

The People's Democratic Republic of Algeria  
Ministry of High Education and Scientific Research  
Mohamed Khider University of Biskra  
Faculty of Letters and Languages  
Department of Foreign Languages  
Branch of English



## **The Significant Role of ICT in Enhancing EFL Learners' Attention**

**Case Study: Student of Second Year LMD at Biskra University**

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Master Degree  
in English: Sciences of Language

### **Submitted by:**

Mounaouli Fatiha

### **Supervised by:**

Mr. Laala Youcef

### **Board of Examiners**

- |                         |            |                      |
|-------------------------|------------|----------------------|
| ➤ Mr. Lala Youcef       | Supervisor | University of Biskra |
| ➤ Mrs. Messaïbi Samira  | Examiner   | University of Biskra |
| ➤ Mrs. Bencharef Sakina | Chairwoman | University of Biskra |

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## **DEDICATION**

To the Almighty Allah the Lord of the world for his guidance and help and to whom I owe  
everything

To my mother who devoted all her time and efforts for me during all the stages of my life

To my father who educated me on good principles

To myself who was the best friend I have ever had.

To all my sisters and brothers who cared for me and supported me: Samia , Mofida

,Kamel Ahmed ,Bachir ,Ismail ,Hakim and Salim

To all my family members and friends who wish me success in my life

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To my niece Nour, Feriel,Iness,Aicha and Nadine.

I really appreciate the support,care and prayers they offered me.

## **ABSTRACT**

The innovation of ICT tools, such as smart boards, laptops, internet and so on, turned learning to a vivid procedure which no longer focuses on teachers' explanation as the only source, Yet the use of this technology in teaching and learning process becomes very influential, especially among those students who face boredom, attention lapses and complete inattention. ICT tools are used to enhance student's interest, attention and create a positive involvement during classes. Therefore, the objective of this research is to highlight the significant role of Information and Communication Technologies in enhancing EFL learner's attention. This research adopts a qualitative method; two tools have been used during investigating this study, a questionnaire for teachers of Second Year LMD at the department of English in Biskra during the academic year 2016/2017, In addition to a Classroom observation. The obtained data from the fieldwork will be analyzed through a descriptive analysis, which is adequate for the study and easy to be interpreted. Based on the findings, some recommendations will be given to help both students and teachers to achieve a felicitous implementation of ICT in order to develop EFL learners' ability for a better progress.

## **LIST OF ACRONYMS AND ABBREVIATIONS**

AC: Attentional control

EFL: English Foreign language

ICT: Information and communication technology

## LIST OF TABLES

<b>Table 3:</b> Teacher experience in teaching.....	49
<b>Table 3.1:</b> Teacher's satisfaction about student's general achievement.....	50
<b>Table 3.2:</b> teacher's view about student's deficiency.....	51
<b>Table 3.3:</b> Teacher' view about student's under-achievement.....	52
<b>Table 3.4:</b> Teacher's view about the use of ICT.....	54
<b>Table 3.5:</b> Teacher's view about the appropriate tool for each lesson.....	55
<b>Table 3.6:</b> Types of ICT tools that teachers use in teaching.....	56
<b>Table 3.7:</b> Teacher's view about the lack of ICT influence on learner's attention.....	58
<b>Table 3.8:</b> Teacher's view about the use of ICT to make students attentive.....	59

## LIST OF FIGURES

<b>Figure2:</b> consciousness requires attention.....	33
<b>Figure 2.1:</b> working memory.....	35

## LIST OF GRAPHS

<b>Graph 3:</b> Teacher experience in teaching.....	49
<b>Graph3.1:</b> Teacher's satisfaction about student's general achievement.....	51
<b>Graph 3.2:</b> teacher's view about student's deficiency.....	52
<b>Graph3.3:</b> Teacher' view about student's under-achievement.....	53
<b>Graph 3.4:</b> Teacher's view about the use of ICT.....	54
<b>Graph 3.5:</b> Teacher's view about the appropriate tool for each lesson.....	55
<b>Graph 3.6:</b> Types of ICT tools that teachers use in teaching.....	57
<b>Graph 3.7:</b> Teacher's view about the lack of ICT influence on learner's attention.....	58
<b>Graph 3.8:</b> Teacher's view about the use of ICT to make students attentive.....	59

## TABLE OF CONTENT

<b>Dedication</b> .....	I
<b>Acknowledgement</b> .....	II
<b>Abstract</b> .....	III
<b>List of Acronyms and Abbreviations</b> .....	IV
<b>List of Tables</b> .....	V
<b>List of Figures</b> .....	VI
<b>List of Graph</b> .....	VI
<b>Table of Content</b> .....	VII
 <b>General Introduction</b>	
1. Introduction .....	1
2. Statement of the Problem .....	2
3. Significance of the Study .....	2
4. Aim of the Study .....	3
5. Statement of the Hypothesis .....	3
6. Research Questions .....	3
7. Research Methodology .....	3
7.1. The Population	
.....	4
7.1. The Sample	
.....	4
8. Research Instruments .....	5



9. Limitations of the Study.....	5
----------------------------------	---

## **Chapter One: The use of ICT tools in teaching and learning English**

Introduction.....	7
1. ICT Definition (s).....	7
2. Components of ICT.....	8
2.1 Software.....	9
2.2 Hardware.....	10
3. The use of ICT in Foreign Language Teaching and Learning.....	11
3.1 ICT and teacher's role.....	12
3.2 ICT and Learner's role.....	13
4. ICT: New Tool for Education.....	15
4.1 Media and Technology.....	16
4.2 Computer and teaching.....	18
5. The advantages of using these materials.....	19
Conclusion.....	20

## **Chapter Two: Introducing Attention**

Introduction.....	23
1. Attention Definition (s).....	23
2. Featuresof attention.....	25
3. Types of attention.....	27
3.1. Attention and the Learning Process.....	28
3.2. Attention and Consciousness.....	30
3.3. Attention and Memory.....	32
4. Factors Influencing Attention.....	34
4.1. Objective Factor.....	35
4.2. Subjective Factor.....	37
5. Attention Distraction.....	38
5.1. External distraction.....	39
5.2. Internal distraction.....	40
6. Consequences of Inattention.....	40
7. Attention Control.....	41
8. Attention and the Role of ICT.....	42

Conclusion.....	43
-----------------	----

### **Chapter Three: Data Interpretation and Analysis**

Introduction.....	45
1. Research Methodology.....	45
1.1 Method.....	45
2. Population and sampling.....	46
2.1. Students.....	46
2.2. Teachers.....	46
2.3. Questionnaire for teachers.....	46
2.4. Description of the Questionnaire .....	46
2.5. Teachers' questionnaires.....	47
3. Analysis of Teachers' questionnaire.....	47
4. Classroom Observation.....	60
4.1 Description of the Observation.....	60
4.2. The classroom observation result.....	61
Discussion.....	64
Conclusion.....	66
Recommendation.....	67
General Conclusion .....	68
References .....	71

Appendix A

Appendix B

ملخص

## GENERAL INTRODUCTION

Since the middle of the 20<sup>th</sup> century, education has witnessed a great progress which led to the implementation of Information and Communication Technology at the universities across the world. Today, Information and Communication Technology has perfectly become the one and only integral part of youth culture, and therefore they are classified as digital learners.

Recently, researches have proved that information and communication technology has a strong role in development and globalization, which had a great impact on students' learning and progress. ICTs provided better tools for the teachers to get the information and differentiate strategies of teaching. Students also benefited from the use of technology in classes which made learning more interesting and exciting. Consequently, most students prefer using high technology system because they perfectly know that it motivates them and inspires their minds to be more creative and talented in their academic and professional life. As it is noticed that technology has begun to change the traditional education to smart technology system and becomes more powerful way to learn and to develop learner's capacities, students are expected to be interested, participative and more attentive when classes are equipped and provided with ICT materials. Therefore, researchers make sure that technology can have a positive impact on students' attitudes, behaviors and cognitive abilities.

This study is an attempt to investigate the significant role of information and communication technologies in enhancing learners' attention. Mostly it seeks to examine students' and teachers' perception towards using of ICT in improving EFL learners' attention and to what extent these devices can facilitate teaching and learning process.

## **1. Statement of the Problem**

Many of the Algerian schools and universities do not use technology in the teaching learning process, which leads many students to come across learning difficulties as well as losing their attention while listening to teachers' explanation of the lesson. However, integrating ICT during lectures can play a significant role of an active stimuli and motivating factor. In this study, the aim is to demonstrate the importance of ICT in enhancing EFL learners' attention.

## **2. Significance of the Study**

The significance of this study is based upon the value of integrating information and communication technologies which can be a strong motivator to increase students' attention, and to provide them with useful techniques to decrease problems of concentration.

## **3. Aims of the Study**

This work aims to encourage the use of information and communication technologies inside EFL classrooms and during lectures. Moreover, it lists the benefits as well as the advantages of such materials and their influence on learners' attention. Also, it investigates how teachers use these tools appropriately in order to improve EFL teaching and learning process.

## **4. Research Questions**

1. What are the appropriate ICT tools that make EFL learners more attentive?
2. Does learning English with the help of different kinds of ICT represent a remarkable improvement in students' attention when compared to the traditional way of teaching and learning?

## **5. Hypothesis**

The present research is based on one hypothesis that states the following:

EFL Learners may enhance their attention if they use Information and communication Technology materials.

## **6. Research Methodology**

### **6.1. Choice of the Method**

In order to investigate the topic that is to obtain significant information concerning the significant role of ICT in enhancing EFL learners' attention, the research is descriptive and the methods which are used to analyze data are both the qualitative methods. Data have been collected by using questionnaires for EFL teachers to see how much they are familiar with ICT tools and to achieve a more reliable and comprehensive image of the topic. Moreover, a classroom observation was done with students of second year LMD to provide us with a clear view of the concentration process while ICT is integrated in lessons and while it is not.

### **6.2. Population and Sampling**

The issue of students' lack of concentration is highly remarkable among Second year students. To investigate this issue of this study, second year LMD students of English at Mohamed Kheider University have been chosen as a case study because some oral expression courses are delivered in laboratories that are provided with ICT tools which is the case we investigated. The population consists of 464 students of different ages and genders.

From the whole population of 464 students, a sample of 70 students ( chosen from two classes) were observed on the subject of the impact of ICT on learners' attention. Moreover, six teachers, who are teaching second year LMD, have been chosen also to contribute with their opinions on the role of information and communication technologies in enhancing EFL learners' attention during teaching English.

### **6.3. Data Gathering Tools**

To answer the research questions, a questionnaire has been used in this respect. It was a questionnaire for teachers to provide a clear image concerning distractions of students' attention and their perception of the use of ICT in teaching EFL. In order to gain insights about the process of attention and how students interact and participate during lessons presented through the use of information communication and technology, a classroom observation was done with two classes of different groups.

## **7. Limitations of the Study**

The study was devoted to have three research tools instruments to investigate the significant role of ICT in enhancing EFL learners' attention; however, only two instruments were used in this work, which are the questionnaire and the classroom observation. Moreover, students' questionnaire was released due to time limitations, besides the fruitful data gathered from the two other tools were precise and accurate. Concerning the classroom observation, it was planned to be with different teachers, but very few of them use laboratories and technology materials during teaching English, so that investigating student's attention was with a limited sample, which makes it challenging to generalize the findings to all students.



## **Chapter One:**

# **The use of ICT tools in teaching and learning English**

### Introduction

#### 1. ICT Definition(s)

#### 2. Components of ICT

##### 2.1 Software

##### 2.2 Hardware

#### 3. The use of ICT in Foreign Language Teaching and Learning

##### 3.1 ICT and teacher's role

##### 3.2 ICT and Learner's role

#### 4. ICT: New Tool for Education

##### 4.1 Media and Technology

##### 4.2 Computer and teaching

#### 5. The advantages of using ICT materials

### Conclusion

## **Chapter One:**

### **The use of ICT tools in teaching and learning English**

#### **Introduction**

The role that technology performs in daily life during the last decades has changed and broadly investigated among scholars mainly in the educational field where learners receive a considerable opportunity to shift from the traditional way of learning to the new digital one. Therefore, educational Technology provides for both teachers and students enormous quantities of information in a simple accessible way that is used as a teaching tool, henceforth it is necessary to shed light on Information and Communication Technology (ICT).

