

MOHAMMED KHEIDER UNIVERSITY -BISKRA-

FACULTY OF LETTERS AND LANGUAGES



DEPARTMENT OF FOREIGN LANGUAGES

DIVISION OF ENGLISH

TEACHERS' ATTITUDE TOWARD THE ROLE OF MIND MAPPING TECHNIQUE FOR IMPROVING EFL STUDENTS' LESSON COMPREHENSION.

Case Study of Third Year Student of the English Language at Mohamed Kheider.

Dissertation submitted in partial fulfillment of the requirement for the Master degree in science of the languages.

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Academic year

2014/2015

DEDICATION

With all love that covers my heart, I dedicate this dissertation to my father, *Bouzid*, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, *Salima*, who taught me that even the largest task can be accomplished if it is done one step at time.

Specially thank to source of my happiness and success in my life, to my lovely fiancé Mrs. *Terghini Youssef* to whom I owe my love and trust. For his unconditional support and encouragement to pursuer interests and make me stronger all the time, You have been with me every step of the way, through good and bad times. also for his patience and care. Thank you even if it is so little for you.

This work is also dedicated to my brothers, *Ismail, Ibrahim, Yakoub*, my sisters, *Soumia and her husband Djemal, Noura and her husband fathi, Zineb*, and my sisters in low, *Saliha and Fatiha*, for their whole hearted support. To all my extended family especially nephews and nieces: *Djoumana, Lina, Mohamed Ali, Oumaima, Mohamed Abd Allah, Abd AlRahman, Mohamed Wail, Ishak Abd Alaziz, Houssam Aldine*.

To my aunts and uncles, to my beloved sister that she follows me all the way, Fatima

To all my friends and teachers at Biskra University, to all those have been supportive, caring and patient, sometimes beyond their strength. I dedicate also this simple work to dearest sisters: Yamina, Djamila, Marwa, Fouzia, Khadidja. Radia, Salima, Hanane,

Razika

To my new sweet family, Terghini.

Thank you to all.

ACHNOWLEDGEMENT

I am most grateful to my teacher and my supervisor Dr. *Saihi Hanan*, for being kind enough to accept directing this work with all her academic engagements. I would also like to thank her for the accurate advice she put forward and for her patience with me throughout the stage of the research.

I would like to thank the board of examiners for accepting to read this work and for any remarks they would make to refine it.

I am extremely grateful to all my friends and colleagues who helped with references which otherwise inaccessible particularly Mrs. *Amine Nouri* and Mrs. *Amine Chala* who offered some of the most important primary sources used in this research.

My deep gratitude goes also to my friend *Djamila* who help me to conduct this work from the first step till the end. I really thank her for her efforts.

My family, especially my father and my mother who suffered with me through this work, deserve thanks, apologies and respect.

Finally, I owe a lot of thanks to all teachers and students who helped me in conducting the questionnaires and provided me with so many instructions.

Thank you all

Abstract

Knowledge representation and verbal reasoning is an area of artificial intelligence whose fundamental goal is to represent knowledge in a manner that facilitates inference from knowledge. Many teachers work hardly to achieve this goal, they use different techniques and methods in the presentation of a lesson to find more efficient and more effective ways of teaching language, also can students understand a lecture without difficulties, in other words, enabling the students of a foreign language to understand the target language and communicate ideas naturally specially between learner and teacher. According to that, providing a good technique in classroom that helps EFL learners in understanding and memorizing the ideas, it should first know how the brain works and learns. Current knowledge about the ways in which the brain works shows that thinking is not linear. For that reason, in this dissertation, we presented a new technique which considered as brainfriendly tool for transmitting and recall information which is Mind Mapping technique. Mind Mapping has proven to be a good technique for memorizing, creative thinking, and learning. This study aims to investigate teachers' attitude toward the use of Mind Mapping technique in lecture presentation and whether this technique is an appropriate one for the learners in order to adopt it in the classroom. In conducting this work, qualitative research approach was applied. Where, we are selected randomly 30 students of third year and 05 teachers' candidate at Biskra University. Questionnaires is one of the tools that under from this approach that we are administered and analyzed to support our hypothesis.

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General Introduction

Learning a second language can be exciting and challenging at the same time. Today, second language learners need to acquire a significant amount of information in the target language in order to success at University. Most of the information is presented in the form of words which can take the students to be boring. Furthermore, it is clear that the students and teachers' involvement inside EFL classroom provides opportunities to reflect on learning and to encourage the brain to create and to memorize in perfect way, also, to find the relations between words rather than demanding them to learn by heart a list of words.

During learning or teaching, transmitted and received information it can be difficult and lack of entertainment to some of the students. At the same time, it can easier and more enjoyable for other learners. It depends on the brain work and teacher method and technique itself that h/she adopted in the classroom. According to Buzan (1993) in his research has shown that during the learning process, the human brain primarily remembers any items associated with things or patterns already stored, or linked to other aspect what is being learned. Hence, Buzan advocated that it is necessary to think about effective second language learning technique that support the learning process and facilitate information that teacher will presented to the learners. This technique should reflect to how the brain works and helps investing the brain's capacities in the most effective way. This research, we aim to investigate about how the brain learns and its function as well as the adaptation to a new technique which is Mind Mapping. Mind Mapping technique is a visual form of note taking that offers an overview of a topic and its complex information, allowing students to comprehend, create new ideas and build connections. Through the use of colors, images and words, mind mapping encourages students to begin with a central idea and expand outward to more in-depth sub-topics.

1. Statement of the problem

Teaching language successfully is one of main challenge for an effective teacher who can reach to learner's goal. Many students at University may face difficulties in learning and acquiring a second or foreign language especially in comprehension of the lessons or what the teacher is talking about. This problem is refers to some factors that are responsible for the poor performance of learners which it can take them to negative attitude to learn this foreign language. A teacher technique in teaching generally and in presentation of the lesson particularly is the main factor that helps or hinder students attitude in processing data. Most of teachers have a big challenge to find a good technique that can use it to present a lecture which it can help students to interact with teacher in the classroom and comprehend the course or new information easily. Mind Mapping is the tool that the teacher can adopt and use for presenting a lecture which may help students to memorize new ideas in classroom.

2. Significance of study

Unfortunately, learning a foreign or a second language is very important task in human life. Most of learners of target language use all efforts in order to achieve their goal to communicate fluently and meaningfully, also they can understand everything easily. Effective teacher who can make this goal truth and student can comprehend the lectures without difficulties. This work presents Mind Map technique which uses all the previous triggers in order to deliver the information to the brain in a brain-friendly way. This research is conducted for one reason: for teachers in order to be aware about his/her technique, Mind Mapping is full of colors, shapes and key images that the most of learners love it and it helps them to process and interact with him/her with success. Also, Mind

Map has a great role to save the data for a long time and students can remember it quickly in a short time.

3. Aim of study

The main objective of this study was aimed to investigate teacher attitude toward using Mind Mapping technique in teaching and whether this technique has an affect for improving the student understanding for the lesson. In addition to that, how "Mind Maps" can be adapted and implemented in the teaching of foreign language. Moreover, it aims also to investigate the role of the brain in processing the data from Mind Mapping easily and save this information for a long time.

4. Research question

The present research addresses to answer three main questions:

- 1. Does the use of Mind Mapping in teaching have an effect for improving EFL students' lesson comprehension?
- 2. How to use this Mind Mapping in teaching?
- 3. How can the students brainstorm the ideas of the lesson from Mind Mapping?

5. Research Hypothesis

In the light of the research questions above, we hypothesized:

- If the teacher at the University uses the Mind Mapping technique in teaching successfully and meaningfully, many of the students can process the information effectively.
- 2. If the students cannot interact and understand the lesson, the use of Mind Mapping technique by the teacher in presentation is not appropriate.

6. Research methodology

In order to test the hypothesis, obtain the required information ad answer the questions mentioned above, the qualitative research method will be applied by using two type of questionnaires for gathering data one for students and the other one for teachers.

6.1. Method

The present study focuses on the description and identification of teacher technique that uses it in teaching for lesson's presentation which it can help students to understand the lesson without difficulties. To serve the need of our hypothesis, the qualitative research technique was used to explain whether the use of Mind Maps technique in teaching can have an effect on student's comprehension.

6.2. Population and Sampling

The study group consisted of 05 teachers' candidates in the department of English teaching at Mohamed Kheider University of Biskra, from the entire population of 61 teachers. Also, we are selected randomly 30 students of third year at Biskra University from the population of 372 students.

7. Research tools

The main objective is to test applicability of the Mind Map technique to present a lesson; accordingly, we have chosen the qualitative research methodology by designing two questionnaires. From one side, the teacher's questionnaires serve as a guide to know the extent of use Mind Mapping technique in lecture presentation. Second one, it is for student to catch up the effectiveness of Mind Mapping tool on student comprehension and student reaction with teacher technique.

8. Limitation

The primary aim of this work is to investigate teachers' attitude toward the use of Mind Mapping technique in teaching and whether this tool can effect on students' comprehension to a lesson. To accomplish this purpose, we have faced some problems on the references because this technique is exclusive and it is not well known in countries.

9. Structure of the research

This dissertation is divided into two main sections, a theoretical part which is concerned with literature review and a practical part which concerns the investigation and the analysis of the results, their interpretation and discussion. The section one contain two chapters: the first chapter, introduction to mind maps, paves the way to the mind map technique by offering a journey into the human brain; it introduces the brain and the two hemispheres. Furthermore, we define the language of the brain, and explain radiant thinking. In addition, this chapter gives a quick look on the mind map by defining it and concludes by the story of the mind map and its benefits.

The second chapter will go deeper into Mind Mapping and its uses in teaching. It begins with definition of listening skill and its relation with Mind Mapping, then, introducing the definition of teacher and its characteristic to be a good one and his/her role in classroom. The chapter ends by giving an overview about Mind Mapping as teaching technique and how to make this technique. Also, we will shed lights on its benefits on preparing and presenting a lecture.

In the second section devoted to main investigation. we make the students' main study and discuss its results. After that, we analyze the teachers' questionnaire and discuss the results gathered. This chapter ends by giving recommendations.

Chapter one

The Brain and Mind Map

Introduction

Most of the people start learning directly without learning how to learn and without learning about the learning machine which is the brain. In this chapter, we shed some lights on the brain and the function of its parts; also, we touch upon on the concept of Mind Map and its advantages.

1. An overview about the Brain

The nervous system is one of the complex devices and tasks associated with each part of the body. The Brain which represents the most important part in the nervous system, it serves as the main machine of the human body and being responsible for the cognitive, emotional and behavioral process, and other necessary activities carried out by the individual to cope with various life situations as a result of multiple external stimuli.

The human Brain has great attention of researchers and scholars in different fields. It is the most sophisticated object in the known universe. Also, it can enable to process, receive, store information and to send instructions all over the body. In addition, human brain is extraordinary processor that many of the researchers resemble it as a computer that it can perceive, process and product information by the use of mind.

The Brain can be divided into two main Hemispheres: the Left and the Right one. The two Cerebral Hemispheres are connected by central processing unit which called Corpus Callasum. Each part is focusing in some of functions. However, they are not separated from each other completely.

Moreover, this organ has the ability to create an infinitive number of ideas, visions and concepts. It can process the information for short time and for long time.

1.1. Concept of the Brain

The Brain is the most complex organ in the human body. It produces our thought, action, memory, feeling and experiences of the world. This term is developed and defined by many of researchers and scholars.

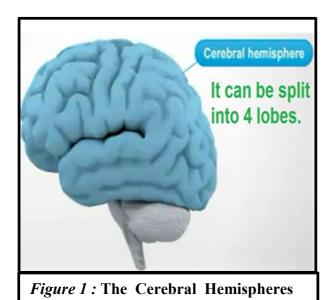
According to Harrison and Hobbs (2010) define the Brain as a magic organ in human body that needs to impulse each day to gain energy. It weights about one kilogram and a half, and it is fed by a network of blood vessels catering oxygen and nutrients to the million-million workers; the brain cells. Also, Marilee (1999,p1) views that Brain is a fascinating organ like the rest of the body, in other words, this organ is capable of arousing and holding attention, it is a hermetic organ in human. It is composed of cells but the Brain cells are different from other cells which are divided into two types of the Cells: Neurons and Glial cells. The first type Neurons cells means "Nerve Cell" that Brain sends messages through this type of cell. Marilee noted that before birth the Brain produces about 250, 00 neurons per minute whereas at birth, humans have 100 billion neurons. The second type of cells is Glial cells means "Glue" which are Brain cells that nurture the neurons, it's just a beginning to get the attention it deserves. It assists in the migration of neurons fetal Brain development.

In fact, Brain is incredibly complex; it controls everything in our body from coordinating our movements and our speech, to storing our memories and keeping our hearts beating. Buzan (2006,p16) states that Brain is "super-powered processor capable of boundless thoughts and radiant thinking", he means that Brain is multi-dimensional faculty that is capable of absorbing, interpreting and recalling information in ways that are more sensual creative, multi-faceted and immediate than speech and written word. While some of dictionaries also define this term as a part of the central nervous system enclosed in the

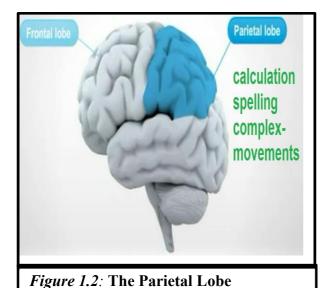
cranium of humans and other vertebrates consisting of a soft convoluted mass of gray and white matter and serving to control and coordinate the mental and physical action. The Oxford dictionary defines it as the organ of soft nervous tissue contained in the skull of vertebrates; functioning as the coordinating center of sensation and intellectual and nervous activity. It is divided into a left and a right side which called Left and Right Hemispheres. Each Hemisphere is made up of four Brain Lobes

These four Lobes are: at the very back is the Occipital Lobe which handles the visual sense. At the top of the Brain are the Partial Lobes which help with tasks such as calculation and spelling and they handle sensation such as touch. Just behind each ear there are the Temporal Lobes which are involved in the organization of sound, memory, speech and emotional responses. Behind the forehead there are the Frontal Lobes which are considered the home of our personality. Harrison & Hobbs state inside the ridges and grooves of each Hemisphere laid a set of structure forming what is known as the Limbic System. This system includes the Amygdala, Hypothalamus, Thalamus and Hippocampus. These parts activate our emotion, pain, pleasure, sensation and other drive that are essential to survival. The Amygdala activates emotional responses, such as fear or euphoria, while the Hypothalamus is the control center for Brain to body, body to brain messages... The Thalamus receive auditory and visual sensory signal and relays them to the outer relays of the brain, known as the cerebral cortex, where the information is processed. The Hippocampus is critical to learning and remembering spatial layouts. At the very of the Brain lies the Cerebrum which controls movements, posture and balanced; finally, there is Brain Stem which controls our vital living functions such as: breathing, heartbeat and blood pressure. (2010, p14)

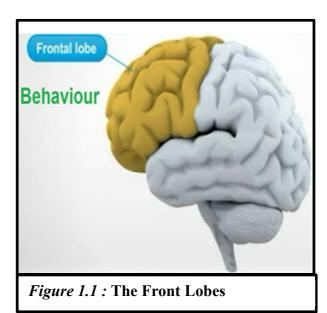
According to Radrigues assumes that the Brain is the most complex organ in the body, encased by the Skull and formed by the Cerebrum, Cerebellum and Brain stem. It is divided into two hemispheres: the Left Hemisphere and Right Hemisphere. So, this magic organ can be defined as the control center for movement sleep, hunger, thirst and virtually every other vital activity necessary to survive. (2007).



