinsons Multiple-Resource Model

Perhaps the fultest treatment of the part played by attentional in L2 learning is that of Robinsons (1995,2005). In his 2003 survey of work on attention in SLA, he distinguished three senses of attention...(1) attention corresponding to the first stage in an information- processing model where input is perceived) (2) attention as capacity (corresponding to central control and decision- making stage), and (3) attention as effort (referring to the sustained attention involved in response execution and monitoring). Attention as selection addresses how

"input"becames intake, Corder (1967). It is equated with Schmidts noticing which Robinson defined as "detection plus rehearsal in short- term memory, prior to encoding in long-term memory, (Robinson 1995:296).in (2003) classified two accounts of how selection takes place early on in processing when input is initially attended to or later when information has already entered working memory. Accordingly, he proposed that selection arises not because of limit in memory capacity but in response to the goals learners form to satisfy task demands. Selection need not but is likely to involve awareness'. Attention as capacity in terms of the differential attentional demands placed on working memory by L2 tasks. Robinson considered there theoretical positions, according to single – capacity models, more complex and less automatized tasks consume more attentional capacity. According to multiple- resource models, attention can be allocated to different task as long these do not belong to the same domain (for example, making mobile call will not interfere with driving acare if it does not involve manual activity). According to interference models, limits on task performance are not the result of limited memory capacity but are caused by involuntary attention shifts included by changing or conflicting intentions. Attention as effort is a "state" concept referring to energy or activity in the processing system (P.651). It addresses the extent to which a learner is able to maintain performance on a tasks over time. Falure to suction attentional effort can occur as a result of prolonged time on a task and complexity of the task .it is reflected in a decline in the frequency of self-repair and monitoring of output. The role of attention is, however, controversial, the major controversies center around two issues- first, does attention necessarily involve awareness? Whereas Schmidt assumed that noticing involves at least alow level of awareness. Tomlin and Villas claimed that attention can take place without awareness .secondly, to what extent is working memory limited in capacity ?whereas most SLA researchers presume a single, limited capacity, Robinson argued for a multiple- resourced and unlimited capacity working memory.

These controversies will resurface in subsequent sections when we consider effective learning models of L2 production.

2-9-6 Integration and Restructuring

These are the processes that remain least understood in cognitive SLA. Integration is a general term that refers to the processes involved in storing items noticed and processed into long-term memory. That is, it involves modification of learnersinterlanguage systems. Modification is both quantitative and qualitative. Qualitative changes take place when new forms are added. They entail item learning and assume an exemplar – based representation. Qualititative changes to a learners implicit knowledge system involve the assigning of new functions to old forms (I.e.the existing form- function network is recognized. This entails "mapping" which, following Slobin (1985b), involves forming alink between an existing notion and a phonological form. Context plays an important part in enabling learners to achieve these links. As Doughty (2001) pointed out, mapping assumes that learners are predisposed to construct systems, as reflected in the will-documented sequences of acquisition, these are considered in a later, it should be noted that not all features processed in working memory can be incorporated immediately into the learners implicit knowledge system so, as ?Gass (1988,1997a)proposed, learners may place new feature/items in aseparate storage until they are ready to modify their interlanguage. The term Restructuring refer to the qualititative changes that take place in learners interlanguages. These changes relate to both the way knowledge is represented in the minds of learners and also the strategies they employ. The primary mechanism of the restructuring is automatization. Mclacighlin (1987) claimed that "one" procedures at any phases become automatized...learners step up to a "met procedural "level which generates representational change and restructuring (p.138). Doughty (2001) similarly argued that the processes of mapping and restructuring take place unconsciously, although she noted that the insights that arise from these processes may be available for metalingusitic comment. However, Schmidt (1994) conclude that overall there are very little evidence for indication of knowledge without awareness. Research in general has shown an advantage for learning accompanied by awareness at the level of understanding (as opposed to just noticing), but as Schmidt pointed out, it is not clear to extent scuch learning is robust and long-lasting, or peripheral and fragile.

2-9-7 Monitoring

krashen(1982) clained that monitoring can only take place when the learners is focused on form ,knows the explicit rule to be applied ,and has sufficient time. As these conditions were difficult to meet ,he believed that monitoring had only a limited role in L2 acquisition .Lennon(1994),however, reported that the bulk of the errors corrected in his study were phonological and morphological(43 percent) and also performs (20 percent),which can be explained by the fact that correction of such errors does not involves any major restructuring of the utterance.

2-10Macr-Processes

Learners differ in the approach they adopt to learning as the result of how they orientate to learning. Drawing on cognitive psychology, SLA researchers have distinguished four general approaches, presented as two dichotomies ... first incidental versus intentional learning and second implicit versus explicit learning. The key distinguishing characteristics are intentianalty and awareness. The essence of intentional learning is that it involves awareness. For example, the learners set out to read abook with the express purpose of increasing his/her vocabulary and is therefor likely to consciously attend to new words in atext. In contrast incidental learning is characterized by an absence of intentionality to learn, but may involves adhoc conscious attention to some features of the L2.

Implicit learning takes place without either intentionality or awareness. However, as we have seen, there is controversy as to whether any learning is possible without some degree of awareness.

2-10-1 Intentional versus incidental learning

As Hulstin (2003) pointed out, intentional and incidental learning were first in restigated without the context or behaviorist psychology. Incidental learning was operationalized in what Hulstijn calls type 1 studies by asking learners to learn a set of stimuli (for example, alist of words)with orienting instructions that did or did not inform them that they would be tested on completion of a task. In other studies (type2), additional stimuli (fore.g) specific morphological features in the list of words) that the participants were not told about were included in the task and subsequently tested .cognitive psychologists later took over the type 2 design. One of the important findings of the psychological research was that in order to measure the effects of the two types of learning it was important to ensure an appropriate match between the method of training and testing (for e.g)with regard to whether receptive or productive knowledge of the learning target is tested.