In this chapter, we will review the use of Information and communication Technology in learning and Teaching a foreign language. The first Section deals with an overview of ICT definition and its main components. The second part shed light on the use of ICT in the foreign language. The third section describes the new role of teachers and students, while in the last section we will discuss the objectives of using these materials.

#### **1. ICT definition(s):**

There are plenty of definitions given to the term ICT (information and communicative technology), However we can simply say that it stands for Information and Communication Technology which is a huge field that establishes a kind of global village through providing collaboration and communication among users. The Union Nations Educational, Scientific and Cultural organization introduced ICT as Information and

Communication Technology which includes electronic digital devices such as computer and internet which are potential tools for educational change and reform. (UNESCO,1998).

Blurton (2002) defines ICT as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. (Blurton, p1) Also, ICT refers to technologies that provide access to information through telecommunications which provide communication over distance. It is similar to Information Technology (IT), but focuses primarily on communication technologies. This includes the internet, wireless networks, cell phones, and other communication mediums. (Christensson, 2010)

Technology including televisions, computers, cell phones, radios and satellite systems made a huge advancement in the ICT educational community. For instance Virtual classrooms, Video conferencing allows thousands of students speak together in anytime and anyplace, learn from each other and created the world that has no limits.

## **2. Components of ICT**

According to Joseph (2017), the components of Information and Communication Technology can be described under six categories that are collected in an acronym "SHIPPED" which refers to: **People, Information, Software, Hardware, Data and Procedures.**

1. People enter data via a keyboard. A computer programmer writes series of instructions for computer systems that do not rely on human intervention to operate at all times.
2. Data are raw facts and figures and are entered by people for processing.

3. The hardware forms the physical components of a computer. They are required to input data, process data which is displayed in the desired format. Examples are the mouse, keyboard, CPU, printer etc.
4. The computer programs are referred to as the software.
5. Information is also processed data.
6. Procedures are a series of actions and steps undertaken to ensure that the computer system executes tasks as is expected of it.

The discussion below will particularly focus on the two basic components which are software applications and hardware devices. Since, this later is useless without software and differentiates from each other.

## **2.1 Software:**

Unlike hardware, Software is Coded programs that control how the computer works. It comprises of a series of instructions, according to severe rules. For Goara& Dario (2011) sate that programs are written in various programming languages by specific programmers, Computers are useless without instructions from software; thus collaboration between software and hardware to maintain a successful operation. There are two major types of Software; each kind performs a different function.

**Operating system:** is a program which manipulates computer hardware. Years ago computers were without operating systems; they contained programs that were directly loaded into the computer .Nowadays, computers have an operating system which saves instructions during the startup of computers.

**Application Software :** According to users' needs tasks are written so computers perform and process orders, Application software are programs that are used to perform different

tasks or for problem solving , such as Disk cleaner, Virus protection ,word processors, Graphics evictors,and web design programs.

## **2.2Hardware:**

Hardware is the mechanical and touchable parts of a computer which accomplish some necessary functions as: producing an image on a computer screen, producing sound. However, it is worthless without the help of a software system. Keyboard, Monitor, Scanner, CD-ROM, Hard Disk and Speakers are some examples of computer hardware. Hardware consists of five computer system component:

1. **Input Devices:** receive commands or data in a shape that the computer can use; then send it to the processing unit such as: keyboard, image scanner, mouse,microphone...etc
2. **Main Memory:** programs and data are hold temporarily in the memory or what it is called primary stage.
3. **Processor:** it is known as the central processing unit (CPU), it executes computer instructions. Processors have electronic circuitry that manipulates input data into the information people want.
4. **Output Devices:** display to people the processed data--information--in comprehensible and usable form such as: headphones, monitor, projectors....etc.
5. **Secondary Storage:** consists of secondary storage devices such as disk-hard disk or some other kind of disk--that can store data and programs outside the computer itself.

In education, the term ICT is generally related to computer-based hardware and software .UNESCO (2002) refers to ICT as computer-based equipment which includes hardware and software, communication networks such as the internet, and communication hardware and software.

### **3. The use of ICT in Foreign Language Teaching and Learning**

Various ICT application in foreign language learning are classified into three groups by Collis and Moonen (2001) named as "Learning resources", they include online, video resources and educational software, "Instructional organization of learning" that refers to technology tools which are used for lecturing in classrooms, computer based testing system and course management system, and "communication" that include websites that contribute communication, and email systems.

The New Medium Consortium (2005) mentioned the technological areas that likely provide to the field of education as follows. Firstly, Extended Learning, in which new communication tools improve and made a great enhancement in the traditional teaching learning process such as instant messaging, Twitter, Facebook, and blogs.

Cheng declare that teaching and learning progress is no longer based on the classroom setting. It is reinforced via social networking sites in which students get engaged into a communicative platform that “facilitate collaborative discussion, exchange of opinions, and critical thinking”(2012, p.2). Secondly, Ubiquitous Wireless, that deals with “the rapid penetration of wireless networks” (Jung, 2006, p.29). The use of portable devices such as smartphones, tablets, laptops advance students' flexibility in acquiring knowledge. The third area is Intelligent Searching makes students able to organize and search data in an effective way. Educational Gaming which is the fourth area composes stimulation and games, it is considered as learning tool that builds critical thinking problem solving and motivation (Jung, 2006).

#### **3.1 ICT and teacher's role:**

There is an important question asked to whether teachers' role become redundant as a consequence of the use of ICT in Education or whether this is just an illusion . In fact, new educational technologies do not deny the need of teachers but they call for a redefinition of their profession because teacher are no longer the only provider of knowledge, nor they are the sole of information.

Jones states that the roles of teachers have changed from that of instructors to that of constructors, facilitators, coaches, and creators of learning environments. (2003, p. 66) expects teachers to have the following ICT competencies:

- To operate a computer and its basic applications;
- Utilize desktop publishing and presentation software;
- Familiarity with multimedia and communication technologies; and
- To apply learning technologies in key learning areas.

Language teachers need to choose carefully learning materials, they should check the validity of information content offered, also be capable of conducting efficient research using the computer. Teacher must be competent and confident to use standard software. They must be wise and critical when they choose any information. Furthermore, Teachers should get training about the use of ICT which has at least two aspects – technical training and preparation to integrate ICT use into the curricula maintain ICT equipment and software though many ways such as: Pre-service university-based courses, in service workshops.

Second, as “integration of technologies into curricula requires changes of huge magnitude” ( Foa, Schwab, and Johnson, 1998, p. 1), knowing the way to implement ICT-

use into the curriculum is necessary .in addition, Guernsey(1998) pointed that teachers need more than a computing center's basic training in how to use Windows or word-processing software (p.35).

Teachers are in front of new responsibilities, although they are greatly facilitated through the use of ICT in teaching learning process. It is no longer a matter of transmitting content knowledge but a matter of being creative, innovative and encourage higher levels of cognitive skills.

### **3.2ICT and Learner's role:**

Learners change the role of passive recipients during the class to active members of the target language. They apply what they know about technology in their studies and activities. Consequently, that leads to raising the scale of participation, motivation and interest to their lessons. Research results indicate that internet use increases language use and acquisition of foreign language for example it was found that interaction in language helps learners to gain input in language learning process (Kitao, 1998)

Information and Communication Technologies offer learners a better chance to be responsible, effective and independent individuals, so they can recognize their own learning (Balanskat, 2006). According to some scholars who supported the previous view and sees that “...students see the use of relevancy-based digital tools, content and resources as a key to driving learning productivity, not just about engaging students in learning” (Speak Up, 2009). It seems that there is an assumption that information and communication technology provides learners with an interactive experience. Polly sees that technology has been shown to positively influence student learning when students explore technology-rich tasks that simultaneously require them to use higher-order thinking skills



(HOTS), such as analyzing or evaluating information or creating new representations of knowledge. (2011)

According to Andrew adds that the beneficial use of ICT can lead to a shift to a learner Centered context, the influence of ICT affects what students learn and how they should learn, particularly the shift from " content centered" to "Competence based" (2000,p7). Words as information Communication technology introduce a collection of applications which differ in objective and scope from a subject context to another (Loveless and Ellis2003, p.23)

Students in schools and universities think that ICTs make a positive difference in their learning process. Especially, in studies that depend largely on self-reporting. This may be due to the fact that learners feel satisfied and comfortable using such tools which make them more efficient individuals. ICT is facilitating completion of work, provide easy communications between classmates. It is a coordinating agent in that all students connect and work together.

#### **4.ICT: New Tool in Education**

Information and communication technology is considered as a powerful tool for educational purposes if used appropriately, ICT increases the educational quality and quantity. Moreover, it makes the learning process active and engaged to real life.

However, efficient implementation of ICT into the education system is complicated process that involves not only technology since getting technology is the easiest part but also curriculum, teacher competencies and institutional readiness.The evolutionof various educational materials and software has positively impacted many learning organizations to integrate them into the curriculum as they can have a immense impact on learners learning (Hawkins et al., 1996). Information and communication technology in education is any

educational technology and facilities that support teaching which is applied in educational process. It includes Hardware approach like use of machines and materials, Software approach like use of methodologies and strategies of teaching learning and Systems approach that uses the management technology that deals with the systematic organization of the hardware and the software. Education technology can be used by many educators and stated as “the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources” (Richey, 2008)

Recently, Bialo and Sivin-Kachala (1995) assume that Educational Technologies have been considered as a crucial factor in improving the quality of education and enhancing the level of student educational learning performance. It has demonstrated a significant positive effect on student achievement and the teaching and learning processes as a whole (Bialo and Sivin-Kachala, 1995). Today, Educational technology is concerned with providing appropriately designed learning situations, which hold in view the objectives of teaching. It modifies the learner's environment through the varied techniques of presentation, arrangement of learning activities and organization of social and physical surroundings. The purpose of educational technology is to improve the quality of language learning.

Furthermore, Blackmore et al. (2003) evident that the use of ICT in education creates self-motivated, independent students and encourages different kinds of teaching methods). ICT in teaching is variously described as time efficient, supporting teaching and learning processes to improve outcomes, increasing motivation through improving students’ self-esteem and perseverance; and inculcating greater learner autonomy (Roblyer et al. 2008)

## 4.1 Media and Technology

Information and communication technology (ICT) ,Media, information technology (IT) , Interactive and Information Technologies (IIT), Multimedia ,Advanced Learning Technologies (ALT) are all various terms that stands for advanced technologies in communicating and managing information within the teaching learning process.

According to Bates media is existed in many main parts for instance: text, communicative human being contacts, audio-visual multimedia (2005, 43) as generic forms of communication associated with particular ways of representing knowledge. Texts, audio, face to face communication and video are all media (Bates, 2005, p.43). The new media provides self-directed activities and fast access to learning materials in which learners feel independent. It creates new roles for both teachers and students with minimum efforts.

Although Technology offers many opportunities, it still lies in the capacity to use digital electronic materials to transmit knowledge in a powerful way, that makes students learn profoundly in an active, self-driven way rather than listening passively to the teacher(Collis and Vanderwednde,2001).Technology gave learning new shape that creates a strong connection between learning and knowledge by the extraordinary digital tools(Duderstadt,2004).it makes learning more exciting and interesting because the use of traditional methods of teaching is less practical(Newman and Scurry,2001a).Technology provides leaners with different chances to access rapidly to a huge amount of data in an encouraging way.

However, many teachers do not use E-technology and media in their classes (Rice and Miller, 2001)because of the need to be well trained and skillful enough to take full advantage of the capacities.

## **4.2 Computer and Teaching**

Undoubtedly, the integration of technology in education has a positive effect on learner's achievements that's why more learners and teacher are excited to use technologies as: internet, computer, smart phones for educational objectives.

UNESCO (1998a) claimed that education worldwide is facing a noticeable challenge to prepare students and teachers for "our future 'knowledge-based' society" when most of them are not prepared to use ICT and "the majority of existing school buildings, even in the most developed countries, are not equipped to integrate the new information and communication technologies." Teachers can use a computer and projector to show slides to illustrate a lecture, students can use laptop computers to take notes during the lecture, and multiple choice quizzes about the content of the lecture can be put on a website.

