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# *The Study of the Correlation between Reading Speed and Note Taking Speed The Case of Third year University EFL Students at the English Department, Setif 2010/2011*

Thesis submitted in partial fulfilment of the requirements for the Magister degree in Applied Linguistics and TEFL (Teaching English as a Foreign Language)

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## DEDICATION

I would like to dedicate this humble work to:

- My parents, brothers and sisters in low; I am very thankful for their patience and support.

- My husband Yacine, my ultimate companion whom I owe a particular debt of gratitude for his love, moral support, patience, and understanding during this long journey.

- His parents as well for their persistence to fulfil this work.

- My little baby Mohammed Abd Al Ghafour.

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- Sweet heart angles nieces and nephews.

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# ABSTRACT

This study aims at investigating the nature of the relationship between reading speed and note- taking speed. It further attempts to explore students' habits and ways while reading and taking notes. Hence, it presents a qualitative and quantitative investigation designed to provide a concrete picture of the difficulties, processes, and strategies used by third year English university students in their academic reading and note taking. The research uses two research instruments, namely two tests and two questionnaires. The main concern of the tests is to measure the typical reading rates and note- taking rates of students. The aim of the questionnaires is to develop knowledge of the learners' actual difficulties encountered and strategies used in a specific reading situation and of the actual execution of on line strategies during note-taking. In terms of the research hypothesis raised in this study, it has been confirmed statistically. In that, it proves that subjects with higher reading ability (rapid readers) are rapid and efficient in their note- taking. In the sense that, they read in a way that allows them to understand the writer's intended meaning (message) without spending much time in the process of reading and note- taking. Subjects with lower reading ability (slow readers), on the other hand, prove to be slow note- takers too. The statistical study of the tests included 48 students who sat for a reading speed and note-taking speed tests. The qualitative study involved 262 students who responded to the reading speed and note- taking speed questionnaires. To determine the nature of the relationship between reading speed and note-taking speed, the correlation coefficient (r) is calculated by means of the SPSS. It reveals a strong positive correlation between the study variables. In addition, the results obtained in the questionnaires confirm the same findings.

## LIST OF ABBREVIATIONS AND SYMBOLS

**EFL:** English as a Foreign Language

**ESL**: English as a Second Language

**FL:** Foreign Language

**L1:** First Language

**L2:** Second Language

**r:** Correlation Coefficient

**SD**: Standard Deviation

**Asymp. Sign**.: Asymptotic Significance

**N:** Number of Cases

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# Introduction

## 1. Statement of the Problem:

Most books in the literature consider each skill separated from the other skills. This makes studies which seek to investigate the relationship between reading and note- taking remain few. Particularly because note- taking was linked to listening more than to reading. Reading performance too is traditionally measured purely in terms of comprehension, but most people need to be able to deal with their daily reading faster and yet recall effectively, in a form of notes, when required. However, Joan Carson Eisterhold (In kroll, 1997: 88) notes that studies suggest that reading and writing are related but researchers have only recently begun to explore this connection.

Reading and note- taking are two of the most essential study skills especially for Foreign Language learners. In fact, EFL learners rely on reading being an information source for acquiring knowledge especially because the EFL is not commonly spoken outside the classroom. On the other hand, readers make use of note- taking skills as a real- world reflection of what's being read. Thus, the present study is intended to focus on the relationship between reading speed and the resultant exercise which is considered as an assembling strategy in which students gather ideas, make plans and so on through note- taking.

It has been established beyond the shadow of doubt that EFL students, in general, endure serious reading and note taking difficulties which are mainly caused by the lack of reading fluency. This is revealed through the great amount of time and effort they invest when they read and take notes. The majority of students tend to plough through a written print struggling in a word by word reading and note taking stumbling at every unknown word. This makes it more difficult to grasp the meaning of what they read and causes them to get struck on individual words which may not be essential to the general understanding of the text and students' reading purposes. In addition, they lose more time writing down whole words and

sentences without making efforts to use abbreviations and symbols instead. Students seem to become absorbed by the printed text and are not nearly flexible in their reading and note taking speeds; they tend to maintain their reading and note taking rates constant whatever their knowledge of the subject or the difficulty of the material.

Being interested in understanding the relation between reading and note- taking with regard to speed, we will show the different reading speeds of EFL students. This study is concerned with speed because to be efficient readers and note-takers, students need to achieve their reading and note taking as quickly and easily as possible. In other words, students' speed will be revealed through the time spent when reading. This study will reflect too the ways they use when dealing with both tasks like reading word by word and stopping at each unknown word or reading whole phrases and sentences. Clearly, readings rapidly or slowly are, of course, subjective and will depend on the text- type (Jordan, 1997: 146). It is easier to read a light novel quickly with understanding than closely- packed textbook, for example.

**2. Aim of the Study:**

In most EFL University situations, reading academic texts is one the biggest requirements for students along with note- taking. The latter is also an important aspect of academic writing and is linked to academic reading (R. Jordan, 1997: 50). Admitting that reading and note-taking are related on this basis, yet our very concern is not to deal with both skills as independent entities but to shed light on this relation in terms of speed. In that, we will measure rates (speeds) of third year English students when exposed to a piece of reading and when taking notes on it. On the light of this, the present research will focus on how rapid/ slow this category of students is in performing both reading and note taking tasks and we will consider good reading and note- taking to be equated with the speed and the quality of performing both. We will look at the extent to which attitudes and habits to reading and note-

taking correlate i.e. how readers react to print and what ways note- takers report on using while taking notes.

**3. Research Questions:**

The current study is designed to answer two primary questions:

1- What is the nature of the relationship between reading speed and note- taking speed? Are they totally independent or correlated variables?

2- What are the habits that slow/ rapid readers and note- takers report on using when dealing with both skills?

And supporting detailed questions may include:

1- 1- Can we expect the students who are fast and fluent readers to be slow note- takers?

1- 2- What are the students' reading and note- taking habits?

**1-** 3- What differentiates fast from slow readers?

**3. The Hypothesis:**

We hypothesize that third year English students at Farhat Abbas University of Setif reading speed and note taking speed are low, hence their reading and note-taking speeds and habits correlate positively.

**4. Means of Research:**

To assess the aforementioned hypothesis and achieve the aim stated previously, a combination of research methods has been used in this research. These methods involve two speed tests and two questionnaires which have been administered and addressed to third year English students. Concerning the tests, a random group of (48) forty eight participants is taken. The whole sample is asked to sit for a reading speed test before sitting for a note-taking speed test. To achieve this end, the participants are asked to read a text of 550 words silently as a technique to depict and diagnose their reading speeds. They are asked to mark the starting and the finishing time of their reading with a stop watch. After accomplishing this, the

participants have been asked to read the text silently once again and take notes at the same time.

Regarding the questionnaires, on the encounter part, they were addressed to 262 students. The first includes questions about reading speed and the reading habits of informants. The second involves questions on note- taking speed and the informants' strategies used when taking notes. This enables us to gain some understanding of the ways in which individual readers perceive reading and to see the extent to which they rely on the device of note- taking when reading as a mean to confirm or disconfirm our claim. The students' questionnaire is not specifically directed to a specific reading task, but rather to the students' perception about the reading behaviour and the general reading habits which they have acquired. Thus, it involves retrieval of information from long-term memory. The questionnaires are left until the end to avoid any bias or effect on the participants while dealing with both tests.

The different measures that are undertaken in this study are: first, the correlation coefficient (r) is calculated by means of the SPSS to examine the relationship between reading speed and note- taking speed in both tests and questionnaires. The two tests and questionnaires are computed by means of the participants' scores in both tests and questionnaires one is relevant to reading speed and the other to note- taking speed. Then, comparisons of the means are applied to compare the results of the participants in reading and then in note- taking. Second, in the light of the findings of both questionnaires as being sources of data, a calculation, analysis and comparison are made between the results obtained.

**6. Limitations of the study:**

This study has different limitations:

a) Reading comprehension is not directly assessed through the students' notes. Our aim is not to test readers' comprehension but to measure reading and note- taking speeds as a broader aim.

b) The second limitation of this study relates to the demand on readers to report on their thoughts and opinions about their own way of reading and note taking. Thus, when we ask readers to report on their reflections about reading or note- taking, we need to remember that they may respond to the questionnaires according to what they think the teacher or researcher wants to hear i.e. they may write that they are rapid readers and rapid note- takers but in the reality they are not.

**7. Organisation of the dissertation:**

The dissertation is composed of six chapters: three chapters represent the theoretical background of the research paper, two other chapters account for the practical part. The last chapter consists of some pedagogical implications and recommendations. The literature survey discusses the processes involved from the moment the eyes get the information from a print until the reader puts his understanding onto paper by means of note taking.

Chapter one deals with the field of reading by highlighting some key elements that are deeply related to our study. This includes the way that information travels in the human mind passing through the sensory store, short- term memory, and long- term memory. It emphasizes the importance of the working memory as well as purposeful reading, in addition to the different reading components that play a significant role in the act of reading like the reading rate. The different models of reading acquisition namely the bottom- up, the top- down and the interactive models are described in this chapter. The two former models contain definitions of the components of rapid reading. The latter is backed up by the automaticity theory from which the interactive model takes its principles. Our interest is not to provide a theoretical support for developing reading fluency and speed as being a component of fluent reading but an explanation of how rapid reading happens.

Chapter two covers the reading speed's theoretical account. Stress in this chapter is placed on reading speed and the characteristics of rapid reading as well as the automatic way

of word recognition which are vitally important. In our endeavours to come to terms with the problem of slow reading which is a problem of many EFL students, some of the reading habits that slow down reading are presented.

Chapter three deals with the difference between note- making and note- taking. It draws attention to the relevance of this crucial skill to reading as being useful for revision, reference and many other recall purposes. Note- taking strategies that make the process more rapid and flexible are stressed like abbreviations, using arrows, and many other techniques for shortening words and sentences. The chapter offers the procedure of effective note- taking and highlights its significance while reading. It ends up by providing some suggestions on how to take better and rapid notes with a good selection of relevant information.

Chapter four deals with data gathering. It starts with a brief account on the debate over the nature of the relationship between reading speed and note- taking speed as well as their position in EFL field of inquiry. The research questions, hypothesis, the population, and the sample of the study are presented. The choice of the design adopted is justified, and the materials implemented are fully discussed.

The fifth chapter accounts for the analysis and interpretation of the data collected by means of the reading speed test and questionnaire added to the note- taking speed test and questionnaire. The results obtained have been correlated to find out whether the research findings prove or disprove the study hypothesis stated in this introductory part that is to check whether there is a positive relationship between students' reading speed and their note- taking speed.

The sixth and the last chapter contains some pedagogical implications and recommendations which will enable students to overcome the difficulties they meet in reading and taking notes by providing them with varied techniques and strategies they can undertake when dealing with these two essential language skills. They will be able to draw conclusions about their

own learning and have an idea about the stage of development which they have reached. It may also be fruitful for teachers, instructors, institutions and curriculum developers to push their students to read and recall effectively. From a general perspective, it will improve and maintain the quality of teaching and learning.

**8. Definition of variables:**

**A. Reading: General definition:**

Reading as a term is used in different ways. While this may be permissible when everybody is conscious of the differences on occasions, it can cause real confusion and difficulty as Urquhart & Weir (1998:11-22) claim. They end up the discussion by defining reading as *"the process of receiving and interpreting information encoded in language form via the medium of print" (Ibid.22).* Such definition involves many skills and abilities which have been categorised this way by Christine Nuttall, (1996: 2):

*a) Decode, decipher, identify, etc*

*b) Articulate, speak, pronounce, etc*

*c) Understand, respond, meaning, interpret, sense, etc.*

In his article, *Reading Matters* (2000: 2), Adrian Tennant offers a definition for reading. Stated simply, this view holds that reading consists of only two components, one that allows language to be recognised through a graphic representation, and another that allows language to be comprehended. He says:

> *"It is the recognition of words at the most basic level. From simple recognition of the individual letters and how these letters form a particular word to what each word means not just on an individual level, but as part of a text because recognition of the actual word is not enough on its own to constitute reading"*

Not far from the realm of defining reading, Hudson (2007: 82) presents tow views stated by Clymer (1968) on reading. The latter points out that some authors define reading as

responding orally to printed symbols while others view reading as the change that takes place in one's knowledge as a result of having interacted with a text. As an attempt to understand a written text, Murcia and Elite Olshtain, (2000: 80) express:

> "*The reader has to perform a number of simultaneous tasks: decode the message by recognising the written signs, interpret the message by assigning meaning to the string of words, and finally understand what the author's intention was",*

**Operational definition:** in our research paper, reading is seen in terms of reading silently which can be described as see and comprehend process because silent reading is the act of directly linking letters to meaning without being sounded out. Skehan (1998: 74) points out that "reading aloud round the class has the additional disadvantages of preventing pupils from learning to read fast and turning what should be a pleasure into dreary boredom". Not very far from this, Wainwright, (2007: 25) notices that "presumably silent reading would permit even higher speeds because you would no longer be restricted by how quickly you could move your mouth muscles".

**B. Reading Speed: General Definition:**

Reading speed is defined by The Encyclopaedia of Educational Psychology (Neil J. Salkind: 2008:445) *as "the rate of reading" or "the speed at which a person reads depends on:*

*a- the type of reading material (e.g. fiction or non- fiction).*

*b- The reader's purpose (e. g. to gain information, to find the main ideas in a passage).*

*c- The level of comprehension required (e. g. to extract the main ideas or to gain complete understanding.*

*d- The reader's individual reading skills".*

It further identifies three kinds of typical reading:

*Slow: study reading, used when material is difficult and/ or high comprehension is required.*

*Average: used for every day reading of magazines, newspapers, etc.*

*Fast: skimming, used when highest speed is required, comprehension is intentionally lower.*

**Operational definition:** reading speed is identified as how fast words are covered while reading. It is obtained by dividing the number of words in a text by the reading time and is reported in words per minute (w/ p).

**C. Note- Taking: General definition:**

In fact there is a difference between note- taking and note- making which have almost different definitions. These are:

**Note- taking:** is the skill of paying attention and taking records of something while reading or listening as part of the learning activities.

**Note- making:** the skill of developing a short- piece of writing in one's words after reading or listening to something.

**Operational Definition:**

Unlike the case of reading, note taking is not open to direct observation. For this reason, the traditional means of analysing or studying note taking speed or recall has been to give readers tasks that require them to produce an outcome of reading. In the context of teaching and in many research contexts, the most widely used outcome has been the comprehension exercises. In the current study, we concerned ourselves with note-taking speed as being a useful device used basically when reading takes place. It reflects the act of differentiating between what is essential and non essential while perceiving. In this study again, note- taking speed is measured in terms of how many words taken down per minute in comparison to the total number of the text's words.

# CHAPTER ONE: READING

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## Introduction:

Though, it is considered by Marcelle Kellermann, (1981, p. 1) as "the forgotten third skill". It is a multifaceted subject that can be the starting point for other considerations when students read. In that, many operations will come to action when reading takes place. Throughout this chapter, we will dig inside the human mind as an attempt to get an understanding and closer image of what goes on. Insights on the eye movements of readers and watching what the eyes are doing and how they gain information while reading is addressed in this chapter. The abstract models of reading namely: the bottom- up, the top-down, and the interactive one to explain the reading process and specifically what happens in the visual system and the brain are discussed here. The first part of the dissertation also discusses the role of the working memory and its undeniable significance in the act of reading.

## 1.1.Definition of Reading:

Although research showed reading to be a relatively minor problem for students compared to other three main areas, in the sense that students almost always cite reading as the skill causing them least difficulty. Nevertheless, researchers never come at a unique definition of reading on the other part. Each one considers reading from his own perspective as reading may mean many things to many people. This led to a huge resultant account for defining and describing reading. Here, we will focus on the broad and the narrow definitions of reading.

### 1.1.1. Broad Definition of Reading:

Researchers in the past decades provided a very general interpretation of reading. The latter was not restricted only to the ability to decipher the graphic symbols but it includes also those who cannot i.e., everyone who can interpret the world around him before being able to decode graphic symbols and assigning meaning to letters, is a reader. Nonetheless, recent researchers, viewing reading as a complex cognitive activity, come to relate it just to people who can interact and respond to the symbols and letters of a language (Florence Davies,1995: 1).

### 1.1.2. Narrow Definition of Reading:

Even the narrow definition of reading suggests a controversy and variation among researchers. This illustrates the sheer volume of research on the topic reflecting "the individual's ability to process, much less to synthesise, everything that is written", as Alderson (2000:1) points out Similarly, the number of different theories of reading is simply overwhelming trying to answer these questions: what is reading, how reading relates to other cognitive and perceptual abilities, how it interfaces with memory. Goodman (1998: 11) states a common belief attributed by ordinary people about reading when he says that reading is *"matching sounds to letters".* He adds that there is an essential interaction between language and thought in reading. The writer encodes language to thought and the act of decoding involves interpreting the sounds carried out by letters from the part of the reader. L. Vecca et.al. (2000: 186-187) agree with Goodman in talking about letter- sound identification in words. They express: "*readers identify words by matching all the letters and sounds, in that, the reader links the sound sequence with the letter sequence".*

However, Davies (1995: 1) provided a more precise definition of reading when he says that *"reading is private. It is a mental or cognitive process which involves a reader in trying to follow and respond to a message from a writer who is distant in space and time".* Hence, reading requires a variety of high mental actions for a reader to understand a writer's intended

meaning. Alderson (2000: 4) went in the same direction. For him, "*to read means to process text meaning through some process of interaction with print".* During the interaction between the reader and the text, many things happen: the reader does not only look at the print, but decipher in some sense the marks on the page, decide what they mean and how they relate to each other. The reader also thinks about what he is reading. What it means to him, how it relates to other things he has read, to things he knows, to what he expects to come next in texts like this. He may be consciously reflecting on the difficulties or ease he is experiencing when reading, and on ways of overcoming the difficulties or of continuing the pleasure. He may be completely unconscious of how he is reading, and what is happening around him. From all these, it is very clear that most researchers share a common view that the ultimate aim of reading is comprehension. The latter is achieved through obtaining the visual data from the print and assimilating the author's messages.

The previous descriptions, indeed, emphasise the necessity of sight in the act of reading. Alderson (2000: 4), for instance, state again *"what the eyes are doing while reading may not tell us what the brain is doing*" and in smith's words (1971): "*What the Brain Tells the Eye is More Important then What the Eye Tells the Brain".* Harmer (2001: 153) perceives reading as being:

> *"A receptive skill which is a way in which people extract meaning from discourse they see. It is an exercise dominated by the eyes and the brain, the eyes receive and the brain then has to work out the significance of these messages".*

Reading is essentially divided into two components: decoding (word recognition) and comprehension. The latter becomes attractive and worth of investigation by cognitive psychologists, psycholinguists as well as educationalists when decoding was their main concern. In the light of this Urquhart and Weir (1998: 20) state: *"there was a move towards research in comprehension which has to be taken as including all the cognitive processes*

*thought to be involved in reading"*. In this context, there is an agreement among researchers that readers understand that reading must make sense (L. Vecca et al. 2000: 203). This is further supported by Hudson (2007: 36) when he points out that, in essence, if reading is viewed as having the two levels of decoding text and comprehending text, then as decoding becomes more automatic, attention can be placed on comprehending the text. Hence, reading, in part, involves detecting graphic features, determining the letter code associated with those features, identifying a spelling pattern across all letters, and determining the visual word code. The visual word is then associated with the reader's phonological memory and then with semantic memory. This process becomes more automatic over multiple experiences. In other words, reading goes beyond linking sounds with letters to extracting meaning from print depending mainly on the reader's experience.

From another perspective, comprehension is seen by some researchers as the end product of reading. Alderson (2000: 6), for example, says: *"the reading product- comprehension- involves a reader recalling what he has read without further recourse to the text"*. Others, however, declare reading as bringing meaning rather than gaining it from the print. That is, by using context and meaning clues as tools for making sense of what is being read. In that, readers reflect their experiences and identify words they have heard but may not have experienced visually added to combining meaning clues with phonic information. (L.Vecca, et al. 2000: 203). In this respect, the reader shares his own experience by relying on his knowledge with the author's printed words that carry out the ideas he intended to communicate.

According to Alderson (2000: 12) a simple view of reading should consist of three essential components, in addition to the previous components: word recognition (decoding) skills, problem- solving comprehension abilities, and reading rate or reading fluency. Fluent reading is regarded as key to comprehension. L. Vecca et al., (2000: 214) express fluency this

way: "*in order to comprehend text, readers identify words rapidly, automatically and accurately*". For them, a reader who knows a word can recognise it, understand it, and use that understanding in combination with other types of knowledge to construct meaning from text. For this reason, using the background knowledge is a crucial step to text's comprehension. Students would be in strategic position to comprehend whenever they use their prior knowledge to construct meaning. Prior knowledge is the sum total of the student's world. It represents the experiences, conceptual understandings, attitudes, values, skills, and strategies that students put into play to comprehend what they are reading. Harmer (2001: 214) claims that understanding a piece of discourse involves much more than just knowing the language. In order to make sense of any text, readers need to have "pre- existent knowledge of the world".