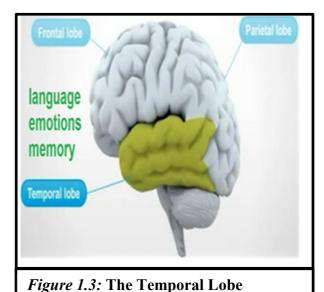
The Cerebral Hemisphere can be split into four different Lobes. Each Lobe has specific functions



At the top of the Brain, there is a Parietal Lobe which handles body awareness, calculation, and spelling



Behind the forehead is the Frontal Lobe which considered the home of a person's personality



Just behind each ear, there is a Temporal Lobe which is involved in the organization of speech, memory and emotional responses.

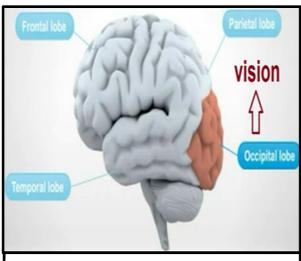
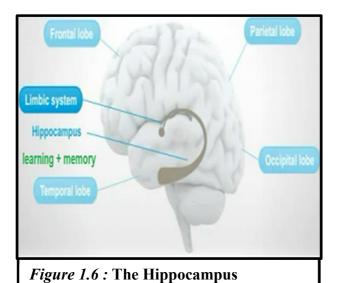


Figure 1.4: The Occipital Lobe

At the very back of the brain, there is the Occipital Lobe which handles the visual sense.



At the lower part of the Limbic System there is the Hippocampus which is critical for learning and remembering

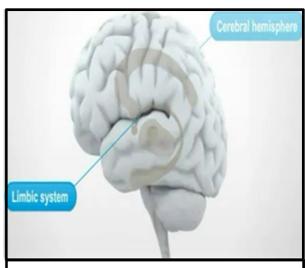
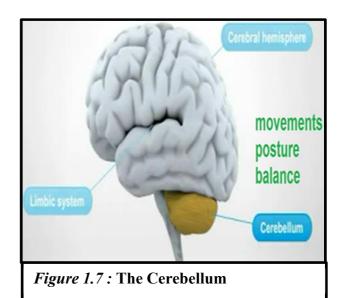


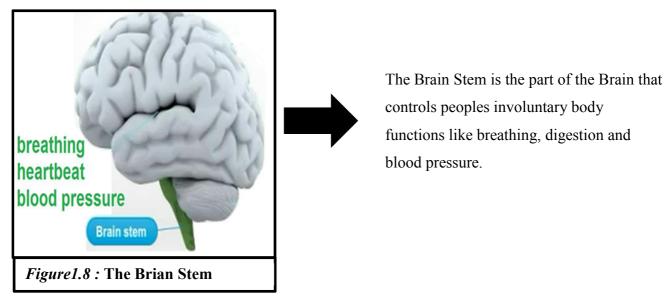
Figure 1.5: The Limbic System

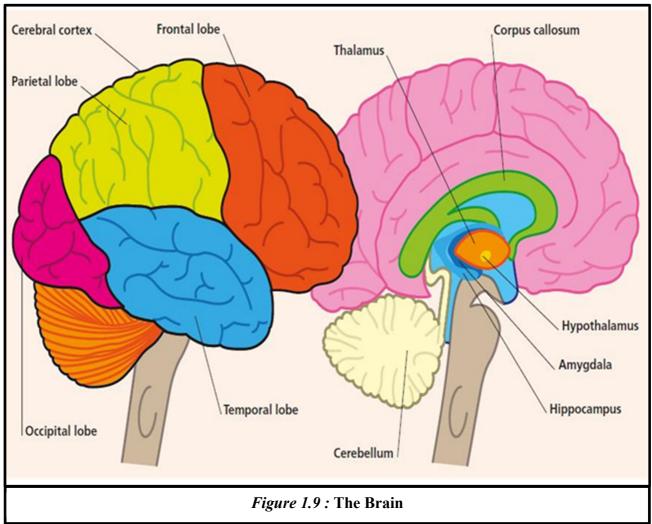
Inside the ridges of each Hemisphere lies a set of structures forming what is known as the Limbic System.



At the brain base, there is the cerebellum which handles the body movements and

balance.



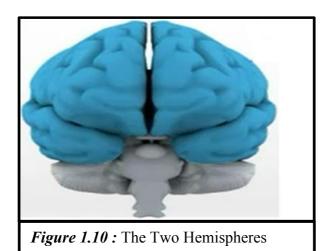


The Brain is divided into two Hemispheres: the Left and the Right which are linked by a central processing unit called the Corpus Callosum. Each Hemisphere is split into four lobes. The left and the right which are linked by a central processing unit called the corpus Callasum.

1.2. The Two Hemispheres

The Brain is an organ that serves as the center of the nervous system in all vertebrate and most invertebrate animals. It is located in the head, usually closed to the primary sensory organs for such senses as vision, hearing, balance, taste and smell.

Human Brain can be divided into two main Hemispheres: the Left and Right Hemispheres. In the later 1960, professor Rogery Sepry was awarded the Nobel Prize for his research in which he found that the two Hemispheres when give a task tends to divide major intellectual function between them; in other words, Rogery knew that the two Hemispheres are different in function each of side has specific functions. Buzan agrees that human has two upper Brain rather than one and they operate in very different mental areas, these two sides of the Brain or two brains which are linked by a fantastically complex network of nerve fitters called the Corpus Callosum deal with different types of mental activity.(1979,September)



The Cerebral Hemisphere can be divided into two main sides: Left Hemisphere and Right Hemisphere

As we mentioned before, each side of Hemispheres is focusing on some of specific functions; the Left Hemisphere deals with logic, language, reasoning, number, linearly and analysis which called academic activities. Whereas the Right side of the Brain deals with

rhythm, music, image and imagination, colors, parallel processing, day dream, face recognition and pattern or map recognition (Buzan, 1979).

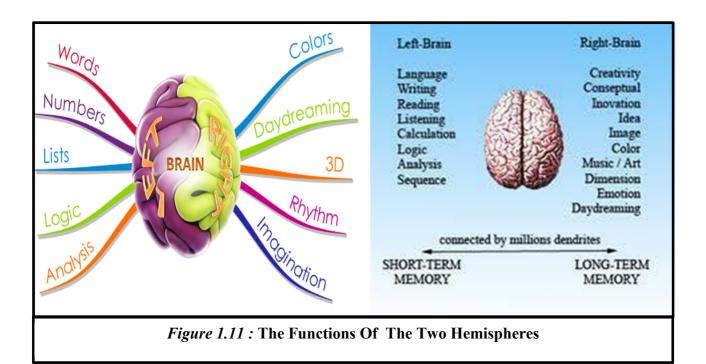
The human Brain's Hemispheres operate both independently and in correct with each other in other word if even the two brains' hemispheres are separated and each part has own function, but they are connected in central processing. The two Hemispheres communicate information, such as sensory observation to each other thought the thick Corpus Callosum that connects them. Roger pointed that the brain's Right Hemispheres controls the muscles on the left side of the body, while the Left Hemispheres controls the muscles on the right side of the human body. In addition to that, the Right Hemispheres is mainly in charge of spatial abilities, face recognition and processing music. It helps us to comprehend visual imagery and make sense of what we see. In other view, the Left Hemisphere is dominant in language: processing what we hear and handling most of the duties of speaking. (Dietzeen, 2010).

According to some theories in psychology of Left Brain or Right dominance, each side of the Brain controls different types of thinking; for the person who is left-brained is often said to be more logical, analytic and objective, while the person who is right-brained is said to be more intuitive, thoughtful and subjective. A clinical perspective is also evident that the Right Hemisphere is specialized in visuospatial, spatial function attention and spatial working memory. Whereas, Left Hemisphere is specialized in language and verbal functions.(Hugdahla,&Westerhaussen,2010,p14).

In the light of brains' function, Thoranes is the person who mentioned the functions of each side of Human Brain from his studies and experiences; he evidenced that the two sides of the Brain has own functions which we mentioned some of these functions in the table below: (Bent Mohmed soliman, 2006)

Left Hemispheres	Right Hemispheres
1- Reading for details	1- Reading for main ideas
2- Search what is fact or real	2- Thinking on images and non-real things
3- Retain names, words and dates	3- Remember images, imagination and faces
4- Verbal thinking, logical thinking	4- Forecasting by intuition
5- Communication to prediction in an orderly	5- Invent stuff and methods
6- Manner	6- Dealing with several things at one time
7- Dealing with one thing in the same time	7- Find discipline unconfirmed
8- Rely on what other are saying accuracy	8- Writing fiction
measurement, verbal description of thinking	
9- Logical things working in world and deed Analyzing ideas, check	9- Analyzing body language
10- Remembering learning only	10- Summarize educated information
11-Thinking while sitting	11- Thinking while recumbence

Table 01: The function of Two Hemispheres (Bent Mohmed soliman, 2006, p26)



1.3. The Language of The Brain

The Brain is a soft mass of supportive tissue and nerves connected to the spinal cord. Some of the nerves in the Brain go Right to the eyes, ears and other parts of the head. Other nerves connect the Brain with other parts of the body through the spinal cord to control personality senses and body functions from breathing to walking.

Neither so, human Brain language is either English or French; also neither spoken nor the written words. Buzan (2006) sees that Brain works by using their senses and thus creating association between images, colors key words and key ideas. According to scientists who have made some progress in taking an objective, direct look at the human brain. They pinpointed that the Brain works through visual information and the human brain is very different from a computer whereas a computer works associatively as well linearly- comparing integration and synthesizing as it goes. Association plays a dominant role in meanly every mental function and words themselves are of no exception. Every single word and ideas has numerous links attaching it to other ideas and concepts. Buzan (2006, p25) adds that imagination and association are connected to whole brain activity. The imagination is stimulated mainly when you use: senses, exaggeration, rhythm and movement, color, laughter, pictures and images; while the association is stimulated mainly when you use: number, words, symbols, order, patterns, and images. Mind map that includes these important factors will encourage the Brain to associate and imagine.

In addition to the Brain that thinks and remembers in images, unlike the most of people believe that the Brain thinks in linguistically way ,but it is the opposite. If you think in any piece of information or anything; for example; a tree, you will directly imagine the picture of the tree rather than the letters that compose the word "tree" with a certain colors and shapes.

1.4. Radiant Thinking

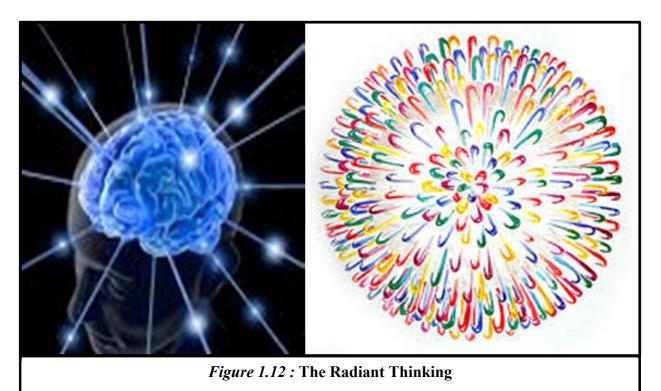
As we mentioned above, the Brain does not think on linguistic or linear way. The Brain works in a non-linear fashion; it is often making connections to a central concept or idea seemingly at random. These thoughts can "radiate" out from a central concept in dozens of directions. Methods to describe and enhance this kind of creative thought can be grouped under the term "radiant thinking." This method is the opposite of linear thinking, which attempts to generate ideas or come to a solution in a linear or step-by-step process.

Radiant thinking is a term coined by Tony Buzan, and most fully defined and described in his book on Mind Mapping. Radiant thinking in many ways emulates patterns found in nature. If radiant patterns are natural, then it follows that radiant thinking may be an instinctive way of developing and defining ideas within the mind. Also, Radiant thinking from the word 'to radiate' meaning to spread or move in directions from a given center; this refers to the associative thought processes that proceed from or connect to a central point. In the Brain, thoughts radiate outward from a key word like the branches of a tree or the blood vessels that emanate from the heart. (Buzan, 2002)

To describe Radiant Thinking further Buzan notes what happens in your Brain when you taste a ripe pear, smell flowers, listen to music, watch a stream, touch a love one, or simply reminisce. The answer is most simple and yet amazingly complex. Each bit of information entering your brain – every sensation, memory or thought, can be represented as a central image or thought which radiates tens, hundreds, thousands and millions of hooks. Each hook represents an association and each association has its own infinite array of links and connections. For some of researcher who view that Radiant Thinking is not natural for the mind to work in any other way, yet many people believe that the mind works in a straight line way of thinking. Our mind is made up of a huge network of

associated thoughts, and we can take advantage of the hierarchy of those thoughts by using the concepts of "radiant thinking". Also Buzan adds that in radiant thinking each thought radiates from its center and extends from that center in 360 degree. Furthermore, radiant thinking extends spherically on an infinitive number of spherical points, each radiant, potentially, infinitively; this mean that when the brain receive a word, this word extend to many meaning as the actin of the sun that surround the center, like the meaning that radiant from a word , the infinitive number of this meaning will be surround the word. (Knee,2013,p174).

A Mind Map is therefore a manifestation of the infinite number of infinitely radiant thought. A Mind Map incorporates the internal universe of infinity of infinite thought.



2. An overview about Mind Map

The natural world is forever changing and regenerating. Therefore, the people think about away that helps them to put a plan in their life and solving problem that may face them during life. So, the human mind is miracle in itself; they are born with special "brain-programs" to be able to learn and memorize everything you experience during your lifetime. They have one "brain-program" to remember special occasions, one program that remembers pictures, one that remembers structures... etc., also, it helps people to achieve their success as effectively as possible and to out a proper plan that they want to accomplish.

Mind Map is a tool that can help people to plan effectively, to manage their information, to increase potential for personal success. Buzan(2006) defines Mind Map as dynamic and exciting tool to help all thinking and planning become a smarter and faster activity. This tool enables everyone in different professional life as problem solving, teaching, revising, managing time and recall memories. Mind Mapping simply optimizes the power that you already have in your mind. Mind Maps are also a great cognitive tool that can be used to arrange and organize information when studying or presenting students with a new topic. It is a great tool for summarizing information and group events that are related to each other. This technique is an effective way to enhance creativity. In order to fully flesh out a Mind Map as it relates to a particular concept, you will have to think creatively.

Mind Maps are a great addition to the area of data visualization. They can be used in any situation where complex thought must be involved; it offers an option that encourages creativity while talking about important tasks. In addition, this spider diagrammed is especially useful in schools, universities and other forms of training and

education that assist students in understanding the relationship between different ideas.

Also, it helps to communicate their ideas quickly and consciously in a diagrammatic way.

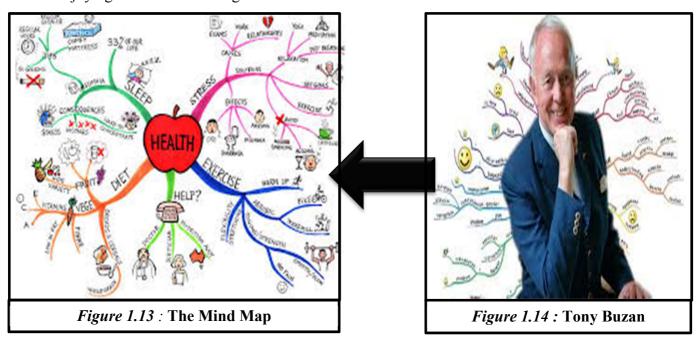
2.1. Concept of Mind Map

Mind Map is an organizational graphic technique that can be applied to all aspects of life where improved learning and clear thinking will enhance performance and effectiveness. In fact, it is non-linear way of organizing information; a technique that allows the capture of the natural flow of ideas.