Information resources at libraries, schools, and universities have only been available within the walls of these institutions, in a wide variety of physical media, at certain times of the day, and in limited quantities. Because of advances in ICT, it is no longer necessary for students and teachers to be at a certain location at a specific time to acquire a physical object. The Internet represents the greatest collection of human knowledge ever assembled, and it is available to every student and teacher properly equipped with ICT.

## **5. The advantages of using ICT materials**

The use of ICT is still mostly a phenomenon in developed countries. This leads to concerns that information and communication technology will deepen the educational gaps that divide the developing from the developed nations, and the poor from the rich. ICT has extensively reconstructed teaching and learning process, furthermore it has expended new opportunities for learning, and accessing to educational resources.

A reasonable amount of literature has highlighted the advantages of ICT in foreign language learning. Darasawang and Reinders (2010) pointed out that an online language support system increases learner autonomy and motivation. Multimedia technology including visual aids, sounds, video clips, animations, and so on influence learners cognitive abilities, “attracts their attention and elevates their interest in learning” (Kuo, 2009,p.25). Moreover, Internet connection allows learners to gain access to a huge amount of authentic,original materials to make english learning more exciting, and reliable (Dang, 2011).

Hence, the application of the online resources available to the inside and outside classroom activities enhances learners' competences in their learning skills.

According to Kelsen (2009, p.3) he claimed that YouTube has the potential to connect learners with authentic English input through what is quite possibly already a part of their life experience ...and provides a context through which they can interact, exchange ideas, share feelings, and participate in a web-based environment. Access to internet has a noticeable impact on the way students and teachers interact in the classroom. As Balanskat clarified a very high 86% of teachers in Europe state that pupils are more motivated and attentive when computers and the Internet are used in class... ICT has a strong motivational effect and positive effects on behavior, communication and process skills. (Balanskat, 2006)

ICT develops team working skills. It offers new methods and approaches. ICT Facilitate collecting and analyzing information. It provides high speed delivery, wide reach at low cost so there is delivery of information. Communication channels are available through emails, virtual classrooms. Regular use of ICT across different curriculum subjects can have a beneficial motivational influence on students ‘learning. Development of higher level learning styles, the use of ICTs helps improve the quality of education.

The positive impact that ICTs is regarded as the fuel of development that made the educational field required from Developing countries Future project which is providing teachers with training and a laptop computer, modem, and an Internet account “to empower teachers with personal skills in the use of information and communications technologies and to help them enhance the curriculum they develop for their students” (Gray & Buchanan, 1998). ICT is important ingredient in creating new ideas, in curriculum and the creation of methods of learning and teaching.

## **Conclusion**

Application of integrating ICT in the educational system to improve learning English is very necessary. This does not mean that the availability of technology only gives importance to this integration, but also the pedagogical design, though, the existence of deficiencies creativity of teachers help them to find ways to motivate students by using innovative aids and strategies in their classrooms.

The computer competency is not enough for effective and appropriate integration of ICT into teaching and learning English, the core competency required of teachers is the intention, strategy, methods and activities that would enable students achieve the learning objective. Helping teachers moving from theoretical models of students centered learning into practice, gives an advance to teaching and learning English language .the potential of ICT in education can only be realized when it is embedded in social context that is open to innovation and supported by environment.

# Chapter Two:

## Introducing Attention

Introduction

1. Definition (s)

2. Features

3. Attention type

3.1 Attention and the Learning Process

3.2. Attention and Consciousness

3.3. Attention and Memory

4. Factors Influencing Attention

4.1. Objective factors

4.2. Subjective factors

5. Attention Distractions

5.1. External Distractions

5.2. Internal Distractions

6. Consequences of Inattention

7. Attention Control

8. Attention and the Role of ICT

Conclusion

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## **Chapter Two: Introducing Attention**

### **Introduction**

Many articles and books on teaching and psychology highlight the importance of students' attention in acquiring any language mainly a foreign one; and of all the tasks the human brain performs; perhaps none is more consequential for the performance of other tasks than attention. When human beings attend, they perceive. When human beings attend and perceive, they remember. When human beings attend, perceive, and remember, they learn. When human beings learn, they can act deliberately and with forethought. In this chapter, the definition of attention is presented; the features and types of attention are explained and the impact of attention on learning is analyzed. Lastly, the factors leading to the decline of attention are examined.

#### **1. Definition (s)**

Throughout time, the use of the term attention by philosophers and psychologists has known different changes. It has been identified as an important cognitive process in second language acquisition.

Attention is the process that “encodes language input, keeps it active in working and short-term memory, and retrieves it from long-term memory” (Robinson, 2003, p 631). Moray (1969, as cited in Levitin, 2002) points out that attention “is sometimes used to refer to the ability to select parts of the incoming stimulation for further processing” (p. 363).



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Also, William (1890, as cited in Styles, 2006) defines attention as a cognitive process of selectively concentrating on a discrete aspect of information, while ignoring others. He states, “It is the process of mind in clear and vivid form...it implies withdrawal from some things in order to deal effectively with others” (p. 1). The process of attention involves the selection of what to concentrate on. A person is able to select aspects of his environment in which he is interested in while ignoring others.

In addition, attention is so important to human cognition because it places limits on what we think about at the same time that it helps determine what our thoughts, words, beliefs, and deeds are about at any given time. In this regard, Styles (2006) states that attention is “characterized by a limited capacity for processing information and that this allocation can be intentionally controlled” (p. 16). He adds that, “attention is an effect that emerges from the working of the whole system as inputs interact with schemata in long-term memory” (Ibid, p. 9). Thus, attention narrows when the cognitive load increases.

Furthermore, the search for a concise definition for attention need go no farther than this famous quotation from William James: attention is “the taking possession by the mind, in a clear and vivid form, of one out of what seem several simultaneously present objects or trains of thought” (1910,p.403-404). Attention remains a wide area of investigation within education and psychology. Areas of active investigation involve determining the source of the sensory cues and signals that generate attention, the effects of these sensory cues and signals on the tuning properties of sensory neurons.

## **2. Features of Attention**

Attention is characterized by many features that are attention span, concentration, ability to switch, distribution, and selectivity.

- Attention span refers to the amount of time a person can focus on a task before starting to distract. Attention span has a great effect on a one's performance at work, school and even the ability to deal with everyday tasks. If a person suffers a lapse in attention, the consequences are the missing out of information, errors and worse (Psychology Today)
- Attention concentration is the degree of a person's focus on some objects or activities. It is a sign of attention "depth" and defines a person's ability to work in bad conditions. Interest and motivation trigger a person concentration. For example when a person reads a thrilling story or watches an interesting movie he forgets everything around him (THEORY, test yourself).
- Ability to switch refers to the volition and purposeful transition of the mental flow from one object to another due to a selection of a new objective. This ability allows a person to adapt to different situations efficiently and fast. It is indeed the reverse side of concentration. The more focused a person is, the harder it is to switch (Monsell, 2003).
- Attention distribution is the ability of a person to focus his attention on many objects or do several tasks at the same time. In the 19th century, people already knew that it is impossible to concentrate on 2 or more things simultaneously. Probably we had an idea about Julius Caesar's phenomenal ability to do 7 things at the same time, or about Napoleon, who could dictate to his secretaries different important texts simultaneously. It is believed that simultaneity comes from a very quick shift from one task to another. An average human being has the ability to distribute his attention on various automated activities. For example, one can drive a car, talk to his friend, and eat a pie simultaneously as long as the situation is unstrained (THEORY, ibid).

- Attention selectivity can be defined as the ability to capture certain objects out of a multitude stimulus. Selectivity is an ability to sort objects, turn some of them into “figures” and the others into “background”. In this regard, Throne and Thomas (2009) argue that “attention is captured by multitude of stimuli and because it is impossible to attend to them all, we must decide which ones are the most important” (p.2). Attention selectivity is influenced by a person’s emotional state and information’s relevance to his needs as when a person is starving all the café signs on his way keep catching his eye, but he does not pay much attention to them when he is not hungry. Yet another example is “Party phenomenon”. This latter is a good example of selectivity. If a person is at somebody's place, fully engrossed in an interesting discussion with his friends, suddenly, he hears his name softly mentioned by someone in the other group of people. He quickly shifts his attention to the conversation hoping to hear something curious about himself. Meanwhile, he stops listening to his friends and lose the thread of the conversation he took part in. It was not the strength, but the significance of the signal, which attracted his attention (Turton, 2014).

### **3. Types of Attention**

Attention is a continuous psychological process, because it accompanies all kinds of mental activity and is inseparable from all cognitive processes. Depending on the level of cognitive regulation, attention is divided into involuntary, voluntary, and post-voluntary attention.

Involuntary (passive) attention is a type of attention that results when the conscious mind switches focus to sudden changes in the environment. It is activated and maintained without the person’s control or preparation. (e.g., it is difficult not to turn around when one’s hears a loud noise or notice a bright flash of light). It is often based on physical

parameters of the signal/object: suddenness, intensiveness, contrast, and length. Involuntary attention manifests itself as an orientating response to an unexpected stimulus. As a rule, involuntary attention does not a long period of time. (Cognitive atlas)

Voluntary attention is when a person's gives attention to something. The aim is no longer set by hazard or circumstances; it is willed, chosen, accepted or, at least, submitted to; it is mainly a question of adapting ourselves to it, and of finding the proper means for maintaining the state; and hence voluntary attention is always accompanied by a certain feeling of effort. For example, a person has decided to learn more about attention and is currently reading this text. It is active and targeted. Its physiological mechanism is based on stimulation in the cerebral cortex. Voluntary attention is developed throughout a person's education and career, because systematic conscious activity is impossible without attention control. (UK ESSAYS)

Besides the two types mentioned above, there is a third type, post-voluntary attention. It is as if a person makes an attempt and focuses his attention on some important activity, he then can continue it without effort after a while. In other words, it is a habitual attention. As a way of an example, a person studying for a difficult exam for the whole day. First, the attention is involuntary and then it turns into voluntary attention. It characterizes conscious sort out of the object, but lacks volitional impulse as in voluntary attention. (Test you self)

### **3.1. Attention and the learning process**

Attention is the first step in the learning process. We cannot understand, learn or remember that which we do not first attend to. Most of the time, the main reason humans do not learn something or remember it well is because they were not paying attention in the first place. Many people think they are just absent minded because they cannot remember where they left something, or they have a bad memory because they cannot remember

things they have learned. Usually, the problem is a matter of not paying enough attention at the times people are learning something. By not paying enough attention things are not learned well enough and are easily forgotten.

Learning can be defined in various ways that are grouped into three main frameworks. These frameworks are the result of in-depth studies conducted over the past decades. The first of is the observable behavior. “Learning is a relatively permanent change in knowledge or behavior as a result of experience.” (O’Donnell et al., 2012, p. 7), from a behaviorist point of view, learning is such a change in one’s behavior.

The second framework is a reaction to the behavioral view point, the cognitive revolution. It focuses on the human brain as the center of all the activities of information processing. Its essence is about how data is saved in memory for later use. In fact, cognitive revolutionaries consider learning a mental activity

Thirdly, unlike the cognitive framework that emphasizes on the individuality of the learning task, this view claims that learning is a social participation extending the acquisition of knowledge (Salkind, 2008, p. 573-574).

All in all, the learning process involves both experience and social participation. Attention and learning are different and dependent on one another at the same time. Turton (2014, p.1) emphasized: Learning is the process of memorization, integration and application of new information and concepts. Attention is the process of prioritizing and applying information and concepts. The end dynamic of these two processes involves distribution of energy, priorities, and decision making once information is absorbed.

So, attention is a strategy that is used by learners to enable them comprehends and process information. Simultaneously, the processing of information requires considerable attentional efforts. Thus, attention is helpful for both efficiency and remembering.

In one hand, attention increases efficiency. Woodworth shows the familiar instances of readiness or preparedness for action in the military command of “attention” and the athletic call of “Ready”. These signals bring about an increased state of motor readiness for responding very quickly to the instruction, “Go”! Or, when learners concentrate their attention on a topic, they are able not to waste their time or efforts as well.