There are, in fact, undeniable and influential attempts for defining reading and giving a precise, comprehensive description of the act of reading. Hence a simple, definition would involve getting messages from a reading material, and then it would be the very job of readers to relate the graphic symbols to their knowledge and experiences which influence the realisation of meaning. Consequently, the product of reading with differs since readers may differ in their knowledge and experiences.

**1.2. Reading Processes:**

The process of reading, as it is indicated by more than a researcher, is a complex one. But it received a large interest since the turn of the century (Alderson, 2000; Davies, 1995). It has been extensively studied and hence a vast literature on reading and the teaching of reading has been resulted in the contexts of both mother tongue (L1) and foreign language (FL) classrooms. Nonetheless, it remains useful to understand the process of reading which, in turn, is important for understanding its nature despite the fact that it is a difficult thing to do.

Attention to the reading process research began to re- emerge with studies addressing speed, word recognition and comprehension. Seeking to understand what goes on in the visual and the mental systems during the process of reading, reading research was traditionally focused on reading primarily as a vehicle for examining perceptual processes such as eye movement, field of vision, perceptual span, and word recognition. However, soon later, psychological research turned its focus to the cognitive process of reading (Hudson, 2007: 32). Our very concern here is to clarify the balance between receiving the visual information via the eyes and the workings of the mind which entails how the reader may arrive at a particular interpretation of information and process written symbols.

### 1.2.1. The Visual Process in Reading:

It goes without saying that reading can't happen without the workings of the eyes. They are considered as the key components for reading to take place, in the sense that, these organs are responsible for the transfer of the visual information to the brain. The eyes reflect the visual ability to recognise the letters and words before sending their data to the human brain where information is gathered and interpreted (Martin W. Matlin, 2003: 32).

#### 1.2.1.1. The Role of Vision in Reading:

The role of vision is highly important in the act of reading. W. Matlin, (2003. p. 33) states that vision is significant as it provides the "raw" sensory information so that it can be used in the more complex mental processes. It is generally assumed that we perceive things immediately when the visual system registers the information and the shapes of these things. However, by the time a visual message reaches the brain, it has passed through several stages of processing. The ultimate processing of visual images takes place in the visual cortex of the brain as being the ultimate destination, of course, and it is here that the most complex kinds of processing occur.

In fact, the act of perception happens when light entering the eyes travels along the visual system then information will be transmitted in a form of nerve impulses to the brain. In this context, Feldman, (1997: 82) points out: *"here the electromagnetic energy of light is converted into messages that the brain can use and interpret the image in terms of its proper orientation"*. It can be understood from this that the eyes do not see; they only look.

**1.2.1.2. Eye- Movements in Reading:**

Eye movement is a second crucial perceptual process. A wide interest has been centred on understanding the nature of eye movement. Actually, our eyes make a series of little jumps as they move across the page. These very rapid movements of the eyes from one spot to the next are known as *saccadic* movements. The purpose of saccadic movements is essential to reading i.e., it brings the center of the retina (fovea) into position over the words. Manya and Eric De Leeuw, (1965: 78) described the operation as follows:

> *"The eye does not move continuously along the line of print because the very movement would produce only a vague blur. The eye can only see when it is still, for when it moves it goes at a tremendous speed, which does not vary and cannot be controlled. This is contrary to experience, for you seem to be able to move your eyes as quickly or as slowly as you please and the movement seems continuous."*

He exemplifies,

> *"If you look about the room you will find you can only see distinctly when your eye is still; and this applies even when it is travelling very slowly: for then it makes a large number of rapid movements or jumps and you see in the pauses between the jumps. The way in which you regulate the speed of the eye over a given distance is by varying the number of pauses". (Ibid. 78)*

Manya and De Leeuw refer to the pauses or *"fixations"* that happen between the jumps when the eye covers the print in a succession of jumps. *"Fixations occur during the period between the saccadic movements" (*W. Matlin, 2003: 310). During each fixation, the visual system acquires the information that is useful for reading.

In the context of reading in English, the eyes do not move (glide) continuously over each line of a print from left to right, they rather cut the line of print into segments, taking snapshots of the print like a movie camera; these the mind interprets as a continuous movement within the flow of meaning. Rapid readers differ from slow readers with respect to their saccadic eye movements. The rapid reader makes large jumps and fewer fixations (pauses for a shorter time before making the next saccadic movement) and is also less likely to make regressions by moving backward to earlier material in the sentence. A typical fast reader might pause for 1/5 second each time, whereas a slow reader might pause 1/2 second making more fixations or they tend to read at the word level (word- by- word). W. Matlin, 2003: 310). Thus, rapid and slow readers differ with respect to the size of the saccadic movement, the number of regressions, and the duration of the fixation pause. All these strategies make sense because they depend too on the reader's experience i.e., novice reader's eye fixation tends to be larger than those of experienced readers. Saccadic movements are also sensitive to the aspects of the reading material, in the sense that difficult materials require more eye pauses than simpler ones.

**1.2.2. The Cognitive Process in Reading:**

In dealing with reading, researchers looked beyond behaviour to process. With regard to the mental process of reading, Goodman (2002: 13) argues that *"understanding reading requires depth analysis and a constant search for the insights which will let us infer the workings of the mind as print is processed and meaning created."* It is widely recognised that reading employs visual input. The eye which is the input organ has certain characteristics and

limitations as an optical instrument, it has a lens which must focus and require minimal light. Therefore, the act of reading doesn't, of course, stop at this stage. The brain is the organ of information processing. It has five processes as Goodman (1998: 16) put them:

1. Recognition- initiation: the brain must recognise a graphic display in the visual field as written language and initiate reading.

2. Prediction: the brain is always anticipating and predicting as it seeks order and significance in sensory inputs.

3. Confirmation: if the brain predicts, it must also seek to verify its predictions. So it monitors to confirm or disconfirm with subsequent input what it expected.

4. Corrections: the brain reprocesses when it finds inconsistencies or its predictions are disconfirmed.

5. Termination: the brain terminates the reading when the reading task is completed, but termination may occur for other reasons: the task is non productive; little meaning is being constructed, or the meaning is already known, or the story is uninteresting or the reader finds it inappropriate for the particular purpose. At any rate, termination in reading is usually an open option at any point.

A cognitive perspective on the reading process involves an understanding of how the reader is able to create meaning from the printed page. Being in the same stream of thought, Day and Bamford (1998, p. 12) provide a definition of reading that is widely accepted by experts as helpful in understanding reading from a mental point of view. They say:

> *"Reading is the construction of meaning from a printed or written message. The construction of meaning involves the reader connecting information from the written message with previous knowledge to arrive at meaning- at an understanding".*

Information processing is used as the most common explanations of a number of theories of meaning. Three kinds of memory storage systems (Memory Storehouses) exist namely: the sensory memory store, the short- term memory store, and the long- term memory store (Woolfolk, 2004: 239, S. Feldman, 1997: 186). These types of store houses vary in their contents, capacity and duration (length of time information is retained).

**1.2.2.1. The Sensory or Iconic Memory:**

Sensory memory is the initial processing that transforms the incoming stimuli into information so it would be of sense. Even though sights may last only fractions of a second, the transformations (information) that represent these sensations are briefly held in the sensory register or sensory information store so that initial processing can take place (Woolflk, ibid: 240). Feldman defined sensory memory as:

> *"A momentary flash of lightning, that represent stimulations of exceeding brief durations, but it nonetheless provide important information that can require some response. Such stimulus in initially- and briefly- stored in sensory memory, the first repository of the information that the world presents to us".* (1997: 187)

The capacity of sensory memory is very large, and can take in more information than one can handle at once. But this vast amount of sensory information is fragile in duration. It lasts between one and three seconds. Actually, sensory memory encompasses several types of sensory memories; each is related to a different source of sensory information. Echoic memory which stores information coming from the ears and the second type is iconic memory which we are interested in on the context of reading. This kind of sensory memory reflects information from our visual system. The information content of sensory memory resembles the sensations from the original stimulus. Visual sensations are coded briefly by the sensory register as images, almost like photographs.

Regardless of the individual subtypes and as stated earlier, sensory memory in general is able to store information for only a very short time. If material does not pass to short- term memory, that information is lost for good. For instance, iconic memory seems to last less than a second, although if the initial stimulus is very bright, the image may last a little longer. In fact, the storage capabilities of sensory memory are so limited and information stored within sensory memory so fleeting; it would seem almost impossible to find evidence for its existence, new information would constantly be replacing older information, even before a reader could report its presence. Despite its rapid loss, then the information in sensory memory was an accurate representation of what people had seen (Feldman, 1997:187).

**1.2.2.2. Short- Term Memory or Working Memory:**

Because the information that is stored briefly in the sensory memory consists of representations of raw sensory stimuli, it remains not meaningful unless it is transferred to the next stage of memory which is short- term memory. Thus, it allows the possibility of long-term retention. Feldman (ibid. 188) gives a definition to short- term memory by saying: *"short- term memory is the memory store in which material first has meaning, although the maximum length of retention is relatively short".* This means that the information in sensory memory is available for further processing, as soon as it is noticed and transformed into patterns of images or sounds or perhaps other types of sensory codes. Woolfolk (2004: 242), on the other hand, described working memory as: *"temporary storage of information that is being processed in any range of cognitive tasks".* She further described working memory as the *"workbench"* of the memory system because it is the interface where new information is held temporarily and combined with knowledge from long- term memory. Working memory contains what the person is thinking about at the moment. For this reason, some psychologists consider the working memory to be synonymous with *"consciousness"* (Woolfolk, ibid.).

In fact, short- term memory is not exactly the same as working memory. The term short- term memory was an earlier name for the brief memory component of the information processing system actually, working memory includes temporary storage and active processing, the workbench of memory, where active mental effort is applied to new and old information but short- term memory usually means just storage, the immediate memory for new but can be held about 15 to 20 seconds then it will be lost unless the person keeps rehearsing the information or process it some other way before transferring it to long- term memory. The repetition of information that has entered short- term memory is called rehearsal. It is accomplishes two things. First, as long as the information is repeated, it is kept alive in short- term memory. More important, however, rehearsal allows us to transfer the material into long- term memory. Since information in working memory is fragile and easily lost, it must be kept activated to be retained. Activation is high as long as the person is focusing on information, but activation decays or fades quickly when attention shifts away.

**1.2.2.3. Long- Term Memory: The Final Storehouse:**

Material that makes its way from short- term memory enters a storehouse of almost unlimited capacity for all practical purposes. Like a new book delivered to a library, the information in long- term memory is filed and catalogued so that it can be retrieved when it is needed. Long- term memory holds the information that is well learned.

Actually, there are a number of differences between working and long- term memory. Information that enters working memory very quickly, it requires more time and a bit of effort t be moved into long- term storage. In addition, once information is securely stored in long term- memory, it can remain there permanently. Our access to information in working memory is immediate because the person is thinking about the information at that very moment. But access to information in long- term memory requires time and effort. Woolfolk (2004: 247) states that recently, some psychologists have suggested that there are not two

separate memory stores (working and long- term). Rather, working memory is the part of long- term memory that works on (processes) currently activated information. So working memory is more about processing than storage.

The type of information that is stored in long- term memory as either visual or verbal units, or both. Psychologists who agree with this point of view believe that information coded both visually and verbally is easiest to learn. This may be one reason why explaining an idea with words and representing it visually in a figure has proved helpful as Woolflok (ibid.) assumes again. Although long- term memory initially was viewed as a unitary entity, most research now suggests that it is composed of several different components or memory modules as Feldman (1997: 192) terms them. Each of these modules is related to a separate memory system in the brain. Thus, two categories of long- term memory are distinguished in cognitive psychology explicit and implicit. Each is further divided into other subdivisions.

**a- Explicit Memory:** is knowledge from long- term memory that can be recalled and consciously considered. It can be either semantic or episodic.

**b- Implicit Memory**: refers to memories of which people are not consciously aware, but which can affect subsequent performance and behaviour. When an event that we are unable to consciously recall affects our behaviour, implicit memory is at work. It has three kinds: classical conditioning, procedural memory, and priming effect.

**1.3. Importance of the Working Memory in Reading:**

Explaining the relationship between reading and memory involves clarifying which memory systems matter most in the act of reading. Perhaps the concept that so well reflects the interaction between the two sets is that of the working memory. Matlin (2003: 312) stresses the visual importance that working memory plays during reading especially because working memory has a limited capacity. He postulates that readers who have a large working memory span can quickly process ambiguous sentences. In addition, researchers have

demonstrated that people with large working memory are especially skilled in guessing the meaning of unusual words on the basis of sentence context (Richard J. Allen and Alan D. Baddeley, 2009: 64). Apparently, the large memory span allows them to read efficiently, so that they have more attention "left over" to remember the importance of contextual cues. Working memory also helps to understand complicated sentences. People, who can maintain many items in memory, while they unravel a sentence, are more accurate and more rapid in understanding complex sentences. Generally, the specific amount of information that can be eld in working memory has been identified: seven separate new items at once, or *"chunks"* of nformation, with variations up to plus or minus two chunks. Woolfolk (2004: 188) defined "chunks" as follows: *"A chunk is a meaningful grouping of stimuli that can be stored as a unit in working memory. Chunks can vary in size from single letters or numbers to categories that are far more complicated"*.

Although it is possible to remember seven or so relatively complicated sets of information entering working memory which is regarded as a dynamic workplace "workbench" where processing meaning and connecting the information the reader is trying to understand to something s/he already knows with knowledge from long- term memory. This, in fact, may overload short- term memory if the reader fills it with detailed information (Allen and Baddeley, 2009: 69). By directing his/ her interest on identifying only four or five letters, and therefore, focusing attention on smaller bits of information, short- term memory becomes fully occupied in addition to the great amount of time and efforts needed from the part of the reader to make sense of these bits of information and joining chains of ideas together. Woolfolk (2004: 245) exemplifies that if the reader attempts to remember that six digits 3, 5,4,*8,7 and 0, well forget the first three set of numbers before reaching the three last digits. She proposes that it will be much easier to retain and process if s/he can group individual bits of information into three chunks of two digits each (35, 48, 70) or two of three digits each

(354,870). This means that when new thoughts accumulate, old information is lost from working memory.

> *"Information is also lost by time decay. If the reader doesn't continue to pay 1attention to information, the activation level decays (weakens) and finally drops so low that the information, cannot be activated- it disappears altogether." (ibid., 246).*

He further commented on the workbench saying that:

> *"It is small but anything on it is immediately available. Because it is small, however, supplies (bits of information) sometimes are lost when the workbench overflows or when one bit of information covers (interferes with) another". (ibid., 254).*

Many researchers refer this handicap to the fact that as new information enters short- term memory, some other previous elements are weeded out (Feldman, 1997: 246, Woolfolk, ibid: 187, Allen and Baddeley, 2009: 70). Feldman (ibid.), for instance, supports this in saying:

> *"It was possible, then, that the information has initially been accurately transferred to working memory, but during the time it took to verbalise the first four or five letters the memory of the other letters faded".*

That is, reading is not a matter of recognising each letter or even each word in isolation. It would be a problem if the reader tries to get and remember every sentence s/he ever read, every detail from the print s/he ever met because readers would quickly overload their work//*ing memories and learning would cease. By means of chunking; grouping individual bits of data into meaningful larger units, efficient reading would be achieved. The idea has been advanced and backed up by Wilga and Temperley (1997:79) when they state:

> *"To become fluent readers, students must acquire the skill of reading whole words groups and whole sentences in English and of holding material in their*

*memory over larger and larger sections as they move on with the developing thought".*

Added to this, they argue that by putting meaningful groups of information together, learners can store not only seven items or letters, but even seven words or seven chunks of information. Allen and Baddeley (2009) assume that *"the capacity to be chunk- rather than item- dependent, and that the more efficiently larger chunks of information are created, the better subsequent memory performance will be" (ibid. p. 63).*

The clearest motive behind this is that searching for meaning and making sense of the material in hand is the focal point of our minds in the act of reading. The construction of meaning in the working memory happens simply by grouping the letters into words and the words into sentences. The brain ignores the component letters and assembles them quickly into meaningful sets of information. Understanding a meaningful word or sentence when reading permits new information to get into the working memory since the old one is transformed and stored into long- term storehouse; nevertheless, staying at the level of the smallest segments (letters) attempting to decipher each one in isolation, makes the reader spends more time, energy, overloads his/ her working memory and ends up with meaningless reading. That is to say, if the reader worries about letters trying to make sense of what s/he reads will make word identification difficult and reading will be impossible as it is of nonsense.

All this research on reading and working memory serve as an illustration of the significance of the cognitive process which do not operate in isolation. Instead, reading skill depends heavily on the role that working memory plays to achieve the ultimate goal of the reading act which is making sense of the reading material without much focus on separate letters and words. This is suggested by means of Baddeley's approach (2009) in considering

working memory not a passive store house; instead, it is like a workbench where material is continually being handled, combined, and transformed to each understanding.

**1.4. Models of the Reading Process:**

Cognitive psychologists who view reading as a cognitive activity were interested in constructing and testing hypothetical models of the reading process as it is thought to take place in the human mind. The abstract models reflect the attempt to understand what goes on in the visual system and the human mind when reading takes place. Reading models, therefore, have been developed to describe the way readers use language information to construct meaning from print. How a reader translates print to meaning is the key issue in the building of models of the reading process. This issue has led to a great misunderstanding and has generated many controversies among model builders. Hence, it led too, on the encounter part to the development of three classes of models: the bottom- up, top- down and interactive.

Actually much has been made in reading research over the last twenty years or so of an apparent dichotomy between two different approaches that may be taken by readers. One is the bottom- up approach. This approach was typically associated with behaviourism in the 1940s and 1950s, and with “phonics” approaches to the teaching of reading which argue that individual readers need to learn to recognise letters before they read words, and so on. In this traditional view, they are passive decoders of the stimuli (i.e., the print, the text, or bits of the text) they are exposed to. Top- down approaches, on the other hand, has replaced the previous approach. Researchers who adhere to this model have been influenced by the emergence of cognitive psychology after the mid 1960s and thus, their major interest is to view reading as a cognitive activity. They argue that it largely takes place in the mind and the physical manifestations of the activity like eye movements, sub vocalisation, etc., are comparatively superficial (A. H. Urquhart and C.J Weir, 1998: 37; Jay Samuels and Michael L. Kamil, 1998: 24). This model, in turn is replaced by the interactive model which assume the process of

translating print to meaning involves making use of both prior knowledge and print. The process is initiated by making predictions about meaning and/ or decoding graphic symbols. The reader formulates hypotheses based on the interaction of information from semantic, syntactic, and graphophenemic sources of information.

Because each model has different components to focus on in explaining what really happens during the reading process and describing how language systems operate in reading, the terms bottom- up, top- down, and interactive are used extensively in the field of communication and information processing during the translation of print to meaning.

According to Hoover and Gough (in Urquhart and Weir, 1998:47- 51), most researchers agree on the fact that the reading process involves two separate but highly interrelated areas: word recognition (decoding) and comprehension. It is worth noting that even the definition of the meaning of the term word recognition (decoding) is disputed. The most obvious definition involves what Urquhart and Weir refer to *"the term means recognising an English word in print, being able to pronounce it, and give its meaning"* (1998: 47). But they come later to disregard the necessity of having the ability to pronounce words and they say: "*it is the recognition of any letter string with space boundaries on either side"* (1998: 51). They add that

> *"Letters are not processed serially. If they were, then the time taken to recognise a single letter, and the longer a word, the longer it would take to recognise, within reason, this does not seems to be the case. Furthermore, subjects are more accurate in reporting letters in words"* (1998: 51).

Being on the same stream of consciousness decoding can be either direct (graphemes to meaning) or mediated (graphemes to phonemes to meaning).

Comprehension as being the second reading component refers to the ability to construct meaning from written/ spoken representations of language. This means that reading is a

multidimensional act which involves decoding alphabetic symbols and using strategies effectively to construct the meaning. So, the reader is in need of developing both decoding and the comprehension skills and strategies to perform both tasks adequately. Developing the decoding skills depends on developing word recognition skills.