Tony Buzan, the founder of the Mind Map technique, who defines this tool as a key to unlocking fact, ideas and information, also to releasing the true potential of our amazing mind(2006).whereas, Knee(2013,p183) states that "a mind map is a powerful graphic technique that provides a universal key to unlocking the potential of the brain. It harnesses the full range of cortical skill: word, image, number, logic, rhythm, colour and spatial awareness in a single, uniquely powerful manner. In so doing, it gives you the freedom to roam the infinite expanses of your brain". Buzan and Barry (2004) knew that Mind Map is a brainy tool that helps everyone demonstrates and processing information efficiently multiplies capacities. This mean that Mind Mapping is a graphic that will encourage the brain to work in the way that faster because it is like the brain's shape in our head; the brain is in the center of our head and it support with radicles as Mind Map tool (as in figure 1-13). Moreover, Buzan(2004) has another definition to this term that he mentioned that it is colorful, visual form of note taking that can be worked on by one person or a team of people in other words, mind map depends on colors that help people to brainstorm ideas using note taking. Also, Silvina.P.H (2012) determines this technique as a technique to process, brainstorm and obtain desired results or even extraordinary ones; it means that this tool helps human to understand the ideas from this map easily, and to summarize information and group events that are related to each other.

Mind Map is an easy way to get information into/ out of your brain and it is the best way of coming up with new ideas and planning project. (Buzan, 2007,p4). Basically, Mind Map is a useful technique that helps all people to learn effectively, to improve a way that information, record support and enhance creative problem you (Riswanto,&Pebri,2012). The effectiveness of Mind Map lies on its dynamic shape and form which resembles the shape of the brain cell. Accordingly, the brain will be encouraged to word in a way that is fast, efficient and in the style which is natural.(Buzan, 2006). Also, Mohydin (2010, p4-5) defines that Mind Map is simply the best tool to involve your whole brain when learning.

The Mind Map is a technique which helps in getting information into and out of the brain; it is made up of words, colours, lines and pictures. It helps in coming up with new ideas, remembering better, saving time and energy, organizing thinking and information, and enjoying the task of learning.



Mind Map is organizational graphic technique that can be applied to all aspects of life where improved learning and clear thinking will enhance performance and effectiveness

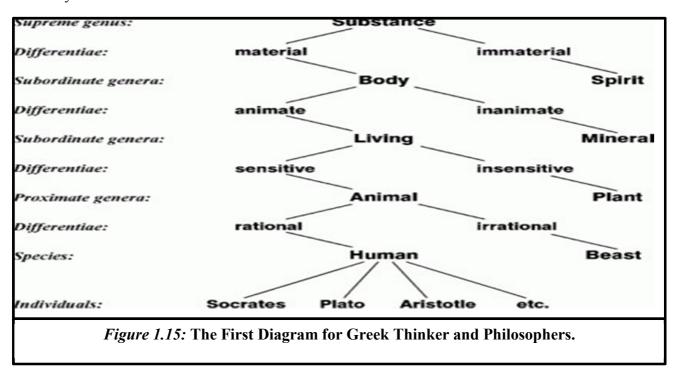
Tony Buzan is the founder of Mind Maping in 1970

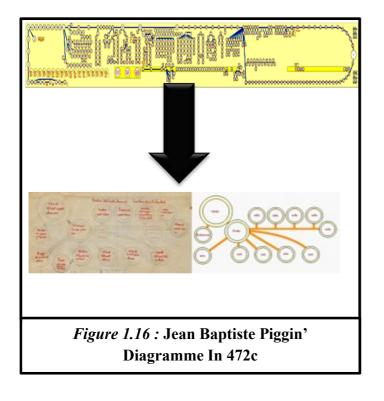
2.2. History of Mind Map

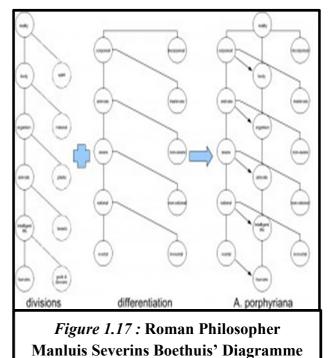
Mind map is a revolution way to top into the infinitive resource in our brain, to make appropriate decisions and to understand our feeling. Tony Buzan is the inventor of Mind Map and the world's leading authority on the brain and learning.

Mind Maps have long history dating back the third century. Early Greek thinkers and philosophers used graphic design to diagram various concepts, words and ideas that related to a central thought. Then, before 472c, Jean Baptist Pigging has a modern reconstruction that re-assembles section in the codex into a continuous chart. This is an extraordinary combination of a timeline and 15 family trees during this period. More recently, Jean developed new diagram or new modern reconstruction by the Roman Philosopher Manluis Severins Boethius; based on copies of the original manuscript "in isagagen porphyri commentum". The original manuscript is lost but the copies that are existing are considered reliable. During the 16 century, D'Auggerand invent new diagram of Radiant organization of nodes, colour and single word branches, it is so familiar to Buzan Mind Mapping. In 1957, when Walt Disney produced a visual representation of his business model and relationship between his organization units; because instead of showing the link between these units or describing the relationship between them, it shows how business units of Walt Disney Company contributes with each other activities. Whereas in 1970, Tony Buzan introduced the term "Mind Mapping" on BBC television series "Use Your Head" where this concept is represented for the first time. (walsh, 2011)

Many of researchers and scholars agree that Tony Buzan is the founder of this type of map. Tony Buzan argued that traditional outline methods don't jibe with the way people actually learn—by scanning entire pages in a non-linear fashion. He figured that mind maps were the best option, as they combined the logical and the abstract in an eye-catching way.







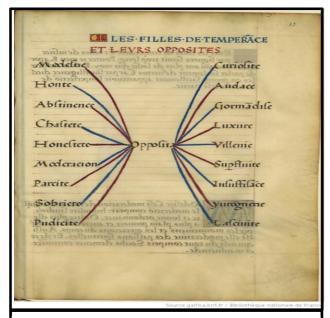


Figure 1.18: D'Auggerand' Diagramme in 16 centery

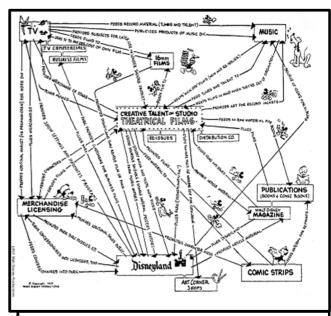


Figure 1.19: Walt Disney' diagramme in 1957

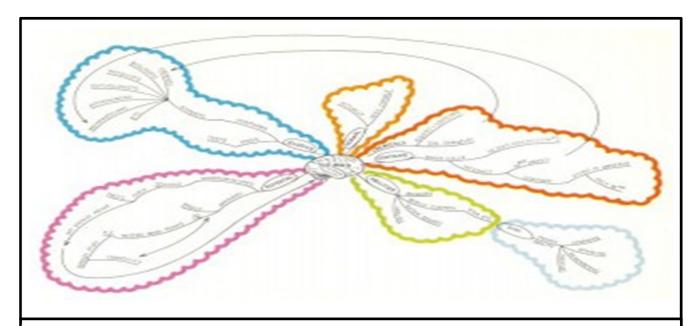


Figure 1.20: The first Mind Map by the founder Tony Buzan

2.3. The difference between Map And Mind Map

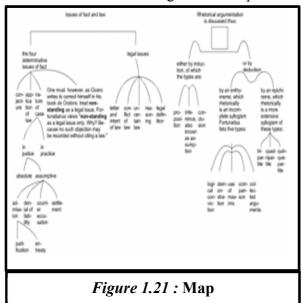
Mind map came into vague in the 1970's with Tony Buzan as their unofficial spokesman. He hasted the popular BBC show"Use Your Head" and called the bennefist of Mind Map for academic, business and personal use.

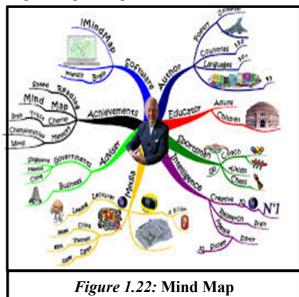
As we can see that Mind Map is an organizationnal graph not as other graphs or maps. There are differences between the concept map and the concept Mind Map. As Chuck compares between the two concepts and he states that these two types of visual mapping look very similar which tends to cause a lot of confusion among people who are just learning about them whereas the differences are: for the Maps are commonly used to organize and represent tact knowledge, he means unspoken knowledge. Also, it usually contains a general concept at the top of the Map, with a more specific concept that is arranged hierarchically below. Maps have connector lines usually contain key words or phrases that summerize the reltionship between the topic they connect. In contrast, Mind Maps are tend to be more flexible and personal than concept map. Secondly, it is used to slice dice the map's central topic or concept in multiple ways; which means that mind map has central topic and this topic is expanded to subtopics that are related to the main one. Moreover, it may contain images and colors to make them more visually stimulating.

According to Beavers(2014) Mind Mapping and concept mapping are ways to visually represent information and ideas though often used interchangeably, educations define them in distinct way. A Mind Map is spontaneous way of showing the association between ideas. A concept map is a more deliberate and structured way of representing the relationship between ideas. Also, Maps usually contain several ideas articulated in words and images whereas a Mind Map contains arrows drawn between association ideas. While Consulting and Duffil (2013) agree that concept Map and Mind Map often get mistakes for

each other. Map are designed for conveying knowledge; in other side, Mind Map are better to capturing information.

Mind Map differs from concept map in focusing on only one word or idea; whereas, Concept Map connects multiple words or ideas. Also, concept map typically has text labels on their connecting line and arms. Mind Maps are based on radiat hierarchies and tree structures denoting relationship with a central govering concept.





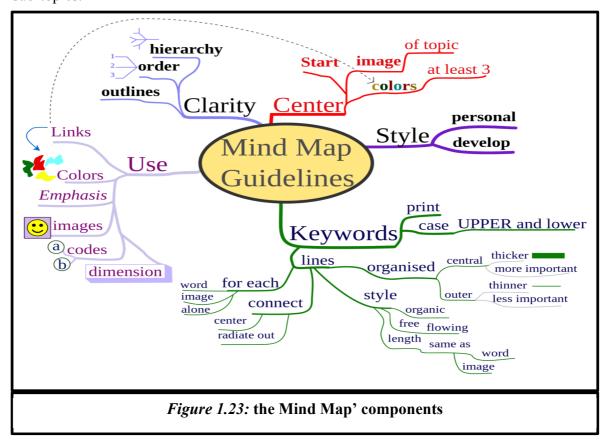
2.4. The components of Mind Map

Mind Map provides with rich features to create meaningful instruction of your ideas, plan and strategies. Each individual's Mind Map is a unique reflection of their interpretation of the world, colored by the own experiences, inside and style While everyone's output may vary. This kind of map builds using some of basic elements in order to be an effective Mind Map.

Mind Map is made up of words, colors, lines and pictures by using three main tools kit: paper to draw the Mind Map on it, colored pens because this diagramed based on different colors, also the brain in order to recognize your ideas from center idea to other

one (Buzan, 2003). Deutch (2009, may 26) assumes that this spider diagram follows to certain elements to build a meaningful Mind Map that can be summarized in 10 elements. First, the central topic which is typically the key or the title of your map. Second, main topic: main ideas that define the topic. Third, subtopic details about the main topics. Fourth, callout topic is referred to supplementary information about a specific topic. Fifth, floating topic is an additional general information about the topic; sometimes used as a parking lot for uncategorized ideas. Sixth, relationship arrows are visually link related topics. Seventh, boundaries are to highlight branches within your map. Eighth element is referred to markers: icon tags that allow you to code you map topics. Nineth, notes are stored information details about your central, main or subtopic. Finally, hyperlink and attachments are linked to web site, other topics and files directly from your topics. Map man pointed that creation of Mind Map is based on certain components which consist as fundamental of Mind Map: the first component is made up of words that the Mind Map will start with one word or central concept. Then, it will expend using other words that should relate to central concept. The second one is the lines that are the connectors of Mind Map; they also help to highlight the words that you are using to expand the central concept. The third one is the shapes which can be used with words or in place of them on the Mind Map. The fourth element refers to the symbols and images because a Mind Map is a visual tool, it's important to incorporate symbols and images with the word, shapes and lines. The final part is the colors; make sure that you use different colors in this map. Colors can be used to group and highlight ideas and concepts while you are creating the Mind Map.

In fact, all Mind Maps begin with a main concept or idea and the rest of the map revolves around, so choosing that idea or topic is the first step. Begin by creating an image or writing a word that represents the first main idea, Create branches, and then create subbranches. It's helpful to use different colors and images to differentiate the branches and sub-topics.



2.5. The advantages of Mind Map

A Mind Mapping is a diagram used to visually outline information. A Mind Mapping is often created around a single word or text, placed in the center, to which associated ideas, words and concepts are added. Major categories radiate from a central node, and lesser categories are sub-branches of larger branches. In addition to the shape of a Mind Map which looks like the brain cell, the Mind Map helps the brain use all the range of cortical skills that we have spoken about above, since we use in it colors, words, numbers, lists, dimensions, logic and so forth.

Mind map is beneficial to all people in different fields which has many benefits: it gives you an overview of a large subject/broad topic and allows you to represent it in a

more concise fashion. Also, it encourages you to see a bigger picture and creative pathways. Mind Map can enable you to plan/make choices about the selection of resource materials you have for an assignment and where you are going to place it. This tool is providing you with a more attractive and enjoyable format for your eye/brain to look at, muse over and remember. (2014). Another thing about the Mind Map is that it utilizes the human language that everyone speaks regardless of his or her nationality; this language is imagination and association; if you hear or read about anything, you will use inevitably imagination and association; in Mind Maps clear and appropriate associations are made between key words.

Furthermore, the Mind Map uses hierarchy and categorization which put the primary ideas in place so that the secondary and tertiary ideas can follow quickly and easily to facilitate a harmonious thought structure. (Buzan, 1994). Some of scholars add that the main benefits in the use this technique are the following: the process of creating a Mind Map is more interesting and entertaining than a standard chart or table; in addition, their visual quality permits users to highlight and review key points easily and more quickly than with standard sets of notes they also facilitate recall, because the association of ideas mirrors the way the brain works; and they help groups to make sense out of things and help to establish priorities. In note taking, Mind Maps help saving from 50 to 95 per cent of the usual time by noting only relevant words; it saves also more than 90 per cent of total time when reviewing Mind Map notes since one does not have to look for key words amongst unnecessary verbiage; accordingly the concentration on real issues is enhanced. One more thing is that the mind thinks in images, and the Mind Map is an image, so the brain finds it easier to accept, remember and recall visually stimulating, multi-coloured and multi-dimensional picture which is a Mind Map.

Buzan (2011) evident that "by understanding the way the brain really works and applying the Laws of Mind Mapping to organize and develop thinking, Mind Maps allow people to: Plan major projects and other activities in a fraction of the time normally needed, Capture and comprehend vast amounts of information relevant to their focus for study, Work creatively individually and in highly collaborative team, Generate winning new ideas related to the task being worked on.

Conclusion

As we overview that the brain is as magic organ that it is the boss of our body where it able to think and remember in nonlinear way. Also, it has the ability to create an infinite number of ideas. A mind map is the mirror of the activity of the brain by being organized in radiant way, thereby triggering creative thoughts and memories. The Mind Map presents itself as the suitable tool which enables the individual to invest his intellectual capital in a much easier, and a far more productive way. Making a Mind Map requires the knowledge of the different steps and the different principals of Mind Mapping.

Chapter two

Mind Mapping as Teaching Technique

Introduction

Teacher is a candle light in the classroom which h/she can take several roles in the stage, the first role as facilitator which h/she should adopt a technique that helps learners to understand a lecture. Mind Mapping technique is one of the tool that can the presenter use it. In This chapter, we are going to touch about the teacher' meaning and his/her roles in the classroom. Moreover, we will define Mind Mapping technique and its benefits in teaching; also, we will devote to find the relation between the listening skill and Mind Mapping technique.

1. Lights on Listening Skill

Success in communication begins with willingness to communication. It is important to get communication off to a good start and we can do this by having a positive attitude and a clear idea of what we want to communicate. We only see the outer appearance of the inner process of the person with whom we are communicating with, we cannot see the inner reactions, thoughts or judgments that are happening. All we hear is what the person chooses to say. Initial contact is the foundation for all subsequent communication. Listening is the foundation and everything is built on this.