On the other hand, attention is helpful for remembering. When attention is paid to certain specific areas or objects, concentration helps to know the details and retain them accurately. Other things which are not properly attended to be not remembered well and as such are forgotten as soon as possible.

### **3.2. Attention and Consciousness**

Attention and consciousness are two closely related psychological concepts that are often times coalesced. Few would argue that the relationship between attention and consciousness is a close one. When we pay attention to an object, we become conscious of its various attributes; when we shift attention away, the object fades from consciousness. This has encouraged many to deduct that these two processes are inextricably interwoven, if not identical (Posner et al, 1994). Others, however, have argued that attention and consciousness are distinct phenomena, with distinct functions and distinct neuronal mechanisms (Iwasaki et al, 1993). Often though, the exact relationship between the two is left unspecified.

Consciousness is a term used differently in philosophy, psychology, neuroscience, and cognitive science. Dörnyei (2009) defines it as ‘a property or characteristic of the mind, associated with qualities such as subjectivity, self-awareness, emotions, and reflectiveness’ (p. 133). Thus, consciousness equals in meaning to awareness.

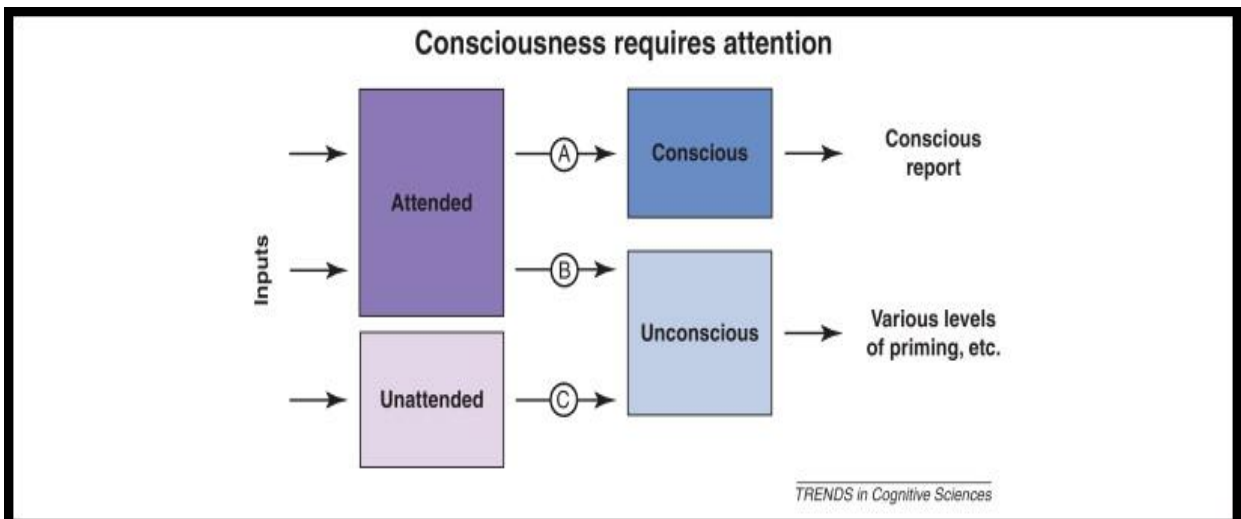
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Consciousness helps in controlling human being's interactions with the environment and through this they preserve their awareness of how well they adjust to the situation. It also aids in linking the past (memories) and the present (sensations) to give a sense of continuity of experience. Furthermore, consciousness facilitates the planning and control of future actions.

In a study that found that people were able to make precise beauty judgments for faces presented so quickly they did not consciously recognize them. This study, and many others on 'implicit' or 'subconscious' perception, shows that people are able to be attentive to something without being conscious of it (Koch & Tsuchiya, 2006 p16).

Both cognitive scientists Christof Koch and Naotsugu Tsuchiya, suggests that getting 'gist' opinions might be one example. Experiments show that when photographs are unexpectedly flashed up in front of participants for no more than 30ms, they do not have time to concentrate on any details, though, are able to convey a general extract or summary of the image. In some instances, consciousness and attention have also been shown to have reverse impacts. When participants try to find two conflated images within a rapid flashed stream of pictures, they usually do not succeed to see the second image – a case known as 'attentional blink' (Ibid, p. 22)

However, another study found that diverting people's attention during this activity, actually made them better at it, they were more able to consciously find the second image. So, reducing their attention to the task increased their consciousness. (Mind Hachs)



**Figure2: consciousness requires attention ( cell)**

### 3.3 Attention and Memory

In order to encode data into memory, a person must first pay attention to a process known as intentional capture. By paying attention to specific information unlike other ones, a person creates memories that could be (and probably are) different from someone else in the same situation. This is why two people can see the same situation but create different memories about it; this means that each person performs intentional capture differently. There are two main types of intentional capture: explicit and implicit.

Firstly, explicit intentional capture refers to a stimulus that a person is unconscious to it becomes notable enough that the person begins to pay attention to it as well as becomes aware of its existence. For example, when something new catches human's focus and becomes cognizant of and focused on that new stimulus. As when a person is working on his homework and someone calls his name, drawing his complete attention.

Secondly, implicit intentional capture is when a stimulus that a person is unconscious to has an effect on the person's behavior, whether or not they're cognizant of that impact or the stimulus. If someone is working on his homework and there is quiet but annoying



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music in the background, he may not be aware of it, but his total focus and performance on his homework might be affected. Implicit attentional capture is important to understand when driving, because while a person is unaware of the impact a stimulus like loud music or an uncomfortable temperature is having on his driving, his performance will nevertheless be affected.

The part of the memory that actively stores many pieces of information for short amounts of time and manipulates them is known as working memory. This latter has sub-systems that control visual and verbal information, and it has limited capacity. Human beings receive a bundle of pieces of information every second; this is retained in our working memory. It decides then (based on past experiences, current thoughts, or information in long-term memory) if certain pieces of information are important or relevant. In other words, if the information is not used or irrelevant, it will be forgotten. However, it may be moved from the short-term memory and transferred to long-term memory.

One famous example of attentional capture is the cocktail party impact, which is the phenomenon of being able to focus one's auditory attention on a particular stimulus while filtering out a range of other stimuli, much the same way that a partygoer can focus on a single conversation in a noisy room. This effect is what allows most people to tune into a single voice and tune out all others.

To sum up, there is, indeed, a close relationship between working memory and intentional capture. A person pays attention to a given stimulus, either consciously (explicitly, with awareness) or unconsciously. This stimulus is then encoded into working memory which decides either to associate it with another familiar concept or with another stimulus within the present situation. If the information is relevant, it is stored indefinitely

and the experience will be committed into long-term memory. If not, it will be forgotten with other unimportant information. (Boundless)

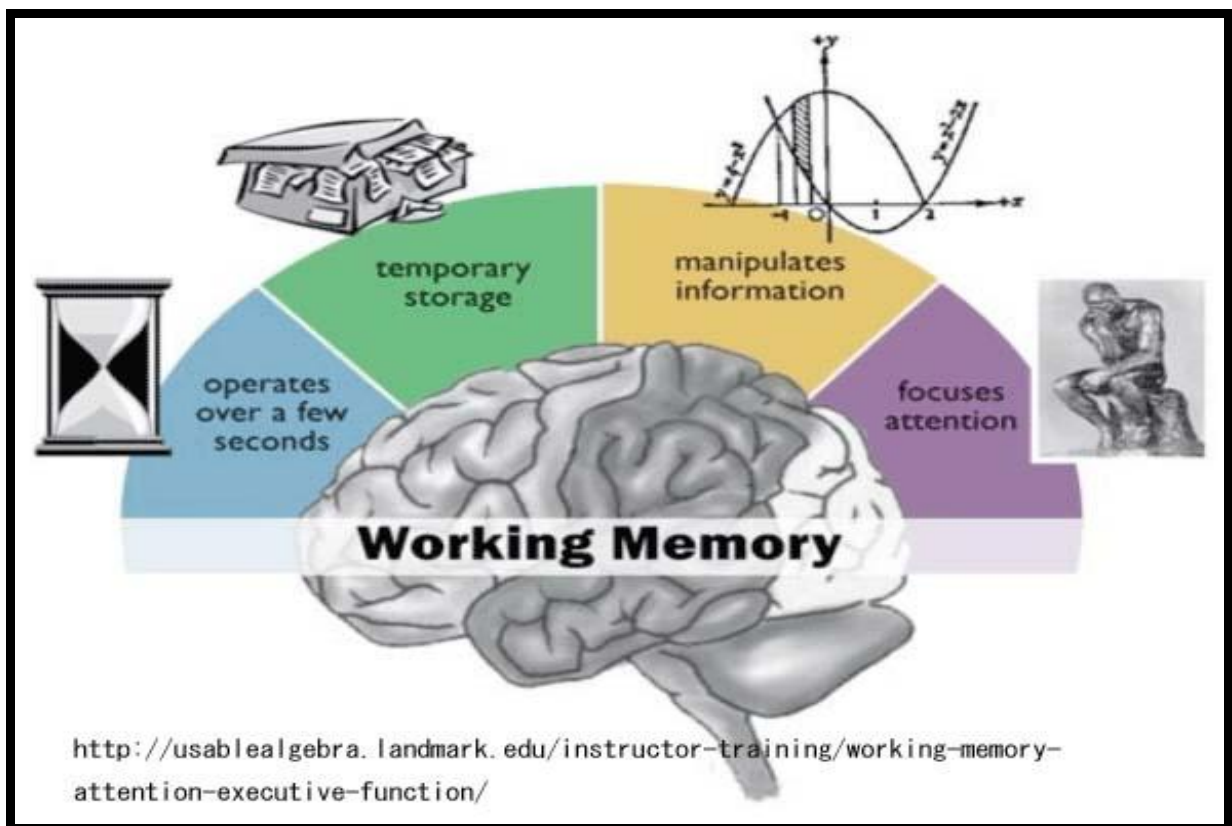


Figure 2.1: working memory (usablealgebra landmark education)

#### 4. Factors Influencing Attention

It is conventional that attention is a selective activity; and volition of our mind is very important to determine our attention. However, there are some factors in the objects as well as in the individual himself which can influence our attention known to be objective (external) and subjective (internal). The former is related to movement, intensity, novelty, size, change, repetition, colors and contrast. The latter is associated with interest, motives, mental set, emotional state and habits. (Psychology discussion)

## 4.1. Objective Factors

These factors are linked to certain aspects of objects which are natural in them. This nature attracts the attention.

### a. Movement

Unlike immobile objects, moving objects draw human's attention. For example, flickering lights draw our attention than non-flickering lights. A moving vehicle draws our attention more than a stationed vehicle. (Psychology discussion)

### b. Intensity

More intense sound, smell, light catches our attention more easily than less intense one. For example, a high voltage bulb will be observed quicker than low voltage bulb, very bright color than obscure color, or a very loud sound than a normal or a high sound. (ibid)

### c. Novelty

Brand new kinds of objects draw our attention fast. Advertising agencies use this technique in nearly a perfect way. For example, latest fashion dress, shoes, pen, etc. (ibid)

### d. Size

In contrast to smaller objects, bigger ones draw the attention of people very easily than average level size of any object, For example, a 7' taller woman, a 2' dwarf, a very fat woman; a very huge multistoried building can attract our attention. (ibid)

### e. Change

A change in our environment draws our attention. For example, regular sound of a moving clock does not draw our attention, but the movement it stops, our attention is changed. A show piece placed in a new place, a radio playing a song stops due to electricity failure draws our attention quickly. (ibid)

**f. Repetition**

When a stimulus is repeated several times our attention is diverted, For example, repeated horn of an ambulance. (ibid)

**g. Clarity**

Clear objects catch people's attention than the stimuli which are not clear, as during night times stars and planets which are seen clearly draw our attention. (ibid)

**h. Colors**

Colorful objects draw our attention more easily than black or white objects. (ibid)

**i. Contrast**

An object that is strikingly different from its background catches our attention. For example, a white spot on a black shirt (ibid)

**4.2. Subjective Factors**

These factors are concerned with the individuals. These are rooted in people. There are many subjective factors which define our attention. (Psychology discussion)

**a. Interest**

Objects of our interest draw our attention immediately. For example, interesting topics capture only the attention of individuals who are attracted to the ideas of the topic. (ibid)

**b. Motives**

Motives are powerful forces which make us to divert our attention. For example, a restaurant will draw the attention of a hungry person because he has a drive for food. (ibid)

**c. Mental set**

Our set or readiness of mind is very crucial rises our attention to any stimulus. For example, when a person is in fantasy he may not listen to any call. But, if he is waiting for a phone call eagerly, he will listen to that immediately. (ibid)

#### **d. Emotional state**

Attention is affected during emotional state. It also disturbs our perception. For example, when a person is highly excited due to fear, he may not listen or understand what others has said. (ibid)

#### **e. Habits**

The things to which we are habituated divert our attention automatically. For example, a smoker remembers smoking even if he is otherwise busy in some work. A person who has the habit to take food at a particular time remembers food at correct time. (ibid)

### **5. Attention Distractions**

Lawrence (2012) has noticed that learners in classroom settings are suffering from bringing back their attention due to sudden interferences. It is also defined as: “is the process of diverting the attention of an individual or group from a desired area of focus and thereby blocking or diminishing the reception of desired information” (Post & Schumm, 1997).