2-10-2 Explicit versus implicit learning

It is important to distinguish explicit instruction and explicit /implicit learning (Schmidt 1994). The terms explicit and implicit instruction need to be defined from a perspective external to the learner. That is, it is the teacher, material writer, or course designer who determines whether the instruction is explicit or implicit. In contrast, the terms implicit and explicit learning can only be considered in relation to the learners perspective. Thus, implicit learning take place when the learner has internalized a linguistic feature without awareness, while explicit learning involves awareness.

2-11Summary of Literature Review

The researcher has found many studies relevant to this study. Majority of them showed above moreover other researchers carried out different studies under different titles but they are similar to these study. This section presents previous studies by Warschaure in (1960) and Warschaure and Healey (1998) took different approaches in the field of using technology in the process of learning English as foreign language. The goals of review were:

- 1- To understand how technology have been used in past to support second/foreign language learning.
- 2- To explore research evidence as relate to how technology can enhance language skills acquisition.

The findings showed that:

- 1-The benefits of technology on learning English as foreign language have been widely accepted and educators agree that it can be an effect instructional tool.
- 2-Research from 1990 to 2016 provided some evidence on the effect of technology in the field of education. For example, the use of visual media supported vocabulary acquisition and reading comprehension and the use of online communication tools has been shown to improve writing skills in a number of studies.

Part Two

2-12Previous Studies

2-12-1 First study

HAROON, A 2016 in his study entitled Investigating the impact of using technology in learning English language in Saudi Arabia . To investigate the

impact of using technology in learning language in high school in KSA /AL-QASSIM ONAIZHA. The researcher used the descriptive method of research. The data of the study were collected by the using a questionnaire which was addressed secondary /high school students in AL-Qassim province who represented the sample of the study. The response of the study was 80 secondary/high school students. The data which obtained was analyzed by using (SPSS) Statistical package for social science. The main findings of the research revealed that most of students have positive attitudes to words the use of technological tools (COMPUTER, SMART PHONES, PRJECTOR....ETC)

The researcher recommended that English adequate application of multimedia technology to the process of learning(teaching as well) can make confusion and distraction in the process of learning, therefore, here the role of the teacher is essential, because the introduction to each lesson and speaking communication are good way to improve students "listening and speaking which technological tools cannot fulfill, therefore teachers, interpretation shall not be overlooked. Meanwhile, as a practical linguistic science, English should be used very often in class to cultivate the students communicative competence. He also recommended that; we need to encourage the students to use their own mind and speak more, actively join in class practice in order to avoid image and animation of teaching materials in order to cause audio and visual effect while using power point programme.

2-12-2 Second Previous Study

HASSAN,A(2015) In His Study Entitled, "Role Of New Technology In Enhancing Language Learning". The study aimed to explore the technology, challenges to the educational field and present exciting opportunities. However, it is sad to observe the downward trend of English language proficiency a mange graduate students of Sudanese Universities. The research carried out

through both questionnaires and interviews. The study finds out: the important of availability of new technology in classrooms, the need foe technology training course, partners of education should pay more on learning process, authentic language materials correct, promote, and purify languages standard. Lastly, the study recommends:- technology should be part of classrooms facilities. Partners of education should accept combining technology with learning process and technology devices should replace old mediums of teaching to save time and energy.

2-12-3 Third Pervious Study

DeLourdes A,(2014) In His Entitled In "Role of Technology In Supporting" English Language Learners In TodaysClassrooms". Which submitted to Ontario Institude For Studies In Education Of The University Of Toronto. The qualitative research study examined the role that technology plays in supporting kindergarten to Grade & English language learners (ELLS)in the classroom. The purpose of this study was to identify different teachers methods and strategies used in classroom to support (ELLS) as well as to identify some technological tools, such as Computers, tablets, and smart Boards that can be used to assist classroom teachers and English as a second language (ESL) teachers and their students during the language learning process. The data collected from an indepth literature review and two interviews with experienced teachers from different grade levels were analyzed. Five themes emerged from the findings and included: 1) variety of teaching strategies support ELLS during the learning process, including the use of technology such as Computers, tablets, and smart Boards; 2)some benefits in using technology with ELLS include positive increase in their independence and language skills ;3)students and teachers face some challenges when using technology in the classroom, including technical difficulties, students engagement and off-task behavior, lack of teachers familiarity with the technology, and new technologies not being children/user-friendly;4) students, parents, and teachers have appositive perception about the use of technology in the classroom. The discussion explored some strategies teachers can use while teaching ELLS, the pros and cons of using technology in the classroom, as well as the way technology is perceived in the classroom by students, parents, and teachers.

2-13 Summary of Provirus Studies

The three previous studies have shown the importance of information technology being implemented in language learning. They recommended ministry of education establish Computer assisted language learning to the teachers. Also recommended all EFL Teachers to be equipped with computers. Consequently, aforementioned studies show the viability of CALL fore enhancing language learning. Enhancing teachers performance will undoubted. As a result, CALL should be consider a critical component to any EFL programme.

Chapter Three Methodology

Chapter Three

Methodology

3-0 Introduction

This chapter describes research methodology. It gives full description of the research tool which used to collect the data from the sample and the procedures that are followed. AQuestionnaire is the tool that chosen to collect the data.

3-1 Research Methodology

The researcher used descriptive analytic method in order to conduct final results of the study. The instrument of data collection is a questionnaire for the teachers of English as a foreign language in Sudanese University (Sudan university of Science and Technology, Alnelein and Bhri university. To analyze the data the researcher is going to use SPSS .computer program .