Listening is one of the most important skills in language. Listening is a complex process and integral part of the total communication process, it is often ignored. This means that most of learners do not prefer to master listening skill that h/she find it more difficult than the other skills. This neglect results largely from two factors: first are speaking and writing are highly visible, and are more easily assessed than listening and reading. Second, many of us aren't willing to improve our listening skills. Much of this unwillingness results from our incomplete understanding of the process could help and

show us how to improve. In fact, Listening is not the same as hearing; the difference between hearing and listening can be stated this way: Hearing is the reception of sound, listening is the attachment of meaning to the sound. Hearing is passive, listening is active.

Simply having good hearing does not make one a good listener. Many people who have perfectly good hearing are not good listeners. Effective listening implies that the listener understands what the speaker means.

1.1. Definition of Listening Skill

The process of language teaching can be subdivided into two major stages: the input stage and the output stage. Receptive skills in which people extract meaning from the source they read or hear, belong to the input stage. Based on the input received, they will speak or write their thoughts. This phase will belong to the so called output stage of language learning. Language skills can be classified according to the medium as well: listening, speaking and interpreting belong to the oral skills, while reading, writing and translating can be categorized as written skills. While listening, speaking, reading and writing are simplex skills interpreting and translating presuppose several sub-skills so they are usually defined as complex skills.

Listening skill is under to receptive skills that defines as the process of receiving, attending, and understanding auditory messages; i.e., messages transmitted through the medium of sound. Often, the steps of responding and remembering are also included.(Kline, 1991). Sarasdy & al (2006) pointed that Listening is the skill that children acquire first. When students start to acquire a foreign language, they can pick it up in many ways. They have a lot of extracurricular sources (songs, films, native speakers, etc). Also, Lynch & Anderson (1988, p6) agree that listening is reciprocal skill which involves a large number of component skill. Effective listeners actively engaged in the

process of comprehension: they apply the relevant internal information available to them in order to contrast their own interpretation of what has been said. Also, it is as the neglected, overlook, or taken for granted skill, in other word, most of learner do not give an importance to this skill because some of them see that listening skill is very difficult than the other skill whereas the other one see that it is not important in target language. Certainly, some EFL (English as Foreign Language) methods have assumed that listening ability will develop automatically through exposure to the language and through practice of grammar, vocabulary and pronunciation. (Hedge, 2000).

There are two roles in communication: listener and speaker. The listening skill is the basic skill of communication; we often take listen for granted; however, to be a good listener take a lot of practice, but thankful this skill of listening can be learned.

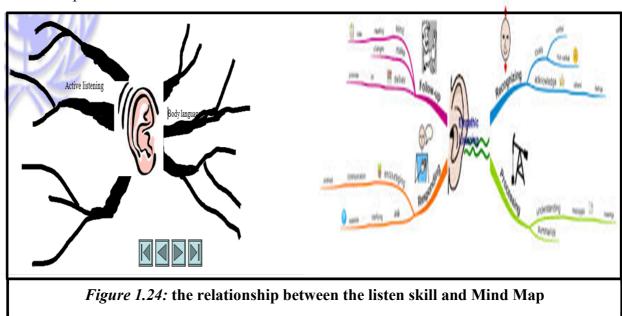
1.2. Listening skill and Mind Map

Listening is the process of hearing, identifying, understanding, and interpreting spoken language continued to receive considerable attention from researchers in the fields of speech, psychology, sociology, and linguistics. Listening is of essential importance in learning a foreign language, in that it comes before speaking, reading and writing in the development of all communication skills. Improving listening comprehension is usually a complicated problem. Both educators and learners are trying to attack the problems. Many of researchers view that listening and understanding speech involves a number of basic processes, some depending upon linguistic competence, some depending upon pervious knowledge that is not necessarily of a purely linguistic nature, and some depending upon psychological variables that affect the mobilization of the competence and knowledge in the particular task situation. The listener must have access to a set of

listening strategies in order to listen, understand, process, and remember the information transmitted.

Listening is a skill that should be taught since eighty percent of what you know is learned by listening. This packet contains specific recommendations to help you listen to a lecture more efficiently. Efficient note taking is necessary for students to have a record of lectures for future study and review. Accordingly, Dees .J, Dees .E (1969) claim that there are common strategies that underline listening comprehension such as comprehension questions, true/false statements, multiple choice questions and matching. These are strategies which can be used to exploit a listening passage. Note taking is one way to enhance listening because you are using a systematic approach to take and review your notes and this can add very much to your understanding and remembering the content of what the teacher has said in class. As Akbarnejad (2014, p417) knew that in teaching English for academic purpose, note taking is considered as an important macro-skill in lecture-listening comprehension process is a popular and useful form of selective listening. The Mind mapping method enables students to organize their notes by categories and relationships while mapping. Also, he adds that Mind mapping, developed by Tony Buzan in 1970, is a method that uses comprehension concentration skills to create notes which relate each fact or idea to other fact or idea. Mapping creates a graphic representation of a lecture's content. Because these techniques are diagrammatic, they provide listeners with the ability to capture a lot of information on a single page. Many people around the world, including managers and students, have said that they find the techniques of mind mapping useful, being better able to retain information and ideas than by using traditional "linear" note taking methods. Many of teachers or learners doodle when they are listening to a talk or presentation. Rather than being a distraction, doodling can actually help concentration.

A Mind Map is an organized doodle can be very useful for example; Imagine that you are listening to a talk on 'The Art of Listening'. This main subject is represented by an ear.(See below) Radiating from this central image, you can draw some branches like lines, and print on each important element of the listening art for e.g., 'body language', or 'active listening'. From each of these initial branches, you would radiate off others, developing each concept.



Current knowledge about the ways in which the brain works shows that thinking is not linear. Individuals can better understand concepts when they have visual representations or by listening to those ideas. Mind Mapping has proven to be a good technique for memorizing creative thinking, and learning. Because it helps the learner to create thinking and put images in their mind while the speaker presents the lecture, moreover to take notes. The most of the students think in imagination and association eg, when the teacher says a car; in their brain put the shape of the car not the word that combine it. Therefor; when the teacher presents the lecture, the learners listen what the mentor is saying and they imagine what he or she says and they translate this words to images in order to understand the topic. When the listener cannot draw a clear image about what the speaker talk about, they cannot understand it. In this way, the relation between

Mind Mapping and listening take, Mind Mapping helps learners to take notes with success when the speaker talks.

2. An overview about Teacher

Education has always been awash with new ideas about learning and teaching. Teachers and administrators are regularly bombarded with suggestions for reform. They are asked to use new curricula, new teaching strategies, and new assessments. They are directed to prepare students for the new state standardized test or to document and assess students' work through portfolios and performance assessments. They are urged to use research-based methods to teach reading and mathematics. In all education science, the teacher is the enabler, the inspiration and also the constraint.

Patient, knowledgeable, dedicated these are words that come to mind when describing a teacher. Some of researcher's definition painted a picture of the teacher and student working together: "The teacher is a midwife at the birth of an idea." Through the ages, great educational thinkers have offered the same piece of advice that at first seems like a paradox: you can't teach anyone anything the students have to teach themselves. Nowadays, effective teaching is considered as "hard currency" due to the qualities of the teachers themselves. Well teaching means well knowledgeable and well skilled students; especially, in higher education levels such as universities. This hard process needs crucial methods in order to transmit the information as it should be. Understanding the lesson and achieving the goal of students are the most of challenge to the teacher during his or her teaching. Additionally, effective teaching means the ability to provide instruction to different students of different abilities while incorporating instructional objectives and assessing the effective learning mode of the students and also to provide effective tools or technique according to the nature of the students.

Teacher technique has the most influence in student performance and processing the data of the lesson. These educators should provide appropriate technique that helps the learners to interact and corporate with him or her. A variety of maps, photographs and technology tools are necessary in today's education activities. "Mind Map" is one of the techniques the teacher can adopt and implement in teaching.

2.1. Definition of Teacher

Classroom management is frequently conceptualized as a matter of control rather than as a dimension of curriculum, instruction, and overall classroom climate. The classroom climate is influenced by the teacher who approaches classroom management, as a process of establishing and maintaining effective learning environments, and as a multilateral ambience, tend to be more successful than others who place more emphasis on their roles as authority figures or disciplinarians since classrooms are composed of numerously different personal views, characteristics, ethics and values.

The teacher has a major impact on pupils' motivation and attitude towards learning, that is to say, for teachers, having been equipped with pedagogical and professional characteristics would not be enough to establish a positive, learnable, and teachable classroom climate. Therefore, the concept of teacher is defined by many of specialist in educational domain and they pointed the reality of what's mean Teacher. Harmer (2001) pointes that teacher use many metaphors to describe what they do. They sometimes say that they are like actors because they are always on the stage. Others think they are like orchestral conductors because they direct conversation and set the pace and tone. Yet others feel like gardeners because they plant the seeds and then watch them grow. The range of images that teachers use about themselves indicate the range of views that they have in their profession. Kumaravadivelu (2003) claim that teacher is the role-play of

education and it is as an artist and an architect, a scientist and a psychologist; a manager and a mentor; a controller and a counselor; a sage on the stage; a guide on the side and more. Whereas Corps (p9) views that Teacher who is courteous, enthusiastic, in control, patient, and organized provide examples for their students through their actions. For example, if the class is getting too loud, don't shout to be heard, speak at a normal volume so the class has to be quiet to hear you. In addition to that, Marzano (2007) adds that the teacher can consider what he or she will do to establish and communicate learning goals, track student progress, and celebrate success, it means that the teacher is the one who can achieve students goal in learning and who can take them to success in what the learners want to reach. Thus, Saleemi Dean(2003,p3) sees that the teacher is the person who can success in different learner situation: To a mind of flint, the teacher must be iron, and strike sparks. To the empty pitcher, the teacher becomes a well presenter. Whereas to the fallow mind, a planter of seeds. To the cluttered mind, a gardener to weed, shape, and clear a space for growing. And to the lens, the teacher is light, and to the mind of light, a lens. To the sleeper, the teacher is the wake-up call of birds at sunrise. For learner clay, the teacher is potter, sculptor, and trainer in self-shaping. To the wanderer, the teacher is a knowing guide. To the developed mind, the teacher is colleague, listener, and friend.

A teacher is an adult with certain qualifications who 'shows' children knowledge in a broader sense of the word, we are all teachers. In daily talk, whether we find it tedious or boring, whether we talk animatedly and listen with eyes wide, whether we yawn and wish we could go to the pub, we teach each other: we 'show' each other things. And thereby we learn, and teach. Every relationship – father–child, friend–friend, publisher–writer, and inspector–teacher – is a two-way educational relationship.

2.2. What is Teacher Attitude

It can be said that one of the most prolific areas of research teacher education is that having to do with attitude, disposition or beliefs. The term attitude can be defined as individual mental processes which determines both the actual and potential responses of each person in the social world, in other words, it is a cognitive, affective and behavioral response which is organized on the basis of experience and knowledge, to the individual's himself/herself or any object or event around his/her environment. (Akbulut, &Karaku,2011, may21)

Gilakjani also defines the attitude as "a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols". In the educational environment, attitudes expressed by teachers as well as students play an important role in the achievement of educational objectives. In addition, The word attitude is defined within the framework of social psychology as a subjective or mental preparation for action. In other definition, attitude can define outward and visible postures of human beliefs. Attitude determines what each individual will see, hear, think and do. According to them, attitude means individuals prevailing tendency to respond either favorably or unfavorably to an object (person or group of people, institutions or events). It can either be positive or negative.(Odiri,2011, April,p18)

2.3. Teacher Technique

Effective classroom teaching requires professional commitment. Although exciting experiences may occur spontaneously, such happenings are the exception, not the rule. If teachers are to sustain a success-oriented environment by promoting student learning throughout the academic year, they must continually and thoroughly address the teaching

act, which is founded on the planning and implementing of instructional activities and the assessing of student performance.

Teacher should provide the tools that will enable in-service and preserve teachers to plan, implement, and assess effectively. In doing so, teachers will constantly make decisions about goals and resources needed to facilitate standards and reflect on whether those goals were met. Teacher has a multiple type of the techniques or tools that can be adopted in the classroom in order to facilitate the curriculum. Ferryman presents several teaching methods: The grammar-translation method, the direct method, the audio-lingual method, the silent way, Total Physical Response, Communicative language teaching.

Grammar-Translation method: this first method is based on an exchange of the knowledge of the student's mother language and the new language's one. It is useful for literature situations, it means, basically, for written texts, comprehension. Second method, The Direct Method This second method we are about to explain, differently from the one we have just discussed, has one basic rule (2008). Whereas, Harmer suggests that audio-lingualism owed its existence to the behaviourist models of learning, using the stimulus, response, and reinforcement model, it attempted through a continuous process of such positive reinforcement, to engender good habits in language learners. Audio-lingualism relied heavily on drill to form these habits: substitution was built into these adults, so that, in small step, the student was constantly learning and moreover was shield from the possibility of making mistakes by the design of the drill.

The silent way is one of the most notable features of the silent way is the behavior of the teacher who rather than entering into conversation with the students, says as little as possible. In this method learners interact with physical object too, especially Cuisenaire rods. There is a problem solving element involved too, since students have to resolve language construction problems for themselves. While the community language learning: in the classic form of this method, the students sit in a circle. It is up to them to decide what they want to talk about. A counselor or a knower stands outside the circle. The knower provides or corrects target language statements so that if a student says something in their own language, the knower can then give them the English equivalent for them to use. The last method that the teacher can provide in classroom total physical response. James Asher worked from the promise that adult of second language learning could have similar developmental patterns to that of child language acquisition. If children learn much of their language from speech directed to them in the form of command ways too. Accordingly, TPR asks students to respond physically to the language they hear. Thus, Language processing is matched with physical action.(2001,p50).

It is important to realize that teachers need to know different approaches so that he or she can choose the one that makes teaching more comfortable and the learning process easier for the students.

2.4. Characteristic of Good Teacher

Effective learning is strongly related to effective teacher and effective teaching. In this concept, teachers' characteristics gain crucial importance in understanding and lessening the problems and difficulties hindering students' long lasting learning process. The question of what makes a good teacher has resulted in an endless stream of ideas, opinions, and theories. Many authors who discuss what makes a good teacher have produced lists of what they consider to be important variables. Different definitions of teaching, the different ideas and traits that make up character, different environments and different students can all affect teaching proficiency.

There are countless views on what is involved in being good at teaching, this account will be stricter to summarizing the points. Morgan (2003, September 18) views come from personal experience and observation rather than educational theory and he offers 10 suggestions: firstly, good teachers who really want to be good teaches means that they try very hard and, if they let their students know they are trying hard, their students will respect them for that. If they see that you really want to teach well then they will be prepared to help you with that. However, they will not forgive you if they get the impression that you don't care about your teaching. Secondly, good teachers take risks: they set themselves impossible goals then scramble to achieve them. It is exciting to try things that may fail; if you succeed then you have accomplished something and if you don't succeed then you have learned that you need to make some adjustments. Thirdly, Good teachers have a positive attitude; in other word, good teachers try not to be cynical or negative about their students or else cast themselves as victims. We need challenges and there is none if all we have are smart, self - motivated, hard- working, wide- awake students; these don't really need to be taught. Fourthly, good teachers never have enough time; they prefer to be busy and know that the work of good teaching expands to fill every moment they can give it. They spend the most hours in their office for students to visit and they get a lot of visits, they put the most effort into providing students with feedback on their assignments, they are most in demand for committee work, they put the most work into their class preparations. Fifthly, The following idea is good teacher's think of teaching as a form of parenting Chris means that Good teachers tend to find the caring that goes into their teaching feels a lot like the caring that goes into parenting. It means knowing when to stand firm on a deadline or a standard of excellence, and when to bend or apologize. (2003, September 18)

As Morgan adds the six point that good teachers who try to give their students confidence. Our students will likely get along fine without knowing much about the subject matter we teach: The process we take them through such as having them say something worthwhile clearly, forcefully and with a proper marshaling of evidence that will give them confidence in their ability to take on tough assignments. Seventhly, good teachers try to keep students and they off balance which means good teachers detest stagnation and look for fresh challenges for themselves. They also like to have their students take on challenges that they are not at all sure they can handle. They like to move their students beyond their comfort zone to challenge their confidence so they can earn a new confidence. Eighthly, Good teachers try to motivate students by working within their incentive system: you can point out your students that many business executives have majors in the liberal arts. That background has given them the advantage of being able to synthesize things, how to explain things to others, how to persuade others to their point of view, and how to understand the people that make any business work. Before the last, good teachers do not trust student evaluations; they do tend to get very good evaluations, but they focus on the one or two erratic evaluations that say something negative about them. They ask myself what they did wrong for those one or two students. Finally, good teachers listen to their students. Those who have asked their students what makes a good teacher have been told that they are accessible, available, approachable, enthusiastic, energetic and excited.