Samuels and Kamil (1998: 22) sees that for experiencing a good reading comprehension, it should begin with the accurate, swift and automatic visual recognition of vocabulary, independent of the context in which it occurs. Hence, automatic word recognition is the basis of fluent reading; it is what allows skilled readers to read with apparent ease and lack of effort, rapidly breezing through material. Nonetheless, the role of fluent reading, as being the key for successful reading comprehension, has been the subject of controversies among the various models of reading acquisition. Bottom- up theorists assume that the process of translating print to meaning begins with the print. This process is initiated by decoding graphic symbols into sounds (lower level processing). The reader first identifies features of letters until s/he proceeds to sentence, paragraph, and text level processing. Top- down theorists consider that reading comprehension starts at the highest level processing (reader's prior knowledge) where little to no contribution is given to word recognition. In fact, neither the first model nor the second one succeeds in giving the same level of importance to the components of reading, decoding and comprehension. This's why the interactive model is the best in considering successful reading comprehension as a combination of word recognition skills and interpretation strategies, one that gives equal importance to the components of the reading process (decoding and comprehension). In sum, the most widely accepted cognitive model of fluent reading according to Richard R. Day and Julian Bamford, (1998: 15) is the interactive model that emphasize the importance of accurate, automatic word recognition that result in the construction of meaning as being the main factors to achieve a successful reading.

Before we engage in details the different types of the models of reading, we need first to introduce the concept of a model. A model of a reading process is regarded by Davies (1995: 57) as: *"A formalized, usually visually represented theory of what goes on in the eyes and the mind when readers are comprehending (or miscomprehending) text"*.

Davies goes further and gives some characteristics for a model as being *"a systematic set of guesses or predictions about a hidden process, which are then subjected to testing through experimental studies"* (ibid.)

**1.4.1. The Bottom- Up Model:**

It is a traditional behaviouristic view which holds that readers acquire a set of hierarchically ordered skills that sequentially build toward comprehension ability. Reading is viewed, as per this approach, as basically a matter of decoding a series of written symbols into their aural equivalents in the quest for making sense of the text. It is a model which takes in stimuli from the outside world and deal with that information with little recourse to higher level knowledge. In other words, in this serial model, the reader begins with the printed word, recognises graphic stimuli, decodes them to sound, recognises words and decodes meaning (Alderson, 2000: 16).

In the words of Davies, the bottom- up models are "Models of the reading process that describe the process as a sequence of discrete "steps", in which the direction of processing is from "bottom- level" features of text to "higher levels", i.e., the reader processes each word letter- by- letter, each sentence word- by- word and each text sentence- by- sentence (William Grabe and Fredericka L. Stoller, 2002: 32). This in itself would entitle it to the term bottom-up (H. Urquhart and C.J. Weir, 1998: 40). In this linear fashion, each stage changes input and sends it to a higher stage for further transformations until meaning and thinking will be reached (Davies, 1995:169). Gough (1972), in his turn, being the outstanding figure who constructed a prototype model for bottom- up processing as an attempt to describe what

happens in "one second of reading", described his model as being "data- driven". The term refers to the process of deriving meaning from print which is triggered by graphic information embedded in print (Gough 1972, in Samuels and Kamil, 2002: 187).

It is remarkable that the proponents of this model insist on the importance of decoding in the reading process. L. Vecca et al. (2000: 27) clearly states that *"readers must learn to process graphonemic information so rapidly that they are free to direct attention to comprehending the text material for meaning".* That is, the reader must practice decoding print to speech so rapidly that decoding becomes automatic. This, as they become more fluent in decoding, they can devote their attention to comprehending the writer's message (Hudson, 2007: 36). Gough (1972, in Hudson, 2007: 34) called for the application of such model in the teaching of reading and it received a great interest from phonic based approaches which rely mainly on letter- sound correspondences at the expense of other sources of information.

Nonetheless, bottom- up models that challenges the alternative model which emphasize the importance of predicting in learning to read, have manifested many noticeable short comings. In that recent research doesn't support his view. One of the weaknesses of the model as a basis for teaching, as Smith (1971, in Davies, 1995: 60) demonstrates, is that it doesn't account for the fact that there are at least 166 different grapho- phonic rules covering the regular spelling- to- sound correspondences on English words that are not easy to teach. Furthermore, the serial processing of the model imposes a very heavy burden on short- term or working memory forcing the reader to focus on lower- level sources of information such as letter- sound correspondences at the expense of other sources of information. This pushes Davies (1995: 60) to point out that Gough's model takes a lot of time and efforts. Hudson (2007: 32), again, supports this view by claiming that the identification of letters by fluent readers occurs rapidly because the print is mapped into a string of systematic phonemes. The individual words are then stored into the working memory until they can be meaningful and

comprehended. The question that may be asked in this context, is has the working memory the capacity to store this amount of information to the time it will be understood.

This fact and other facts paved the way for a set of criticisms from the part of many researchers and educationalists and has almost always put Gough's model (1972) under attack as being insufficient. It over relies on the features of the language, mainly words and structure. At the same time, there are aspects of this view, Urquhart and Weir (1998: 41) argue that, it is difficult to see how, as is claimed, one stage of the process is over before the next stage begins. Then the model would not appear to have any way of knowing when to stop processing words and move to processing sentence. Although, it is possible to accept these views, it must be confessed that knowledge of linguistic features is also necessary for comprehension to take place. However, the knowledge, experience, and the concepts that readers bring to the text are also part of the reading process and the construction of meaning. As counteract, consequently, the cognitive view is introduced and the top- down model has emerged to correct the pitfalls of the bottom- up model.

**1.4.2. The Top- Down Model:**

There is, however, an alternative way of representing the process of reading in which the sequence is almost the reverse of that above. This is the thing that makes it in direct opposition to bottom- up models. According to Davies (1995: 61), the top- down models have been developed within the theoretical framework of psycholinguistics. Kenneth Goodman and Frank Smith (1969, 1970, 1975, and 1985) are most closely identified with early theories associated with top- down approaches to the reading process. In general, the model begins with view of "reading as a psycholinguistic guessing game" (Alderson, 2000: 17) and the processing sequence proceeds from predictions about meaning to attention to progressively smaller units, for example, letters, visual features (Davies, 1995: 175). Actually, this model stresses the reader's reliance on existing syntactic and semantic knowledge structures (higher-

order sources of information) and pays minimal attention to letter- sound correspondences (Samuels and Kamil, op. cit., 186).

The theory of top- down processing holds that readers form hypotheses and make guesses about words they will encounter and the meaning of the text. They sample the print to confirm or disconfirm the guess. In this respect, reading is an active process in which the reader begins to bear not only knowledge of the language, but also internal concepts of how language is processed, past experiential background, and general conceptual background (Hudson, 2007, cit., p. 37). The thing that makes inferencing a prominent feature of top- down models, as the significance of a reader's background knowledge as Grabe and Stoller (2002: 32) deduce. This fact is taken to indicate that guessing and sampling are taking place as text is transformed into meaning. To accomplish this sampling efficiently, the reader directs the eyes to the most likely places in the text to find useful information. Goodman (1998: 15) state: *"this model sees reading process as cyclical, the reader moves from hypothesis to text to hypothesis, and so on. So each cycle melts into the next and the reader leaps toward meaning".*

As opposed to being data- driven, top- down models are said to be "conceptually driven", "reader- driven", or "hypotheses- testing model". That is to say, ideas or concepts in the mind of a reader trigger information processing during reading. As Smith (1985, in L. Vecca, et al., 2006: 27) puts it: *"the more you already know, the less you need to find it out".* In other words, the more readers know in advance about the topic to be read, the less they need to use graphic information on the page. Thus, prediction proceeds confirmation which proceeds correction and understanding is expectation based in Goodman's words (1998: 16). Alderson (2000: 17) cites that *"it is only when the expectations are useless or wrong that bottom- up processing begins".* Additionally, Goodman (1976, in Hudson, 2007:38) argued that in this model, efficient reading is not the result of close perception and identification of all textual

features. Rather, it results from skill in choosing the minimum cues necessary to produce correct guesses and then tentative decisions are made to be confirmed, rejected, or refined as reading progresses. Another distinctive feature of this model is Goodman's use of the term "decoding" as stated in Samuel's and Kamil (1998: 23). Whereas others typically reserve this term to describe what happens when a reader translates a grapheme input into a phonemic input, Goodman uses it to describe how either a grapheme input or phonemic input gets translated into meaning code. Then, Goodman uses the term decoding to describe the process of translating graphemes into phonemes.

Smith (in Hudson, 2007:39) sees reading *"as a purposeful and selective in that readers attend to what is necessary to their current purposes".* As opposed to the first model in which the reader processes the text word for word, accepting the author as the authority, the reader in the second model comes to the text with previously formed plan, and perhaps omits chunks of the text which seem to be irrelevant to the reader's purpose. This makes knowledge of relevant schemes (: networks of information stored in the brain which act as filters for incoming information) is obviously essential if the reader is reading any kind of text with comprehension. A child, for instance, who does not have a scenario about farming, is unlikely to understand a story about farming or a reference to farming in a textbook. As such, reading is an active process based on comprehension and is anticipatory in nature. The implications of this view are that reading instruction should take place when comprehension of a text is possible, rather than focusing on isolated phoneme- grapheme correspondence activities (Urquhart and Weir, 1998: 42).

The top- down approach has been very influential in both L1 and L2 reading theory and teaching methodology, especially in highlighting guessing and going for gist at the expense of attention to letters and words. This, of course, presents a sharp contrast to Gough's (1972) model. However, like Gough's model, Goodman's model also revealed many weaknesses and

limitations (Davies, op. cit., 62). The top –down model was rejected in certain educational contexts and its strengths were ignored seeking for a more simplistic model like that of Gough. May be the most serious basis on which this model was rejected is that it brings data from L1 beginners to represent or describe the behaviour of efficient fluent readers. Eskey (1998:39) adds that though the application of the top- down model draws many benefits to L2 learning, it doesn't reflect or pay attention to decoding problems that L2 readers face. He clearly states:

> *"the model they promote is an accurate model of the skilful, fluent reader, for whom perception and decoding have become automatic, but for the less proficient, developing reader- lie most second language readers- this model doesn't provide a true picture of the problems such readers must surmount"(ibid. 39.*

Another problem the top- down model has encountered is the fact that readers may have little or no knowledge about the topic of a text, and so, they cannot generate hypotheses (Samuels and Kamil, op. cit., 212). Moreover, in extreme interpretations, Grabe and Stoller (2002: 32) argue that there is a question about what a reader could learn from a text if s/he must first have expectations about all the information in the text. Furthermore, the mechanism and the time by which a reader would generate expectations is not clear. As far as time is concerned, although a skilled reader is able to generate predictions, the amount of time necessary for this process is greater than the amount of time he needs to simply recognise the words as Samuels and Kamil (ibid. 212) assume.

Urquhart and Weir (1998: 44) directed another criticism to Goodman, Smith and other writers claiming that good readers guess more, and use the context more than poorer readers. They add that a great deal of work has shown, quite conclusively, that while all readers use context, good readers are less dependent on it than poor ones. In fact, it has been shown that

what distinguishes good from poor readers, at least among young populations, is the ability of the members of the first group to decode rapidly and accurately.

From what has been said above, it becomes clear that if, with bottom- up models, it is difficult to see when to stop, with top- down models, the difficulty is seeing where to begin. Bottom- up models start with the smallest text unit, either letter or letter features. One might expect, then, that top- down models should begin with the largest unit, the whole text. However, it s virtually impossible to see how a reader can begin by dealing with the text as a whole, then proceed smaller units of the text, say paragraphs, then down to individual sentences, ending to single letter (Urquhart and Weir, 1998: 42).

Thus, the pendulum swings. It is clear that both bottom- up and top- down information is important in reading, that the two interact in complex and poorly understood ways, and that the balance between the two approaches is likely to vary with txt, reader and purpose (Alderson, 2000: 20). In that, readers following the bottom- up model are more active and they share in the author's construction of meaning by matching what they already know with the meaning they extract from the text relying on their past experience and their knowledge of the language. However, the lack of interaction between the distinct processing stages of both models unveils their deficiency and calls for an urgent correction. So, a more adequate model was proposed and known as the interactive model, in which every component in the reading process can interact with any other component, be it "higher up" or "lower down". Processing is now thought to be parallel rather than serial. The interactive model offered then a remedy and a kind of compromise between the bottom- up and the top- down models, aiming at overcoming the shortcomings of the previous two models of reading.

**1.4.3. The Interactive Model:**

More recently, however, a newer and perhaps even more insightful model that seeks to account for both bottom- up and top- down processing in the reading process has been

proposed by Rumelhart (1977) and further has been developed by Rumelhart and others (1980, 1981) (in Eskey, 1998:93; Davies, 1995:63- 65). This characteristic is needed for fluent and accurate reading. This is the reason which makes of this model the most influential model supporting both L1 and L2 approaches to reading. In his description of the model, Samuels (1979) states that "*the model assumes that an individual will work at the highest level (comprehension) and drop down to lower levels (word recognition) when processing at the highest level becomes ineffective"* (1979: 361). Rumelhart's objective is to propose a model which reflects the possibility of parallel processing i.e., simultaneous processing of information from more than one source of information. This so- called interactive model seems to strike a better balance among the various sub processes of reading. In that, it doesn't present any sequential processing. Rather, the reader is considered as being able to make simultaneous but selective operations ranging from different sources of information. This includes visual, orthographic, lexical, semantic, syntactic and schematic knowledges. Eskey (1998:94) points, in this context:

> *"unlike the top- down model, the interactive model does not presuppose the primacy of top- down processing skills- the gradual replacing of painful word- by- word decoding with educated guessing based on minimal visual cues- but rather posits a constant interaction between bottom- up and top- down processing in reading, each source of information contributing to a comprehensive reconstruction of the meaning of the text."*

In contrast to top- down models whose advocates have always been to downgrade the perceptual dimension of reading and the simple decoding of the language of the text and to promote higher- order cognitive skills, like prediction based knowledge of both texts and the world, as a means of achieving true fluency in reading. The interactive model pays a considerable attention to visual information. For Rumelhart, *"reading is at once a*

*"perceptual" and cognitive process"*. That is the reader starts by taking up cues to meaning from the page by the eyes and ends with the construction of meaning. Moreover, a skilled reader, as he viewed him, is able to make use of sensory, semantic and pragmatic information to accomplish his task (Rumelhart 1977, in Davies, 1995, cit. 64). These various sources of information appear to interact in many complex ways during the process of reading to construct a plausible meaning for the text.

The term interactive, in this model, as being described by Urquhart and Weir (1998: 45) refers to the interaction between information obtained by means of a Feature Extraction Device which has operated on the Visual Information Store, then it passes the data to a pattern synthesiser which receives input from syntactical, semantic, lexical and orthographic knowledge, all potentially operating at the same time. The reading process, therefore, is the result of the parallel application of those sensory and non- sensory sources of information. Each of these knowledge sources continually evaluates probabilities. If one takes Stanovich's description as defining interactive models, then, he meets Goodman's view, since according to him, "*readers utilize not one, but three kinds of information simultaneously and continuously"* (Goodman, 1998: 14). The information is orthographic, syntactic, and semantic. Thus, for Rumelhart (1977, in Samuels and Kamil, 2002: 57), linear models which pass information along in a way which prevent the interaction among the different stages of models contain serious deficiencies against a set of hypothesized interpretations. Though this process, a hypothesis can be accepted, rejected, or be the source of a new hypothesis until the reader comes to some decision (Hudson, 2007: 42). Hence, the interactive model suggests that the process of reading is initiated by formulating hypotheses about meaning and by decoding letters and words. According to Samuels and Kamil, (2002: 57) readers assume either an active or a passive role, depending on the strength of their hypotheses about meaning of the reading material. If readers bring a great deal of knowledge to the material, chances are that

their hypotheses will be strong and that they will process the material actively, making minimal use of graphonemic information. Passive reading, by contrast, often results when readers have little experience or knowledge of the topic to be read. They rely much more on the print itself for information cues. This suggests, as Eskey (1998: 96- 97) and L. Vecca et al. (2000: 28) explain individual differences among readers at the level of the mix of skills and knowledge (bottom- up and top- down). The latter will naturally vary from reader to reader and even for one reader in meaning from text to text, but the interactive model can account for and accommodate this. Eskey (ibid.) exemplifies that it can accommodate the problems of developing less than fluent readers, such as L2 readers, who seem to need as much help in "holding in the bottom". That is in simple decoding as they do in performing higher- level interpretations of texts (i.e., top- down processing).

Being a complex and less clear as a model of prediction than bottom- up sequential model, as Rumelhart notes, it doesn't account for the way these different sources of knowledge work together. He explains that there a set of parallel interacting processes which are controlled by a message centre. This keeps a set of running hypotheses about the nature of the input string which are either confirmed or disconfirmed (Davies, 1995: 65). Also, as Hudson (2007:39) states:

> *"The different interactive models will tend to have biases which lean either toward the bottom- up approaches to the top- down approaches. This in part reflects whether the interactive frameworks focus on the process of reading where the key is on the interaction of componential cognitive processes in fluent reading or whether the interactive focus is on the product of the reader's interaction with the information in the text and the reader's background knowledge during comprehension".(ibid: 39)*

**1.5. Types of Reading:**

**1.5.1. Scanning:** is a strategy used by all readers to find relevant information in a text and, as H. Douglas Brown (2004: 209) declares, it requires rapid identification of relevant bits of information from a stimuli which may include: one- to two- page news article, an essay, a chapter in a textbook, a technical report, a table or a chart depicting some research findings, a menu, and an application form. One of the purposes of scanning is to quickly identify important elements. In like manner, Nuttall (1982: 34) defines scanning by saying:

> *"by scanning, we mean glancing rapidly through a text either to search for specific piece of information (e.g. a name, a data) or to get an initial impression of whether the text is suitable for a given purpose (e.g. whether a book on gardening deals with the cultivation of a particular vegetable)".*

Urquhart and Weir (1998: 102) adapted a definition of scanning which is attributed by Harris and Hedges (1981): *"scanning as to read something quickly but selectively"* to achieve very specific reading goals and often the reader does not even follow the linearity of the passage. S/he simply let his/ her eyes wander over the text until s/he finds what s/he is looking for. This is the main feature of scanning. That is, any part of the text which does not contain the pre- selected symbol(s) is dismissed. Urquhart and Weir (1998: 249) state again that it looks as if scanning merges with what they have called *"search reading"*. This would seem to involve comparison between scanning and say *"normal reading"*. According to them, scanning belongs to *"the expeditious group"* i.e., it should be carried out at a faster speed than normal reading. *"For example, one can scan for a graphic symbol or a word target very fast, but the scanner remembers almost nothing of what he saw except the target" (ibid. 250)*

**1.5.2. Skimming:**

Harmer (2001: 210) looks at skimming as glancing rapidly through a text to determine its gist. This definition covers instances like deciding paper is relevant to our own work (not just to determine its field which we can find out by scanning) or to keep ourselves superficially

informed about matters that are not of great importance to us; much newspaper reading is skimming. H. Douglas Brown, (2004: 213) defines skimming as

> *"The process of rapid coverage of reading matter to determine its gist or main idea. It is a prediction strategy used to give a reader a sense of the topic and purpose of a text, the organisation of the text, the perspective or point of the writer, its ease or difficulty; and/ or its usefulness to the reader". (ibid. 213)*

While Hoover and Tumer (1981, in Urquhart and Weir, 2000: 103) appear to distinguish skimming and *"reading for main ideas"*, but this appears for Urquhart and Weir (ibid.) to be the same thing. They add:

> *"The defining characteristics are (a) the reading is selective, with sections of the text either omitted or given very little attention; (b) an attempt is made to build up a macrostructure (the gist) on the basis of as few details from the text as possible".*

However, many people would consider that reading *"for the general idea"* constituted skimming. Under skimming, they say that the term shares only the first of two primary meanings of "scan", to read rapidly and selectively, but purposely, rather than to read carefully. It is difficult to justify the apparent contrast between reading *"selectively"* and *"purposely".* Therefore, as has been suggested before, in the process of skimming, even if an entire sentence is processed, the reader will not necessarily proceed to the text sentence. The process, hence is selective, some parts of the text being omitted. To conclude, it contrasts strongly with the description attributed to scanning, since skimming is an expeditious reading carried out for the sake of extracting gist.

Authors are in agreement as to the value of skimming. Nuttall (1996) considers that skimming (together with scanning) enables the reader to *"select the texts, or the portions of a text, that are worth spending time on" (ibid. 49).* Therefore, the distinction between skimming

and scanning, as he comments, is not particularly important. In both, the reader is not reading in the normal sense of the word, but is forcing his eyes over the print at a rate which permits him to take it in only perhaps the beginnings and ends of paragraphs ( where information is often summarised), chapter headings, subtitles, and so on (ibid. 34). Skimming is preliminary to careful reading and it aims at getting a top- down view as being a valuable way of approaching difficult texts. But it requires, as Nuttal notes (1996: 49), close attention to the text than scanning does. Rayner and Pollatsek (1989: 447) remark that:

> *"Skimming... is a very important skill in our society. In careers that depend on the written word, there is simple too much information to be assimilated thoroughly, and we are constantly forced to select what we look at. Those unable to skim material would find they spend their entire day reading"*. (ibid)

Rayner and Pollatsek equate "speed reading" with skimming, and say that

> *"speed readers appear to be intelligent individuals who already know a great deal about the topic they are reading and are able to successfully skim the material at rapid rates and accept the lowered comprehension that accompanies skimming" (ibid. p. 448)*

It follows from this that, if the product of the skimming is to be coherent, then background knowledge is going, as Urquhart and Weir (1998: 252) suggest, to have to play an increased role in the build up of the macrostructure. Rayner and Pollatsek consider that the successful speed reader (i.e. skimmer) already knows a lot about the topic. It seems, then, that the efficiency with which L2 readers skim a text is likely to depend crucially on their knowledge, either of the topic of the text being skimmed, or the structure of the text, or both, and that this likely to be even more the case than with careful reading. Urquhart and Weir (1998: 252) add that this familiarity may come either from previous reading in the L2, or from their previously acquired literacy in the L1.