3.2 population and sample of research

The participants (sample) of this study consists of 40 EFL teachers from both genders male and female from different universities, college of language, English Department, Sudan university of Science and Technology n, Alnelein and Bhri universities. They were asked to give their opinions of 15 statements that were prepared by the researcher.

3.2.1 Teachers:

Fourty teachers from different universities both male and female their ages between 30 to 55 all of them graduated from college of languages, their teaching experience about two to 12 years specialized in teaching English language.

3-3 The instrument of the Research

The researcher used a questionnaire to collect the data of this study. The researcher thinks that the questionnaire is a good tool through which the relevant information can be collected easily.

The questionnaire was designed in a simple and a clear language to avoid ambiguity and misunderstanding which sometimes mislead the respondents. The questionnaire is in a model concerns teachers only, it consists of fifteen statement that address teachers and the interests which concern this issue.

3-4 The procedure

The researcher distributed the questionnaire to the teachers to look over the items and make up their minds, then gave them enough time to do it after that the researcher collect the questionnaire for analysis.

3-5 Validity and Reliability

Validity and Reliability are important for the questionnaire because the ensure the quality of the instrument which was used throughout this study.

3-5-1 Validity

Therefore the validity and reliability of the research tool has been confirmed in this study by DR Naglla taha bashari supervisor and head of the Department of English language learning and DR Abbas muchtar, and DR Hillary.

3-5-2 Reliability

The questionnaire was piloted to check its reliability. For teachers whowere not part of the main study sample were chosen to respond to the questionnaire after one weak it was administrated again for the second time and the result showed stability in answer.

3-6 Summary

This chapter has provided description of the research tools and their procedure, the data will be statically analyzed and discussed in chapter four.

Chapter Four Data Analysis, Results and Discussion

Chapter Four

Data Analysis and Discussion

4-0Introduction

In this chapter, the data collected from the questionnaire which is conducted at Sudan University of Science and Technology is introduced and analyzed statically.

4-1 Analysis of the Teacher's Questionnaire

As mentioned in chapter three, the questionnaire was distributed to the English language teachers at different Universities (Sudan University of Science and Technolog, Bhari and Alnelein universities) It consists of fifteen statements.

Table No(4-1)
There are mutual relationship between information technology and English language teaching (ELT).

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	0	0
Neutral	0	0
Agree	13	32.5
Strongly agree	27	67.5
Total	40	100.0

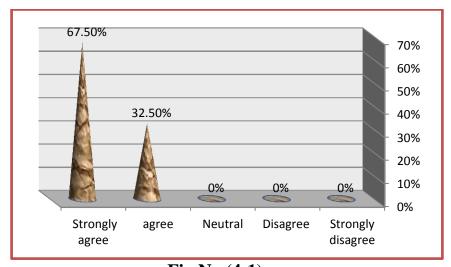


Fig No (4-1)

There are mutual relationship between information technology and English language teaching (ELT).

Results in table (4.1) and figure (4.1) above explain that respondents were sample study, and pointed that high percentage in "Strongly agree and agree " are exemplified "(67.5%) and (32.5%)" respectively are high equal (100%),so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table No (4-2)
Feedback provided by computer assisted language learning (CALL)
gives me sufficient information

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	0	0
Neutral	1	2.5
agree	17	42.5
Strongly agree	22	55.0
Total	40	100.0

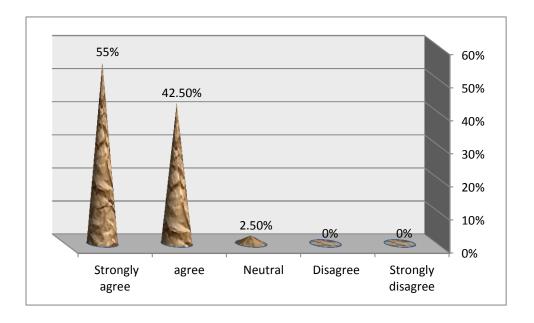
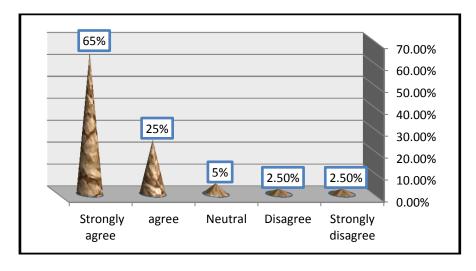


Fig No (4-2) Feedback provided by computer assisted language learning (CALL) gives me sufficient information

Results in table (4.2) and figure (4.2) above explain that respondents were sample study, and pointed that high percentage in "strongly agree and agree " are exemplified "(55%) and (42.5%)" respectively are high equal (97.5%),so the highest percentage is going to positive direction of the statements and most answers of the study sample are agreeable.

Table No (4-3)
The CALL Programs can replace the traditional language learning methods

Valid	Frequency	Percent (%)
Strongly disagree	1	2.5
Disagree	1	2.5
Neutral	2	5.0
agree	10	25.0
Strongly agree	26	65.0
Total	40	100.0



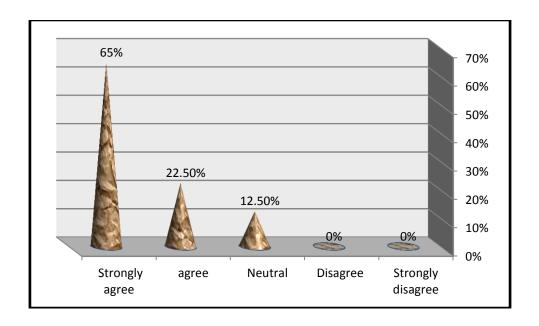
 $\label{eq:figNo} \begin{tabular}{ll} Fig No~(4-3) \\ The CALL~Programs~can~replace~the~traditional~language~learning~methods \\ \end{tabular}$