Distraction is caused by the lack of ability to pay attention; lack of interest in the object of attention; or the great intensity, novelty or attractiveness of something other than the object of attention. Distractions come from both external and internal sources. External distractions include factors such as visual triggers, social interactions, music, text messages, and phone calls. There are also internal distractions such as hunger, fatigue, illness, worrying, and daydreaming. Both external and internal distractions take part in diverting focus.

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## 5.1. External Distractions

Things happening around the individual are known to be environmental or external factors. Visual and auditory stimuli are part of external distractions.

Scientists as Ryan (2013) regards the classroom setting deemed important effect for learners' attention. He states 'there are physical and integral elements that have impact on students' focus and achievement.' It is meant by physical environment the structure as well as the color, overcrowding, and uncomfortable seats; all of these affect student's attention because they are the first thing they see and have comment on.

The non- physical environment refers to different aspects as the background noise, lighting, temperature and the aroma of the food (ibid, p. 2- 10). Both kinds of environments are distractions that divert the learners' attention. Despite of this, these elements can be transformed into motives increasing students' attention in case they were organized.

Also, other kinds of external distractions in classrooms could be a ringtone of a mobile, a student coming late to class and a loud noise or voice happening suddenly. These distractions have a serious impact on both the teaching and learning attentional processes.

## 5.2. Internal Distractions

Internal distractions are the inner dialogues and thoughts about what is happening in one's life (Cooper, 2014). They are emotional disturbances as anxiety, boredom, anger, fatigue, feelings of insecurity, and lack of motivation and interest. If a learner is suffering from an emotional distraction, he certainly has an attention issue.

Other internal distractions are mental disorders that cause a mental deficit. Learners with such disabilities have different cognitive activities than normal ones. A damage in the left hemisphere of the brain (Wernicke's area) results in an inability to understand what others say, this is known scientifically as Wernicke's aphasia ( Yue, 2013).

Yet another internal distraction and also considered a mental deficit is the 'Attention Deficit Hyperactivity Disorder (ADHD). Tannock (2007) defines this mental issue as 'a neurobiological condition with impairment on the levels of inattentive or hyperactive'. In this case, all the mental executive functions and their processing are slow compared to normal ones.

## **6. Consequences of Inattention**

Inattention is a state of mind in which a person receives information but is not focusing on it, so that information is not encoded (Kline, 1996). Attention and selection of the information as well as the ignorance of distractions deemed important for the processing of data. If one of these components is missing the learning process does not take place.

Zero comprehension results from a breakdown in information processing that is due to absence of attention. However, in some cases, inattention is essential for the state of attention as in an example offered by Lawrence (2012) when a student wants to pay attention to his lesson, he did divert his attention from the surroundings. Thus, this learner has created a system that enables him to focus more; this process of guiding attention is called attention control.

## 7. Attention Control

Astle and Scerif (2009) define attention control as ‘the individual’s ability to choose what to pay attention to and what to ignore. It is also known as endogenous attention that selects what to pay attention to and inhibits distractions or unrelated aspects’. Also, Corbetta and Shulman (2002) define it as ‘the individual’s goal-directed strategy that allows getting back to the flow after witnessing a break in attention’. Further, Eysenck et al. (2007) is a resistance to distractions interference, which is recognized as inhibition. This means that, a fully focused person has to use the technique of attention control to execute distractions.

Since stimuli-driven is powerful than goal-directed and human’s attention is diverted automatically, attention control plays a major role in directing one’s focus to the intended point. In this regard, Eysenck et al. (2007) claim, “attentional control plays an important role in determining switching costs” (p. 346).

Dörnyei and Ushioda (2011) present strategies for learners to boost self-motivation. They categorized them into five main classes. The First class is commitment control strategies that assist in rising learners’ goals, by picturing the fruitful results. The second strategy offers learners self-reminders to focus, by reminding oneself of the deadlines that involve monitoring data and disregarding irrelevant tasks. This strategy is known as metacognitive control strategies. Third one, the satiation control strategies comprise making tasks more active and not boring. As for the fourth class, the emotion control strategies that contain self-encouragement strategies to breed positive emotions. These positive emotions work as a halt for negative emotions. The last class is environmental control strategies, through this strategy, learners are setting aside environmental distractions and making a good use of the positive environmental influences (p. 124-125).



To sum up, attention control is the human being's ability to refrain distractions away and concentrate on the target.

## **8. Attention and the Role of ICT**

Paying attention and concentration to specific objects, images or sounds is useful for remembering what students learn at classrooms, as Schimdt stated " people learn about the things they attend to and do not learn much about the things they do not attend to" (2010,p 722)

Technology can help to activate students' interaction with each other and it can also aim to guide students' attention as well as foster comprehension. When students use electronic devices instructor designed activities that are connected to course learning objectives, students use of these tools can have a positive impact on classroom learning and engagement(Samson et al ,2010) whereas when students use electronic devices for lecture unrelated activities. They distract them from the lecture content for example: social networks like Facebook, websites, emails or games.

Students ' use of information and communication technologies can have a positive influence on their attention and learning if these tools are used for course related and educational purposes.

## **Conclusion**

For efficient teaching and learning, teachers are requested to integrate information and communication technologies as a relevant stimulus to learners' attention and turn what is supposed to be a distraction to a useful way as the surrounding plays a positive role if it is used appropriately and related to lessons' objectives.

## **Chapter Three:**

# **Data Interpretation and Analysis**

### Introduction

#### 1. Research Methodology

##### 1.1 Method

#### 2. Population and Sampling

##### 2.1. Students

##### 2.2. Teachers

##### 2.3. Questionnaire for teachers

##### 2.4. Description of the Questionnaire

##### 2.5. Teachers' questionnaires

##### 2.6. Description of the Questionnaire

#### 3. Analysis of Teachers' questionnaire

#### 4. Classroom Observation

##### 4.1 Description of the Observation

### Discussion

### Conclusion

### Recommandations

### General conclusion

## **Chapter Three:**

### **Data Interpretation and Analysis**

#### **Introduction**

Generally, the quality of any research study depends largely on the quality of data collected, and the quality of data collected is related directly to data collection procedures. Therefore the main focus of this current study is to investigate the significant role of ICT in enhancing EFL learners' attention .The research questions required the use of a set of data gathering tools.

This chapter is concerned with data collection and analysis. The descriptive method is used to describe the findings of the role of Information and communication technology in enhancing EFL learner's attention which will be presented in statistical forms. It focuses on the qualitative method. For, a questionnaire was addressed to teachers of 2<sup>nd</sup> year at Biskra University in order to get their opinions about the use of ICT in their classes and to which extent it affects students' attention, In addition to a classroom observation in order to collect more information during a period of two weeks with different groups to confirm or reject the stated hypothesis.

#### **1. Research Methodology**

##### **1.1 Method**

The nature of this research is quite qualitative (descriptive) and it is designed to see to what extent ICT can enhance EFL learners' attention. We decided to deal with questionnaire for EFL teachers to obtain various points of view concerning our topic.

Therefore, we opted to use classroom observation as a second tool which aimed to involve in the real learning context to get more realistic and reliable data .It was conducted in oral expression classes with two groups of second year students at the department of foreign languages, Branch of English studies at the University of Biskra.

## **2. Population and Sampling**

### **2.1. Students**

For our classroom observation, we opted for two different classes which we had selected on purpose; one in the laboratory and the second class in the classroom. Both classes consisted of a reasonable number of students; whereas the second class holds 37 students (males and females)

### **2.2. Teachers**

We have dealt with the sample of six (06) teachers selected randomly from the entire population of about forty one (41) teachers. All the participation in this study taught different subject at the same university so that we get a general use of ICTs in teaching

### **2.3. Questionnaire for teachers**

This section is devoted for describing the questionnaire and the aims of each section, besides the analysis of the results obtained from it.

### **2.4. Description of the Questionnaire**

For this present study, we have selected the questionnaire for teachers as a tool of data collection that aims to investigate the role of ICT in enhancing EFL learners'

attention. This questionnaire was given to a sample of six teachers of different modules. All the selected teachers are teaching Second year students of English, at Biskra University. It aims to gather information about teachers' opinion concerning students' attention when integrating ICT in their classes.

## **2.5. Teachers' questionnaires**

This questionnaire contains questions of multiple choice type and open ended questions where teachers put a tick in the corresponding boxes or give a full answer according to them after reading the questions attentively which is divided into two sections as follows: section one: Teacher's background (Q1-Q3). It includes general question about teachers' experiences in teaching, also the main method that they rely on in teaching EFL. Section two: Teacher's attitude towards ICT use and its impact on teaching (Q6-Q9). It deals with teachers' way of integrating ICT tools. Whereas, Section three deals with: The impact of ICT on students' attention (Q10-Q12).

## **3. Analysis of Teachers' questionnaire:**

In this section of chapter three, we will analyze the teachers' questionnaire which is divided into three sections.

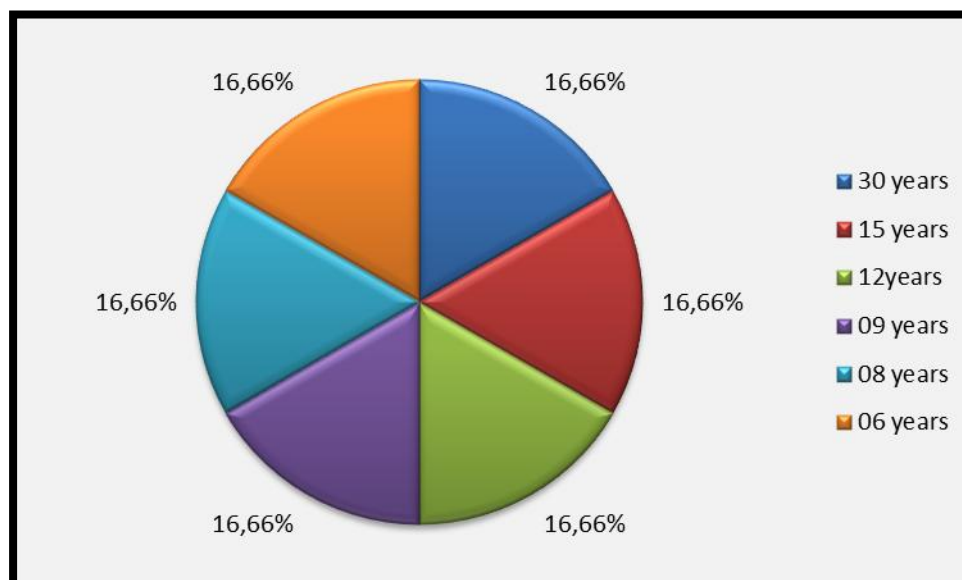
### **Section One: Teacher's Background**

#### **Item 01: How long have you been teaching English language?**

This item was intended to know the period teachers have seen teaching English at the University. The results are presented in the following table:

<b>Options</b>	<b>Numbers</b>	<b>Percentage</b>
<b>30 years</b>	<b>01</b>	<b>16.66%</b>
<b>15 years</b>	<b>01</b>	<b>16.66%</b>
<b>12years</b>	<b>01</b>	<b>16.66%</b>
<b>09 years</b>	<b>01</b>	<b>16.66%</b>
<b>08 years</b>	<b>01</b>	<b>16.66%</b>
<b>06 years</b>	<b>01</b>	<b>16.66%</b>
<b>Total</b>	<b>06</b>	<b>100%</b>

**Table 3: Teacher experience in teaching**



**Graph 3: Teacher's experience in teaching**

Teachers, from table 3 graph 3, are required to give in numbers how many years they have been teaching English i.e. their teaching experience. Each teacher differs in terms of number of year in teaching: the first teacher has been teaching for 30 years; whereas, the second one is for 15 years. 12 years is for the third teacher while the fourth is for 09 and the fifth has been teaching for 08 years, the last has been teaching for 06 years. Teaching experience may improve teacher's teaching skills and the way they deal ICT materials

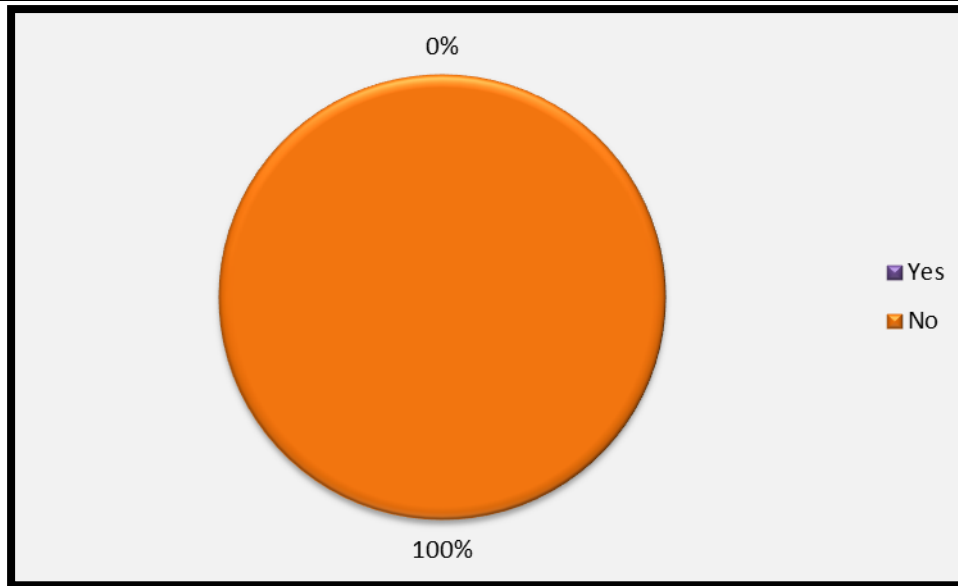
**Item 02: Are you satisfied with the student's general achievement?**

This item was intended to know if the teacher is satisfied with student's achievement when teaching English.

Teachers' answers are illustrated in the table below:

<b>Options</b>	<b>Numbers</b>	<b>Percentage</b>
<b>Yes</b>	<b>0</b>	<b>0%</b>
<b>No</b>	<b>06</b>	<b>100%</b>
<b>Total</b>	<b>06</b>	<b>100%</b>

**Table3.1: Teacher's satisfaction about student's general achievement**



**Graph 3.1: Teacher's satisfaction about student's general achievement**

The table (3.1) indicates that 6 teachers (100%) are not satisfied with the students' general achievement.

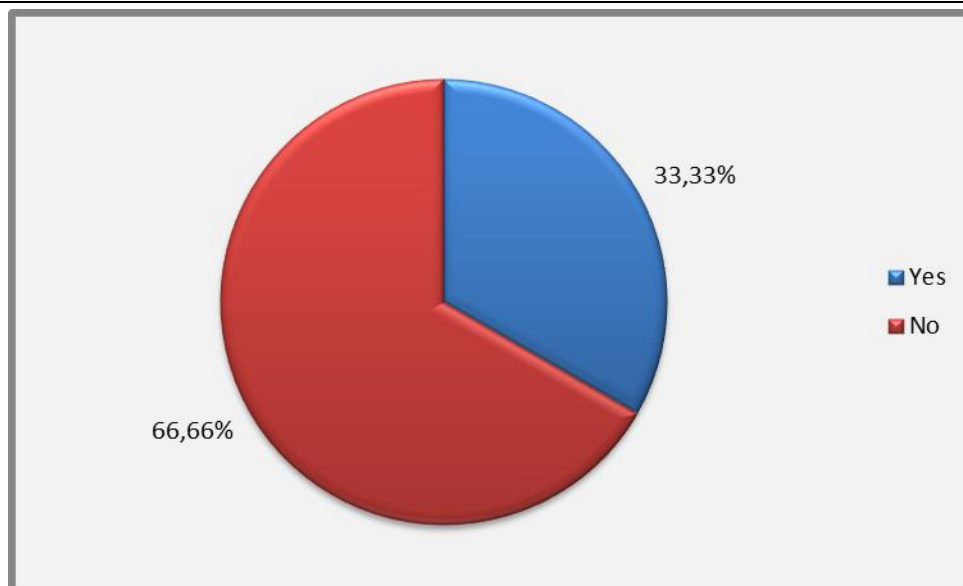
**Item 03: Do you think that student's deficiency or even failure could be related to the fact that the choice of the English language studies has been imposed on them?**

This item was intended to know if student's deficiency is related to the fact that the choice of English language studies has been imposed on students.

Options	Numbers	Percentage
Yes	02	33.33%
No	04	66.66%
Total	06	100%

**Table 3.2: teacher's view about student's deficiency**





**Graph 3.2: teacher's view about student's deficiency**

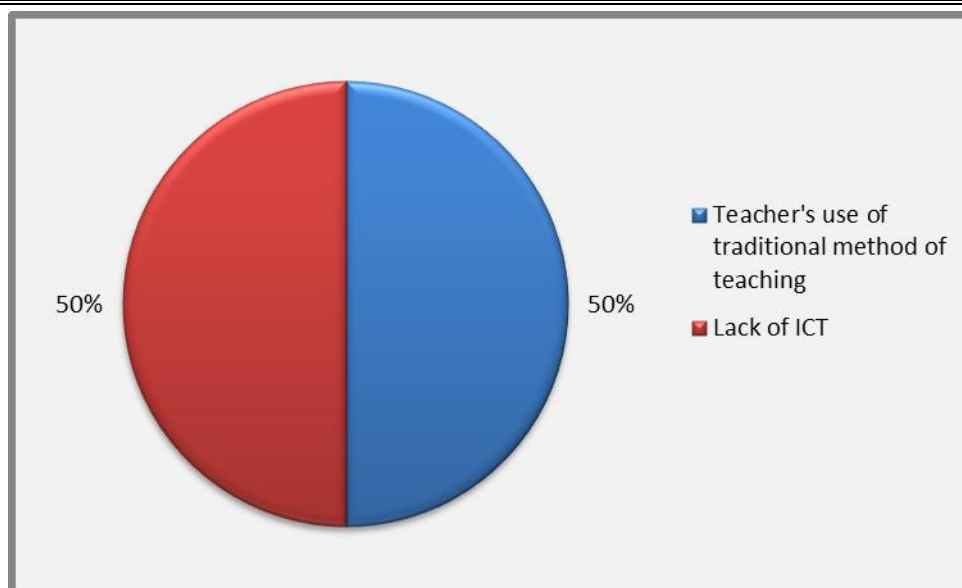
As shown in table (3.2) (33.33%) of the teachers believe that student's failure could be related to the fact that the choice of English language studies has been imposed on them, while 04 teachers (66.66%) think that it is related to other reasons such as the lack of motivation, or because it is related to their linguistic ability.

**Item04: According to you, student's under-achievement is related to:**

During assessing students, their level differ from one student to the other, this item aims to investigate whether students under-achievement is related to the use of traditional methods or the lack of ICT.

Options	Numbers	Percentage
Teacher's use of traditional method of teaching	03	50%
Lack of ICT	03	50%
<b>Total</b>	<b>06</b>	<b>100%</b>

**Table 3.3: Teacher' view about student's under-achievement**



**Graph 3.3: Teacher' view about student's under-achievement**

As it is visible in table (3.3), three teachers (50%) relate student's under-achievement to teacher's use of traditional method during teaching. Whereas the others who present (50%) claimed that the lack of ICT could be the reason which means that the use of information and communication technologies can be good factor that increases student's achievements.

**Item 05: Which method do you rely on in teaching EFL?**

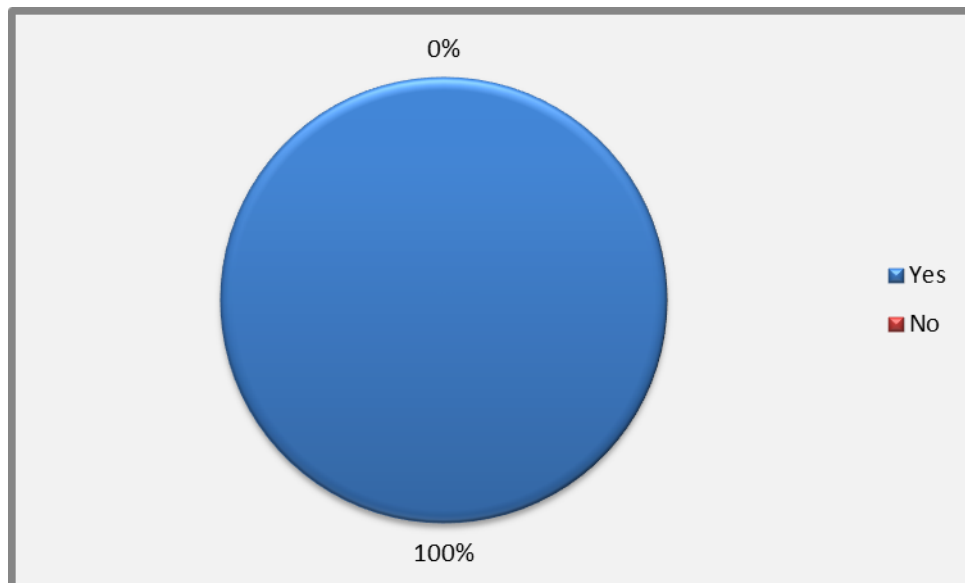
Two teachers stated that they adopt the communicative approach because it is the best way teachers foster students to express themselves within a classroom context and improve the language, a teacher claimed that he uses varied methods according to student's level and the course because one single method does not suit everybody or each objective. Another teacher utilizes the traditional method because of the administrative bureaucracy. While another uses the eclectic method, the sixth teacher adopts the discussion based approach because it gives the students the opportunity to discuss the applicability of the information being taught.