From all what has been discussed above, it becomes clear that both skimming and scanning are specific reading techniques necessary for quick and efficient reading. In that, to sum it up, when skimming, the reader goes through the reading material quickly in order to get an idea of the tone or the intention of the writer. Nevertheless, when scanning, the reader only tires to locate specific information. Skimming is therefore as Grellet (1991: 19) expresses it as:

> *"A more thorough activity which requires an overall view of the text and implies a definite reading competence. Scanning, on the contrary, is far more limited since it only means retrieving what information is relevant to our purpose. Yet it is usual to make use of these two activities together when reading a given text".*

For instance, we may well skim through an article first just to know whether it is worth reading, and then read it through more carefully because we have decided that it is of interest. It is also possible afterwards to scan the same article in order to note down a figure or a name which we particularly want to remember.

Skimming covers the aim of certainly not reading all texts in such a superficial way because this would be in contradiction with the principle of flexibility mentioned earlier. But, it should make students better readers, that is, readers who can decide quickly what they want or need to read. So, many students spend so much time carefully and thoroughly reading a newspaper (for example) that by the time they find something of real interest, they no longer have time or energy left to read it in detail (Grellet, 1991: 19).

**1.5.3. Extensive reading:**

Most of the skills and strategies used by learners are found when studying shortish texts in detail. But others are only discovered and learnt by the use of longer texts, including completer books, journal articles, technical reports, longer essays, short stories. Among these strategies, for example, that are obvious and can only be practiced or trained

by practice on longer texts are skimming and scanning, the use of content list, an index, etc. more complex and arguably more important are the ability to discern relationships between the various parts of longer text, the contribution made by each to the plot or argument, the accumulating evidence of the writer's point of view, and so on. These two approaches are described traditionally as intensive and extensive reading.

Pointed out by Brumfit (1977, quoted in Nuttal, 1982: 23) that better labels might be *reading for accuracy* for the former and *reading for fluency* for the latter, assuming that these are certainly more informative but still do not reflect all the purposes served by reach type of reading. The labels indicate a difference in classroom procedures as well as difference in purpose.

Extensive reading, on the one hand, brings about many conflicting definitions (Hedge, 2000: 202). Some use it to refer to *"skimming and scanning activities";* others associate it to quantity of material. According to Hycraft (1978, p. 117), *"students aim to understand the main idea of a passage while reading because they are not concerned with understanding every word"*. For Palmer (1968, quoted in R. Day and Bamford, 1998: 5), extensive reading meant *"rapidly reading a book after book".* H. Douglas Brown (2004: 212) asserts that the reason behind placing such reading into a separate category is that "reading of this type of discourse almost always involve a focus on meaning using mostly top- down processing, with only occasional use of targeted bottom- up strategy" or *"placing no focus on the language of the text*", as Day and Bamford, (1998:5) state. In Palmer's conception of extensive reading, *"texts are clearly being read for the purposes of language study, but because attention was on the content and not the language, it could only be that the texts were also being read for ordinary real- world purposes of pleasure and information".* This led extensive reading to take a special sense in the context of language teaching.

On this context, Jordan (1997: 145) conceives reading *"as suggesting reading at length, often for pleasure and in a leisurely way. It frequently takes place when students are reading on their own"*. Urquhart and Weir note that extensive reading refers to either "silent reading" is the classroom, or *"reading done unsupervised in the library or at home, the aim being pleasure or practice, or both."*(1998:216). Hence, enjoyment and pleasure are key features of extensive reading. To support this view, Alderson (2000: 28) says: *"reading for many people; an enjoyable, intense, private activity from which pleasure can be derived and in which one can become totally absorbed".* For this reason, reading specialists like Stephen Krashen and Beatrice Mikuleckry (in Day and Bamford, 1998: 7) call extensive reading *"pleasure reading".* However, William Grabe is not particularly keen on either term: extensive reading being rather general, and pleasure reading too specific. In that, people may read a lot of extended texts for a variety of reasons.

Hafiz and Tudor (1989: in Urquhart and Weir, 1998: 216), in considering extensive reading, see the goal of this type of reading, being of a great pedagogical value, *"as to flood learners with large quantities of meaningful L2 input with few or possibly no specific tasks to perform on this material"*. In other words the extensive reading aims to get students reading in second language (L2) and liking it.

Extensive reading has been called *"supplementary reading"*. The goal of this latter was *"the development to the point of enjoyment of the ability to read the foreign language, and the methodology involved in taking care of individual differences and encouraging the reading habit" (*Day and Bamford, 1998: 6). Not far from this, Davies (1995: 329, quoted in Urquhart and Weir, 1998: 217) defines extensive reading programme as

*"... a supplementary class library scheme, attached to an English course, in which pupils are given the time, encouragement, and materials to read pleasurably, at their own level, as many books as they can, without the pressure of testing or marks. Thus, pupils are only competing against themselves, and it is up to the teacher to provide the motivation and monitoring to ensure that the maximum number of books is being read in the time available".*

Nuttall (1996: 127) describes it as *"the private world of reading for our own interest and offers some valuable suggests of organising such activities"*. She argues that reading extensively is the easiest and most effective way to improve reading and it is easier to teach in a climate where people enjoy the activity as well as value it for pragmatic reasons. This is clear for reader's higher reading ability that takes a meaning- centred approach and sees reading as a pleasant, imaginative activity. In addition to this, it enables them to achieve their dependency by reading either in class or at home. However, readers of lower ability, on the other hand, tend to see reading in terms of a serious, difficult process, requiring hard work and disciplined effort.

Students select their own reading texts with respect to content, level of difficulty, and length. To exemplify, Urquhart and Weir (1998: 217) emphasise that extensive reading should normally be at the level of students' reading or below it. This, contrasts with careful intensive reading where the aim is often to stretch the student slightly. In like manner, Jordan (1997: 50) argues that extensive reading especially where students are reading material written especially at their level- has a number of benefits for the development of students' language. Among the benefits that can be drawn from extensive reading as the Longman Dictionary of Language Teaching and Applied Linguistics encounters them: *"extensive reading is intended to develop good reading habits to build up knowledge of vocabulary and structure, and to encourage a liking for reading*". Being

in the same stream of thought, Grabe and Stoller (2002:183) discuss some of the benefits of extensive reading. *"Longer concentrated periods of silent reading build vocabulary and structural awareness, develop automaticity, enhance background knowledge, improve comprehension skills, and promote confidence and motivation".*

These commentors and others agree that extensive reading is by far the best possible way for students to develop automaticity- that is automatic recognition of words when they see them- and improve their English reading and writing overall. Moreover, Day and Bamford cite (1998: 8) cite that extensive reading enables students to read without constantly stopping and providing and increased word recognition. From another perspective, a student not reading and not liking to read is a problem. It is simplistic but nevertheless true that the more students read, the better they become at it. *"Reading.... must be developed, and can only be developed, and can only be developed by means of extensive and continual practice. People learn to read and to read better, by reading",* claims Eskey (1998: 96). Furthermore, students with negative attitudes toward second language reading are likely to be motivated to do the reading they need to do to become fluent readers.

**1.5.4. Intensive Reading:**

Palmer (1964 cited in Day and Bamford, 1998: 5) contrasted extensive reading with what termed intensive reading, by which he means "to take a text, study it line by line, referring at every moment to our grammar, comparing, analysing translating, and retaining every expression that it contains". Intensive reading is also labelled reflected reading. Learner, in this type of reading, usually read page to explore the meaning and to be acquainted with writing mechanisms. Moreover, it involves approaching the text under the close guidance of the teacher, or under the guidance of a task which forces the student to pay great attention to the text. Intensive reading involves reading short passages and understanding everything

(Haycraft, 1978, p. 117). The aim of intensive reading is to arrive at a profound and detailed understanding of the text: not only of what it means, but also of how the meaning is produced. The "how" is as important as the "what", for the intensive reading is intended primarily to train student in reading strategies as Nuttall (1982: 23) claim. During this type of reading, the learner will be able to form a critical view and thus, able to state well- founded opinion about the content, the arguments, the language used, the message, the intention and the form of a text.

Hafiz and Tudor (1989, in Urquhart and Weir, 1998: 216) differentiates between extensive and intensive reading, asserting that in intensive reading activities, learners are in the main exposed to relatively short texts which are used either to exemplify specific aspects of the lexical, syntactic or discourse system of the L2, or to provide the basis for targeted reading strategy practice. Nuttall (1982: 23) agrees that of course, it is easy to handle work on short texts, which can be studied in a lesson or two, than long ones. It is also generally supposed that in order to understand the whole (e.g. a book), we must be able to understand the parts (the sentences paragraphs, chapters) of which it is made up. However, it is also true that we are often able to understand a book without fully grasping every part of it. This suggests that we ought to pay attention to both extensive and intensive reading. There are, in fact, an infinite variety of strategies which are interrelated and overlapping not only two contrasting ways of reading. Intensive and extensive readings are complementary and both are necessary, as well as other approaches which perhaps fit into neither category.

**1.5.5. Purpose of reading:**

When it comes to the reading skill whether in L1 or any other language, it is necessary for a practical reader to process an awareness of the way in which we use language. There are two things which are known about language; "first, that we use it for a purpose, second that it only makes sense in context, that is a part of a larger text or in a situation", as Wallace, (1992

p. 3) notes. Hence, reading as a skill involves not only an ability to identify and see the words, but also to decode the text and read it "not to attribute a meaning to a word- and in a third situation to interpret- to work out the meaning of a written text with the purpose of being able to take some action as a result" (ibid., p. 5).

The reading purpose is clearly fundamental to all kinds of reading. In that it determines the reader's speed, skills, strategies, and the way by which s/he reads. On this scope of discussion, a number of researchers highlight the importance of having a purpose while reading. Manya and De Leeuw (1965: 9) state that *«reading has no significance apart from the reader's purpose and interest".* Grabe and Stoller (2002: 11), from their own part clearly declare that *"when we begin to read, we actually have a number of initial decisions to make, and we usually make these decisions very quickly, almost unconsciously in most cases".* What Karen Tankersley (2003, p. 97) supports is that in setting aims for their reading will keep readers on task and move via the material without losing sight of their direction. In addition, it helps students ground themselves in the most important aspects of the text they are dealing with and it will enable them to decide how to approach the material. Instances of reading situations may include reading novels, short stories, tales and other literary texts and passages (e.g. essays, diaries, anecdotes, biographies), plays, poems, letters, postcards, telegrams, notes, newspapers, magazines (headlines, articles, weather forecasts, radio, TV programmes), reports, essays, reviews, summaries, handbooks, textbooks, guidebooks, recipes, advertisements, puzzles, instructions (e.g. road signs), menus, statistics, diagrams, maps, telephone directories, etc (Nuttall, 1982. p. 2). Grellet (1991. p. 4) and Harmer (2001: 30) meet in stating that there are two types of purposes: reading for pleasure and reading for information. The first type of reading purposes is done for its own sake for excitement (we read novels of all kinds), as Catherine Wallace, (1992:7) declares, like reading illustrated carbon or photo, for example.

The second type entails reading to find out something or in order to do something with the information the reader gets. Jordan (1997: 145) maintains *"a text is a vehicle for information not a linguistic object"*. This type of purposes is termed by Harmer (2001:30) as "instrumental reading" for the simple reason that a large amount of reading may take place because it will help in achieving some clear aim. Thus, for example we read the instructions on a ticket machine as we need to know how to operate it. It is clear that there is a wide range of specific purposes for which the reader may read and that his specific purpose may change during the course of reading a single text. Some students, for instance, may wish to learn merely to extract certain kinds of information from English texts. They wish only to learn to decipher, to break the code sufficiently for their purposes. John Haycraft (1978: 117 ) assumes that

> *"Readers, then, discuss the reasons for their guesses and reasons for the inaccuracy of some of these guesses. From the beginning students read texts of interest to them, carefully selected to provide a gradation of difficulty. They gain their satisfaction from their ability to draw the information they want from the text rapidly, without attention to style" (ibid: 117 )*

Grabe and Stoller (2002: 13) identify seven main headings of reading purposes:

1- *Reading to search for simple information.*
2- *Reading to skim quickly.*
3- *Reading to learn from texts*
4- *Reading to write (or search for information needed for writing)*
5- *Reading to critique texts*
6- *Reading for general comprehension.*

Reading to search for information is a common reading ability, as they further claim *"though some researchers see it as a relatively independent cognitive process. It is used so*

*often in reading ability"*. In this type of reading purpose, readers typically scan the text for a specific piece of information or a specific word. To exemplify, in prose texts, we sometimes slow down to process the meaning of a sentence or two in search of clues that might indicate the right page, section, or chapter. Similarly, reading to skim (i.e. sampling segments of the text for a general understanding) is a common part of many reading tasks and a useful skill in its own right. It involves in essence, a combination of strategies for guessing where important information might be in the text, and then using basic reading comprehension skills on those segments of the text until a general idea is formed.

Reading to learn from texts typically occurs in academic and professional contexts in which a person needs to learn a considerable amount of information from a text. It requires abilities to remember main ideas as well as a number of details that elaborate the main and supporting ideas in the text as well as linking the text to the reader's knowledge base. Reading to learn is usually carried out at a reading rate somewhat slower than general reading comprehension (primarily due to rereading and reflection strategies to help remember information).

Reading to integrate information require additional decisions about the relative importance of complementary, mutually supporting or conflicting information and the likely restructuring of a rhetorical frame to accommodate information from multiple sources. These skills inevitably require critical evaluation of the information to integrate and how to integrate it for the reader's goal. In this respect, both reading to write and reading to critique texts may be task variants of reading to integrate information. Both require abilities to compose, select and critique information from a text. Both purposes represent common academic tasks that call upon the reading abilities needed to integrate information.

Different readers read texts may have different purposes which are used to serve their needs (Wallace, 1992: 6). Thus, much empirical research is done to explore the effect of

purpose on reading process and product. In this context, Alderson (2000: 52) states that changing the purpose of typical reading has no effect on what students understand, or their reading rate. Actually, Davies (1995: 132) assumes that *"there is a close relationship between reading purpose and text. In addition, there is also a relationship between reading purpose and types of reading".* That is, once the reader is clear about reading purposes and text, s/he will be in a position to consider the most appropriate type of reading to adapt. Nevertheless, depending on the reading purpose, different reading strategies and skills will be involved to suit the pre- designed purpose, in turn; the skills can be divided into sub- skills. In like manner, Alderson (2000: 50-51), again, elaborates this idea stressing the purpose someone sets as s/he reads a text and claiming that it has a great impact on the process of reading i.e. the manner and the way by which he reads it, and the ultimate understanding and the amount of recall s/he has of that text as being the resultant product of reading. According to Alderson (ibid.), reading a short story of entertainment at a bed time differs in all the three aspects (process, product, recall) from reading a history lecture for an examination the next day. He further assumes that "the process of reading differs for the same reader on the same text at a different time or with a different purpose in reading. It is even more likely, then, that the process will be different for different readers on different texts at different times with different purposes (Alderson, ibid: 3). If, for instance, all the reader wishes to do is get a general idea of text content, s/he will pay less attention to the detail of the text and s/he may well read in very different ways then if s/he is studying a text in order to identify key information.

Although we may engage in different kinds of reading for different purposes, comprehension is the most basic purpose for reading or "reader's intent" as Alderson (2000: 51) terms it (whether for information or for pleasure). Grabe and Stoller (2002: 11) admit that *"the overall goal is not to remember most of the specific details but to have a good grasp of*

*the main and supporting ideas and to relate those main ideas to background knowledge as appropriate".* Hence, it is very important to assess and decide about the relative importance of the information being read and the reader would be active, and at the same time, selective in choosing the most appropriate information that best suits his needs and matches his purpose of reading and not to *"strive mechanically"* to the whole data offered by the writer. In this context, Manya &De Leeuw (1965:13) notes: *"if the reader becomes passive, he is inclined to mistake or ignore his purpose. Lack of purpose is a great waste of capacity."*

Before moving to another point of discussion, it seems worth commenting on two terms that are commonly used to describe the activity of reading namely *skills* and *strategies.* The former represent linguistic processing abilities that are relatively automatic in their combinations (e.g. word recognition, syntactic processing). In most educational psychology discussions of skills, they are seen as general learning outcomes of gaol- driven tasks, acquired gradually and eventually automatised. Strategies are often defined as a set of abilities under conscious control of the reader; though this common definition is not likely to be true as Grabe and Stoller (2002: 15) point out. In fact, many abilities that are commonly identified as strategies are relatively automatic in their use of fluent readers (e.g. skipping an unknown word while reading, rereading to re-establish text meaning). Thus, the distinction between skills and strategies is not entirely clear precisely because that is part of the nature of reading and not a definition problem.

**1.6. Flexibility in Reading:**

Admitting that not all written prints are treated in the same manner, and that the reason behind reading a text impacts significantly the how and the what to extract from it; a reader's purpose also affects his rate of reading a great deal. This will, in fact, enable learners to approach texts appropriately in terms of matching purpose and speed of reading as Tricia Hedge (2000: 195) points. This, in turn, will enable them to make the fullest possible use of

their capacity and to avoid wasting it. This means that when the reader knows what s/he wants and has located suitable material, the next task is to use it efficiently. This, on the other hand, does not necessarily mean reading as fast as possible, nor need it entail understanding every detail because speed is not always appropriate. The important thing is to determine what is appropriate for his/ her purpose to the text and his/ her purpose of reading it. However, the evidence of this is unmistakable as Manya & De Leeuw (1965: 13) assume:

> *"Readers in general seem to become subdued by the printed word and are not nearly flexible enough in their speed: some appear to have only one speed, whatever their knowledge of the subject or the difficulty of the material. This inflexibility wastes capacity".*

Therefore, if readers remain constant in their reading lacking or ignoring the purpose of reading (i.e. reading everything in the same speed), they become passive and they waste a great deal of capacity including time and energy.

For Manya & De Leeuw (ibid. 47-61), as the amount of information that can be digested in a given time is limited, the reader must vary and adjust his speed of reading according to text difficulty; reading faster when meaning is easy to be extracted as it needs less time and reading slowly through spending more time when meaning is difficult. Hence, flexibility requires the economical distribution of both time and efforts especially for long passages which offer more scope for flexible reading. This makes flexibility one of the principal characteristics of a good reader. In that, s/he varies his speed, and his whole manner of reading. In the same line of thought Nuttall (1996: 48) claims that *"people who read flexibly are skilled at judging what they need to get out of a text to accomplish their purpose"*. He further exemplifies:

> *"With an urgent need to put out a fire, such a person skips the technical details about the fire extinguisher and goes straight to the section that tells him how to*

*operate it but when deciding which extinguisher to buy, he might read the technical details carefully and only skim the operating instructions" (ibid, 48).*

Reading flexibly means always keeping in mind how much the reader needs to read in order to satisfy his/ her purpose and changing his/ her rate accordingly to his purpose. This helps to decide which parts of the text to ignore which to skim to get the gist, and then which parts to study closely. Similarly, when wanting to finish a good novel in ten minutes, for instance, entails different purposes for reading determine different strategies in approaching texts and also different rates of reading (Hedge, 2000: 195). Added to this, knowledge of the subject (what other call familiarity with the topic), the reader's comprehension, his method of assimilation, his effort, the nature of the material and its density as well as the number of difficult vocabulary it contains, all affect the reader's speed of reading. In comparison to the poor readers, better readers are more able to monitor their comprehension than poor readers; they are more aware of the strategies they used, and they use them more flexibly. Specifically, better readers adjust their strategies to the text they are reading and to their purpose, as Hudson (2007:121) claims.