In descripting a good teacher, Dincer & all (2013,p3) suggests that a characteristics of a good teacher can cite four main features related to an effective English language teacher will be mentioned namely; socio-affective, pedagogical knowledge, subject-matter knowledge and personality characteristics. The first characteristic is Socio-Affective Skills which mean that teachers have some basic socio-affective skills to interact with their students and maintain the educational process effectively. These skills include a wide

range of items such as motivating students, sparing time for students when they ask for help, being enthusiastic for teaching, having positive attitudes towards students, responding to students' needs and providing a stress-free classroom atmosphere. Many of perspectives and educators view that the relationship between teachers and students is one of the most striking features; also highlight the importance of establishing and maintaining positive relationships with students. While the second characteristic is Pedagogical Knowledge; in order to conduct any kind of job properly, one should have the knowledge of how to do it. S/he should be aware of the procedures and the strategies to follow in the process, which is pedagogical knowledge. They define pedagogical knowledge as what teachers know about teaching their subjects, they also claim that without pedagogical knowledge teachers cannot convey what they know to their learners. During their studies, they show that students prefer their teacher to have the knowledge of how to teach in order to deal with the affective domain. To deliver the content in the best way, an effective teacher needs both field specific knowledge and knowledge of how to present it. Whereas the third characteristic is Subject-Matter Knowledge .Another main area that attracts attention is the subject-matter knowledge which teachers should possess regarding their specific field. To make a general definition of this notion they regard the subject matter knowledge as what teachers know about what they teach and they suggest the use of subject matter knowledge in different phases of the educational process such as using target language effectively in class, integrating lessons based on students' backgrounds and preparing effective lesson plans. Subject matter knowledge enables teachers to make use of audio-visual materials when possible, guide students to get some learning strategies, teach a topic in accordance with students' proficiency levels, and watch and inform students about their progress in language learning. Personality Characteristics is the fourth characteristic of a good teacher, people who work in any profession indispensably bring

their personal characteristics in the working environment. This is also valid for teachers who not only are human beings but also deal with human. Personal qualities of an effective teacher should be as follows: being challenging and having reasonably high expectations, having sense of humor, being enthusiastic and creative. To this list, other studies have added being tolerant, patient, kind, sensible and open-minded, flexible, optimistic, enthusiastic, having positive attitudes toward new ideas, and caring for students as characteristics necessary for being an effective teacher.

Teacher effectiveness is a cliché term in general education domain and there are many useful publications such as magazines, journals, books, papers and internet websites which you can easily reach with a little effort. most of the educators and scholars agree with the idea that teachers are inseparable parts of education and they have highly significant roles in the quality of teaching and raising successful learners, it would be better to talk much about the attributes of effective language teacher in terms of popular perspectives in order to increase language learners' academic achievements both inside and outside the class. According to different definitions for an effective teacher; many of researchers suggest various characterics of a good teacher according to their angle.

2.5. The Role of Teacher

Teacher has a great role in the educational process that is vital educational than to call him to get away from the traditional role and not to have a bowl of information, but its role is to guide the students when needed and without excessive intervention and planning to guide them and to help them to discover the facts of science. The concept of "role" has become very popular in ELT and this term in common usage to denote the function that teacher and learners perform during the course of a lesson. In the social setting of the classroom, teachers' and learners' expectation about what are appropriate functions in

various learning tasks will determine the role that each performs, and these will be culturally influenced.

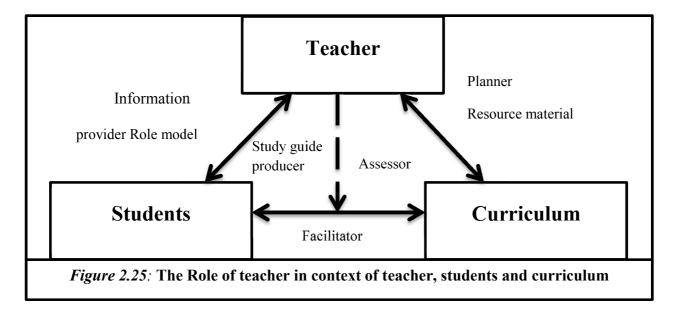
Teacher has several roles that list as controller, organizer, assessor, prompter, participant, resource, tutor and observer. As controller means that when teachers act controllers, they are in charge of the class and the activity taking place in a way that is substantially different from a situation where students are working on their own in groups. Controllers take the roll, tell students things, organize drills, read aloud, and in various other ways exemplify the qualities of a teacher fronted classroom. (Harmer, 2001)

There are times when acting as a controller makes a sense such as when announcements need to be made, when order has to be restored, when explanations are given, or when the teacher is leading a question and answer session. Indeed, teacher as organizer: one of the most important roles that to perform is that of organizing students to do various activities. This often involves giving the students information, telling them how they are going to do the activity, putting them into pairs or group, and finally closing things down when it is time to stop. It is vital important for teachers to get this role right when it is required. If the students do not understand what they are supposed to do, they may well not get full advantage from an activity, the activity is wasted. Harmer (2001)

According to Harmer who thinks that teacher can be as an assessor, what the students expect from their teachers is an indication of whether or not they are getting their English right. This is where we have to act as an assessor, offering feedback and correction and grading students in various ways. Students need to know how and for what they are being assessed. We should tell them what we are looking for and what success looks like so that they can measure themselves against this. Prompter is one of the teacher's roles, when the students are involved in a role play activity, for example, they lose the thread of what is

going on, or they are lost for words. They may not be quite sure how to proceed. What should teachers do in these circumstances? Hold back and let them work things out for themselves or instead nudge them forward in a discreet and supportive way. If we opt for the latter, we are adopting some kind of a prompting role. The next role is as participant; the traditional picture of teachers during student discussing, role play, or group decision making activities, is of people who stand back from the activity, letting the learners get on with it and only intervening later to offer feedback and correct mistakes. However, there are also times when we might want to join in an activity not as teacher, but also as a participant in our right.

Teacher is as resource. In some activities it is inappropriate for us to take on any of the role we have suggested so far. Suppose that the students are involved in a piece of group writing. Or that they are involved in preparation for a presentation they are to make to the class. In such situation having the teacher take parts, or try to control them, or even turn up to prompt them might be entirely unwelcome. However, the students may still have need of their teacher as resource. While as tutor, when are working on longer project, such as a piece of writing or preparation for a talk or a debate, we can act as a tutor, working with individuals or small groups, pointing them in directions they have not yet thought of taking in such situation we are combining the roles of prompter and resource, acting as tutor. Harmer adds that teacher can be as observer where teaches will want to observe what students do ,so that, they can give them useful group and individual feedback



3. Mind Mapping as Teaching Technique

Knowledge representation and reasoning is an area of artificial intelligence whose fundamental goal is to represent knowledge in a manner that facilitates inference from knowledge. Many teachers work hardly to achieve this goal, they use different approaches and methods in the presentation of the lesson to find more efficient and more effective ways of teaching language, also can student understand the courses without difficulties, in other words, enabling the students of a foreign language to understand the target language and communicate ideas naturally specially between learner and teacher. The classroom teacher is the one who can provide different methods or materials according to the needs of learners in his/her representation. On many occasions, teachers are required to implement strategies and resources from other fields such as psychology because this field is very interesting on student mind and behavior. All the psychologist work on student's need and acquiring a target or foreign language is one of its missions by giving all strategies and techniques that help learners acquire language in a good way.

One of the tools that teacher can adopt in the teaching of foreign language is "Mind Mapping". Mind Mapping is a cognitive technique that many teachers view that it can help

the student to understand the lesson easily and they can brainstorm the ideas individually and as group. This technique does not only show facts but also shows the overall structure of a subject and the relative importance of individual parts of it.

3.1. Definition of Mind Mapping as Teaching Technique

Mind Mapping was created by Tony Buzan, who is a renowned thinker and educator. Today, Mind Mapping techniques are used by millions of learners and executives (as Finland' teachers and learners) to enhance their learning thinking and memory capacity. it is a brain compatible technique which uses whole brain learning and is fashioned along the pattern of our human brain neural network.

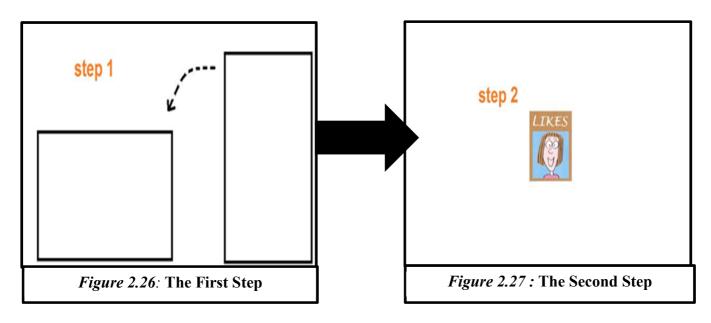
Mind map is a technique that teacher can adopt in classroom which primarily used for stimulating thought. Tony realized that the education system primarily focused on the left brain strength, which includes the use of "language, logic, numbers, sequence, detail, linier, symbolic representation and judgmental looks at characteristics. Mind Mapping is a useful technique that helps you to learn more effectively, improves the way that you record information, and supports and enhances creative problem solving. It involves writing down a central idea and thinking up new and related ideas which radiate out from the center. (Riswanto,& Putra,2012, November). Nemati & al(2014,p97) defined this technique as an expression of Radiant Thinking and therefore a natural function of the human mind. It is a powerful graphic technique which provides a universal key to unlocking the potential of the brain. They also express that using mind maps decreases the learners' stress and unhappiness caused by disorganization and helps them overcome the hurdle of the learners' block. Furthermore, they find the ability to gain new information which enhances creativity and originality. Whereas Gomes & King suggested that the mind mapping technique has become a very important part of teachers' and students' daily lives in the ESL classroom in order to empower memorization and language acquisition through pictorial organizers. They add that Mind Maps represent a task or idea in a pictorial form with a minimum of words". This means that the brain is used to relate images with concepts and specific vocabulary words and sentence constructs.(2014, april24).

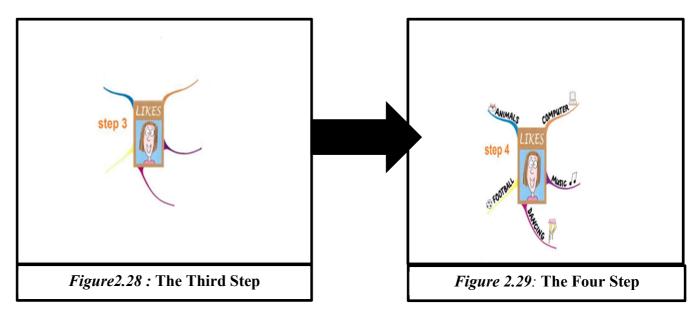
Mind Mapping technique also can define it by Polson & as a graphic technique developed by Tony Buzan in the late 1960s and early 1970s to improve note-taking, to enhance memory and problem-solving, to encourage creativity, to organize thinking, and to develop ideas and concepts, was explored in two S2 classrooms as a pedagogical tool for enhancing history education. According to who suggests that Image is a great tool to teach the child what it gets from any subject submitted to him is simply the images formed by himself on the subject, if we spend the proportion of ninety percent of our energy in the educational composition of the follow-up to the image of the child properly, the task of teaching will already be easy.(2004,april, p14).

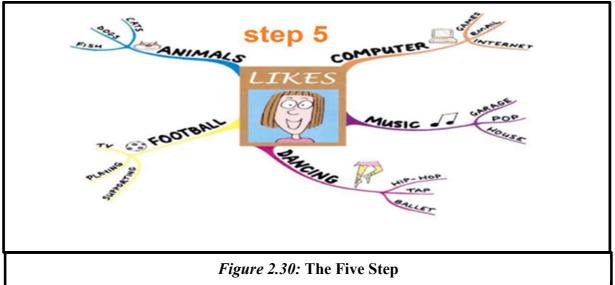
In the light of researcher's point of view; Mind mapping is a beneficial learning tool to help students brainstorm any topic and think creatively. Mind maps are particularly helpful in the writing process and provide students with a natural way of thinking and building thoughts on a story plot or theme Mind Maps also provide teachers with insight into their students' thought process regarding a specific topic. By asking students to create Mind Maps demonstrating their comprehension of a concept, teachers are able to understand what a student's prior knowledge was and how well the student understands the assignment or the material being taught. This is a very effective way of evaluating students' understanding.

3.2. The five steps

Making a Mind Map is simple; it requires five easy steps which are the following: first, the mind mapper should bring a blank unlined paper and place it sideways; second, a picture is drawn in the middle of the paper; it should be in the middle for two reasons: one, it reflects the nature of the brain's thinking process, and second, it allows thoughts and ideas to flow freely in space. The picture summarizes and represents the main subject, and it should contain at least three colours, and as the old adage says: "a picture is worth a thousand words." Three, the mind mapper would draw some thick curved, connected lines coming away from the central picture; each line represents a main idea in the subject, these branches are considered the central branches of the Mind Map. Four, the mind mapper will name each of these ideas represented by the branches, and where possible a little picture of each is drawn- this uses both sides of the brain. Words are underlined throughout a Mind map; this is because they are key words, and the underlining, as in normal notes, show the importance of these words. Five, from each of these branches i.e., ideas, other connected lines can be drawn; they spread like the branches of a tree. The mind mapper would add thoughts on each of these ideas. These additional branches represent the details. (Buzan, 2003, p. 10). These five steps are summarized in an example below:







3.3. How Brain Process

The Brain is the most complex part of the human body. It is about the size of a cantaloupe. This three pound organ is the seat of intelligence, interpreter of the senses, initiator of body movement, and controller of behavior. The human brain is a complicated, creative information-processing system. As technology advanced from primitive to modern, the metaphors used to describe the brain are also advanced. Initially, it was compared to a wax tablet, then to a sheet of papyrus, then to a book, and most recently, to a

computer. As you learn about the brain, keep in mind that the usefulness of these metaphors is limited and can lead to erroneous conclusions.