Results in table (3.3) and figure (3.3) above explain that respondents were sample study, and pointed that high percentage in "Strongly agree and agree" are exemplified "(65%) and (25%)" respectively are high equal (902%), so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table No (4-4)

CALL as a system of language acquisition is as valuable as traditional methods of language learning

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	0	0
Neutral	5	12.5
agree	9	22.5
Strongly agree	26	65.0
Total	40	100.0



 $\label{eq:call_constraints} Fig~No~(4\text{-}4)$ CALL as a system of language acquisition is as valuable as traditional methods of language learning

Results in table (4.4) and figure (4.4) above explain that respondents were sample study, and pointed that high percentage in "Strongly agree and agree" are exemplified "(65%) and (22.5%)" respectively are high equal (97.5%), so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable

Table No (4-5)

Internet helps me to get more information easilyinstead of using library.

Valid	Frequency	Percent (%)		
Strongly disagree	0	0		
Disagree	0	0		
Neutral	1	2.5		
Agree	14	35.0		
Strongly agree	25	62.5		
Total	40	100.0		

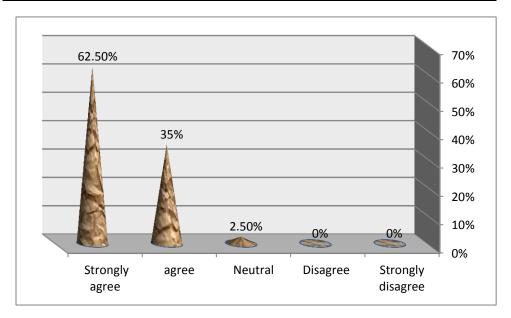


Fig No (4-5) Internet helps me to get more information easily instead of using library.

Results in table (5.5) and figure (5.5) above showed that respondents were sample study, and pointed that high percentage in "Strongly agree and agree" are exemplified "(62.5%) and (35%)" respectively are high equal (97.5%), so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table No (4-6)

Illustrates the mean and stander deviation and Chi-Square and degree of freedom and p.value of answering about the Statements of hypothesis one

Statement	Mean	STD	Ch2	DF	p.value
1. There are mutual relationship between information technology and English language teaching (ELT).	4.675	0.474	18.05	1	0.000
2.Feedback provided by computer assisted language learning (CALL) Gives me sufficient information	4.525	0.554	57.75	2	0.000
3. The CALL Programs can replace the traditional language learning methods.	4.475	0.905	18.65	4	0.000
4.CALL as a system of language acquisition is as valuable as traditional methods of language learning	4.525	0.716	21.65	2	0.000
4.internet helps me to get more information easily instead of using library.	4.600	0.545	29.00	2	0.000

The above table indicated the mean , standard deviation, Chi-Square ,degree of freedom and p.value .regarding the answers of respondents of the study sample about the above Statements it has been noticed that all means are greater than mean stated in hypothesized mean which is about (3) that implies that all means of these Statements are in positive direction and show that the standard deviation ranges from (0.474 to 0.905) The difference between the highest standard deviation and lowerst is less than one that means there's similarity and homogeneity of answers made by respondents which pointed that the p.value of all Statements is less than (0.05) this show that the answers are in the positive direction .this is in line with what has been stated in the hypothesis one .

Table No (4-7)
Teachers attainment rate increases when using IT

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	1	2.5
Neutral	2	5.0
agree	18	45.0
Strongly agree	19	47.5
Total	40	100.0

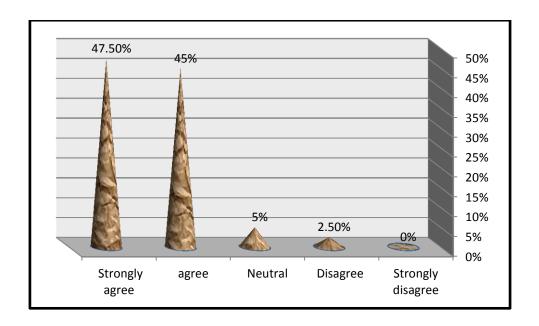


Fig No (4-6)
Teachers attainment rate increases when using IT

Results in table (4.6) and figure (4.6) above explain that respondents were sample study, and pointed that high percentage in "Strongly agree and agree" are exemplified "(47.5%) and (45%)" respectively are high equal (93%),so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table No (4-8)
Information technology is becoming a must in English language learning achievement

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	1	2.5
Neutral	5	12.5
agree	17	42.5
Strongly agree	17	42.5
Total	40	100.0

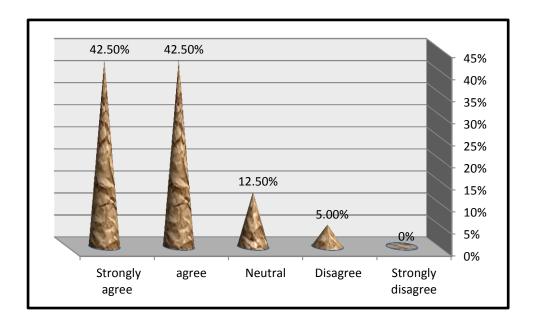


Fig No (4-7)
Information technology is becoming a must in English language learning achievement

Results in table (4.7)and figure (4.7) above pointed that respondents were sample study, and pointed that high percentage in "Strongly agree and agree" are exemplified "(42.5%) and (42.5%)" respectively are high equal (85%),so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table No (4-9)
CALL develops speaking & listening skills for students

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	0	0
Neutral	2	5.0
agree	23	57.5
Strongly agree	15	37.5
Total	40	100.0