It is clear that reading for learning new information requires a full and detailed understanding from the reader's side. The latter makes use of his thinking and engages in an active process of relating new information if it matches with his existing or general knowledge and fits with the previous information in a text. For example, reading a novel for pleasure, however, does not demand a careful reading nor remembering details of the story; a reader sometimes decide to skip a page or two in a rather boring part. S/He may, on the other hand, decide just to focus on the headlines in a newspaper, or to read the end of the detective story before reading the introduction by means of scanning for specific information or skimming technique to have a broad idea of its content. In other words, one seeks to isolate

and identify parts of the material that are relevant to a particular topic or purpose for which one is reading. Hedge (2000: 195) divides reading into five types:

*1. Receptive reading: is undertaken when a reader wants to enjoy a short story or understand the main stages in a textbook description of a manufacturing process, for example.*

*2. Reflective reading: involves episodes of reading the text and then pausing to reflect and backtrack. For instance, when a reader wants to check something expressed earlier in the same article.*

*3. Skim reading: is used to get a global impression of the content of a text. An example of this would be previewing a long magazine article by reading rapidly, skipping large chunks of information.*

*4. Scanning: involves searching rapidly through a text to find a specific point of information, for example, the relevant key points in an academic text.*

*5. Intensive reading: involves looking carefully at a text, as a student of literature would look at a poem to appreciate the choice of words.*

It is now recognised that one text may be read in a variety of styles and that readers will have different purposes at each stage of reading process and will apply the appropriate strategies and thus, change their speed accordingly. For this reason, flexibility is considered as being the key to reading efficiently. Since not every piece of reading material is of equal importance, readers should conserve their emergence for more demanding material.

Actually, Wainwright (2007: 61) proposes a number of tips for checking one's flexibility in reading:

*a. Spending enough, or too much, time reading the material under focus.*

*b. Taking enough, or too much, care over his/ her reading on this occasion.*

*c. Making enough, or too much, effort to understand what s/he is reading.*

*d. Reading as quickly as his/ her purpose, the material and conditions permit.*

*e. The possibility of having anything else s/he should be doing in order to read more efficiently.*

*f. If s/he is reading to speed up or slow down if the material suddenly becomes easier or more difficult or if his/ her purpose in reading it changes.*

Moreover, he identifies four reading processes or as he calls them *"Reading Gears"* assuming that it is a more appropriate term to be used when talking about speeds.

*1. Studying*: involves reading, re- reading, making notes and revising: *"undoubtedly, this takes time, but it takes less time when undertaken systematically" (ibid.61),* he points out. This kind of gear is a technique to be reserved for those occasions when the content is difficult or unfamiliar or important and a high level of comprehension is required.

*2. Slow reading*: is generally word- by- word reading and is what brought the reader to pick up this book or attend the course that is using it in the first place. Wainwright (2007: 63) notes that:

> *"this type of reading is usually accompanied by a great deal of regression and it is used when the material is difficult but all the reader needs is a general level of understanding or when it is of average difficulty and the reader needs a detailed understanding".*

*1. Rapid reading:* is the gear that involves groups of words- by- groups- of- words reading, largely without regressions. It is used when the material is difficult but all the reader's needs is an outline understanding or when it is average and the reader wants a general understanding or when it is easy and s/he wants a detailed understanding.

*2. Skimming:* involves allowing the eyes to move quickly across and down the page (glancing rapidly through a text to get its gist), not reading every group of words nor even every line. Skill in skimming depends on a clear sense of purpose, paying particular attention to headings and subheadings, reading the first and perhaps also last sentences of paragraphs and looking

for key words and phrases in the text. It gives the reader a general picture or "overview" of the content, though it can be used to find specific information. Skimming is used when the reading material is average but the reader only needs an outline understanding. He would also use it on easy material for a general understanding or an outline.

The various gears are used, of course, depending on the reader's purpose and the nature of the material. To summarise, Grellet (1991: 17) concludes that

> *"Students will never read efficiently unless they can adapt their reading speed and technique to their aim when reading. By reading all texts in the same way, students would waste time and fail to remember points of importance to them because they would absorb too much non- essential information."*

**Conclusion:**

Various conclusions can be drawn from the above presentation of literature about reading and the reading processes. The first one concerns research on the nature and definitions of reading which can be described, to use Smith's (1973) words, as incredibly confused and inconclusive. From this, it would appear difficult to ask the question of what reading actually is, had it not been for the fact that to date nobody has been able to define reading exhaustively. Definitions of reading can generally be placed across a continuum of two opposing views, one focusing on the process of reading and the other focusing on the result of that process, the product. According to the first view, reading is primarily a decoding process.

On the other hand, the reading process involves the perception of words, the comprehension of text. Hence, no matter how reading is being defined and whatever definitions are attributed to it all of them agree on the fact that reading is meaningless without comprehension and that understanding is the essence of reading. Accordingly, reading is best described as the product of decoding and comprehension without either of them the reading act is hampered. The conclusion that we can draw about the various models of the reading process reviewed in this chapter is that reading starts with a visual stimulus and, if successful, it ends up with meaning. However, these models differ at the relative emphasis each model places on these different sources of information due to the methodology and the data which they are based on. Nonetheless, each one contributes in a different way to our understanding of reading behaviour.

## CHAPTER TWO: READING SPEED

# CHAPTER TWO: READING SPEED

## Introduction:

In reality, effective reading means- "flexible and appropriate response to the material in hand and this is always guided by the writer's purpose (Wallace, 1992, p. 6). In this respect, it seems impossible to perform one skill without the others. We may attend to a lecture listening and taking notes or reading and taking notes simultaneously while giving an opinion or commenting on the material being read and then would write a report of the lecture or the book and read it to our colleagues.

Consequently, needless to predict that a language skill is practised for its own sake in isolation or that we can set boundaries between them. There is always a purpose for a skill and its introduction calls for the assistance of the other skills which is very essential to assure a better and efficient development in reception and production abilities.

A far as speed is concerned, skehan (1998, p. 16) points out that it is crucial to develop affectivity in the use of language with some ease. For this, speed is one of the features that clearly distinguish the reading skill from the other skills. Rebecca M. Valette (1977:211) proves in his studies that rapidity of writing or speaking is limited by the muscular functioning of the hand or the speech organs; rapidity of listening comprehension is determines by the speed at which others speak. Again, this piece of research tends to focus on the relationship between two variables (reading and note- taking with regard to speed (i.e. in terms of the time in which the mind can assimilate information in reading and the time required for writing it down). This is based on looking at the application of reading which proves reading not as an isolated activity. In our case, it is linked and leads to taking notes.

In the present chapter, reading speed is discussed with focus on the physical as well as the mental aspects of this skill. In this vain, Nuttall (1996. p. 54) argue that "reading crucially

involves the mind. It is a physical activity too; it involves vision and the movement of the eyes. Poor vision makes for slow reading; small or unclear print has the same effect".

**2.1. The place of comprehension in reading speed and note- taking speed:**

Comprehension is generally regarded as the essence of reading (Durkin, 1993, in Tankerseley, 2005: 108). In that it plays a major role and addresses a great consideration both in the acts of reading and note- taking. Brown Douglas (2004: 214) states that "a reader's comprehension of extensive texts may be accessed through an evaluation of a process of note-taking and/ or outlining". For the same reason, some researchers refused to provide a definition to reading speed without associating it to comprehension because any attempt to consider or explain the reading rate without reference to comprehension (i.e. an understanding of what's being read) is meaningless (Jordan, 1997, p. 146).

These researchers state their argument on the basis that readers cannot read quicker than they could understand (Nuttall, ibid, p. 54). This is clearly refers to by Wainwright (2007: 34) in declaring reading speed to refer to the speed of reading comprehension (i.e. the rate at which readers understand a print) and this latter rather confusedly refers not only to the whole process of reading but also more specifically to the quality of reading comprehension, since the reader keeps looking ahead for meaning rather than stopping at each word to seek the exact native- language equivalent. As an instance, some students are able to read with speed, expression and smooth decoding, but they do not understand what they read. These students are not yet fluent readers because fluency also requires comprehension. Thus, the stronger the reader's fluency in reading a specific passage, the greater the resulting comprehension would be.

Despite the fact that both are certainly closely linked (Nuttall, ibid, p. 54), the relationship between reading speed and comprehension is complex and not yet clear in terms of which causes the other (i.e. do people read quickly because they understand easily, or do they

understand because of the speed at which they read?). However, it is needed to remember that each affects the other though not always as Wainwright (ibid) comments, especially if we know that low speeds do not automatically give better comprehension and higher speeds do not automatically give poorer comprehension. This point is further stressed by Nuttall when she points out that "a slow reader is likely to read with poor understanding". If only because his memory is taxed: the beginning of a paragraph may be forgotten by the time he has struggled to the end of it". Actually, because the process of comprehension is more or less automatic for good readers, we are not interested in testing it directly in the present study. In this respect as comprehension takes place, words are recognised and their meanings are accessed in the reader's memory. Phrases and sentences are quickly processed so that their meanings do not fade before the next ones are handled.

Though Rivers & Temperley (1979: 265) claim note taking to be integrated with the improvement of reading if it doesn't lead to it", the relationship, in turn, is not yet clear in terms of which causes the other. However, it is worth noting that both are tightly related elements to comprehension as each approach of reading insists (ibid, 241). In this context, reading speed clearly refers to the speed of reading comprehension and putting what has been understood into words in a form of notes. Therefore, readers ' notes serve as a real world reflection of the amount of information being understood from the reading material because they may include sentences which give the main gist for each paragraph then set down the important details related to the central idea; showing clearly their relationships in the development of the main idea.

Rasinski (2002, in L. Vecca et al., 2000. p. 221) explains that fluency has three dimensions. The first and the second are accuracy in word decoding and prosody or prosodic features of reading. They are not related to our study. However, the third dimension does. It concerned automatic processing. That is when the reader uses as little mental effort as

possible with the decoding of text, saving mental energy for comprehension. He further explains (in L.Vecca et al., 2000: 211) that because fluent readers do not have to spend time decoding words (i.e., they can sight- read thousands and thousands of words) they are able to spend time and energy on making sense of and comprehending the text.

**2.2. Reading Speed:**

Readers can speed up their reading by means of skimming or scanning in finding the relevant texts/ sections and focusing on these; now it is time to consider the speed with which they process the linear text itself. Reading speed is a major characteristic of fluent and skilled readers and a contributing factor in comprehension. It plays a significant role too as being one of the factors to consider when judging someone's reading efficiency. But it is obvious that two readers understand a text equally well, the one who performs more quickly is judged more efficient (Nuttall, ibid: 54). Having this weight and importance, reading speed is thoroughly dealt with in first part of this chapter. After defining reading speed and insisting its significance for EFL students, the La Berge and Samuels (1974) Automaticity theory is introduced because it provides a theoretical support for reading speed. It explains the characteristics of rapid and fluent readers and forms the principles for one the models of reading which is the interactive model. Dealing with one of the components of reading fluency which is reading speed would help us to know more about one of the important variables related to our present study. Then, we discuss the role of automatic word recognition in rapid reading. We end up all what have been said earlier. At least, we close the section with some faulty reading habits readers have to get rid of.

**2.2.1. Definition of Reading Speed:**

Much work has been done as an attempt to understand how readers respond to a print in terms of speed (Nuttall, 1982. p. 54). The significance of reading speed lies in its roles in determining the extent of readers' fluency. In this context, reading fluency is often associated,

in every day terms, with reading easily and well. Rasinski (2002, in L. Vecca et al., 2000: 220) defines fluency as "the ability of readers to read quickly effortlessly and efficiently with good meaningful expression". In his view "good readers are both good decoders and good interpreters of texts; their decoding skills becoming more automatic but not less important as their reading skills develops" (p. 94). According to Wainwright (2007: 01) reading speed is the act of reading the material as quickly as the reader feels she/ he still takes information in". This entails that the more the reader understands the reading material the quicker he/ she would be like reading easy enjoyable book will let readers do it quickly as Skehan (1998: 83), exemplifies.

In his studies of reading development, reading rate and reading efficiency, Carver (1990, 1998, in Grabe and Stoller, 2002: 122) demonstrates that reading abilities are essentially a combination of comprehension accuracy and reading rate. This latter explained by decoding abilities and simple speed of naming words and numbers. In this way, reading rate is the product of word decoding abilities and cognitive processing speed (Grabe and Stoller, 2002: 123). Bernhardt (1991a: 234, in A. H. Urquhart &G. J. Weir, 1998: 192) defines reading speed in L2 as the skill of reading as fast in that language as their knowledge of it will allow, in relation to their reading purposes". In this case, L2 readers often read texts more slowly than L1 readers as Urquhart &Weir claim (ibid). For this reason, speed is one of the most striking differences between L1 and L2 readers of English texts and high speed is a characteristic of fluent readers who adjust their reading speed according to the material that they are reading and their purpose for reading it. He defines reading speed as the "rate at which you read" and he distinguishes it from speed reading in which the aim is to read everything at maximum speed (Orr, 1992: 54). Speed reading is defined by Orr (ibid) as the function of the number of eye fixations, or momentary tops, which you experience as you move your eyes across a line of writing. Even though one fixation is a very brief pause in your

eye movements, usually a matter of micro- seconds, the cumulative total of these fixations can be immense". The experienced readers often seek to achieve flexibility and the ability to speed up or slow down according to the text and his/ her purpose for reading (Mikulecky and Jeffries, 2007: 240-241).

This means that reading rate, according to Eskey, is used to describe the process of reading in meaningful words labelled "chunks". Actually, if reading fluency is known as such, reading speed is estimated as being an accurate measure of reading fluency. In this sense, it is used to evaluate reader's quickness in covering the words per minute. Agreeing with Eskey, S. J. Samuels &Michael L. Kamil argue that there is a serious problem which is that even if a skilled reader can generate predictions, the amount of time necessary to generate a prediction may be greater than the amount of time the skilled reader needs simply to recognise the words. In other words, for the sake of efficiency, it is easier for a skilled reader to simply recognise words in a text than to try to generate predictions. Both researchers conclude that while the top- down models may be able to explain beginning reading, with slow models may be able to explain beginning reading, with slow rates of word recognition, they do not accurately describe skilled reading behaviour. This, in fact, makes rapid reading a more language- structured affair than the guessing game metaphor- seems to imply. Thus, good reading, that is, fluent and accurate reading –can result only from a constant interaction between bottom- up recognition skills and their top- down interpretation strategies (Eskey, 1998; 95). Though these two cognitive processes are involved in simple decoding which successful comprehension cannot be achieved without, both are necessary for successful reading.

Being on the same stream of thought and looking at reading speed from another perspective, Stanovich (in Eskey, ibid: 95) notes that "reading rate is more dependent on the speed with which a reader can recognise words and construct a representation". That, is, on

bottom –up skills, “than on the ability to use predictions”, that is on the basic top- down strategy. Eskey concludes, then that fluent (both rapid and accurate) readers do not use conscious expectancies to facilitate word recognition” (p. 95)

**2.2.2. The importance of reading speed in EFL:**

The fact that reading speed is important is widely recognised by researchers and educationalists according to Eskey and Grabe (in Alderson, 2000.p. 12) who calls for a better understanding of these skills reading speed, automaticity together with flexibility claim that they are required in reading. Consequently, a great deal of work has been done on the improvement of reading speeds. Stemming at least I part from the discovery that good readers do not read word by word. They make fewer eye movements than poor one; his eye takes in several words at a time: one characteristic of an efficient reader is his ability to chunk a text into sense units, each consisting of several words, and each taken by one fixation of his eyes. Rebecca M. Valette, 1977: 210) states that the matter becomes easier and quicker to take in the sense of two or three chunks and fit them together than to do the same with a larger number of smaller chunks. So the larger the sense groups a reader can take in, the more easily he will turn them into coherent messages (Nuttall, 1982. p. 33). As a result, slow reading becomes a problem and a great difficulty for EFL students. It causes their embarrassment and changes their reading into a hard unpleasant experience, where they will easily get discouraged and stumble on unfamiliar word and fail to grasp the general meaning of the passage. This, in fact, causes them, again to fall behind with their reading assignments and to fail to appreciate the act of reading.

Nuttall (1982: 19) asserts that slow reading is the product of classroom methodology in reading lessons. Texts designed for reading are generally used as vehicles for the presentation and practice of language items such as vocabulary and sentence structures rather than the encouragement of reading itself. This emphasis on linguistic patterns encourages students to

develop a word- by- word reading habit as being a characteristic of non- fluent readers who focus their attention on figuring out words. Considering this as the most convenient way to achieve a total comprehension of texts and having less attention to devote to comprehension. This, in fact, leads students to feel insecure about deleting or skipping over words and shakes their confidence to be flexible readers because flexibility is the sign of a competent reader who use different rates for different materials and different purposes instead of plodding through everything at the same careful speed.

Nuttall (1982: 35), again, identifies many factors to sustain EFL students' slow reading. First is the lack of extensive exposure to the foreign language. He claims that "students must develop the habit of foreign reading massive amounts. For this, we learn to read by reading... we want students to read better... to do this they need to read more (1996, p. 128). Unlike L1 Adult readers whose reading automaticity (being able to see the words and read them quickly without decoding them letter- by- letter and finding their meaning immediately) tend to progress spontaneously, as a result of a vast exposure to the L1, EFL students are faced with difficulties due to their limited reading experience with the FL. This clearly affects their reading automaticity as well as their reading comprehension (Grabe And Stoller 2002. p. 123). Second, the vast number of unfamiliar words, complex sentences and difficult ideas students come across. Thus, they make the text difficult and dense with information it carries (i.e. the minimum number of words expresses the maximum amount of information. In this case, students may feel insecure to stop giving equal attention to every word or practice and develop the skills of skimming and scanning which should be practiced on simple material first. That is not beyond their level. Third, non- automatic word recognition; in other words, disfluent word decoding. Forth, un- efficient syntactic parsing; that is to say, inadequacy in its grouping words into meaningful chunks, as Matlin, (2003. p. 166) expresses (i.e., reading phrases, clauses, and sentences by parsing, or dividing text into meaningful chunks" (National

Institute for Literacy, 2001. p. 22). Another crucial factor that proves to be very influential in EFL students reading fluency lacuna is the structural differences between the writing systems of Arabic (L1) and English (FL), for example.

There are serious differences between ESL and natives as far as reading is concerned. In that the former readers tend to spend six times longer than natives to read a text (Eskey and Grabe, 1988, 233). This reading slowness stems primarily from a word- by- word deciphering which overloads their short term memory and intervenes with their reading ability and comprehension. Despite the fact that EFL fluent decoding shifts their reading into a hard effort- wasting task.

Reading fluency is regarded as the provider of a bridge between word recognition word recognition and comprehension (National Institute for Literacy (NIFL, 2001. p. 22).to understood the significant role fluency plays in reading instruction, teachers should be “good detectives” to find its clues. One of the cardinal variables in reading performance is reading rate. For this reason, Grabe and Stoller, (2002. p. 123) suggest that “reading instruction and assessment should focus on both comprehension abilities and reading rate (and fluency) “abilities”. So rate and fluency (and by extension, amount of reading) play important roles in reading comprehension abilities. A further implication is that word- decoding skills represent fundamental abilities underlying both comprehension and rate (fluency) a finding argued in many experimental studies”. Wainwright (p. 11) emphasizes the same point saying that “reading speed is important for those who wish to achieve a certain kind of improvement in recall in addition to comprehension or want to increase their flexibility in dealing with different kinds of material”. He asserts that reading against the watch or setting time limits for reading is a useful idea because when you wish to have the reading completed and the deadline will help you in your quest for progress” (p. 17- 18). However, Eskey stresses that reading rate should not be overlooked, as students reach advanced levels of proficiency; they

have to be able to read at a moderate rate and demonstrate a good comprehension as well. In this sense, speed can have an adverse effect upon comprehension if you go beyond certain limits. What those limits are will vary a great deal from person to person and from time to time" (Wainwright, 2007 p. 36). Unfortunately, reading speed has formerly been ignored by both researchers and teachers.

Wainwright (ibid. p. 19) argues that reading rate has been disregarded by both researchers and teachers. He notes in his words "there is a training gap we in fact encountered earlier, the fact that most people are taught how to read in primary school and then receive no further actual training in techniques of rapid reading and recall". Reading speed is rarely measured either to assess reading development or to identify its problems (Carver, 1998, in Grabe and Stoller, 2002. p. 122). He adds that the rate at which individuals read with accurate comprehension is a major factor" which extremely influences readers' achievement.

It has been observed that reading teachers tend to de- emphasize fluency development by giving more focus on word recognition, vocabulary, and comprehension improvement. For them fluency is not a contributing factor in itself. That's why fluency is very restrictively introduced- if not at all- in the currently used reading textbooks (Rasinski, 2000), to explain his view point.

Rasinsky (ibid: 146) commented that reading speed is not very important as long as the students are able to extract meaning from the written material, or as they are able to understand what is being read. Although he strongly agrees that understanding is the end-product of reading, he stresses the fact that reading rate should not be ignored neither as an indicator of fluent reading nor as an evidence of excessively slow processing of a text.

Slow or inefficient (usually synonyms: Wainwright (2007, p. 23) effortful reading hinders L2 /Fl learners to achieve an effective an efficient comprehension of what they read and hampers them from dealing with the required amount of reading. Hence, improving reading

fluency for L2/ FL learners is a major goal for educators. Being in complete accordance with this, Rasinsky (op. cit.) states:

"The point I am hoping to make is that we need to take the notion of slow, inefficient disfluent reading seriously. Even with adequate comprehension, slow and laboured reading will turn any school or recreational reading assignment into a marathon of frustration for nearly any student". (Rasinsky, 2000:146)

He considers reading rate as an indicator of fluent and disfluent reading and, a tool for assessing students' reading performance. It is according to reading rate that authentic instructional activities can be included into a reading programme.