According to Johnson who affirms that information processing starts with input from the sensory organs, which transform physical stimuli such as touch, heat, sound waves, or photons of light into electrochemical signals. The sensory information is repeatedly transformed by the algorithms of the brain in both bottom-up and top-down processing. For example, when looking at a picture of a black box on a white background, bottom-up processing puts together very simple information such as color, orientation, and where the borders of the object are - where the color changes significantly over a short space - to decide that you are seeing a box. Top-down processing uses the decisions made at some steps of the bottom-up process to speed up your recognition of the box. Top-down processing in this example might help you identify the object as a black box rather than a box-shaped hole in the white background. In order to process information, the brain must first store it. (2010)

There are multiple types of memory, including sensory, working, and long-term. First, information is encoded. There are types of encoding specific to each type of sensory stimuli. For example, verbal input can be encoded structurally, referring to what the printed word looks like, phonemically, referring to what the word sounds like, or semantically, referring to what the word means. Once information is stored, it must be maintained. Some animal studies suggest that working memory, which stores information for roughly 20 seconds, is maintained by an electrical signal looping through a particular series of neurons for a short period of time. Information in long-term memory is hypothesized to be maintained in the structure of certain types of proteins. (Johnson, 2010)

Johnson (2010) adds that there are numerous models of how the knowledge is organized in the brain, some based on the way human subjects retrieve memories, others based on computer science, and others based on neurophysiology. The semantic network model states that there are nodes representing concepts, and that the nodes are linked based on their relatedness. For example, in a semantic network, "chair" might be linked to "table," which can be linked to "wooden," and so forth. The connectionist model states that a piece of knowledge is represented merely by a pattern of neuronal activation rather than by meaning. There is not yet a universally accepted knowledge organization model, because each has strengths and weaknesses. Once stored, memories eventually must be retrieved from storage. Remembering past events is not like watching a recorded video. It is, rather, a process of reconstructing what may have happened based on the details the brain chose to store and was able to recall. Recall is triggered by a retrieval cue, an environmental stimulus that prompts the brain to retrieve the memory. Evidence shows that the better the retrieval cue, the higher the chance of recalling the memory. It is important to note that the retrieval cue can also make a person reconstruct a memory improperly. Memory distortions can be produced in various ways, including varying the wording of a question. For example, merely asking someone whether a red car had left the scene of a hit-and-run can make the person recall having seen a red car during later questioning, even if there was never a red car. (Johnson, 2010)

Information processing in the brain is the topic of a large, ongoing body of research.

Although some people are fascinated by the brain on its own merits, a growing number are looking to psychology in order to better their own study skills and cognitive performance.

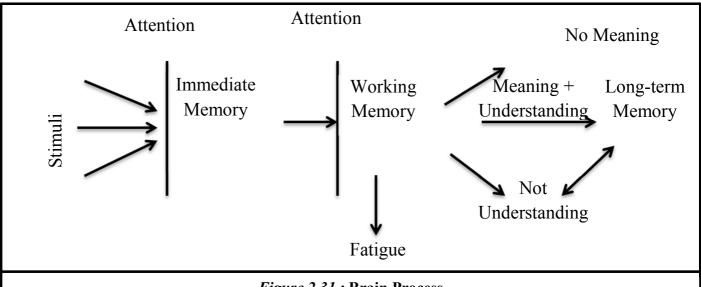


Figure 2.31: Brain Process

Benefits of Mind Mapping in Preparing a Lecture and in 3.4. **Presentation**

Using Mind maps for self-analysis is very beneficial. They make future planning easier and more accurate by putting it in the context of the individual's state; also, they provide a comparatively and increasingly objective perspective on the self. In addition, by utilizing all the cortical skills, self-analysis Mind Maps give a full and realistic picture of the individual, and they act as a permanent record, thus allowing the mind mapper to gain a truer. Also it has great advantages in educational side especially for presentation and preparing teacher lesson

3.4.1. For Preparing the Lecture

One of the most powerful ways to use Mind Maps is as lecture notes. Preparing a lecture in Mind Map form is much faster than writing it out and it has the big advantage of allowing both the lecturer and the student to keep an overview of the whole subject at all times. As a frame work for lecturing, the Mind Map enables the speaker to hold a perfect balance between a spontaneously spoken and fresh talk, on the one hand, and a clear and a well-structured presentation on the other hand. Furthermore, the Mind Map allows accurate time keeping during the lecture or, if time allows changes for some reason, it will allow the speaker to edit 'on the move' to adjust the talk to a greater or lesser length, as required. This editing function can also be very useful if some new information becomes available just before the lecture. A Mind Mapped lecture is easy to update from year to year without becoming messy and its mnemonic qualities mean that a brief overview before the lecture quickly brings the topic right back into focus. Since the lecturer's own knowledge will evolve the same Mind Map, will trigger quite different lectures if used from year to year; this avoids the tedium of stale lecture notes without requiring any extra work. Accordingly, it makes the lecturing more fun and more interesting for both the lecturer and the students or audience. (Buzan, 1994, p. 223)

3.4.2. For Presentation of the lecture

Presentations are becoming a vital part of business life today. Amazingly, a huge number of people are terrified of public speaking, ranking their fear of making speeches above their fear of spiders, snakes, diseases, war and even death! Fortunately, mind mapping helps overcoming this fear enabling the mind mapper to prepare, organize and present his or her information and ideas in a clear, interesting and effective way. The benefits of Mind Maps in presentations are of utmost importance; they increase the effectiveness of the presenter and the comprehension and entertainment of the audience. Mind Maps are beneficial in many ways; first, they increase eye contact with the audience; second, they give the presenter the freedom of movement; third, they utilize a greater range of cortical skills; fourth, they increase involvement both for the speaker and the audience; fifth, they enable the presenter to adapt his or her presentation to the needs of the audience and to time it precisely, because they make it easier to alter or expand on key

points; sixth, they result in a more memorable, effective, and enjoyable performance for both the speakers and the audience; finally, they give the presenter the freedom to be him or herself. (Buzan, 1994, p. 223)

Mind Maps are also useful in this category; they can be used for planning; management, meetings, and education. Let us take management for example, in management Mind Maps increase efficiency, productivity and enjoyment. In fact, they can be used by every individual in a business or professional organization in any situation where linear notes would normally be taken.

Conclusion

Classrooms are complex social systems, and student-teacher relationships and interactions are also complex, multicomponent systems. We posit that the nature and quality of relationship interactions between teachers and students are fundamental to understanding student engagement. The teacher is the one who can make the difficult things be easier for students. It is like the candle of classroom that can take the learners to negative or positive attitude for learning. This assessor has many roles in the classroom that change in different type of tasks as facilitator. Facilitator is one of the main roles of the teacher because he or she facilitates the curriculum to students by using appropriate methods or techniques that make students understand the lesson easily. Mind Map is one of the techniques that teacher can adopt in classroom for presenting the lesson which many of the perspectives and scholars agree that this tool can help students in learning, understanding and processing the information in a good way. As said that the whole life is just a bunch of pictures inside the brain in other word that the human brain makes images or pictures while receiving information. When the speaker talks, the brain imagine and draw an image according to topic in order to understand it.

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, this chapter is devoted to presentation and the analysis of data obtained through the implementation of the present research. The analysis concerns the data obtained from two different questionnaires, namely, teachers' questionnaire and students' questionnaire. In the first section of this chapter, we will deal with the **Students' Questionnaire** and the second section of the same chapter we will analyze the **Teachers' Questionnaire**. The collect data and the obtained result will enable us to investigate Teachers' attitude toward the use of Mind Mapping technique in his/ her teaching and whether this tool is prefer from the students during their learning. The participation of the teacher is very important because they are aware about students' learning and which technique that h/she can adopt in lecture presentation to help the learners to memorize the data easily.

1. Research Methodology

1.1. Method

The present study focuses on the description and identification of teachers' techniques that use it in teaching for lesson's presentation which it can help student to understand the lesson without difficulties. To serve the need of our hypothesis, the qualitative research technique was used to explain whether the use of Mind Maps technique in teaching can have an effect on student's comprehension.

1.2. Population and sampling

1.2.1. For Students

For our empirical part, we have randomly selected a sample of thirty students (30); in the department of foreign language at Mohamed Kheider University. These learners are third year. The reason behind choosing to work with third year is that they are studying two (2) years before and they are aware about which technique that helps them to learn and to memorize a lecture.

1.2.2. For Teachers

Teachers at the University of Biskra make up the whole population. We dealt with the sample of five (05) teachers selected randomly, from the entire population of about 61 teachers. All the participants in this study are professors, doctors, and setteacher) and they taught different subject at the same University.

2. Description of the Questionnaires:

For this present study, we devised two questionnaires, one for teachers and one for students. The questionnaires contain questions of the multiple choice type, and open ended questions where the teachers/students put a tick in the corresponding boxes or give a full answer according to them after reading the questions attentively.

2.1. Teachers' Questionnaires

Teachers' Questionnaire contain of open- ended questions and multiple choices questions which divided into three sections as follows: section one: personal information (Q1-Q3). It includes general questions about teachers' experiences in teaching, also the main subject/s that they taught at Biskra University and their degree. Section two: students' learning and teaching technique (Q1-Q6). It deals with teacher technique in teaching and

we look for student ways in learning. Section three: Mind Mapping technique in teaching (Q1-Q9). After the overview about teacher technique and students' style in learning in classroom, this section is composed of questions seeking information about the use of Mind Mapping tool during teaching.

2.2. The students' Questionnaire

The students' questionnaires were composed of eighteen questions (18) that it divided to three parts: the first part deal with personal information about the students, the second parts involves questions students learning in the classroom and their view about teacher technique. Part number three deals with students view about Mind Mapping and whether they used this tool during their study.

3. Analysis of Students' Questionnaire:

The first section of chapter three we will analyze students' questionnaire that it has 18 questions which is divided into three sections.

Section one: Personal Information

Question 01: Age:

Years	19	20	21	22	23	24	Tolal
Number of students	01	01	14	09	02	03	30
Percentage	3%	3%	47%	30%	7%	10%	100%

Table 2: The Students' Age.

This table shows that there are six age (6) group in our selected sample. All students are between 19 and 24 years old out of the total number of the sample (N=30). 3% is for one student who is 19 years of age and the other for the student who is 20 years old; this means that they started early their primary education. The majority of the participants 47% are in 21 years. Besides, 30% is for the learner who is 22 years old and 7% who are 23 years of age while 1% is for the students who are 24 years old. The three last percentages, they are older subjects who either have repeated years or not having started early their primary education.

Question 02: How long have you been studying English? Year

This item was intended to know the period students have spent studying English, not only at the University, but also at the Middle and Secondary school. The results are presented in the following table:

7 years	8 years	10 years	11 years	12 years	Total
1	2	24	2	1	30
3%	7%	80%	7%	3%	100%

Table 2.1: Students' Years of study English.

The table (3-1) shows that 80% of the total population of the study (N=30) have been studying English for ten (10) years. Two students for 11 years who are making up7% and one who study English language for 12 years make up 3%; this means that they repeated a year(s) during their studies. Whereas, the two students who study this language for 8 years(7%) and the other one for 7 years(3%), they study less than ten years(10); this may means that they do not study English language in one of the stage(Middle or Secondary school).

Question 03: How	do you consider you	ir level in English?		
Very good	Good	Average	Poor	

Through this item we come to know the level of proficiency of the student in the language they are studying in the end of the first degree licence in English. The findings are summarized in the table below:

Very good	Good	Average	Poor	Total
05	19	04	02	30
17%	63%	13%	7%	100%

Table 2.2: Students' English level.

This table indicates that 63% of the total population (N=30) claim to have "a good" level. 17% consider their level in English as "very good", this level is refers to some factors that help them to develop their English level. However, 3% who assume that their

level is "average" and 7% is for those who have a poor English level; this may mean that these students have factors that hinder them to increase their level. Students usually relate their level to how well or how bad they can understand and produce this language either orally or in writing.

Section Two: Students' learning and teaching technique

 Question 01: Which skill would you like to master most?

 Listening skill
 Speaking skill
 Reading skill
 Writing skill

This item was intended to know which skill that student wants to master most, in the same time to investigate which skill they find it difficult for him/her. The results are illustred in the coming table:

Listening skill	Speaking skill	Reading skill	Writing skill	Total
06	18	02	04	30
20%	60%	7%	13%	100%

Table 2.3: The Skill that the students want to master.

This table shows that most of the students which present 60% like to master "Speaking skill"; whereas, 20% want to master "listening skill". 13% claims that "Writing skill" is the skill that they prefer to master it and 7% is refers to the students who want to overlord. Many students think that in order to be as native speaker, it should be mater Speaking skill; a good English learners who have a good speaking or a good pronunciation.

Question 02: Which method do you prefer in your study?

Audio- visual method Visual method

This item was intended to provide information which method that helps the students in their studies especially in lecture presentation. The results are illustred in that following table:

Audio-visual method	Audio method	Visual method	Total
24	01	05	30
80%	3%	17%	100%

Table 2.4: The Students' Method in learning.

The table above indicates that 80% of the total population likes "Audio-visual method" during his/ her studies at University. 17% is for the students who prefer "Visual method". Only 3% from the students who like "Audio method".

Question 03: In your point of view, the role of teacher is:						
a facilitator	a guider	an assessor				

This item aims to investigate the role of teacher in students' point of view, what can take role in the classroom. The results are presented in the following table:

A facilitator	A guider	An assessor	Total
17	12	01	30
57%	40%	3%	100%

Table 2.5: Teacher' Role.

The above table reveals that 57% of the total population (N=30) think that the role of teacher is "a facilitator"; whereas, 40% is for the students who view that teacher can take role as "a guider". Also, one students of our sampling assume that teacher is as "an assessor".

Question 04: According to you, a good teacher in the one who:	
1- gives the outline of the lecture before starting then explain it	
2- just keeps talking till the end of the session	
3- writes what h/she wants to explain in the board	
4- uses the handouts of the lecture	

This item was intended to seek information which better way that make this teacher is prefer to the student according to his/her strategies in classroom. Students' answers to this item are summarized in the following table:

gives the outline of the lecture before starting then explain it	22	73%
just keeps talking till the end of the session	0	0%
writes what h/she wants to explain in the board	04	13%
uses the handouts of the lecture	04	13%
Total	30	100%
TOTAL	30	100%

Table 2.6: A good Teacher in lecture presentation.

Table (3-6) shows that there are 73% of the total population assume that a good teacher is the one the one who "Give the outline of the lecture before starting the lesson than h/she explains the lecture". 13% is the one who "Writes what h/she wants to explain in the board" and also 13% who claim that a good teacher who "Uses the handouts of the lecture". However, there is no student prefer the teacher who "just keeps talking till the end of the session".

Question 05: Do you process the lessons' information at first time?

Sometimes
Often
Rarely
Never

This item aim to investigate how many times that student can memorize a lecture at first time, it means that when the teacher present a lesson for the first time, the students can process it or they need more explanation to understand it. The findings are illustred in the following table:

Sometimes	Often	Rarely	Never	Total
13	12	05	0	30
43%	40%	17%	0%	100%

Table 2.7: Students' lecture memorizing at first time.

This table shows that 43% of the total population (N=30) choose the first option "Sometimes"; in contrast, 40% claim that students are "often" process the lecture at first time.17% is for the students who "Rarely" understand the lecture at first time. The last option "Never" is not choosing by the students.

Question 06: Do you think that the misunderstanding to the lecture refers to:

the teacher's technique	your style in learning	your English level	

This item aims to identify the cause of the students 'misunderstanding to a lecture in classroom. The results are presented in the subsequent table:

the teacher's technique	your style in learning	your English level	Total
19	10	01	30
63%	33%	3%	100%

Table 2.8: Cause of Students' misunderstanding.

The table above indicates that 63% of participants who stated that the misunderstanding of a lecture is refer to "teachers' technique" in classroom. The technique that the teacher adopted to present a lesson, it does not help learners to understand. In contrast, 33% who affirmed that "students style in learning" is one of the cause that hinder students to memorize the ideas and 3% who opted "English level" as an answer to that question.

Question 07: Teacher technique in presentation a lesson plays a crucial role in your comprehension and processes it effectively?

This item aims to identify whether the teacher technique plays a crucial role in students' comprehension. The answers are summarized in the coming table:

Yes	No	Total
28	02	30
93%	7%	100%

Table 2.9: the importance of teacher technique in students' comprehension.

A quick look at this table shows that 28 participants who making up 93% view that teacher technique in presenting the lecture plays a crucial role in students' comprehension. Whereas, two participants (2) make up7% think that the students' comprehension does not rely on teacher technique may be is refer to other factor.

Section three: Mind Mapping technique in teaching

 Question 01: Do your teachers use any kind of diagrams during the session?

 Yes
 No

This item represent a turning point in the questionnaire because it is the first item to know whether the use of diagrams or maps help them to memorize the lecture. The table below represents the results:

Yes	No	Total
21	09	30
70%	30%	100%

Table 2.10: The use of diagrams in lecture presentation.