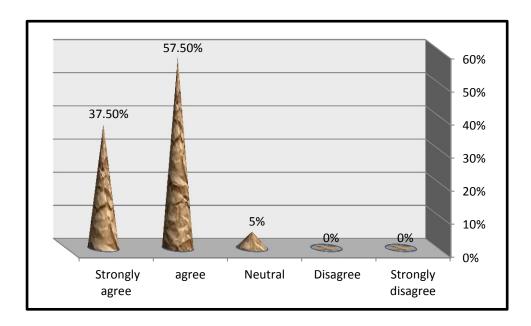
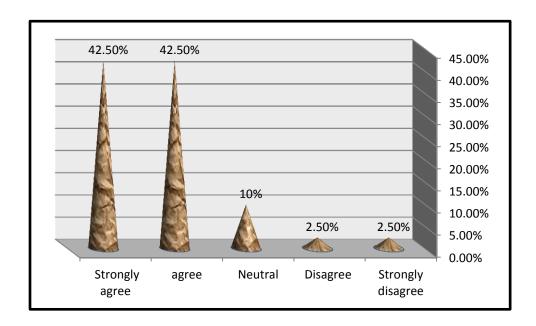


Fig NO (4-9) CALL develops speaking & listening skills for students

Results in table (9) and figure (8) above indicated that respondents were sample study, and pointed that high percentage in " agree and Strongly agree " are exemplified "(57.5%) and (37.5%)" respectively are high equal (95%),so the highest percentage is going to positive direction of the statements and most answers of the study sample are agreeable.

Table NO (4-10)
Fluency of speaking English language is better when we use technology

Valid	Frequency	Percent (%)
Strongly disagree	1	2.5
Disagree	1	2.5
Neutral	4	10.0
agree	17	42.5
Strongly agree	17	42.5
Total	40	100.0



 $\label{eq:figNo} \textbf{Fig No (4-10)}$ Fluency of speaking English language is better when we use technology

Results in table (10) and figure (9) above indicated that respondents were sample study, and pointed that high percentage in " agree and Strongly agree " are exemplified "(42..5%) and (42.5%)" respectively are high equal (85%),so the highest percentage is going to positive direction of the statements and most answers of the study sample are agreeable.

IT teachers are more proficient in teaching English language

Table No (4-11)

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	1	2.5
Neutral	4	10.0
Agree	19	47.5
Strongly agree	16	40.0
Total	40	100.0

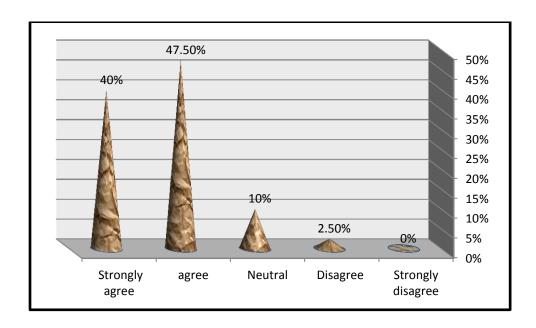


Fig No (4-11)

IT teachers are more proficient in teaching English language

Results in table (11) and figure (10) above explain that respondents were sample study, and showed that high percentage in "agree Strongly and agree "are exemplified "(40%) and (47.5%)" respectively are high equal (87.5%), so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table No (4-12)

Illustrates the mean and stander deviation and Chi-Square and degree of freedom and p.value of answering about the Statements of hypothesis two.

Statement	Mean	STD	Ch2	DF	p.value
1.Teachers attainment rate increases when using IT	4.375	0.705	20.40	3	0.000
2. Information technology is becoming a must in English language learning achievement	4.250	0.776	16.85	3	0.000
3.CALL develops speaking & listening skills for students	4.325	0.572	16.85	2	0.000
4. Fluency of speaking English language is better when we use technology	4.325	0.572	34.50	2	0.000
5. IT teachers are more proficient in teaching English language.	4.200	0.911	23.403	3	0.000

The above table (12) indicated the mean , standard deviation, Chi-Square ,degree of freedom and p.value .regarding the answers of respondents of the study sample about the above Statements it has been noticed that all means are greater than mean stated in hypothesized mean which is about (3) that implies that all means of these Statements are in positive direction and show that the standard deviation ranges from (0.572 to 0.911) The difference between the highest standard deviation and lowerst is less than one that means there's similarity and homogeneity of answers made by respondents which pointed that the p.value of all Statements is less than 0.05 this show that the answers are in the positive direction .this is in line with what has been stated in the hypothesis two.

Table No (4-13)
Teaching English inside the language labs boots the teacher interest

Valid	Frequency	Percent (%)	
Strongly disagree	0	0	
Disagree	1	2.5	
Neutral	4	10.0	
Agree	19	47.5	
Strongly agree	16	40.0	
Total	40	100.0	

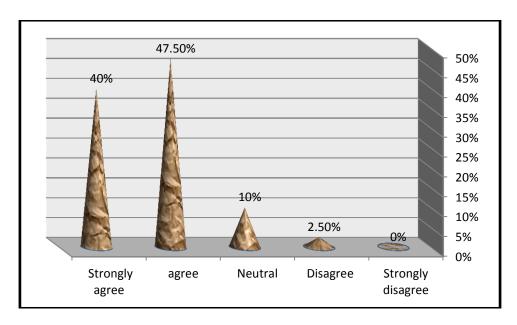


Fig No (4-13)
It teachers are inside the language label boot the teachers interest

Results in table (13) and figure (11) above showed that respondents were sample study, and pointed that high percentage in "agree Strongly and agree " are exemplified "(40%) and (47.5%)" respectively are high equal (87.5%), so the highest percentage is going to positive direction of the statements and majority answers of the study sample are agreeable.