Nuttall (1982: 167) on her part, explained through "the vicious cycle of the weak reader", the frustration caused by slower reading. Readers who do not comprehend tend to slow down their reading speeds, in doing so; they lose interest in what they read because they spend much time. As a result, they do not read much and will not improve their reading speed; readers are invited to the "vicious cycle of the good reader". If students are able to read quickly, they will enjoy reading, with practice their comprehension improves.

From the above discussion, it becomes clear that reading rates vary for individual readers, depending on the nature of the text one is reading, one's reason for reading and one's reading proficiency. There are rates, however, that are simply too slow for general comprehension many language learners read too slowly with good comprehension, these students could probably benefit from direct attention to rate building in class. Reading speed can be developed in numerous ways in the classroom. Therefore, it needs to be taken seriously by both teachers and curricula designers.

**2.2.3. Automaticity Theory: The Theoretical Background of the Study:**

The present study is built on the basis of the La Berge and Samuels "Automaticity Theory" (1974). Before we tackle the model of the La Berge and Samuels which represent the

automatic processing of information, in this part of this chapter, we will clarify the notion of automaticity in its relation with learning new skills in everyday life and to reading.

**2.2.3.1. Automaticity: The Route to Competence:**

Automaticity (Automatization) as a technical term has been used in different meanings in the literature. Some meanings are based on broad and loose definitions. The broad definitions usually concentrate on one of the three aspects of automatic behaviour: Logan (2005: 130, in Zoltan Dornyei, 2009. p. 156) defines automatization as the "power function speed up in reaction time", Lee (2004: 44) states that automatization is "another name for acquiring procedural memory", and Segalowitz and Hulstijn (2005) describe the generally understood essence of the concept as the "absence of attentional control in the execution of a cognitive activity" (p. 371). While all these aspects of automatized skill performance- speed is not as defining criterion if it only concerns a quantitative change in the execution of a programme, according to him, the hallmark of real automatization is a qualitative change in processing, according to N. Ellis (2005 a), needs to occur ballistically (i.e. automatic in the sense that it cannot be stopped, outside explicit control.

To better explain the term automaticity, an analogy is often made to driving a car. Mostly, a skilled driver will focus little attention or use little mental energy while driving. Skilled drivers frequently follow a complex process that entails many operations to be carried out correctly, rapidly, and instantly. They drive on automatic pilot. Nevertheless, when the need arises, a driver can swiftly focus attention on driving, for example, when a warning light goes on or when weather conditions suddenly change. In other words, most of us drive with automaticity, with little use of mental energy but when necessary, we're able to refocus rapidly on what we're doing as drivers, whereas beginner drivers have to think about every procedure before carrying it. With practice they become automatic so that all tasks would be

performed unconsciously (M. Matlin, 2003: 379). That is a simple example of gaining automaticity over a task in everyday life (L. Vecca et al. 2000: 222).

It is understood from this example that the performance of any new skill tends to be slow, effortful, and time- consuming because every detail and each step in its execution requires a great deal of conscious attention. Once it is performed over and over again, the achiever gradually gains proficiency over it and succeeds in fulfilling it rapidly, effortlessly, and unconsciously. Hence for Huey (1968: 104), it is the repetition of any process that facilitates a task's termination, shortens its duration, and allows its accomplishment without a close attention. This principle of mastering a new skill also applies for becoming good readers. He contends: "easy repetition progressively frees the mind from attention to details, makes facile the total act, shortens the time, and reduces the extent to which consciousness must concern itself with the process".

Not far from this, Eskey (1998, p. 94) explains his position by thinking the rapid and accurate decoding of language is important to any kind of reading and especially important to second language reading. Good readers know the language: they can decode, with occasional exceptions, both the lexical units and syntactic structures they encounter in texts, and they do so, for the most part, not by guessing from context or prior knowledge of the world, but by a kind of automatic identification that requires no conscious cognitive effort. It is precisely this "automaticity that frees up the minds of fluent readers of a language to think about and interpret what they are reading, that is to employ higher level, top- down strategies like the use of schemata and other kinds of background knowledge (Neely, 1997, p. 94, in Eskey, 1998). Thus, when we perform aspects of a task automatically, we perform them without experiencing then need to invest additional effort and attention (or at least with significantly less effort and attention). However, Zoltan Dornyei notes that (2005, p. 287) from a psychological perspective "speed" may not be a defining feature of automaticity because fast

processing is not necessarily automatic. Automaticity figures as an important issue in nearly all theories of cognitive skill acquisition including treatments of first language performance and in many discussions of second language acquisition (Segalowitz 2003: 394, in Zoltan, 2005: 287).

For Samuels (1999:183), this automaticity principle covers all the complex processes such as reading a print, writing a script, reading music and playing it simultaneously. All these activities comprise sub- processes which might be performed instantly and unconsciously only after they become automatic.

To sum up, the term "automatization" has been used in at least four different meanings in the literature: (1) speed of processing, (2) availability of relevant procedural memory, (3), absence of attentional control, and (4), ballistic (i.e., unstoppable processing.

**2.2.3.2. La Berge and Samuels Automaticity Theory: Automaticity in Reading:**

In one of the most important contributions by cognitive psychologists to reading research (and potentially the teaching of reading) in recent years, it was repeatedly found that good readers used context much less often than poor readers when recognising printed words with. In fact, they appear to be able to recognise words without conscious thought, i. e., at the automatic level (Urquhart and Weir, 1998, p.. 190). On this basis, the theoretical rational for the current study stems from (i.e., the La Berge and Samuel' (1974) model of automatic information processing in reading which is rooted in Heuy's classic work (1908, 1968) The Psychology and Pedagogy in Reading. His work attributed an increased importance to automatic word recognition in L1 reading which has been extended later, though with less empirical support, to the L2 reading area.

Previously in L2; a great deal of faith had been placed on decoding by means of context. Haynes (1984, in Urquhart and Weir, 1998: 191), however, points out that we need to get the level of automaticised vocabulary up rather than focusing on decoding in context. He states

(48): “rapid precise recognition of letters and words, that is, bottom- up, more input constrained processing must be mastered before fluent reading can take place. Urquhart and Weir 1998: 192 notes that automatic word recognition is more important to fluent processing of text than context clues. Poor readers have simply not acquired automatic c decoding skills. They spend too much time processing time thinking about words and relating them to the surrounding context, rather than automatically recognising them”.

La Berge and Samuels (1974: 293) emphasise the importance of automaticity in reading relying on the argument of the limited capacity of attention in human beings. They contend: “during the execution of a complex skill, it is necessary to coordinate many component processes within a very short period of time. If each component process requires attention, performance of the complex skill will be impossible because the capacity of attention will be exceeded. But if enough of the component and their coordinations can be processed automatically, then the loads on attention will be within tolerable limits and the skill can be successfully performed. Therefore, one of the prime issues in the study of a complex skill such as reading is to determine the processing of component sub skills becomes automatic (La Berge and Samuels, 1974: 193)

As it has been articulated by La Berge and Samuels, attention refers to the mental energy used by a person to process incoming information. This cognitive effort is a limited capacity: if a person manages to minimise its amount to carry out a task, more attention would be available to be devoted to a concurrent performance. They proposed that once an operation becomes automatic, attention demands are reduced to a minimum. Thus, the more automatic the processing at earlier levels, the more attention capacity is left for complex levels of processing. On this context, L. Vecca et al. (2000. p. 222) note that “when readers are accurate but not automatic, they put considerable amounts of mental energy into identifying words as they read. When readers are both accurate and automatic, they identify or recognise

words accurately, rapidly, easily, and with little mental energy". Like the skilled driver, the skilled reader can rapidly focus attention on a decoding can rapidly focus attention on a decoding problem but most of the time will put energy into comprehending the text.

Automaticity principle is related to complex processes such a those involved in reading. There are two basic processes that the reading act entails as Samuels identified them. They are undertaken by readers to become automatic, so they would be of paramount importance (Samuels 1990: 180). The first process involves decoding which gained general recognition out of its importance though these is less agreement on how to achieve the goal in L2 reading (Urquhart &Weir, 1998: 193). This process entails readers to see and pronounce the words either silently or loudly, and the second process entails comprehension. In this vain, Day & Bamford (1998, p. 12) indicate that

> *"The initial process of accurate, rapid, and automatic recognition of vocabulary frees up the mind to use several simultaneous processes involving reasoning, knowledge of the world, and knowledge of the topic to construct meaning. Hence, reading begins with the accurate, swift, and automatic visual recognition of vocabulary, independent of the context in which it occurs"*

Bernhardt (1991a: 235-6) in Uquahart and Weir, ibid, p. 192) argues that the ultimate goal is automaticity. In that good L1 readers process language in the form of written text without thinking consciously about it, and good L2 readers must also learn to do so. It is only this kind of automatic processing which allows the good reader to think instead about the larger meaning of the discourse- on the one hand, to recover, the message that the author intended to convey and, on the other, to relate that new information to what the reader knows and feels about the subject, and to his or her reasons for reading about it (Tankersley, 2003. p. 88-89). In short, it is only this kind of local processing that allows for global meaning with true comprehension. In other words, in order to understand what has been deciphered, readers

must access words' meanings (match words' definitions with descriptions held in readers' mental dictionary by relating the printed information to their own background knowledge). Both decoding and comprehension require paying attention.

Humans have two levels of processing that are relevant to attention and are important for readers to become automatic, as far as Walter Schneider& Richard Shiffrin view point is concerned (in Matlin, 2003. p. 58). Regarding the first stage, which is termed a beginning "controlled" stage; beginner readers spend much time and effort to decode the words. This process is performed at a conscious level and demands considerable attention and effort. It is generally used for on difficult tasks or on tasks that use unfamiliar items. It is serial in nature (i.e., the reader can handle only one item at a time). At the automatic stage, in contrast, word recognition refers to linking the printed representation of a word to its meaning) becomes mechanical, attention frees and hence carried out rapidly, accurately, and effortlessly. It is used on easy tasks that use highly familiar items (Feldman, 1997, p. 345)

From a general perspective, Juel (1991: 783, in Urquhart and Weir, 1998, p. 193) points out that automaticity in most skills comes from over learning: "repeated practice frees up one's attention so that it does have to be focused on the mechanics involved in the specific activity..." Moreover, to obtain the automaticity that this involves requires frequent opportunity to link together the components of sentences so that they can be produced without undue effort, so that what will be important will be the meanings underlying the text. Only by frequent use is the fluency side that the interest of a good passage may make students want to read the book from which it is taken. In this regard, and in the light of the definition of automaticity –the ability to execute a complex process with little attention- Samuels conceives that practice in reading (extensive reading) enables the reader to decode with minimal attention and save the available cognitive resources for comprehension processes. In like

manner, automatic students may feel the easiness of reading since they do not load their short-term memory and what is stored there is meaningful to them (Woolfolk, 2004. p. 149)

**2.2.3.3. La Berge and Samuels Model of Automatic Information Processing:**

The La Berge and Samuels model of automatic information processing embodies five main components: attention, visual memory, phonological memory, semantic memory, and episodic memory.

**2.2.3.3.1. Attention:**

Attention is the core aspect in La Berge and Samuels' (1974) model of automatic information processing. It refers to the limited cognitive energy a person uses to process information. It is defined by M. Matlin (2003: 72) as a concentration of mental activity". However, Ralph G. Nichols (Vol. 22, No. 1, Spring 1960) conceives that the best definition of attention he knows is that "it is a collection of tensions that can be resolved only by getting the facts or ideas that the speaker is trying to convey". In order to comprehend how attention is used, considering how it is used by both beginning and mature readers is worth noting.

As it has been suggested by Samuels and Kamil (2002: 197), the decoding process is hard for beginning readers who must first learn to distinguish and remember visual features of letters, and then comprehend what has been deciphered. The joint effort of decoding and comprehension may surmount the attention capacity of the beginner students and inhibits the two processes (decoding and comprehension) from co- occurring simultaneously. To compensate for this hindrance, students apply the attention switching strategy. They first direct their attention to decoding; once the decoding task is fulfilled, attention shifts to comprehension processes. Although comprehension switching permits students to comprehend, it tends to consume too much time. In addition, it causes short- term memory to be overloaded, and this prevents them from recalling what they have read (Samuels and Kamil, ibid.).

In contrast to beginning non- automatic readers who adopt attention switching strategy that allows them to either decipher or comprehend at once, mature automatic readers can do both decoding and understanding simultaneously. Since their decoding task is very automatic, very little attention is allocated to it so that all the available attention is allowed for comprehension processes. In this vain, Logan, Taylor, and Etherton (1999: 197, in Zoltan Dornyei, 2005: 158) state that "what is learnt during automatization depends on what is attended to and how attention is deployed"

**2.2.3.3.2. Visual Memory:**

It is at the visual memory that the visual stimuli from the printed page are processed. Units in the visual memory take different sizes. They could be a distinctive feature, a letter, a spelling pattern, or a word. At a very early stage of reading, before they become familiar with language letters, readers start by noting their distinctive features. Gradually these distinctive features would be unitized into a letter code. With sufficient practice, certain letter combination would not be processed as separate letters but as a single visual unit (single spelling patterns). These spelling patterns, in their turn, are further combined so that the word itself is processed as a single visual word unit (Samuels and Kamil, ibid. 198- 199)

**2.2.3.3.3. Phonological Memory:**

Similar to the visual memory, which includes units of increasing size from the distinctive feature up to the word, the phonological memory entails distinctive features, phonemes, syllables and morphemes. Phonological memory utility lies in its function as a mediator between the visual and the semantic memory; in other words, before proceeding to the semantic memory for meaning processing, letters, spelling patterns, and words selected from the visual memory return to the phonological memory to meet their counterpart letter sounds, syllables, and morphemes, for a reader may break a word down into parts and sounds them out before he recognizes the word meaning (Samuels and kamil, ibid, 204).

**2.2.3.3.4. Semantic Memory:**

The final element addressed in La Berge and Samuels (1974) model, according to Samuels and Kamil (2002: 205), is the semantic memory. it is memory for meaning, including words, facts, theories, and concepts (declarative knowledge). These memories are not tied to particular experiences and are stored as propositions, images, and schemes. Semantic memory consists of associations between mental representations of various piece of information. It activates also the recall of related concepts, bringing them more readily to mind. Since semantic memory includes the entire knowledge one may have. It is very significant in reading since the reader relies heavily on his background knowledge to make sense of the print. . In reading too, unless the printed information fits adequately with a reader's general knowledge, his comprehension would be hampered. Accordingly, understanding of written materials is facilitated by the various types of experiential knowledge stored in the semantic memory. A part from the semantic memory, Jordan, (1997: 92) emphasised the role of the lexicon which includes the meaning of all the words someone knows that is very essential in reading. He states:

> *"Research in memory suggests that words are stored and remembered in a network of associations. These associations can be of many types and be linked in a number of ways. Words in our mental lexicon, for example, are tied to each other not only by meaning, form and sound, but also by sight."*

Decoding speed is a key element in Samuels and La Berge model. According to this model, a reader is required to be able to decode words rapidly and efficiently before being able to fully develop the more complex skills of reading. As decoding becomes more automatic, more attention is available for comprehension: with greater mental resources devoted to it, comprehension improves.

**2.2.3.3.5. Episodic Memory:**

It is memory for the biographical details of one's individual life (i.e., events related to people, objects and time). Memories of what we have done and the kinds of experiences we have had constitute episodic memory. This Katter, then, can provide information events that happened long in the past. That's why it can be surprisingly detailed. Hence, Information in this memory consists of answers to "wh questions": when for time, where for location, who for people and what for objects (Samuels and Kamil, ibid).

**2.2.4. Automatic Word Recognition:**

In recent years, L2 reading researchers have become much more aware of the importance of rapid and automatic word- recognition skills of fluent reading, which has prompted explorations of differences among L2 students in their word- recognition abilities. Day & Bamford (1998, p. 12) note that

> *"Automatic word recognition is the basis of reading; it is what allows skilled readers to read with apparent ease and lack of effort, rapidly breezing through material. Research has established that readers fixate (rest on) almost every word of text as their eyes move across the printed page*".

The significance of automatic word recognition in the reading process lead to its consideration as the basis of reading (Gough, 1984, in Stanovich, 1991: 418), it is further estimated to be the "crux" of reading. Thus, Day & Bamford (1998, p. 13) argue that words that readers are able to recognize automatically are often referred to as *sight vocabulary*.

Rapid word recognition which is used by Eskey is often used too to describe the term immediate word identification. However this latter is far more complicated than recognising words on flash cards, as L. Vecca et al. (2000, 221) point out. In that when a word is retrieved rapidly from long term memory, the process is often triggered by well- developed schemata that the reader has developed for a word. In immediate word identification, which is a strategy

used by skilled readers on 99 percent of the printed words they meet, schematic or physical features in a word (e.g., a single letter or letter cluster) trigger quick retrieval of that word.

Automatic word recognition operations are highly related to higher levels of reading comprehension (Stanovich et al., 1996: 1). Despite the fact that both top- down processes (such as prediction) and bottom- up processes (such as word recognition) are necessary for comprehension, the latter relies greatly on rapid and accurate decoding (Birch, 2002; in Eskey, 1998: 566). It has been suggested that after initial word identification, but still during the fixation, good readers move onto higher- level prediction and monitoring, as well as planning of subsequent fixations. This is thought to be because good readers use less capacity to analyse the visual stimulus, and therefore, have other resources available for other sorts of processing.

Word recognition is also cited amid the three fundamental reading skills; namely comprehension skills, rate skills and word recognition skills (Juel, 1991: 771, in Urquhart &Weir, 1998: 190). Word recognition would be repeated throughout our discussion, thus, it would be better to explain it for clarity.

Word recognition is the process of seeing a word and accessing its meaning. Automatic word recognition entails phonological recoding and lexical access. Phonological recoding consists of matching the printed letters to their corresponding sounds relying on letter sound rules. For instance, the word “bed” would be translated into its component letters (b, e. d) then into their corresponding sounds (/b/, /e/, /d/) before being matched to form the word bed. Lexical access, however, consists of finding the words’ meaning in the readers’ mental dictionary (lexicon). In this context, the visual eye span in eye fixations has been demonstrated to be very limited: first, , language readers are capable of seeing no more than 15- 16 letters in a fixation- typically 3- 4 letters to the left of a fixation and 10- 12 to the right (Rayner and Pollatsek, 1989), what distinguishes, good from poor readers, as Alderson, 2000:

56- 57 reports is not the number of letters in a fixation , nor the number of words fixated per page, but the speed of the fixation- the automaticity of word recognition- and the processes that occur during fixation. Rayner and Pollatsek (1989) report that words are identified quickly: the rate for skilled readers exceeds the recognition of five words per second.

To sum it up, Ehri and Walace (1983; in Carver, 2000:67) contend that automatic word recognition proceeds through three main phases:

1- Accuracy: it involves recognition of unfamiliar words by focusing attention on the component letters of words trying to decode the words accurately (L. Vecca et al. 2000. p. 221)
2- Automaticity: with experience readers are able to recognise familiar words automatically as whole units.
3- Speed: the speed of processing familiar words increases to a maximum. NAEP (in L. Vecca et al, 2000. p. 247) data suggest that students who read with greater fluency also read with greater speed than less fluent readers.

Grabe and Stoller (2002: 20-22) stress the centrality of rapid automatic word recognition for fluent reading comprehension considering word recognition as a car's gasoline and the car as reading comprehension; they contend that just as a car could not run without gasoline, reading comprehension could not take place without fluent word recognition.

In this respect, the utility of fluent word recognition lies in the fact that it provides the working memory with accurately recognised words which facilitate text comprehension. Thus, the relation between word recognition and comprehension with regard to memory is explained in this way by Pressley (1998. p. 6, in Grabe and Stoller, 2002. p. 21) as "why does automaticity matter?... decoding and comprehension compete for the available short term (memory capacity. When a reader slowly analyzes a word into component sounds and blends them, a great deal of capacity is consumed, with relatively little left over for comprehension

of the word, let alone understanding the overall meaning of the sentence containing the word and the paragraph containing the sentence. In contrast, automatic word recognition (i.e. recognising a word as a sight word) consumes very little capacity, and thus very little capacity, and thus, frees short term capacity for the task of comprehending the word and integrating the meaning of the word with the overall meaning of the sentence, paragraph, and text".