Twenty one participants, who making up 70%, opted for "Yes" while only nine participants, i.e.(20%) opted for "No". we assume that they are many of teachers at Biskra University use diagrams to present their lecture to students.

Question 02: If your answer is Yes, in which module?

This item is only for the participants who answer the last question (1) by "Yes". They will mention which module the teacher use a diagram in their lecture presentation. The results are summarized in the following table:

Didactics	Written Expression	Pragmatic	Methodology	Total
05	08	05	03	21
24%	38%	24%	14%	100%

Table 2.11: The modules that use diagrams by teacher.

This question is related to the previews one about the use of diagrams in session. The participants whose opted is "Yes", in this question, they mentioned in which module the teacher use diagrams. 38% of participants (N=21) stated that the teacher of "Written Expression" uses this kind of tool. To 24% who affirmed that teacher of "Didactics" and "Pragmatic" use this technique; while the rest of the percentage 14% reveals that "Methodology" module also use diagrams in the classroom to present a lecture.

Question 03: Do think that summarizing the main points of the lecture on diagram is better for you in order to process it perfectly?

This item aims to identify students' view about summarizing the main points of the lecture on diagrams is a good way to memorize the ideas easily. The answers are presented in the following table:

Yes	No	Total
30	0	30
100%	0%	100%

Table 2.12: Students' view in summarizing lecture on diagrams.

The whole population (N=30) i.e. the equivalent of 100%affiremed that they prefer to summarizing the main points of the lecture on diagrams better than give it orally. Students' think about this kind of technique ,which is use visual material in classroom as presenting lecture using diagrams, may help them to memorize it easily.

 Question 04: Do you have an idea about Mind Mapping technique?

 Yes
 No

After the overlook about the students' attitude toward the use of diagram in classroom to present a lecture, this item is very important in our work in order to have to what extent the students have an idea about Mind Mapping technique which is the topic of our research. Students' answers to this item are summarized in the following table:

Yes	No	Total
15	15	30
50%	50%	100%

Table 2.13: Students' view about Mind Mapping.

Half of the participants 15 make up 50% opted "Yes"; whereas, the other half opted "No". The students who know Mind Mapping may have the meaning of this technique but they do not use it or they use this technique during their learning. In contrast, the other students do not know about Mind Mapping.

Question 05: this question divided into three parts

Part one: A- If your answer is yes, have you used it before?

Yes

No

This item is related to preview question for the participant who answer "Yes" which they are 15 participants. This part aims to know if they use Mind Mapping during their education or not. The results are presented in the following table:

Yes	No	Total
14	01	15
93%	7%	100%

Table 2.14: Students' use to Mind Mapping.

It is visible here, the majority (93%) of the participants use Mind Mapping during their education, mean that they know what is Mind Mapping and they used it for different purposes which we will discover in the following part of this question. 7% is refers to the students who have an idea about Mind Mapping but they do not use it.

Part two: B- For which purpose:		
Summarizing your lectures	drawing the outline of your essay	
solving your problems		

This part aims to investigate in which purpose the students use Ming Mapping. The following table represents students result:

Summarizing your lectures	11	79%
drawing the outline of your essay	02	14%
solving your problems	01	7%
Total	14	100%

Table 2.15: Students' purpose in the use of Mind Mapping.

By this question, we assume that the majority of participants that they know about Mind Mapping technique and they use it 79% for "summarizing lecture" i.e. the learners use Mind Mapping in order to help them revising. 14% of the participant is for the subjects

who use this technique to "draw the outline of an essay". On participants, who is making up 7%, who chooses the third option "solve problem".

Part three: C-Would you like your teacher to use this technique in the presentation of his/her lectures to draw or to summarize the outline of a lesson on this Mind Mapping?

Yes No

As we find above that 14 participants who know Mind Mapping and they use it for different purpose. This part (c) aims to investigate whether the use of this tool in teaching. The results are illustred in the following table:

Yes	No	Total
14	0	14
100%	0%	100%

Table 2.16: Students' attitude about the use of Mind mapping in teaching.

Fourteen participants (14), who are making up 100%, prefer to use Mind Mapping by the teacher in classroom. They find that it is a good tool to organize their ideas and to memorize it in a short time.

Question 06: this questionnaire is divided into two parts

Part one: A- If your answer is No, do you want studying using colors in the board?

Yes No

This question is for the students who do not know Mind Mapping and they answer Question 05 by "No". The students' results are presented in the following table:

Yes	No	Total
15	0	15
15%	0%	100%

Table 2.17: Students' attitude about the use of colors in the board.

The table above indicates that the whole participants whose answers were "No" in question 05, they prefer study with colors in the board. The use of colors may attract them and help them to organize their ideas.

Part two: B- Do you prefer studying with pictures and shapes?			
Yes		No	

This parts aims to identify whether the use pictures and shapes in the board help the learners to comprehend more than explain a word or an idea using just words. Students' opinions are presented in the table:

Yes	No	Total
15	0	15
100%	0%	100%

Table 2.18: Students' view in using pictures and shapes in the board.

As we see, the fifteen participants (15) prefer to use pictures and shapes that relate to the topic to understand the meaning. There are no students who choose the second option "No".

Question 07: Does the use of colors, pictures and shapes that relate to the lecture make you more comfortable to learn and gives you a clear image about the topic the lesson in your brain?

Yes	No	
	l l	

Yes	No	Total
30	0	30
100%	0%	100%

Table 2.19: the importance of the use colors, pictures and shapes in students 'comprehension.

According to the table above, all the participants (N=30) who is making up 100%, they prefer to use colors, picture and shapes which make them comfortable and attractive during their education and it gives them a clear image about the topic.

Question 08: During the lecture, I would like to:
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take notes	rely on handouts	just listening		
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When the teacher presents a lecture, each student chooses a way that h/she thinks that it helps him/her in learning. This item was intended to show which a way they prefer. The results are presented in the following table:

take notes	rely on handouts	just listening	Total
28	02	0	30
93%	7%	0%	100%

Table 2.20: Students' technique in classroom.

The table above shows that 93% of the participants (N=30) they take notes when the teacher present a lecture. 7% claim that they prefer to relay on handouts. There are no students who choose the third option "just listening".

Question 09: Do you interact with your teacher during the session?				
Most of time	Always	Rarely	Never	

This item was intended to provide information about the interaction between the students and teacher in the classroom. The students' answers are illustred in the table below:

Most of time	Always	Rarely	Never	Total
10	6	14	0	30
33%	20%	47%	0%	100%

Table 2.21: Students' interaction with teacher.

The majority of the students (14) make up 47% choose the third option "Rarely". 33% is for the participants who they interact with teacher in the most of time. Whereas, six students are always interact with his/ her teacher. For the last option "Never", there is no students tick in this answer.

3.1. Discussion of Students' Questionnaires results:

The analysis of the students' questionnaire reveals that the half of the participants (N=30) have an idea about Mind Mapping technique. Also, they use this tool in his/her studies; this means that they view that Mind Mapping is a good technique to organize their ideas and to memorize new information and they use this tool for different purpose. All the students' answers are quite positive and strengthened to our research.

At the first section in students' questionnaire, we aimed to know some personal information about the learners at Biskra University. As table (3, 3-2) show that the most of English learners are 24 years (80%) and they have a good level in English (63%); this may refers to some factors that help them to increase their level and to be as native speaker.

After the overlook about the learners' information, the second section contains questions in order to provide information about students' style and the way that they prefer during their education also their attitude on teacher technique in classroom. 60% of the participants want to master speaking skill (table 3-3), where the considered the other skills are less important, according to them, this skill is very important in order to communicate and to break down all the negative factors that hinder them to speak. This section also demonstrated that the great majority of the students (80%) are preferred studying with audio- visual method in classroom (table 3-4) which help them to learn effectively. When speaking about the classroom, we find that 73% of the students who answered the questionnaires prefer a teacher who gives the outline of a lecture before starting to explain the lesson (73% as in the table 3-6) which they consider the teacher has facilitator role i.e. a teacher should first facilitate the curriculum to them and h/she should provide a good technique in classroom that help learners' comprehension (57%) as mentioned in the table (3-5); gives the outline of each lecture at the beginning of session, according to them, makes them aware about the point that teacher will taught. However, when the students may face difficulties to understand the ideas of a lecture, this problem may refers to the teachers' technique as the participants finding shows this results in the table (3-8) who are making up 63% because teacher technique in presentation a lesson plays a crucial role in students' comprehension; question 7 in the same section indicate the result that all the participants agree with this idea (93%) (Table 3-9).

The analysis of the last section- Mind Mapping technique in teaching- reveals that the half of the students have an idea about Mind Mapping technique and its uses. From students' responses, we can see that all the participants like to use diagrams in teaching to summarize the main points of a lecture as in the table (3-12), after seeing the influence of the use diagrams on his/her understanding that many modules as didactics and pragmatics use this kind of tool (table 3-11). Moreover, in this section, the learners who know Mind Mapping, they use it for summarizing their lecture (79%) as in table (3-15). Whereas, the other half of the participants who do not know Mind Mapping, they prefer to study with colors, shapes and pictures (100%), this results mentioned in the table (3-17, 3-18) because they thinks they using this kits will make them comfortable to learn, easy to understand, and draw a clear image about the topic

4. Analysis of Teachers' questionnaire:

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

Section one: Personal Information

Question 01: Your degree

BA(licence)	MA (Master/Magister)		PhD (Doctorate)		
` '		_ I _ I		l	

This item aims to identify the teacher degree at Biskra University. The following table ie represented the results:

BA(licence)	MA (Master/Magister)	PhD (Doctorate)	Total
01	03	01	05
20%	60%	20%	100%

Table 2.22: Teachers' Academic degree.

As the table indicates, the highest percentage is that the teachers who have got a Master/Magister degree make up 60%. In the second position come to one who has a degree of Doctorate (20%); whereas, the other one had a Licence degree (20%).

Question 02: Work Ex	perience: (N	Number of year)	
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Number	Subjects	Percentage
30 years	01	20%
28 years	01	20%
8 years	01	20%
6 years	01	20%
2 years	01	20%

Table 2.23: Teacher experience in teaching.

Teachers, here, are required to give in numbers how many years they have been teaching English i.e. their teaching experience. Each teacher of our population has own number of year in teaching: first teacher have been teaching for 30 years; whereas, second one is for 28 years. 8 years is for the third teacher while the last teacher has been for 2 years.

Question 03: Subject/s Taught:

Written Expression	Didactics	Oral Expression	Total
03	01	01	05
60%	20%	20%	100%

Table 2.24: Teacher' subjects taught.

As shown in this table, 60% of the teachers are teaching "Written Expression" module, while, one teacher taught "Didactics" module (20%) and 20% for the teacher who has "Oral Expression" module.

Section two: Students' learning and teaching technique.

Question 01: Which material do you usually provide in the classroom?

This item was intended to provide information about the materials that teacher adopted in the classroom. Teachers' answers are illustred in the table:

Audi-visual material	Audio material	Visual material	Total
01	01	03	05
20%	20%	60%	100%

Table 2.25: Teachers' material in the classroom.

According to this table, the majority of the teachers (60%) claim that they prefer to use or to provide "Visual material" in classroom. There are followed by "Audio-visual material" for one teacher (20%). The last percentage also makes up 20% for the teacher who uses the "Audio material".

Question 02: During your career, which technique helped you and your students better in the lesson presentation? Why?

This open ended question aims to identify the technique that helps teacher to present his/her lecture with success and the students can interact with him/her. The table below is represented the results:

Audio-visual materials	02	40%
Using board	02	40%
Communicative approach	01	20%
Total	05	100%

Table 2.26: The best teacher technique during his/her career.

It is important for teacher to provide a better technique to their students to facilitate the curriculum. 40% of the participants declared that "Audio- visual material" is the best technique which helps learners during their learning; whereas, two other teachers view that using the "Board" is a good tool that is making up 40%. In contrast, 20% for one teacher who sees that communicative approach in one of the best tools that helps learner to understand a lecture.

Question 03: Do	you give the o	outline of each	n lecture before	starting your lesson?
Yes		No		

This item was intended to know if the teachers give the outline of each lecture before starting their lesson to make students aware about the points that teacher will taught it.

Teachers' answers are illutred in the table below:

Yes	No	Total
05	0	05
100%	0%	100%

Table 2.27: Teachers' attitude about the outline.

From the table above, we see that the whole participants (N=5), who is making up 100%, they give the outline of a lecture before starting their explanation. Each teacher gives justification about this answer. One teacher said that "the outline allow students to do

more research on the taught topic". In other hand, second teacher affirm that this way let the learners think and participate during session. Also, it is to push them to follow and help them to organize their notes. While a teacher stated that if you do not know where to go, you will never arrive.

Question 04: Do you think that it would be enough for students to learn only by relying on the handouts even if you do not explain their contents? Why?

Yes No

Yes	No	Total
0	05	05
0%	100%	100%

Table 2.28: The use of handouts.

At University, many of teachers view that time is not enough to accomplish the curriculum. For that, using handouts is one of the ways that they used it in order to give more explanation to the learners. Our participants have negative answer about this question; they do not prefer the handouts (100%). The second option is neglected.

Question 05: Do all the students understand the lesson from the first time?

α		D 1	NT
Sometime	Often	Rarely	Nev
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During teaching, lecture understanding is different from one teacher to the other. There are who understand from the first time; whereas, the other one need more time to memorize the ideas. This item aims to investigate how many time students can understand the lesson from the first time. The table below is represented the teachers' results:

Sometimes	Often	Rarely	Never	Total
02	02	01	0	05
40%	40%	20%	0%	100%

Table 2.29: Students' understanding to the lesson.

As it is visible, here, the majority (40%) of the participants assume that learners often understand the lesson from the first time. Also, the same percentage (40%) is for participants who choose the second option "sometimes". One teacher who is making up (20%) claims that students' understanding for the lesson from the first time is "rarely". There are no teacher choose the fourth option "never".

Question 06: Can the students' misunderstanding of the lesson refer to your technique of the lecture presentation? Explain, please.

Yes No

Yes	No	Total
04	01	05
80%	20%	100%

Table 2.30: Teacher' technique cause to students 'misunderstanding.

The table above shows that 80% of the participants (N=5) who answer by the first option "Yes", they affirmed that students' misunderstanding is refer to teacher technique itself. Whereas, on teacher make up 20% thinks that it is not the right cause.

Section three: Mind Mapping technique in teaching.

Question 01: While teaching, do you use any kind of diagrams or maps on the board to present your lecture?

Yes No

Yes	No	Total
04	01	05
80%	20%	100%

Table 2.31: The use of diagram in teaching.

Table shows that 80% of the whole participants, they use diagrams in teaching to present their lecture. In contract, one teacher, who is making up 20%, who does not use diagram while h/she teach.

Question 02: If Yes, what is your point view about students' reaction and interaction?

This open question is for the participants who answer the last question (Q1) by "Yes". This item aims to identify students' reaction and interaction with him/her while they present the lecture. Those who use diagrams in teaching think that it is a good tool to students because, according to them, learners can understand more and memorize ideas easily. Also, one of the participants added that learners love colors and shapes that make them attractive.

Question 03: Do you have an idea about Mind Mapping technique?

Yes		No		
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This item is very important in our dissertation; it is turning point of the research. It aims to investigate how many teachers have an idea about Mind Mapping. The results are represented in the following table:

Yes	No	Total
03	02	05
60%	40%	100%

Table 2.32: Teacher' feedback about Mind Mapping.

60% of the whole participants at Biska University assume that Mind Mapping is well known in their glossary. While 2 teachers make up 40%, they do not know what Mind Mapping is.

Question 04: How can you define this technique?

The question four is asked for the participants who answer the question 03 by "Yes" in this item. They give a definition about Mind Mapping. Teacher 01: define this definition as a tool that used to represent the main important points of given lecture, lesson or task. Whereas, teacher 02: knew that Mind Mapping is putting down any idea or word that comes to one's mind about define subject. Finally, the third teachers also see that Mind Mapping as brain friendly tool of teaching and learning that's based on colors and shapes.