Table No (4-14) CALL provides teachers with authentic language that can be missed by non-native teachers.

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	0	0
Neutral	3	7.5
Agree	18	45.0
Strongly agree	19	47.5
Total	40	100.0

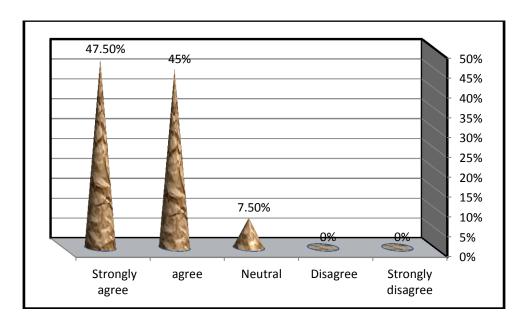


Fig No (4-14) CALL provides teachers with authentic language that can be missed by non-native teachers.

Results in table (14) and figure (12) above explain that respondents were sample study, and pointed that high percentage in " agree and strongly agree " are exemplified "(47.5%) and (45%)" respectively are high ,so the highest percentage Equal (87.5%) is going to positive direction of the statements and majority answers of the study sample are agreeable.

Table No (4-15)
Information technology has positive effect on the process of learning English language

Valid	Frequency	Percent (%)	
Strongly disagree	0	0	
Disagree	0	0	
Neutral	3	7.5	
Agree	26	65.0	
Strongly agree	11	27.5	
Total	40	100.0	

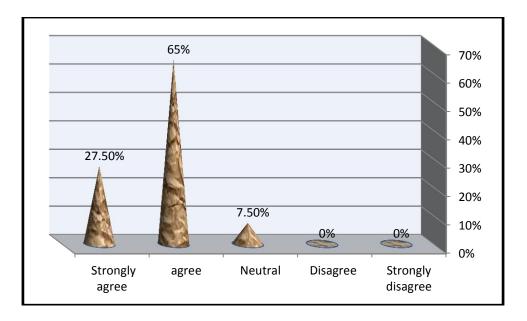


Fig No (4-15) Information technology has positive effect on the process of learning English language.

Results in table (15) and figure (13) above demonstrated that respondents were sample study, and pointed that high percentage in "agree and Strongly agree "are exemplified "(65%) and (27.5%)" respectively are high ,so the highest percentage is going to positive direction of the statements and most answers of the study sample are agreeable.

Table No (4-16) CALL develops Vocabulary knowledge.

Valid	Frequency	Percent (%)
Strongly disagree	0	0
Disagree	0	0
Neutral	5	12.5
Agree	21	52.5
Strongly agree	14	35.0
Total	40	100.0

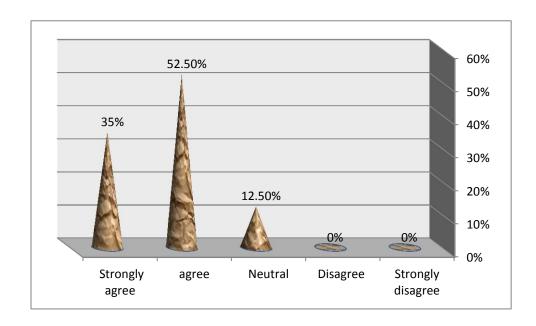


Fig No (4-16) CALL develops Vocabulary knowledge

Results in table (16) and figure (16) above explain that respondents were sample study, and pointed that high percentage in "agree and Strongly agree " are exemplified "(52.5%) and (35%)" respectively are high ,so the highest percentage is going to positive direction of the statements and most answers of the study sample are agreeable.

Table No (4-17) CALL is adequate for language acquisition

Valid	Frequency	Percent (%)	
Strongly disagree	1	2.5	
Disagree	1	2.5 5.0 57.5	
Neutral	2		
Agree	23		
Strongly agree	13	32.5	
Total	40	100.0	

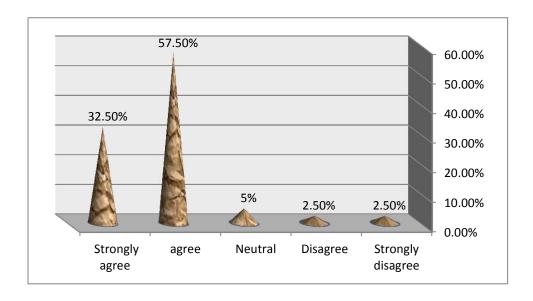


Fig No (4-17)
CALL is adequate for language acquisition

Results in table (17) and figure (15) above explain that respondents were sample study, and pointed that high percentage in "agree Strongly and agree "are exemplified "(57.5%) and (32.5%)" respectively are high equal (90%),so the highest percentage is going to positive direction of the statements and all answers of the study sample are agreeable.

Table (4-18)

Illustrates the mean and stander deviation and Chi-Square and degree of freedom and p.value of answering about the Statements of hypothesis three.

Statement	Mean	STD	Ch2	DF	p.value
1. teaching English inside the language labs	4.250	.742	23.40	3	0.000
boots the teacher interest			23.10	3	0.000
2.CALL provides	4.400	.632			0.000
teachers with authentic language that can be			12.05	2	0.000
missed by non-native teachers.					
3.Information technology has positive effect	4.200	.564	20. 45	2	0.000
on the process of learning English language.			20.45	2	
4- CALL develops Vocabulary knowledge	4.225	.660	9.65	2.	0.000
1 ,				<u> </u>	
5.CALL is adequate for language acquisition	4.150	.834	48.00	4	0.000

The above table indicated the mean , standard deviation, Chi-Square ,degree of freedom and p.value .regarding the answers of respondents of the study sample about the above Statements it has been noticed that all means are greater than mean stated in hypothesized mean which is about (3) that implies that all means of these Statements are in positive direction and show that the standard deviation ranges from (0.564 to 0.834) The difference between the highest standard deviation and lowerst is less than one that means there's similarity and homogeneity of answers made by respondents which pointed that the p.value of all Statements is less than 0.05 this show that the answers are in the positive direction .this is in line with what has been stated in the hypothesis three.