The fundamental requirement for fluent reading comprehension to rapid and automatic word recognition enables good readers' lexical access to be automatic. In addition, to being very fast, it cannot be readily reflected on consciously, and it cannot be suppressed; that that is, when the eye sees a word, the reader cannot stop him- or herself from accessing its meaning. Hence, the ability to recognize word, as Alderson (2000. p. 57) describe it, rapidly and accurately (encoding time) is an important predicator of reading ability. Hence, exhibiting poorer processing in "lower mechanisms that may be involved in basic word recognition is the cause of not reading quickly or easily and not the deficiency in vocabulary knowledge, as Segalowitz et al., (1991: 20, in Alderson, 2000: 58) notes.

**2.2.5. Faulty reading habits that reduce reading speed:**

There are a number of reading habits that inevitably slow the reader down and contribute greatly to making reading a tedious and time-consuming chore as identified out of research into reading in the United States (Wainwright, p. 24).

**2.2.5.1. Regressing**:

The biggest problem that the inefficient or slow reader has is that he or she regresses, that is, goes back o read things again instead of sweeping steadily forward believing that these regressions are necessary because s/he does not understand the first time what s/he is being told. We go back for many reasons. Instances of this would be to check that we have the information we need or should be getting. We regress out of lack of confidence or out of a

habit. Even though making regression is a sign of active and responsive reading where readers go back to check their predictions or to confirm their understanding of a text, excessive regressions lead to very slow reading (Nuttall, 1982, p. 38). Speaking about the skilled reader she claims that

> *"S/he continually modifies his interpretation as he reads, according to whether his predictions about what the writer will say are fulfilled. To do this he may have to return to earlier parts of the text and reinterpret them in the light of what has followed"*(Nuttall, 1982; ibid)

In this vein, Manya & De Leeuw (1965.p. 31) argue that "some readers feel most uncomfortable if they do not read every word, have a sense of guilt about skipping or skimming, and feel duty- bound to finish whatever they have started, however, distasteful and unnecessary the task". Nevertheless, Haynes (1984: 50) and others in Urquhart and Weir have identified the root of the problem of slow reading to the length of the fixation which slows down the reading rather than the number of fixations or regressions. This latter (i.e. Regression) is further is regarded by Urquhart and Weir (1998.p. 192) as the most striking difference between L1 and L2 readers of English texts. Haynes (1984, p. 50) notes:

> *"There is no clear experimental evidence explaining these longer visual fixations times, but a strong possibility involves the time required for lexical access, that is the time it takes for a reader to match the printed word to a word meaning in memory".*

It seems likely that it takes longer to access lexical meanings. L2 readers of English do not have large well- précised vocabularies and years of experience of recognising words in print as Jordan (1997: 193) comments. Hence, it takes them longer to decide whether a word us known or unknown and, in the latter case, whether to skip it or not. For this, students should

be urged to force themselves in moving their eyes continually forward. Eliminating pointless regression is achieved by practice with very easy material (Nuttall, ibid)

**2.2.5.2. Vocalising and Inner Speech:**

Another reading habit that is often criticised is the subvocaliszation or vocalising and inner speech. These are simply technical terms for reading aloud. Nuttall defines it by saying that "it is forming the sounds off the words you are reading and even murmuring them aloud (Nuttall, 1982, p. 37, 1996, p. 59). This reading habit is specific to some readers who are unable to read silently, that is, they read aloud silently. It is often called inner speech and is most noticeable if you are reading something written by someone you know well. It is as if you can hear his/ her voice as you read".

It becomes clear that efficient readers do not subvocalise; reading aloud is much slower than silent reading (our eyes move faster than our tongue) and subvocaliszation takes almost as long as reading aloud (Peter Shefred & Gregory Mitchell, 2006, p.9) . Wainwright stresses this by pointing out that "presumably silent reading would permit even higher speeds because you would no longer be restricted by how quickly you could move your mouth muscles" (p. 25). When readers vocalise, they tend to read word by word instead of reading through chunks and this effort will interfere with the ability to comprehend (Cowan and Chen, 2009. p. 92). This habit is easily eliminated through conscious efforts. Otherwise, asking to put a pencil in their mouths as they read will solve the problem (this will inhibit the physical action of the lips) (Cramer, 1998:9)

**2.2.5.3. Pointing:**

Similar criticism is made of pointing at words with a pencil or a ruler to fix concentration on the deciphered word. Again it is true that this can slow down the reading process if the finger points word by word. However, the act of not stopping when coming to an unknown word and skipping over it and continue reading is a useful idea. In some cases, knowing the

meaning of the word will not be necessary for understanding the important ideas in the passage. In other cases, s/he may be able to get a general sense of the word from the context (Mikulecky and Jefferies, 2007, p. 243). The eyes of a good reader do not move line by line through a text. Instead they tend to jump ahead for new information or hack for confirmation of what was read. Mikulecky &Jefferies (2007: 241) note that "they eyes should be free to follow the thoughts, not the finger!" For Nuttall (1982: 33- 34), although fingers can be used to read faster over a page, it is a common habit in FL mainly when L2 writing system is different from L1. Encouraging students to fold their hands helps them to get ri of this habit.

**2.2.5.4. Mental Translation:**

The ability to use strategies to understand a text better is a basic goal of reading instruction and a major topic for reading research (Grabe and Stoller, 2002. p. 140). Strategy use during reading seems to cover a wide range of possibilities and most students report using a large number of strategies while reading. Yet, not all the strategies that students use are recognised as particularly useful. One such case is the use of mental translation from the L2 back to the L while reading. Until recently, this strategy was seen as a "bad habit" typical of weaker readers who think that it helps to maintain concentration and keep information active while they problem- solved and put ideas in a reasonable order. It was to give readers assurance that they really understood the passage. Hence, it should be noted that better students use less mental translation overall. Translation gave readers a sense that they understood the text precisely rather than vaguely. Nuttall (1982: 32) argues that "translation not only slows down their reading speed but also interposes the L1, instead of letting the FL speak directly to itself. From another perspective, translating into one's native language takes time and prevents from concentrating on the ideas. Furthermore, it interferes with his/ her ability to think in English as s/he reads (Mikulecky &Jefferies (2007, p. 241). However,

fluency in reading is a sign that the students are not mentally transposing the text, partially or entirely, into their native language (Rebecca M. Vallete, 1976, p. 211)

**2.2.5.5. Vocabulary**:

It is termed diction too. Vocabulary together with reading fluency and reading rate are central to skilled reading. Knowing letters, letter groups, word parts, words and phrases very quickly helps in becoming good and rapid readers. For this reason, vocabulary is one element that affects the speed at which students read. Jordan (1997: 146) points out that

> *"It should be noted that there are two diametrically opposed points of view regarding reading speed. One is that because students have difficulties with reading comprehension, probably linked to a narrow range of vocabulary (i.e., they frequently meet unknown words and phrases), they will naturally read slowly, and any attempt to increase reading speed before improving reading comprehension is misguided".*

The other point of view is that by improving reading speed the student is able to see longer stretches of language with each fixation of the eyes and thus more easily contextualise unknown vocabulary and be able to achieve general understanding.

**2.2.6. Effective Reading Strategies that Enhance Rapid Reading:**

**2.2.6.1. Skimming Strategies:**

Skimming should not be confused with reading, but it is a valid and useful reading technique. It involves always allowing the eyes to break away from line- by- line movements and move more freely across and down the page. There are at least three ways of skimming technique as has been classified by Wainwright (2007: 71).

*a. Sampling*: takes the form of reading parts of the material rapidly in order to form an impression of the whole. It concentrates on the first sentence of each paragraph because this is where the key information in each paragraph is most likely to be. Examples of sampling as a

skimming technique can serve as a substitute for reading when time is short. To assess the level of difficulty of the material or to decide whether or not to read and to help in the selection of material.

*b. Locating*: is vertical reading. It does not look very vertical because the material is not printed vertically but horizontally from left to right. So the eyes will move diagonally to the left. The resulting pattern looks like zigzag pattern of eye movements which is further complicated by the fact that this kind of skimming will only work really well if the reader has already identified key words and phrases. The eyes will be drawn to the information which is relevant or of interest. Wainwright (2007: 71) explains this by saying that

> *"This happens because in addition to the area of close focus vision that we call eye span, there is "peripheral vision". This keeps you alive out on the streets. You see a bus coming "out of the corner of your eye" long before it can hit you and you take appropriate evasive action".*

Peripheral vision is used every time the reader gets to the end of a line of print and makes the return sweep to the beginning of the next line. He (ibid.71) assumes that when the reader is looking at the right- hand side of the page and cannot see clearly what is on the left, but the brain can see it sufficiently clearly to direct the eyes accurately to the beginning of the next line. If this did not happen the reader would spend a lot of his/ her reading time missing lines out or reading again lines already read. Headings, for instance, words in bold type or in italics and words which begin with capital letters all help to attract the attention of the brain and therefore of the eyes. Locating is used to find specific information, or when using dictionaries and handbooks.

*c. Previewing:* is a combination of the first two techniques and uses both first sentences of paragraphs and peripheral vision to identify the salient points. It enables the reader to obtain an overview of the material before reading or rejecting it and can be a great time saver. This

technique is used to gain an overview and see the pattern organisation of material. It is a means also of defining purposes in reading or in assessing the relevance of material to the reader's immediate needs.

**2.2.6.2. Flexible Reading Strategies:**

There are several flexible reading strategies, as they are called, available. They are built upon the different gears of reading speed as proposed by Wainwright (2007: 64).

**A. P2R:** there are many occasions when "reading" material three times can be better and quicker than reading it once. The approach usually known as P2R is one used by a lot of naturally rapid and efficient readers. It consists of the following steps:

a. Preview: skim for structure, main points, relevance, etc.

b. Read: as quickly as purposes and material will allow.

c. Review: skim to check that nothing has been overlooked and/ or to reinforce points to be remembered.

In exhibiting these steps in this way, it does not mean to use them rigidly, step by step all the time. Sometimes the reader uses all the steps. On other occasions, s/he omits the first step because he is already familiar with the structure of the material. On other occasions, s/he only use the preview and review steps because there does not appear to be anything new in the content so the preview will tell him about this, but the review will be simply a quick check to be sure. Sometimes, s/he will decide to re-invest some of the time saved in this way in a second reading. Flexibility is the key.

**B. S- D4**: secondly, there is S- D4 which works like this:

Survey: a quick skim to identify the structure and the key points, then

Decide: one of four decisions:

a. To skip: that is not to read at all; b. to skim, probably at a slower speed than the original quick skim; c. to read at the appropriate speed; d. to study.

**C. Pacer***:* this approach is similar to P2R, but with more steps:

a. preview; b. Assess: purpose and material; c. Choose: the appropriate technique to use; d. Expedite: a reminder to speed up again after being slowed down by a difficult part;

e. Review: after reading should be undertaken with care because it is only a skim. It is simply designed to be a final check. Hence, if the reader spends too long on it there is a danger that it can become a second reading.

Other techniques of flexibility include:

**D. Taking risks:** the reader in this technique should try to push the upper limit on speed as high as it will go, even if this leads to some loss of comprehension. He can after all go back at any time to slower speeds if he wishes.

**E. Reading fast twice:** another technique which will be worth trying if the material really does need to be read slowly, is to read it twice. This will work very well if the reader uses the first reading to understand what can be understood and make quick small marks in the margin with a pencil where there are problems. Then the second reading can be done to deal with these problem areas, rubbing out the marginal marks as s/he resolves them.

**F. Minimal reading speed:** it is also worth trying to establish a minimum reading speed no matter what the material. A little extra speed can also solve concentration problems because some speed will help to keep the mind on the task in hand.

**2.2.6.3. Scanning strategies:**

Basically, the process of scanning involves the running of eyes down each page and taking note of any terms in **bold-face** print or *italics*, section headings, graphs and charts or anything else which seems to jump off the page. Most textbooks and student resources are designed to be very reader-friendly, as Orr (1992:56) states. That is, the author and editors make every effort to help the student learn from the resource. Some texts even have margin notes to tell the reader what the section is about. While the reader is scanning the chapter or section,

his/her mind will have to be very alert and active, in Orr's opinion. The eyes act only as the collectors of information and the mind must do the registering and analysing. The reader may find it very helpful to ask herself/ himself questions as s/he scans down the page. These questions may involve: What does this term mean? What relationship does it have to the preceding concepts? What is its importance? These types of questions help to give that specific term some discrete relevance and significance.

Orr (p.56) argues that

> *"Scanning is a preliminary process, an initial exposure without expectation of thorough understanding. You just want to get the basic drift of the reading material and mentally note some of the important terms. If it helps, you might want to make a note of the terms picked up by scanning".*

However he contends that the reader must remember that writing is a time-consuming task. S/He should write the term, not a definition. Just the act of writing the term will help to record it in her/ his memory. The importance of scanning the reading material lies in the fact that browsing through the background references prior to a lecture, for example, will help the reader to listen and understand. The same processes are working in the scanning process. Having noted several terms and concepts during the scanning process, Orr claims, the mind will be primed for their presence during the reading function. When you come upon these important terms, they have a much greater impact than if the reader was to read the material cold.

**2.2.6.4. Scanning Techniques:**

Reading a book in one night is a challenge to any speed reader. Hence, deciding to read the introductory section and the final few paragraphs of each chapter is a workable technique hoping that any crucial information would be found in those sections. The basis for this particular scanning approach is that any well-written text often tells the reader the message at

least three times, as Orr declares. The introduction gives the reader the overview, the body provides the detailed treatment, and the finishing paragraphs generally provide a summary.

Another scanning technique which might be helpful is to read the first sentence of each paragraph. Once again, well written works often have lead sentences introducing the concept being dealt with in the paragraph. This will not always be the case, but for scanning purposes, the reader will probably obtain the general drift of the work (Orr, p.57-58)

A final approach which the reader might have an opportunity to use is what Orr (ibid, op., cit.) calls the magnetic technique. This is practical if the readers thinks of her/his eyes as magnets and run them down the page. Allow them to be drawn to **bold-face** print, *italics*, or any other terms which stand out from the surrounding text. Orr sees it as a much more cursory approach, but with practice, the reader will be able to glean the essence from the text in very short order.

In summary, scanning is a very efficient and most helpful set of reading techniques which allow the reader to get the overview of the material or to find specific facts quite quickly. The reader may want to use different approaches for different types of writing and for different types of reading goals. The point to be stressed is that scanning will save you time.

**Conclusion:**

As we have seen, reading speed is one set of reader characteristics that has received considerable attention (Alderson, 2000. p. 56). Researchers identified that individuals are quite flexible in their rate because it varies with the nature of the information: the more redundant or predictable the letters, words or sentences, the faster the individual supposedly reads. It is used to be claimed that individuals adjust their rate during reading so as to keep efficiency at a constantly high level across a wide range of rates (Alderson, 2000. p.56). nevertheless, Carver (in Alderson , ibid. p. 58) claims that if good readers did hypothesise what lies ahead and adjust their rate to match changes in difficulty, reading rates would adjust to suit materials. In this case, it would not seem appropriate for good readers to adjust their rate as materials decrease in difficulty (1982: 85). For short, reading speed has three elements that indicate its significance, as Mikulecky &Jefferies (2007, p. 240):

1. The reader will get through required reading more efficiently.
2. S/he will enjoy his/ her extensive reading books more and so s/he will read more.
3. S/he will improve his comprehension (p. 240)

## CHAPTER THREE: NOTE- TAKING SPEED

# CHAPTER THREE: NOTE- TAKING SPEED

## Introduction:

Information presented in class or the different reading materials often contains the central concepts of the course, the subject the reader is interested in, or the material most likely to be included on exams. Yet, Learners regardless to their age, sex, or level frequently do not realize the importance of note taking and reading. They tend always to rely too much on their memory instead of using notes. Yet it happens that shortly afterwards, if ever they want to recall something they had been exposed to in reading, for instance, they can only remember a small part of it if they do not forget it completely.

At such instances readers feel so concerned about the efforts that had gone in vain. If only because they paid a little attention to note down the most essential points and henceforth would use them in case of need. For this reason, they are called for using such a helping device. This is strongly stressed in the United States of America and Great Britain where note taking is considered as an essential element in how to study in reading and for organising the students' personal work as well as a tool for facilitating written communication. Henceforth, no one disputes the importance of note taking in academic situations. Actually, effective note taking was essential 23 years ago when the article, Reading to Take Notes and to Summarise: A Classroom Procedure (Edge, 1983, in Jee Hyun Ma's article Just Taking Notes is not Enough, Volume 18, Number 2, October 2006) was published; and it is still indispensable for students and professionals in this technologically advanced age (Kobayashi, 2006; Ryan, 2001, in Jee Hyun Ma's article just taking notes is not enough, Volume 18, Number 2,October 2006).

Therefore, this chapter discusses note taking as a helping technique for readers. It reflects the definition of note taking and stresses its advantages and importance for EFL students as they read. It further presents the different ways and strategies used in the practice of rapid

note taking. It provides also tips on how to recall more information from your readings through active reading and purposeful note taking. In addition, notes got from reading can be a critical tool for preparing for exams. Suggestions are provided for how to use your notes regularly to review.

**3.1. Definition of Note taking:**

Note taking is probably one of the most common strategies that should be used by readers as Woolfolk (2004, p. 298) notes. Yet when students perceive the kind of information they select and want to keep record of, they frequently achieve this by means of note taking. From a general perspective, note taking belongs to the category of study skills. A dictionary explanation of study skills involves note taking. Study skills are:

> *"Abilities, techniques, and strategies which are used when reading, writing or listening for study purposes. For example, study skills needed by university students studying from English- language textbooks include: adjusting reading speeds according to the type of material being read, using the dictionary, guessing word meanings from context, interpreting graphs, diagrams, and symbols, note taking and summarizing" (Richards, Platt and Platt, 1992, in Jordan, 1997: 6).*

Henceforth, note taking is seen as an adjunct to listening or reading (i.e., receptive skills), but also as a lead- in to, or link with, the productive skills of speaking or writing, e.g. listening to a lecture, taking notes, and then making use of the notes to make comments in a seminar or in writing an essay. Jordan (1997. p. 6) shows the integrated relationship of the skills. The receptive skills are seen as necessary inputs to the productive skills, with each receptive skill having its place with each productive skill, depending on the appropriate study situation or activity. Summary writing, for example, is an important aspect of academic writing, and is linked to academic reading by means of note taking or note making.

As far as the definition of note taking is concerned, Jordan accordingly (ibid., p. 187) makes a distinction between note taking and note making. The former refers to the straightforward writing down of whatever is said or written in a print, etc. It may not require much thought. The latter, on the other hand , is the creation of one's own notes, which may involve summarizing, paraphrasing, putting question marks against some items (to querry, check or comment on at a later stage), and making important elements stand out by visual means. However, for the sake of convenience, in the present study, the more generally used term note taking will be used for both.

In his book "La Prise de Note Intelligent", Renée and Jean Simonet (1988, p. 14) define note taking as the active starting of registration of information in a written form. They further explain note taking as a system of treating information. This system involves:

1. Note taking as a process of communication.
2. Note taking as an intellectual work, and a mental product that is derived from a written material. It is an intelligent work and not a mechanical activity.

From the above discussion, it becomes crystal clear that note taking involves putting into paper the data perceived through our senses. The data considered here, figures, letters, phrases or complete sentences. Taking notes is very essential while we perceive knowledge whether while listening, observing, discussing, or thinking, so that we will be able to build up a full account of all what we perceive. This makes it a complex activity which combines reading and listening with selecting, and summarizing and writing (Clara Perez, Fajarado, V. 34. 2; pp 22-25, April 1996). It is further defined by Fred Orr (1992, p. 77) as the record of information gleaned from various sources. The process of note taking combines different skills where essential information is the target and later on may be used as a supporting data for doing communicative tasks whether in spoken or written form.

**2.2. Why Note Taking is a Useful Device (its Importance):**

The importance of note taking in the reading process has been observed and recognised by several researchers (Flowerdew 1994, in Jordan, 1997, p. 187). In that, Chaudron, Loschyky and Cook 1994 (in Jordan, p. 187) assume that note taking and the quality of notes lead to a successful recall of reading information by students at a later time. On his own attempt to explain this, Jordan (ibid., p. 18) states that "Allied to reading, listening, understanding and remembering is note taking. It is a necessary skill for later reference or revision purposes". Beard and Hartley (1984, in Jordan, 1997. p. 10) emphasize the same point through their investigation of the link between note taking and learning. They concluded in their studies that "there is evidence to suggest that note taking can aid the learning process in certain situations, note taking is related to recall, and reviewing one's notes is a useful procedure". Actually, this illustrates the significance of reviewing too. Fletcher, C., in his book *Essay Clinic: A Structural Guide to Essay Writing*, 1995, p.4) states that "You need to review your notes to remember them and put them into the perspective of the essay. Reviewing tells you if you have answered the question and identifies any weak areas and poorly understood concepts". Being in the same stream of consciousness, Michael Mc Carthy (1990. p. 127) stresses the significance of keeping some sort of written record of new vocabulary as being a part of language learning for many students.