## **Section Two: Teacher's Attitude towards the impact of ICTs use in Teaching**

**Item 06: Do you think that the use of ICT in a classroom assists you to enhance your learner's attention? If yes, do you use any kind of ICTs in your session?**

Options	Numbers	Percentage
Yes	06	100%
No	0	0%
Total	06	100%

**Table 3.4: Teacher's view about the use of ICT**



**Graph 3.4: Teacher's view about the use of ICT**

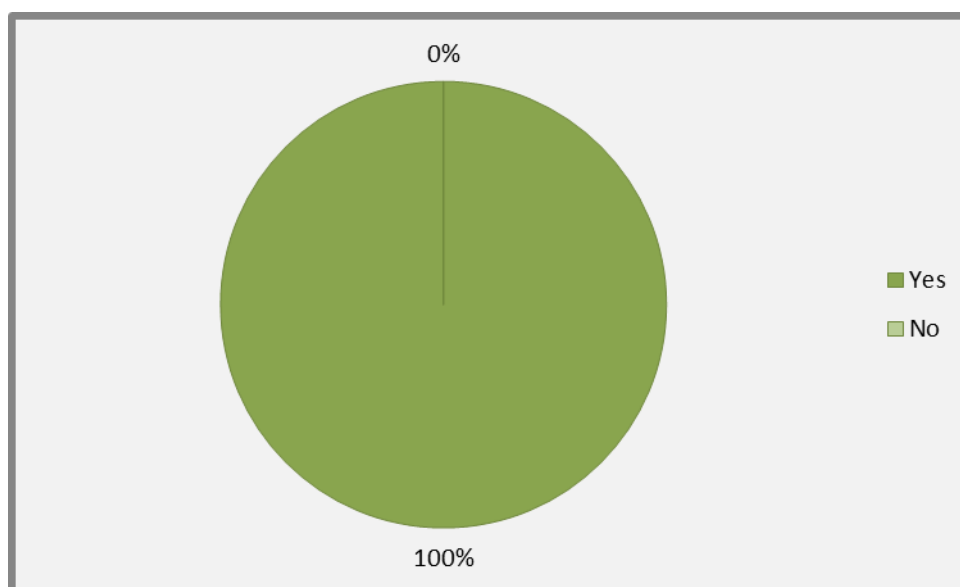
The table (3.4) shows that 06 participants (100%) answered by the first option and believe that the use of information and communication technology is helpful to

enhance learner's attention. Those teachers who answered with "Yes" stated that they use laptops, video projectors and the rest said that they use smart phones.

**Item 07: Do you think that each lesson has its appropriate tool?**

Options	Numbers	Percentage
Yes	06	100%
No	0	0%
Total	06	100%

**Table 3.5: Teacher's view about the appropriate tool for each lesson**



**Graph 3.5: Teacher's view about the appropriate tool for each lesson**

The table (3.5) 100% of participants at Biskra University have assumed that each lesson has its appropriate tool because the selection of materials diversifies according to learners and methodology.

**Item 08: How can you select the appropriate tool for lesson?**

The question is asked to those who assumed that they select appropriate tool for each lesson, two teachers select tools according to the purpose and objectives of lessons, and some according to the content and methodology of presentation, the others claimed that it is according to the nature of the lesson.

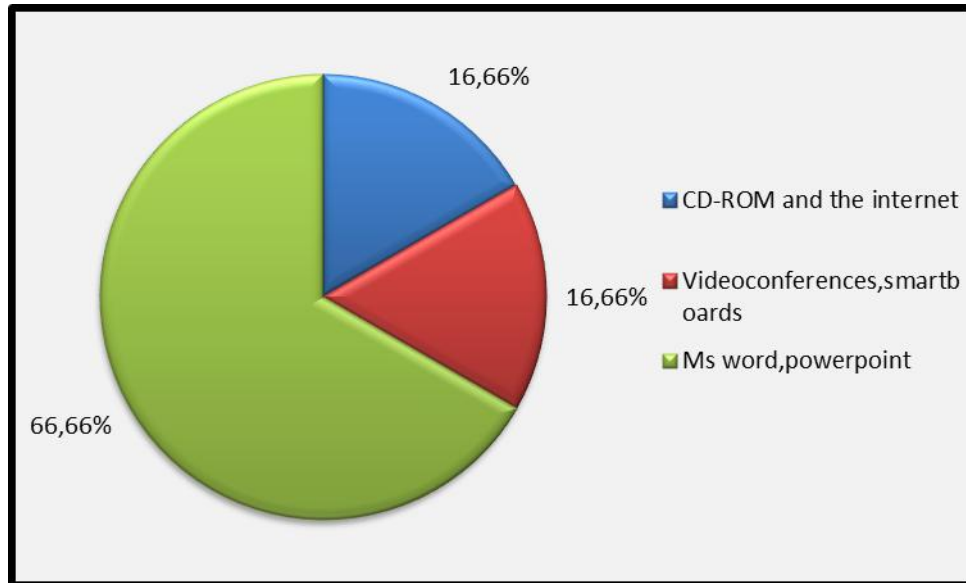
**Item 09: Which types of ICT tools do you use while teaching?**

This item was intended to provide information about the ICT tools that teacher adopt in the classroom.

Teachers' answers are illustrated in the table:

<b>Options</b>	<b>Numbers</b>	<b>Percentage</b>
<b>CD-ROM and the internet</b>	<b>01</b>	<b>16,66%</b>
<b>Video conferences, smartboards</b>	<b>01</b>	<b>16,66%</b>
<b>Ms word, powerpoint</b>	<b>04</b>	<b>66.66%</b>
<b>Total</b>	<b>06</b>	<b>100%</b>

**Table 3.6: Types of ICT tools that teachers use in teaching**



**Graph 3.6: Types of ICT tools that teachers use in teaching**

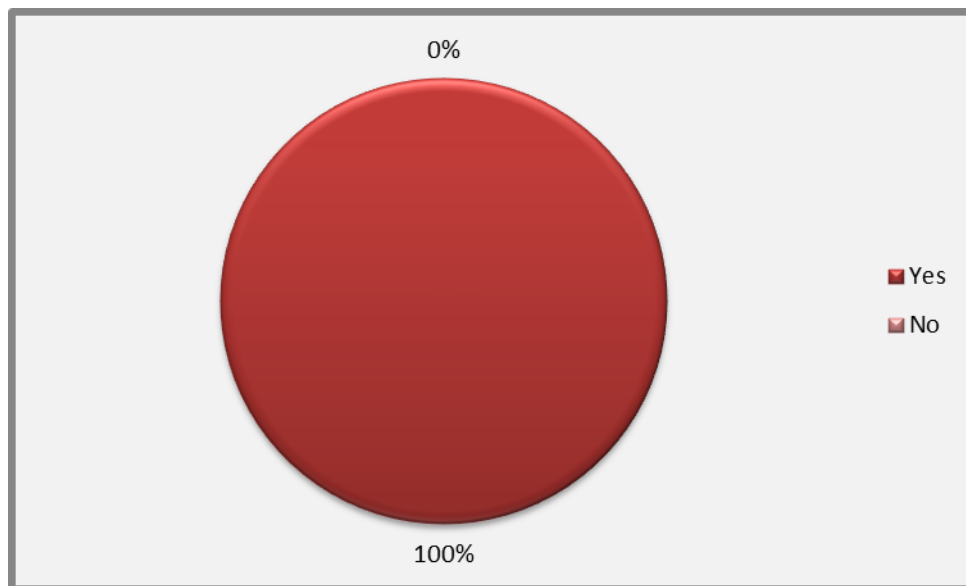
From the table (3.6), teachers (66.66%) use Ms Word /power point as a tool while teaching. whereas the (16.66%) for CD-ROM and the internet and same for Video conferences, smart boards are seldom used. Teacher's use of information and communication aids is based on some software programs on computers more than modern devices; this is maybe due to the scarcity of these ICT materials.

### **Section Three: The impact of ICT use on Student's attention**

**Item 10: Do you think that the lack of ICTs could be an important reason for learners' attention lapses? If yes, what are the difficulties that prevent you from using ICTs in your sessions?**

Options	Numbers	Percentage
Yes	06	100%
No	0	0%
Total	06	100%

**Table 3.7: Teacher's view about the lack of ICT influence on learner's attention**



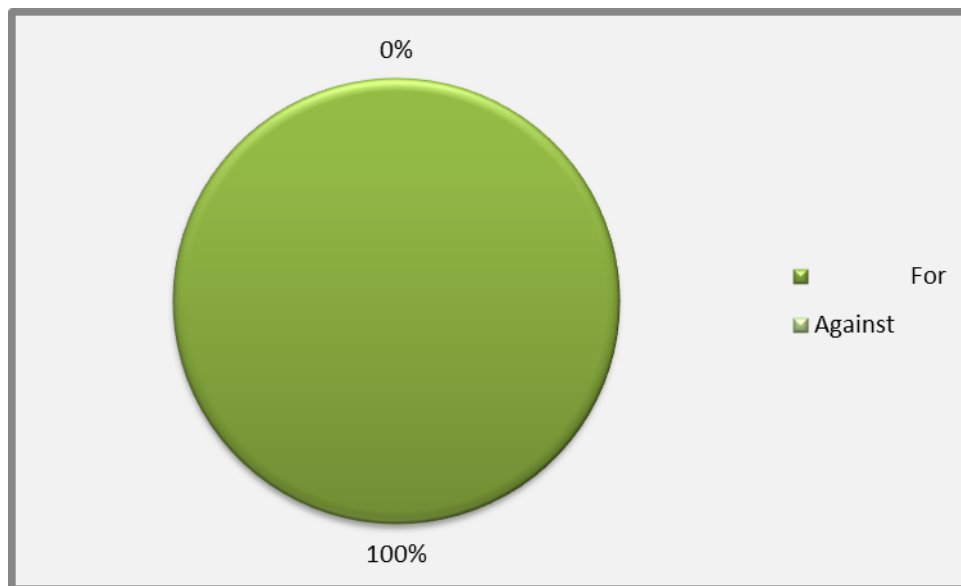
**Graph 3.7: Teacher's view about the lack of ICT influence on learner's attention**

Findings in the table (3.7) indicate that teachers (100%) think that the lack of ICTs could be an important reason for learners' attention lapses. Teachers argued that there some difficulties that prevent them from using information and communication technology in their sessions such as: scarcity of materials and power, the inappropriate setting, limited time, and the large number of students.

**Item 11: Are you for or against the use of ICTs to make students pay attention to the lesson?**

Options	Numbers	Percentage
For	06	100%
Against	0	0%
Total	06	100%

**Table 3.8: Teacher's view about the use of ICT to make students attentive**



**Graph 3.8: Teacher's view about the use of ICT to make students attentive**

As shown in the table (3.8), teachers 100% are for the use of ICTs to make students pay attention to the lesson. For that information and communication technology are very beneficial because it involves students to be more attentive and interested. Moreover it extends their concentration span and comprehension. Teachers believe that we are dealing with digital generation where technology occupies the greatest part of their life.



**Item 12: We believe that ICTs are more significant than the traditional teaching, what do you think?**

Teachers answered about the above question as follows:

- " I am with this proposal due to the fact that it enhances students' attention and motivation to learn"
- "Yes indeed, there are other reasons that can be taken into consideration like making students aware of the importance of ICT in learning and make them more autonomous, motivate student to work, share and collaborate with each other in the classroom..etc"
- "More attractive, motivating and beneficial; however, the choice of what to use depends on so many factors, including the nature of the subject under study and the availability of needed equipment as well as the level of students".
- "Yes I agree especially in the field of EFL"
- "I share the same belief; it's time to make a shift from traditional classroom to tech-based classrooms. This generation has grown up with technology and it becomes a part of their lives. ICTs are not only helpful for students but also for teacher as well. They create a source of motivation in class in which students may have more interaction than in traditional classes".
- "I do agree. Traditional methods are no longer convenient to teaching nowadays because students are acquainted to learning through the use of technology; hence we must update our teaching methods and strategies".

## **4. Classroom Observation**

In addition to the questionnaire, classroom observation was the second tool of collecting data. The purpose of classroom observation was to observe students' participation and attention while ICT was integrated to lessons and the observing the role of the teacher in the classroom.

### **4.1 Description of the Observation**

The classroom observation had been taken place on February 2017 with two classes of second year at the department of English in Biskra University. It lasted two weeks in which we attended four sessions with two different groups, two with the use of ICT tools, and two sessions without the use of information and communication technologies.

The observations that we have undertaken was overt and direct, we have not used any recording or filming devices. In addition, we have depended on structured observation; we followed our personal classroom observation checklists.

During each one hour and half, we sat on one side of the classroom where we can observe, without interfering the teaching and the learning activities. Moreover, our classroom observation has assisted with oral presentation activities that set our results about the use of ICT in enhancing EFL learner' attention, throughout this dissertation we aimed at pointing to the extent to which integrating information and communication technology enhances learners' attention.

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## 4.2. The Classroom Observation Result

**Academic Year: 2016/2017**

**University: Mohamed Kheider**

**Observer: Mounaouli Fatiha**

**Level: 2<sup>nd</sup> Year/ Group:06**

**Session1: Oral expression**

**Date and time: 12/02/2017 09:40/11:10**

In this session, the teacher made a clear introduction about the objective of the lesson. She/he started the lesson by warming up questions then students were exposed to a listening recording with handouts about "Paramedics in the UK". Students sat in an organized, comfortable and well equipped laboratory. Each student has his own headset and individual place where they listened carefully to the recording twice then answered the questions. The teacher provided sufficient time and an equal amount of contact for students to participate.