4.2 Verifications of the research hypotheses:

From data analysis and discussion and according to research questions and hypotheses, the researcher arrives at or the results of the research in hypotheses:

The first hypotheses "there are mutual relationship between information technology and English language teaching it has positive respondents, the percentage shows that about (67%) teachers have positive attitudes towards using of technology in the process teaching English language learning, also hypotheses two and three has positive respondents and percentage shows that about (85%) is going to positive direction of the statement and all the answers of the study sample, therefore, all the hypotheses successfully and achieved.

4.3 Summary

To sum up chapter four, the researcher was present the introduction and data that has been collected and analysis teachers questionnaire, the data which obtained analyzed by using (SPSS) this chapter includes investigate the first hypotheses and then investigate two and three hypotheses, the researcher came out through results and discussions, the total findings and summary chapter, the next chapter will be chapter five.

Chapter Five

Conclusion, Recommendations & Suggestions for Further Studies

Chapter Five

Conclusion, Recommendations and Suggestions for Further Studies

5-0Introduction

This chapter presents the final task of which included the results, findings, recommendations and conclusions. It also includes suggestions for further studies.

5-1 Results and Findings

This study investigated the Effect of Information Technology on English Language Learning and Teaching in Universities of Sudan. The findings of the study revealed that most of teachers have positive attitudes towards the use of technology tools in the process of teaching English language according to question No 2 Why does Information technology use have better effect on process of learning English language. Several studies conducted in many countries also found similar findings about using technology in learning English language, high attitude towards technology method. Although, there are some challenges that all Universities in Sudan haven't taken full interestingly to the role of technology method in the process of learning. Participants in this study were teachers of English as a foreign language who have traditional methods for teach in the students under traditional methodologies they answered evaluation questions from a questionnaire based on their experience and knowledge. The majority indicated through their answers the increased level of comprehension and recall experienced using CALL methodology. Therefore, it is necessary to convince teachers of EFL about the usefulness and benefits of technological method in improving learning process and instead of using them in timeconsumption.

5-2 Recommendations

In the followings points there are very useful recommendations studed by the research that are helpful for teachers and researchers who conduct such kind of topics. -It is proved through practice that adequate application of multimedia technology to the process of learning (teaching as well)can make breakthrough in process of learning. Therefore, here the teacher is essential because the introduction to each lecture and speaking communication are good way and using videos and audiovisual materials support teachers in effectively applying the CALL approach, YouTube, digital cameras and projectors to improve students learning. -It is necessary to the ministry of high education to take the role of technology into considerations to be available in all universities. - Teachers of universities in Sudan should be familiar with the computer-assisted language teaching approach (CLT).

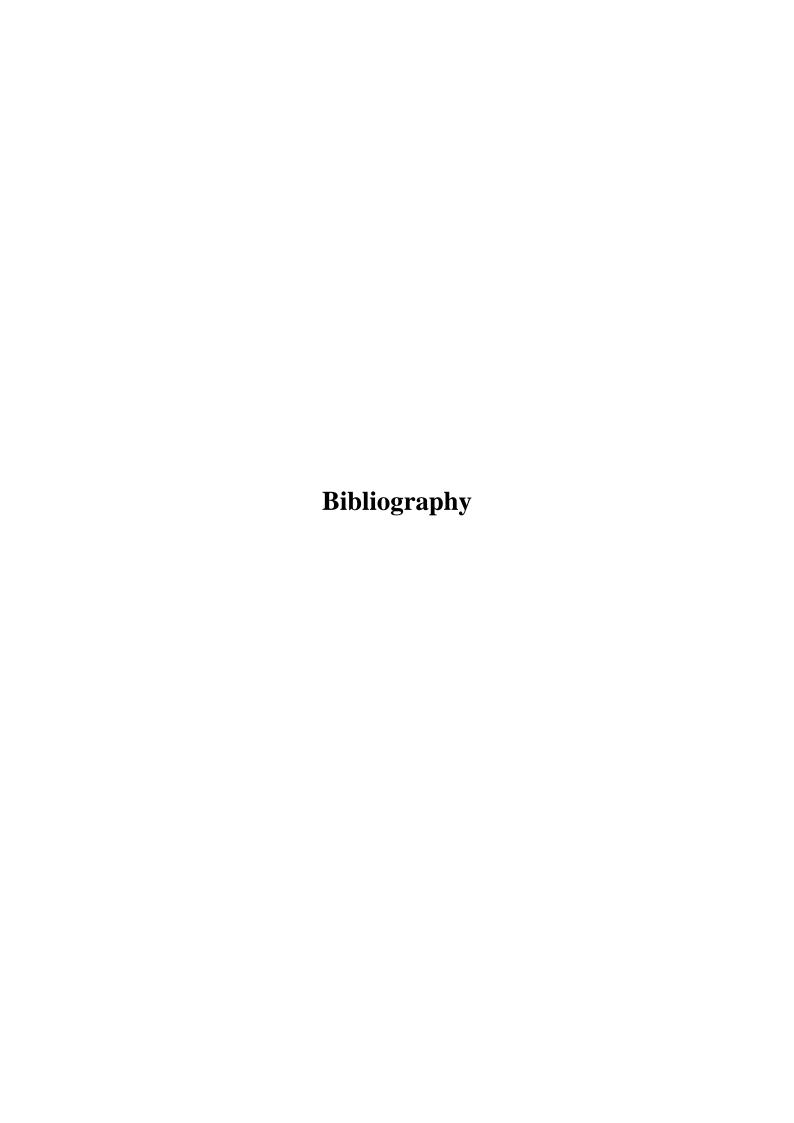
5-3 Conclusions

Ideally, the purpose of both the traditional and computer-assisted language cooperative learning is to provide a space in which the facilitation of learning and learning itself, can take place. It is true that CALL becomes a must in English language learning and teaching, also there are a mutual relationship between technology and English as a foreign language teaching, as the results of statistical analysis in chapter four show more than 90% are going to positive direction of the statement and all answers of the study samples are agreeable . Therefore, all hypotheses successfully achieved.