Question 05: Have you used Mind Mapping in your presentation or preparing the lecture before?

Yes No

Yes	No	Total
03	0	03
100%	0%	100%

Table 2.33: The use of Mind Mapping in presentation.

The table above shows that the participants who know Mind Mapping technique, they use it to present a lecture. They make up 100% while there is no who opted "No".

Question 06: this question is divided into two parts for the participants who use Mind Mapping technique in their teaching (N=3).

Part one: A- If yes, do the students process the information easily and interact with you successfully?

Yes	No	Total
03	0	03
100%	0%	100%

Table 2.34: Students' interaction when using Mind Mapping.

100% the whole participants whose answer is "Yes" in question 05 claim that when they use this technique, most of the students interact with them and memorize ideas successfully. The option "No" no one chooses it.

Part two: B- Do you think that Mind Mapping is a good technique for presenting the lecture?

Yes No

Yes	No	Total
03	0	03
100%	0%	100%

Table 2.35: Beneficial of the use Mind Mapping technique for lecture presentation.

Further we asked the question of whether the use of Mind Mapping technique in presenting a lecture is a good one. 100% of the participants (N=3) agree that it is a good tool in teaching which helps learners to memorize and to organize their ideas.

Question 07: this item is divided into two parts for the participants who do not now about Mind Mapping .

Part one: If your answer is no, do you use colors in your board?

Yes No

Yes	No	Total
02	0	02
100%	0%	100%

Table 2.36: Using colors in the board.

Using colors in the board is one of the techniques that make students attractive and active learners. As the table show that the participants who do not know about Mind Mapping and they do not use it. They prefer to use colors while they present a lecture

because this way may attract learners' intention and students' reaction that why the participants choose the first option "Yes" (100%).

Part two: B- Do you use shapes or pictures that relate to the lecture on the board during your presentation?

Yes No

Yes	No	Total
02	0	02
100%	0%	100%

Table 2.37: Using shapes and pictures in the board.

By asking this question, 100% of the participants who do not use Mind Mapping tool, they use shapes and pictures that relates to the lesson in order to help learners to understand also, to facilitate both the learning and teaching process.

Question 08: Do you find a difference between the use of colors, shapes and pictures or not for students' understanding of the lesson?

Yes No

Yes	No	Total
05	0	05
100%	0%	100%

Table 2.38: The influence of shapes, pictures and colors in students' understanding.

The whole of the teacher population (N=5) i.e. the equivalent of 100% affirmed that the use of colors, shapes and pictures in the board to explain or to present a new idea has an influence on their understanding.

 Question 09: During the presentation of your lecture, most of students are:

 taking notes
 just listening
 not with you

taking notes	just listening	not with you	Total
04	01	0	05
80%	20%	0%	100%

Table 3.39: Students' style in learning.

Teachers, as it was mentioned above, see that when they present a lecture, most of the learners take notes (80%) this may mean that learners have a good listening that help them to take note about the topic. One teacher choose second option "just listening" who make up 20% while no answer about third option.

4.1. Discussion of the Teachers' Questionnaire results:

With respect to teacher answers, a large number of responses were quite positive in the sense that strengthened more our ideas. It is reasonable to think that, the participating experienced teachers are noticeably well aware the importance of Mind Mapping in teaching to enhance students' understanding because teacher' technique is the main cause that can hinder or help learners' comprehension like in the table (3-30). The amount of information recalled from a given lesson can be increase by more than 80% by using the Mind Mapping technique because, according to them, this tool is a good technique that help learners to memorize their ideas, to create and to think in a good way, also can increase students' interaction with their teacher with success in the classroom.

As the results of teachers' answer, also we noticed that the Mind Mapping technique can be implemented in the department of English language. One way of implementing this tool in English language teaching is by designing mind mapped handouts rather than using just words in which we use only key ideas reinforced by colors, shapes and key image as we see the influence of this kits on students' comprehension, when English teacher at Biskra University use it in the board as in the table (3-38).

Conclusion

This chapter has represented the practical field work we have followed in order to identify teachers' attitude about Mind Mapping to present a lecture and whether this tool has an influence on students' comprehension. The result of students' questionnaire shown that the half of the participants 50% have an idea about Mind Mapping and they use it for summarizing their lecture this technique helps them to process the information with success. Moreover, they prefer to use this technique by the teacher to present a lecture. Whereas, the teachers' answers indicate that 80% of them they use this technique during their teaching where they find students' reaction and interaction by adopting this tool when they present a lecture. Mind Mapping is full of colors, shapes, and key images which attract the students' intention. As we mentioned on the first chapter about Brain that it is learn in non-linguistic way this means that it can process something's that contains colors, symbols and shapes rather than language.

Recommendations

The present study has covered teachers' attitude toward the use of Mind Mapping in teaching and whether the use of this technique can help students' comprehension. Considering the facts provided by our research, we can recommend the following purpose of improving the level of education in general, and the English language teaching in particular:

- 1. The age we are living in now is very different, it is the age of information; the information is available everywhere and any time. Accordingly, students now are not interest by more information, they are looking for the important point or they are looking for new skills. Organizing seminars or workshops is one way of providing the necessary skill for students in which students learn and practice the new skill where they will memorize it perfectly.
- 2. Applying the Mind Mapping technique can increase students' understanding where we can achieved few word and less efforts and will find better results. Cutting the unnecessary verbiage from the lesson is crucial. Unfortunately, most of the learners like colors, shapes, and key ideas; in place of writing a lesson in 2 or 3 pages, we can summarize it by using Mind Mapping to be only on one page; by putting the title of the topic in the central which supported by sub-topics, each sub-topic use colors, symbols, shapes, and key image that relates to this sub-topic.
- 3. When knowing the natural way by which our brains function, learning and teaching would be much easier and more enjoyable. The Mind Map technique is a brain friendly way of teaching because we know that our brain learn in non-linguistic way i.e. it can process images, shapes, and colors more that words so Mind Mapping is full of this kits that help the brain the memorize the content for a long time.

General Conclusion

To be successful instructor, it is a good idea for one to be armed with new techniques and strategies of teaching, to be able to understand the students' needs and potentialities, also to identify the problem that students might face during the process of learning, finally try to find implement the new technique in order to make teaching and learning more effective. This work focused on the field of education generally, and language teaching and learning particularly where we introduced a Mind Mapping technique for improving EFL students' lesson comprehension. Before that, we have certainly gained some knowledge about the brain and how the brain learns, then, we shed lights on Mind Map and its benefits on preparation and on presentation to a lecture. Mind Mapping considered as a tool of taking notes and to create thinking. For testing our hypothesis, we have selected randomly 30 students and 05 teachers who are at Biskra University where we are administered questionnaires to them.

The results that we have come with prove that this technique can be applied in the English language teaching setting at Biskra University. The half of students are prefer to use Mind Mapping tool by teacher whose they have a background about it and its advantages in learning process. Whereas, the other half prefer to use colors, pictures and shapes in the board which make them comfortable and help them to memorize and to organize the ideas in effective way. While, 60% of the teachers who are using Mind Mapping technique during his/her teaching where h/she found the students' reaction and interaction. Moreover, it helps students' lesson comprehension, through the results that obtained from both teachers and students' questionnaire, the first hypothesis in our dissertation which is: if the teacher at the University uses the Mind Mapping technique in

teaching successfully and meaningfully, many of the students can process the information effectively, is accepted.

In conclusion, Mind Mapping technique is one of the best thinking tools that helped and it can help students to transmit and recall information in organizational way and with success.

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Students' questionnaire

Dear student,

We would be so grateful if you could answer the following questions about your opinion about Mind Mapping technique and TEACHERS' ATTITUDE TOWARDS THE ROLE OF MIND MAPPING FOR IMPROVING EFL STUDENTS' LESSON COMPREHENSION. Your answer will be very helpful for the research project we understand. We hope you will answer with full attention, honesty and interest.

To answer the question, you are required to put tick $(\sqrt{})$ in the box corresponding to your answer. Be sure that any information you will provide us within this questionnaire will remain strictly anonymous.

Remarque: Mind Mapping is a great cognitive tool that can be used to arrange and organize information when studying or presenting students with a new topic.(it also called spider diagram).

Miss Ferfad khadidja

Age:
1- How long have you been studying English? Year

Section one: Personal Information

2- How do you consider your level in English?	
❖ Very good	
❖ Good	
❖ Average	
❖ Poor	
Section two: Students' Learning and Teaching Technique	
1- Which skill would you like to master most?	
❖ Listening skill	
❖ Speaking skill	
❖ Reading skill	
❖ Writing skill	
2- Which method do you prefer in your study?	
❖ Audio-visual method	
❖ Audio method	
❖ Visual method	
3- In your point of view, the role of teacher is:	
❖ a facilitator	
❖ a guide	
❖ an assessor	
4- According to you, a good teacher in the one who:	
gives the outline of the lecture before starting then explain it	
just keeps talking till the end of the session	
writes what h/she wants to explain in the board	
uses the handouts of the lecture	
5- Do you process the lessons' information at first time?	
❖ Sometimes	
❖ Often	

	Rarely		
	❖ Never		
6-	Do you think that the misund	derstanding to the l	ecture refers to:
	the teacher's technique	e	
	your style in learning		
	your English level		
7-	Teacher technique in present	ation a lesson play	s a crucial role in your
	comprehension and processe	s it effectively?	
	Yes	N	No
Section	on three: Mind Mapping tech	nique in teaching	
1-	Do your teachers use any kir	nd of diagrams dur	ing the session?
	Yes	No	
2-	If your answer is Yes, in whi	ich module?	
3-	Do think that summarizing the	ne main points of t	he lecture on diagram is
	better for you in order to pro	cess it perfectly?	
	Yes	No	
4-	Do you have an idea about N	Ind Mapping tech	nique?
	Yes	No	
5-	A-If your answer is yes, have	e you used it befor	e?
	Yes	No	
	B- For which purpose:		
	summarizing your lect	tures	
	drawing the outline of	your essay	
	solving your problems	3	

		acher to use this technique in the presentation		
	of his/her lectures to dr	raw or to summarize the outline of a lesson on		
	this Mind Mapping?			
	Yes	No		
6-	A- If your answer is No, d	o you want studying using colors in the board?		
	Yes	No		
	B- Do you prefer studying	with pictures and shapes?		
	Yes	No		
7-	7- Does the use of colors, pictures and shapes that relate to the lecture make			
	you more comfortable to le	earn and gives you a clear image about the topic		
	the lesson in your brain?			
	Yes	No		
8-	During the lecture, I would	d like to:		
	take notes			
	rely on handouts			
	just listening			
9-	Do you interact with your	teacher during the session?		
	Most of the time			
	❖ Always			
	Rarely			
	Never			
Otl	ner suggestions about your	Teacher Technique in lecture presentation		
		Thank you		

Appendix B

Teachers' questionnaire

Dear Teacher,

Your timely completion of this questionnaire will help us to bring to fruition our Master degree research. The purpose of this questionnaire is to help to investigate about teachers' attitude towards the use of mind mapping technique in teaching and whether this technique has an effect for improving the students' lesson comprehension. Be sure that your answers will help us to identify this aim.

Thank you very much for taking time to share your experience and knowledge. Your input is very important and greatly appreciated.

Please, put a tick ($\sqrt{}$) in the appropriate box (es) or give full answer(s) on the broken lines.

➤ **Mind Mapping** is a great cognitive tool that can be used to arrange and organize information when studying or presenting students with a new topic. (It is also called **spider diagram**).

Miss Ferfad khadidja

Section one: Personal Information

1- Your degree:
❖ BA (Licence)
❖ MA(Master/ Magister)
❖ PhD(Doctorate)
2- Work Experience: (Number of year)
3- Subject/s Taught:
Section two: Students' Learning and Teaching Technique
1- Which material do you usually provide in the classroom?
❖ Audi-visual material
❖ Audio material
❖ Visual material
2- During your career, which technique helped you and your students better in the lesson presentation? Why?3- Do you give the outline of each lecture before starting your lesson?
Yes No
Why
4- Do you think that it would be enough for students to learn only by relying on the handouts even if you do not explain their contents? Why?

5- Do all the students understand the lesson from the first time?
❖ Sometime
❖ Often
* Rarely
❖ Never
6- Can the students' misunderstanding of the lesson refer to your technique
of the lecture presentation? Explain, please.
Yes No
Justify
Section two Mind Manning technique in teaching
Section two: Mind Mapping technique in teaching
1 777 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1- While teaching, do you use any kind of diagrams or maps on the board to
present your lecture?
Yes No
2- If yes, what is your point view about students' reaction and interaction?

3-	Do you have an idea about Mind Mapping technique?					
	Yes		1	No		
4-	How can yo	u define this te	echnique?			
				• • • • • • • • • • • • • • • • • • • •		
5-	Have you us	sed Mind Mapp	oing in your presentat	ion or p	reparing the	
	lecture before	re?		ſ		
	Yes			No		
6-	A- If yes, do	the students p	process the information	n easily	and interact	t with
	you success	fully?				
	Yes			No		
	B- Do you t	hink that Mind	Mapping is a good te	echnique	e for present	ing
	the lecture?					
	Yes			No		
7-	A- If your a	nswer is no, do	you use colors in you	ur board	1?	
	Yes			No		
	Why (if Yes	s or No)?				
	B- Do you use shapes or pictures that relate to the lecture on the board					
	during your	presentation?				
	Yes			No		
	Why (if Yes	s or No)?				
	•	,				

8- Does the use of colors, shapes and pictures have an influence on students' understanding of the lesson?
9- During the presentation of your lecture, most of students are:
❖ taking notes
❖ just listening
❖ not with you
10- Do you think that teacher's technique as the use of maps or diagrams, to
summarize the main points of the lecture, plays a crucial role in students' lesson
comprehension?
••••••
Thank you

تقديم المعرفة والمنطق اللفظي هو مجال الذكاء الاصطناعي الذي يمثل المعرفة بطريقة تسهل الاستدلال في معرفة الهدف الأساسي، فالعديد من المعلمين يعملون بالكاد لتحقيق هذا الهدف، فهم يستخدمون تقنيات وأساليب مختلفة في عرض الدرس لإيجاد طرق أكثر كفاءة وأكثر فعالية من لغة التدريس، ليمكن الطلبة في فهم محاضرة دون صعوبات مما يتيح لطلاب اللغة الأجنبية من فهم اللغة المستهدفة فيحدث التواصل بشكل طبيعي خصيصا بين المتعلم والمعلم. ليتم توفير أسلوب جيد في الفصول الدراسية تساعد المتعلمين EFL في فهم وحفظ الأفكار، يجب أن نعرف كيف يعمل الدماغ ويتعلم، من خلال الدراسات السابقة حول المعرفة الحالية تبين أن استيعاب الدماغ للمعلومات ليست بعملية خطية دائما، لهذا السبب، قدمنا في هذه الأطروحة تقنية جديدة التي تعتبر وسيلة سهلة لنقل واستدعاء معلومة وهي تقنية الخريطة الذهنية. وقد أثبت التجربة أن الخريطة الذهنية هي أسلوب جيد للحفظ وللتفكير الإبداعي والتعلم، لهذا السبب كان هدف الدراسة هو التعرف على موقف الأساتذة في استخدام تقنية الخريطة الذهنية لتقديم المحاضرة ،بالإضافة إلى التأكد من نجاعة هذا الأسلوب من أجل اعتماده في الفصول الدراسية. وللتوصل إلى هذا الهدف، تم تطبيق منهج البحث النوعي، وذلك من خلال الاستبيانات؛ وهي واحدة من الأدوات التي تتدرج تحت هذا المنهج للتحليل ولدعم فرضيتنا. حيث تم اختيار ثلاثين (30) طالبا اختيارا عشوائيا من السنة الثالثة، وخمسة (05) أساتذة من جامعة بسكرة.