We remarked that students showed interest, motivation, and excitement during the lesson when the teacher used both audio and video aids to present the lesson. Students seemed to be calm and attentive. They followed teacher's instruction during a matching exercise which was related to the topic. It took them 10 minutes; they gave positive feedback about the understanding of the lesson. We observed that 25 students out of 40 were present because the teacher divided them so each student gets his own material. In general, there was no existence of anxiety, distractibility or absent-mindedness, only very few students were whether discussing or checking their mobiles from time to time. Concerning teacher and student' interaction, there was a clear harmony between them.

The presentation of the lesson was evaluated as well .The teacher played a video as a follow up activity, she/he was skillfully using ICT materials with an appropriate choice of these tools, the sound of the recordings was loud enough, and the teacher' voice as an instructor has been easily heard. Therefore, we observed that students were interested, enjoying their time and paying attention.

**Academic Year: 2016/2017**

**University: Mohamed Kheider**

**Observer: Mounaouli Fatiha**

**Level: 2<sup>nd</sup> Year/ Group:05**

**Session2: Oral expression**

**Date and time: 12/02/2017 11:20-13:00**

At the beginning, the teacher made a clear statement of the purpose of the lesson that was about Paramedics in the UK which was this time with another group. She/he distributed collection of exercises related to the lesson. The classroom atmosphere was comfortable, organized; the session took a place in a laboratory. The number of students was 24 out of 39 because the teacher divided them. Each student sat in an individual separated place. The teacher played a recording which describes Paramedics in the UK followed by an activity to learn new lexis. Students were asked to fill in the gaps then circle the right answer. Most of them paid attention to the teacher' instructions then answered.

The teacher was able to choose the appropriate tool in the suitable time .Moreover she integrated ICT in many stages, at the beginning using an audio recording and at the end of the session using a video, all that was according to student's need and the objective of the lesson. It was observed that, students

responded positively through showing understanding, interaction and their active participation, in addition to the absence of distractibility and anxiety.

During the presentation students showed motivation, interest and excitement, it was clear that one of the effective ways to be so that of implementing information and communication technologies while teaching. The majority of students were interacting with the teacher, commenting on the topic of the lesson and involved.

**Academic Year: 2016/2017**

**University: Mohamed Kheider**

**Observer: Mounaouli Fatiha**

**Level: 2<sup>nd</sup> Year/ Group:05**

**Session3: Oral expression**

**Date and time: 14/02/2017 09:40-11:10**

Before the beginning of the session, students organized the classroom and sat next to each other, the teacher chooses one of the students then he stood up to discuss a topic that was written on a piece of paper, the chosen students received questions from his/her classmates. The teacher gave students sufficient time and supported them with new words so they can express their ideas correctly

We observed that the teacher did not integrate any kind of audio visual aids; the major focus was on students' performance. Some males who sat in the back looked bored and with absent-mindedness, while few girls were motivated and participating.

Presenters discussed different subjects; some of them had an average level of fluency and acceptable pronunciation, but also many showed hesitation, fear to speak and anxiety.

**Academic Year: 2016/2017****University: Mohamed Kheider****Observer: Mounaouli Fatiha****Level: 2<sup>nd</sup> Year/ Group:06****Session4: Oral expression****Date and time: 19/02/2017 11:10-13:00**

During this session the teacher's objective of the current oral expression lesson was improving speaking skill through a play that students perform. The topic of the lesson was a visit to a doctor where a conversation took a place in a clinic between him, a nurse and a patient.

Neither the teacher nor the students used any of information and communication tools. They relied on performance and observation. Students' voice could not reach all classmates ears. It was low and unclear because of the lack of microphones. Most of the audience looked inattentive. Two girls were looking from the window, another was turning back and chatting, and a student playing a game on his mobile whereas the surrounding was noisy Chairs and tables were untidy.

Time was not divided equally between presenters. It was obvious that boredom and distractibility existed between learners. The teacher did not ask any specific questions to check student's understanding.

## **Discussion**

From teacher's questionnaire and classroom observation checklists results, we conclude:

- 1- Information and communication technologies provide a motivating atmosphere for learners where they get exposed to new technology which extends their concentration span.
- 2- Teachers who get training programs about the use of ICT are competent and can easily control them while those who did not get any specific learning face many difficulties.
- 3- Most common ICT materials used by teachers are laptops, projectors, smart phones, headsets or loud speakers. Teachers select appropriately according to lessons methodology and objectives, also the availability of these tools at laboratories or classrooms.
- 4- The majority of Students who deal with different ICT instruments react positively, pay attention and save time during any session
- 5- Teachers face some difficulties that prevent them from using ICT such as: scarcity of materials, inappropriate settings, limited time and the large number of students.
- 6- The traditional way of teaching is still dominant though teachers acknowledge that information and communication technologies usefulness in enhancing learners' attention.
- 7- The implementation of ICT would make an effective change in classroom management, methods of teaching with different activities and textbooks.

## **Conclusion**

This chapter deals with the analysis and interpretation of data gathered. It is concerned with getting real data about students' attitude and teachers' perception concerning the significance of information and communication technology tools in teaching. The results have shown that teachers and students of English Foreign language have positive attitudes towards the role of ICT in enhancing EFL learners' attention. Teachers and students are aware of the importance of implementing information and communication technologies therefore they need to be provided with appropriate settings with the sufficient and suitable materials.



## RECOMMENDATIONS

In order to increase learners' attention and facilitate the teaching learning process, we recommend the following:

- Classrooms and laboratories should be provided with all the materials students and teachers need.
- It is important to organize workshops for teachers to use different kinds of technological devices effectively.
- The use of authentic materials must be extended when teaching English language.
- Students should be aware of the usefulness of ICT tools, and how do they ameliorate the cognitive, social skills when compared to the traditional methods of teaching.
- Algerian universities should supply a specific budget for information and communication technologies such as smart boards, computers, projectors and internet.
- The choice of the appropriate ICT tools and the variation of this use can be a good factor that increases learners' attention.
- The syllabus should implement information and communication technologies through related tasks.
- Students might not grasp the information when the number of students is huge. It is recommended to divide them into groups.

### GENERAL CONCLUSION

Information and communication technologies had been widely discussed concept in the field of second and foreign language teaching and learning, In addition to the emergence of ICT made learner-centered approach more popular. Thus, this study aimed to investigate the role of using ICT materials in enhancing EFL learners' attention.

The integration of technology can certainly create an atmosphere where learners use the target language effectively and teachers who implement these technological instruments show remarkable control over students' attention and interest. Moreover students who study in laboratories with sufficient information and communication technology sources achieved better progress than those which are not equipped especially when there is a good collaboration between the use of these materials and tasks related to the objectives of lessons. The results of this research indicates that most of teachers are aware of the importance of integrating ICTs in learning English language Also the positive impact of this use on students' concentration when tools are selected appropriately. Through the interpretation of the findings, we can come up with the conclusion that universities which provide access to technological devices empower teachers. Moreover foster the development of learners' cognitive skills.

Finally, this was done in order to help and shed some light on the importance of information and communication technology as well as the process of attention. This research remains open to any further development that would deal with the promotion of students' attention along with more integration of ICT tools in the forthcoming years.

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## **Appendixes**

## Appendix A

### Thesis Title: The Significant Role of ICTs in Enhancing EFL Learners' Attention

#### Questionnaire for Teachers

This questionnaire aims to investigate the teachers' perspective about teaching with ICTs. We try to explore their vision of the importance, the need of these tools and the use of these tools as a modern teaching method to improve learners' attention during classes.

Your contribution would be both helpful and efficient to our humble work, we will be grateful for your assistance.

**Fatiha Mounaouli**

#### Section One: Teacher's Background

1. How long have you been teaching English language?

.....

2. Are you satisfied with the student's general achievement?

Yes                       No

3. Do you think that student's deficiency or even failure could be related to the fact that the choice of the English language studies has been imposed on them?

Yes                       No

.....

4. According to you, student's under-achievement is related to:

**Teacher's use of traditional method of teaching**

**Lack of ICT**

5. Which method do you rely on in teaching EFL?

.....

\*Please state why?

.....

.....

**Section Two: Teacher's Attitude towards the impact of ICTs use in Teaching**

6. Do you think that the use of ICTs in classrooms assist you to enhance your learners' attention?

Yes

No

\*If yes, do you use any kind of ICTs in your sessions?

.....

7. Do you think that each lesson has its appropriate tool?

Yes

No

8. How can you select the appropriate tool for each lesson?

.....

9. Which types of ICT tools do you use while teaching?(You can tick more than once)

**CD-ROM ,The internet**

**Video conferences, Smart Boards**

**MS Word, PowePoint**

**others,.....**

**Section three: The impact of ICT on students' attention**

10. Do you think that the lack of ICTs could be an important reason for learners' attention lapses?



**Yes**

**No**

\*If yes, what are the difficulties that prevent you from using ICTs in your sessions?

.....

**11.** Are you for or against the use of ICTs to make students pay attention to the lesson?

**For**

**Against**

\*Please state why?

.....

.....

**12.** We believe that ICTs are more significant than the traditional teaching. What do you think?

.....

.....

.....

.....

.....

**Thank you!**

## Appendix B

### Observation Checklist for the Significant Role of ICTs in Enhancing Learners 'Attention

University:	Academic Year:
Observer:	Level:
Session:	Date and time:

Criteria	Poor	Good	Very good	Excellent
1- Teachers integrate ICTs within oral sessions.				
2- Learners show interest, motivation and excitement during the lesson.				
3- Teachers provide sufficient time for students to participate.				
4-Teachers ask specific questions to check students' attention.				
5- Students receive equal amount of contact with the teacher.				
6- Students seem bored during the session.				
7-The existence of anxiety , distractibility and absent mindedness				
08- The use of ICTs ease the way the teacher presents lessons				
09- Students listen carefully to audio recordings ,and pay attention to video clips.				

10-Students respond to teacher instructions and feedback.				
11- Teachers use both audio and video aids to present the lesson.				
12- ICTs are used related to the objectives of lessons.				
13-Teachers use ICT in many stages of the lesson to attract student's attention				
14-Students study in an organized, comfortable setting.				

## ملخص

حوّل ابتكار أدوات التكنولوجيا المعلومات والاتصال مثل اللوحات الذكية، أجهزة الحاسوب المحمولة والإنترنت التعليم إلى عملية حية إذ لم يعد يركز على شرح المعلمين كمصدر وحيد. إذ أصبح استخدام التكنولوجيا في عملية التعليم والتعلم أمرا مؤثرا خصوصا بين الطلبة الذين يعانون من الملل وهفوات في التركيز أو فقدانه كليا. أدوات التكنولوجيا تستعمل لتعزيز اهتمام الطالب والانتباه وتخلق مشاركا إيجابية خلال الحصص. لذلك فإن الهدف من هذا البحث هو تسليط الضوء على الدور الهام للتكنولوجيا وتقنيات الاتصال في تعزيز التركيز لدى طالب اللغة الإنجليزية. هذا البحث يدعم الأسلوب النوعي، تم استخدام أداتين أثناء دراسة هذا الموضوع. الأول عبارة عن استبيان لأساتذة السنة الثانية في قسم اللغة الإنجليزية في ولاية بسكرة خلال العام الدراسي 2017/2016. أما الأداة الثانية التي استعملت هي الملاحظة داخل القسم. تم تحليل البيانات التي تم الحصول عليها من العمل الميداني من خلال تحليل وصفي وهو ما يكفي لهذه الدراسة وهو مناسب لتفسيرها وتحليلها. استنادا إلى النتائج سيتم تقديم بعض التوصيات لمساعدة الطلبة والمعلمين على تحقيق الاستعمال السليم لتكنولوجيا المعلومات والاتصالات من أجل تطوير قدرة متعلمي اللغة الإنجليزية وتحقيق تقدم علمي أفضل.