5-4 Suggestions for Further Studies

The study was an attempt to investigate the effect of information technology on English language learning and teaching. Because there is a great need in of investigation the use of IT in the field of pedagogy Accordingly the researcher has suggested the following topics for further studies:

- 1. The importance of using computer assisted language learning in up grading the language teaching.
- 2. Investigating the simplicity of learning occurring from using technology in pedagogical process.



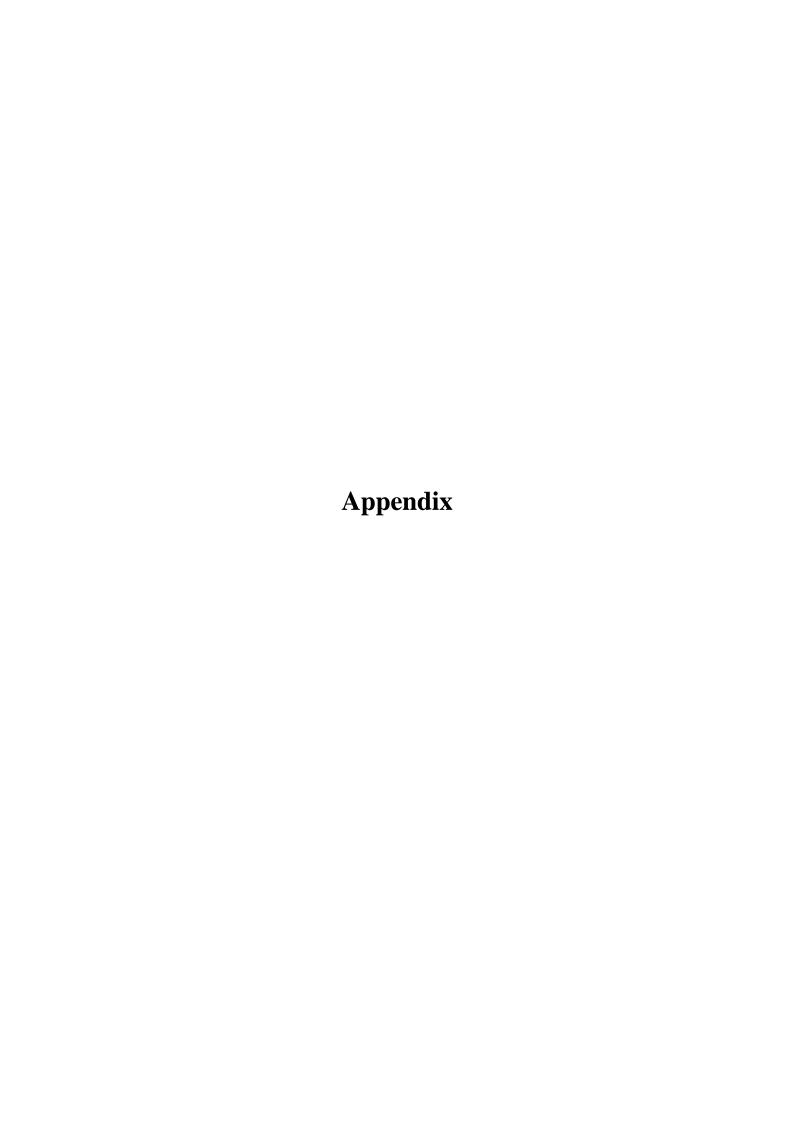
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Sudan University of Science and Technology

College of Graduate Studies

College of Languages

Research questionnaire

Dear teachers,

I will be very grateful if you respond to the following questionnaire

Information Technology (IT) is designed to collect data about Effect of Information Technology on English Language Learning.

Questionnaire:

Give your responses to the following statement by ticking () one of the alternatives given under each item:

No	Statement	Strongly	Agree	Neutral	Strongly	Disagree
		agree			Disagree	
1	There are mutual					
	relationship between					
	Information Technology					
	and English Language					
	Teaching (ELT).					
2	Feedback provided by					
	Computer Assisted					
	Language Learning (CALL)					
	gives me sufficient					
	information.					
3	The CALL programs can					
	replace the traditional					
	language learning methods					
4	CALL as a system of					
	language acquisition, is as					
	valuable as traditional					
	methods of language					
	learning.					
5	Internet helps me to get					
	more information easily					
	instead of using library.					
6	Teachers attainment rate					

		1	T	T I
	increases when using IT.			
7	Information technology is			
	becoming a must in			
	English language learning			
	achievement			
8	CALL develops speaking			
	& listening skills, for			
	students			
9	Fluency of speaking			
	English language is better			
	when we use technology			
10	IT teachers are more			
	proficient in teaching			
	English language.			
11	Teaching English inside the			
	language labs boots the			
	teachers interest.			
12	CALL provides teachers			
	with authentic language that			
	can be missed by non-			
	native teachers			
13	Information technology has			
	positive effect on the			
	process of learning English			
	language			
14	CALL develops vocabulary			
	knowledge.			
15	CALL is adequate for			
	language acquisition			