While many students view note taking as an activity conducted simply in reading, solid note taking skills require preparation and reflection as well. The reading notes can serve as an important tool for reviewing for exams and distilling key concepts. Woolfolk focuses (2004. p. 298) his attention on the fact that notes provide extended external storage that allows the reader to return and review. In that students who use their notes to study tend to perform better on tests especially if they take many high quality notes more is better as long as the reader is capturing key ideas, concepts, and relationships, not just intriguing details (Kiewra,

1985, 1989, in Woolfolk. P. 298). Van Matre; Wicholas H. Carter; John F., (in Boyle's article *The Effects of Note Taking and Review on Retention of Information*. April, 1975) argue that the benefits of note taking appear to be derived from having a subsequent opportunity to review notes, and not from the act of note taking itself. Encoding differences as a function of note taking appear to be minimal, while the external storage function is of primary importance.

Note taking, on the one hand, helps learners to become autonomous having an organised attention. This involves making goals, plans, etc., while switching along the flow of information and selecting what is relevant and essential moving from the stage of perception to comprehension and finally to production. Purvis (1978, p. 6) states that "taking notes while reading helps to understand what is being read and can be used for revisionlater". Moreover, note taking is considered as the key for intelligent learning and the mastery of language content and the culture transmitted through such a language. It serves as a supporting and motivating means to provide learners with self- confidence and security. It diminishes frustration and encourages students to present outstanding works in variables related to format and mechanics.

Despite the fact of having such importance, note taking has always been neglected by the majority of teachers. They neither train learners on the strategy to develop the students' learning styles, nor lead the pupils to carry out the device efficiently. Boyle (March 2010, Vol. 36. No. 4, p p.221-224) argues that:

> *"Note taking skills should not be underestimated whether students are recording notes from scientific observations, during class discussions, or at how textbooks, note taking skills are important to acquire, used almost daily, and utilised throughout their life time"(R. Boyle. 2010).*

### 2.2.1. Note Taking as a Memory Aid:

Few people realize how it is difficult to retain and remember everything they had read. On the spot, they think that they can, but very soon after, if the written papers had been left away, much of what they had come across will be lost, as Renée & Simonet (1988, p. 68) note. In this vain, studies have shown that people may forget 50% of the perceived information within 24 hours, 80% on two weeks, and 95% within one month if they do not take notes (The Journal of Education Learning Assistance Center, 2003, p. 12). This actually identifies the usefulness of taking notes.

Boyle states that note taking encourages clarification of confusing information and aids encoding during long term storage (Hughes, 1996, in Boyle, 2010). He states in his article *Enhancing the Note Taking Skills of Disabled Students* (Vol. 36. No. 4, March 2010. p p. 221-224) that note taking is a skills that is helpful for all of us- from jotting down a grocery list to learning post- it notes on the computer monitor, we all rely on notes to help us remember. In fact, notes serve as an extension of our long term memory: what we can't remember, we write down. He stresses that teachers have ranked note taking as one of the top critical skills that students should have in their classes. In that it focuses attention during class and helps encode information so it has a chance to be transferred to long term memory. The act of taking notes lengthens the span of the working memory. This lies behind the fact that reading something once is not enough to really remember and learn it. That is why note taking is important.

Clearly written accurate notes help to capture information for later study and review. In this sense, Michael Mc Carthy (1990. p. 127) notes that the very act of writing a word down often helps to fix it in the memory, even if only with regard to its spelling". Rost (1994: 71) says that we are in effect depositing a cache of information but we will later try to use the tap over representation of the text. Most note takers think that notes help them to recall the macro- structure of the data, and without the presence of the notes, they would recall a few of

the most interesting points or ideas like recalling specialized terminology or recall keeping prepositions. Rost (1997, p. 73) states that "we can perform all the processes without using notes. However, notes amplify the effectiveness of the processes". Note taking helps too in building schematic knowledge and reconstructing an overall structure of the text.

On this scope, Manya & De Leeuw (1965, p. 170) recognize the importance of note taking as an aid to memory, but he conceives that note taking may have dangers. In that the most insidious danger is being the habit of postponing learning by understanding. There are some readers, for instance, who find it difficult to comprehend thoughtful writing without first taking notes; Manya & De Leeuw, state that

> *"It is significant that among these are people who in their professional capacity summarize documents and from the summaries draft reports. In fact, this is a wrong thinking because obsessive note taking is the occupational hazard of students. They believe they remember things best by writing them down"* Manya & De Leeuw (1965, p. 170).

They add that

> *"writing things down, however, is a practice that can be abused: it can so easily lead to a passive and unconfident attitude to books; every little point the student reads may in its context be so persuasive and compelling that he feels constrained to include it in his notes, which become an abridged version of the original".* Manya & De Leeuw (ibid, p. 170)

The obsessive note taker usually postpones learning by understanding till he comes to read his notes; but as these are not always the product of understanding they may be lengthy and unreliable. Furthermore, sentence- by- sentence or paragraph- by- paragraph note taking commits the reader to page- by –page reading; and this is not necessarily the best way of reading and understanding a book. For short, note taking helps to retain and retrieve

information as the physical act of writing, which helps us to embed information into our memory.

**3.2.2. Notes as an Aid to Concentration:**

Some researchers identified the importance of note taking as being an aid to concentration in the sense that it directs attention when we read to record the salient points and ideas in a way they would help us remember since there is a supporting device for reconstructing a relative map of what we had been exposed to. Rowntree (1976: 112) insists on note taking as a helping device for extending our attention span because when reading, even the most motivated learners' minds may tend to wonder off. S/he might be inclined to think about work, money, or relationships. It is quite easy for other aspects of his/ her life to pop into his/ her head while s/ he is reading.

Note taking aids in keeping the student focused on his/her subject area and to the task at hand (Kesselman; Turkel and Peterson, 1982:2). It makes us actively involved with what is being said, makes us try to understand and extract meaning as we go along. If the skill takes all our attention; leaving no space for the desire to do anything else, or for self-consciousness, then concentration comes at work. Peter Schneider points out that "performance is also as high as there is commitment to the goals- the ability to fulfil them, and sufficient autonomy". Being completely involved and having the enjoyment requires continual growth. Joseph, R. Boyle (2001) in his article *Enhancing the Note Taking Skills of Students with Mild Disabilities*, clarifies that note taking allows for active engagement during reading. Research has indicated that note taking is one way to actively engage the student in the learning process (Hughes, 1996, in Boyle, 2010).

On this realm of discussion, Jordan (1997, p. 313) states that "the purpose of taking notes during reading is to help the reader concentrate on the writer's message and to provide a summary for reference or revision later". Orr (p. 45), too, points out that readers must get rid

of boredom and gain interest and concentration; they have to try prompting more attention by guessing and asking what relationships exist between the present topic and the preceding ones. If the reader has an egocentric bias (and we all do to some extent), s/he has to ask herself/ himself how the topic being discussed relates directly to her/ him. Any question the reader asks herself/ himself is likely to improve her/ his concentration.

**3.2.3. Note Taking and Comprehension:**

In this respect, note taking is regarded as the output of comprehension. In the sense that readers often make records by means of note taking to put their understanding into paper. Manya &De Leeuw (1965: 170) argue that "the readers' notes should be the outcome of understanding and not the prelude to it. Notes of this kind are brief". Having this benefit, note taking is considered as an aspect of successful recall of reading information (Jordan, 1997, p. 187). The same points are stressed by a number of researchers assuming that if taking notes distracts the reader from making sense of the reading material, then note taking may not be effective (Di Vesta & Gray, 1972; Kiewra, 1989; Van Meter, Yokoi, & Pressley, 1994, in Woolfolk, 2004, p. 298). For this, it becomes useless for some readers who have the habit of reading thoughtful material twice, to delay the effort to comprehend (Manya &De Leeuw, 1965, p. 171). The readers' notes become an indirect but arguably valid from assessing global reading comprehension (Douglas, 2004, p. 136)

Readers have to make sure that they understand what they are reading. They can reduce their reading speed for difficult passages and stop rereading parts which are not clear. Once they still have difficulty in understanding a text they have to look up words in the dictionary or glossary of terms and reread. If the meaning of a word or passage still evades him/her, they can skip it (leave it) and read on. Perhaps after more reading, they will find it more accessible and the meaning will become clear. Reflection too can increase understanding of what someone is reading when the author makes a claim, reflection your prior knowledge to

support or disapprove it. If this raises more questions, readers can note them down. This will help the reader remember and understand.

Marie- Laure Barbier, Jean- Yves Roussey, Annie Piolat and Thierry Olive (Vol.3; 2006, p. 20) argue that in first language, note takers are simultaneously engaged in language comprehension and production activities (Piolat, 2004, 2007), which are likely to exceed working memory capacities (Baddeley, 2000). Indeed, taking notes involves a deliberate and strategic management of the processes involved in language production and comprehension. Boyle expresses that the simple act of allowing students to review their notes independently can improve comprehension of the topic, as evidenced by a number of studies (Kiewra et al., 1991, in Barbier et al., 2006). Hence, the allotted time for reading can be spent together reviewing a concept from a lecture that students did not fully understand. That's why jotting down notes on a reading in the margins and/ or highlighting important sections can help the reader to better understand a text to some extent.

**2.3. Reasons of Taking Notes:**

Readers might want to take notes for a variety of reasons; to focus concentration, to aid memory and understanding, to summarise texts for revision, so they can use the ideas in essays or perhaps written assignments so that somebody else can use them (Renée & Simonet, 1988, p. 46- 47). Notes trigger basic reading processes. They are often a source of valuable clues for what information the author thinks most important (i.e., what will show up on the next test, for instance). Notes often contain information that cannot be found elsewhere (i.e., in your textbook). Hence, recognising that there are different reasons makes it easier to see why there is no single way of making notes.

Actually, according to Boyle, notes serve two main purposes. First, they aid students' understanding of the reading information, and second, they serve as reference material for later study or to prepare for tests. Nigel Fabb and Alan Durant, (1993. P. 45) identify another

two reasons for keeping notes. First, doing so helps you pay attention to the text; by writing notes you are forced to think about what the text is saying. They state that "this is an advantage of notes even if you subsequently throw them away (and incidentally is also a good reason for taking notes on reading)". Second, taking notes helps record what you have read, and in particular keeps a record of which page (and edition of a text you found something useful on, so you can go back to it later.

**3.4. Note Taking Problems:**

When taking notes in a second language, language mastering is of major importance. Students are indeed faced with many difficulties for at least two reasons. First, when linguistic skills are poorly automated, in other words when psycholinguistics processes require a large amount of attention and are not fluent, they prevent a fast transcription of information (Barbier, 1998, 2003, 2004; Randell & Barbier, 2002; Roca de Larios, Murphy & Marin, 2002). Second, when the metacognitive control of note taking is restricted, note takers do not succeed in evaluating the reliability of the content of their notes with respect to former knowledge and competence already acquired in first language (Barbier, 2003, 2004; Barbier, Faraco, Piolat, Roussey& Kida, 2003). These two sources of difficulties have been identified from the very low performance (qualitatively and quantitatively) observed among note takers in second language (Orr, p. 48).

Jordan (1997: 188), in this context, states that note taking as a skill is not easy in one's own language; in a foreign language , the difficulties can become very serious. Edge (1983, in Jee Hyun Ma's article *Just Taking Notes is not Enough*, Volume 18, Number 2, October 2006)) emphasized the same point, he stated that "note taking is difficult in one's native language and in a foreign language, especially for students who are expected to understand everything in a text". For this reason considerable help may be needed, which may take

several forms. Some of these forms are now looked at in the context of some of the books that give note taking practice.

Another problem which is associated with note taking is stated in one article entitled *How Copying and Pasting Notes Affects Learning from Text*. Boyle (2010) in this article discusses the negative effect of copying and pasting notes on learning from text. It is an educational problem, despite its appeal to most students in the sense that, their initial learning of text ideas suffers, as do their abilities to transfer text information later. He explained this by saying that

> *"Many students take copy- and- paste notes in a decidedly mindless way- selecting and pasting large amounts of text at any given time with little evaluation of which text ideas are critical to their notes. Upon testing of the information they have noted, then, those students tend to recall little, if any, of the information in their notes".*

This behaviour and subsequent impact on initial learning was documented in studies that examined copy- and- paste note taking (Igo, Kiewra, & Bruning, 2004, in Boyle, 2010). Albeit far fewer effective students should be more selective while taking copy- and- paste notes. They evaluate which text ideas are essential to their notes and paste smaller amounts of text, and consequently, they learn more (Igo et al., 2005b, in Boyle, 2010). For example, in a study by Igo et al., students who pasted fewer words of a note taking chart remembered more ideas and students who pasted more words remembered successively fewer ideas. Hence, students who are selective learn more, but students who are not selective learn little. Researcher also suggests that students can be prompted to be more selective in their pasting and think more deeply about text as they take notes (Igo et al., 2005b).

Barbier et al., 2003) state that, in particular, note takers in L2 very often transcribe the words they are reading without introducing new words, staying very close to the source text. They indicate that that this phenomenon is related to the subjective difficulties of note takers.

Cultural differences in note taking practice also explain the problems and difficulties that note takers encounter, Barbier et al., 2003 claim that in each culture, note takers use a set of personal and conventional abilities (i.e., abbreviations, or icons, semiographic marks, formatting, etc) that are more or less stabilized for each of two communities. In addition to cultural differenced, the very nature of the mother tongue of note takers, and its structural similarities with the foreign language may affect how students transfer the techniques they use in L1 note taking to note taking in FL. Nigel Fabb and Alan Durant (1993. P. 46) suggests that "notes are more useful when they are short. It is rarely helpful to copy large sections of text, and it is usually better to start summarising and making what you are learning from your reading as concise as possible usually the not taker will write just a few sentences, and this should help constrain him/ her in not taking more than s/he needs from an original text. In case, s/he decides to refer to a particular passage, it is essential that each note s/he makes is accompanied by accurate record of where the passage can be found, with sufficient information that s/he can complete a bibliographical reference. One of the most common accidental sources of plagiarism is when s/he takes a note and do not record that what you have written is someone else's words; if s/he then incorporate the words of his/her note into his/her essay without referring to the original source s/he has in fact "stolen" it.

Renée and Jean Simonet (1988, p. 18) provide another set of difficulties that students may encounter while taking notes. They assert that the act of taking notes is difficult especially if it is accompanied by a regular individual training, self critique and permanent self correction. Despite these difficulties, the results will be positive. Nevertheless, they have identified another two difficulties that take place during the act of taking notes:

1. The difference between the necessary time of reading and the necessary time of taking the idea down (i.e., the reading speed and the speed of taking notes down):

Studies concerned with these two types of activities evidenced that students who read at 150 words per minute tend to note down about 27 words at the same time. They comment that this is just the average, and of course, each one has his own aptitudes. However, they considered the physiological factor as the fundamental difficulty in note taking. In that, it is impossible to reproduce a word by writing it down at the same time of hearing it in the lecture, for example. They add that despite the fact of having such a difficulty, they are studying new methods of work that permit the reader to select the most possible effective data.

2. The necessity of combining several mental operations simultaneously:

When the act of note taking takes place, the intellectual process comes at work simultaneously while reading (perceiving words and sentences from the print) or receiving an oral message, for instance. This process involves: reading, comprehending, analysing, and selecting before taking the idea down. Hence, a great capacity of attention and concentration will be present while taking notes. However, personal training will insure progress in this domain but still it is impossible to apply a stereotypic method or a readymade receipt, as they state (p. 19). Experience has a role in this domain, thus, it would permit them to elaborate a practical guide that aids in taking the best kind of notes.

**3.5. Characteristics of good note takers:**

As stated before, note taking is an important academic task that helps to remember what you have learnt and helps you to review materials for re- use in revision and assignments. It is significant that you are critical when note taking and that you only write or draw what you will need later on and that you record the information in a format that is easy to understand.

It is especially at the university level, the sheer amount of information that is delivered to students through the reading books, articles..., etc., can be daunting and confusing. Students may even think to copy down everything they read since it may be difficult for them to identify what is important and what is not. Students may feel the need to copy out fact after fact from readings and textbooks. When preparing for an exam, for instance, it is tempting to produce extensive notes on page after page or A4 paper. These methods of note taking are generally time consuming and in effective. Therefore, Woolfolk (2004, p. 298) gives a set of characteristics of good and effective note takers.

**3.5.1. Selectivity and systematcity:**

As readers take notes from a written source, they have to keep in mind that not all of a text may be relevant to their needs, as Renée & Simonet (1988, p. 40) indicate. Thus, they should keep in mind their purpose for reading and read only the relevant sections of the text carefully and take separate notes. But before they start taking notes, they can skim the text, as Keith Purvis (1978, p.1) points out. Then highlight or mark the main points and any relevant information they may need to take notes from. When readers select material and information for their assignments, for example, it should never be used indiscriminately - there should be a continual evaluation process occurring for evaluating information for its relevance and usefulness to their work, and its quality. In this vain, these are brief tips:

a. Set out your notebooks so that you have a similar format each time you take notes.

b. Columns that distinguish the source information and your thoughts can be helpful.

c. Headings that include bibliographic reference details of the sources of information are also important.

d. The use of colour to highlight major sections, main points and diagrams makes notes easy to access (e.g., Highlighter pens and Post-it stickers can help you read more actively)

e. Taking notes from the reading helps you to focus. Be selective and don't write down everything. Don't be a human copy machine; if you really need every word then photocopy.

f. Identify major and minor arguments and the supporting evidence.

g. React to what you read; agree, disagree, question.

h. Try not to use copious note taking as a way of avoiding understanding complex material.

In this vain, Manya & De Leeuw (1965, p. 107) state that

> *"The term "selective reading" is used when the reader concentrates on selected aspects of the text. The art of selective reading is to locate the information by skimming; the reader should try to link the subject he has in mind with a closely associated pattern of words he can recognize in the text, telling "here" and "not here". It is possible to narrow the search if the reader has an idea where the information is likely to be found within the general organization; and a preliminary skimming can sometimes show how the writing is organized"*

In this aspect too, Nigel Fabb & Alan Durant, 1993. P. 44) state that "there is always more to read than you have time for. But one powerful principle of selection is forced on you". As far as the point of selectivity is concerned, Woolfolk (2004, op., cit.) enhances the point by saying that "it is better to be selective, in studies that limit how much students can underline, for example, only one sentence per paragraph. This, according to Snowman, (1984, in Woolfolk, ibid) improves learning.

Being selective is beneficial for note takers because once they start taking notes from a written source, not all of a text may be relevant to the students' purpose of reading. Good note takers frequently identify their purposes whether they are reading for a general understanding of a topic or concept on the one hand, or reading for some specific information that may relate to the topic of an assignment. In addition to being selective, this makes them to be systematic. It is better to start skimming the text before making notes then highlighting the main points

and relevant information. They may need to take notes from. Finally, keeping in mind their purpose for reading which makes readers read the relevant sections of the text carefully and take separate notes as they read.

Manya & De Leeuw (1965, p. 33) conceives that there is nothing arbitrary about this, if the reader decides the amount and the kind of information s/ he requires; he can therefore read freely and flexibly. Furthermore, if s/he cannot be able to retain and recall the information, than her/his technique of reading is at fault especially if the reader has difficulty in specifying the purpose of reading (reading for the main points, a general understanding, or a detailed understanding, for example). S/He further states that when there are multiple- choice or free-answer questions, the reader should note- down the main points before answering the questions, or at any rate make a mental summary.

Since note taking is considered as an act of communication, the role of getting the "message" across relies on both the "author" and the "reader". Therefore, it is imperative for the reader to adhere to a number of guidelines during this communicative process. This will aid students' understanding during reading, and hence, improves students' notes (Boyle, 222, in his book *Intervention in School and Clinic)*. Because each piece of writing contains terms, group of words, or phrases, some of these have a privileged place in a text, article, etc., (Renée & Simonet (1988, p. 39). To achieve flexibility in note taking while reading, the reader can greatly aid himself through the way s/he reads. First, s/ he can slow down her/ his speed when the points s/he is reading are important to record, and rather than recording notes verbatim, students can think about or process lecture information. In that, expert note takers record information verbatim only when a verbatim response will be required. In other words, they are strategic about taking and using notes (Van Meter, Yokoi, & Pressley, 1994, in Woolfolk, p. 298). In addition to being strategic and selective, they can actively transform the information into their own words instead of relying on the words of the book by means of

connecting between what they are reading and other things they already know, as Woolfolk (2004, p. 298) argues.

According to Surtisky and Hughes (1996, in Boyle 2010), there are two types of cues by which readers can be alerted to prominent information. First, Emphasis cues, alert students to pertinent text information through statements of emphasis like “this points is really worth/ important, etc to remember. Similarly, the author’s use of organisational cues such as” there are six parts to a cell”, prompting students to categorize this topic in their notes with six recorded components. There are also certain key words which should cause caution lights to flash in the reader’s mind. They include: examinable, assessable, must know; and any other term which suggests that the present concept is very important and it’s likely to appear on an examination paper. Important information is recognised when finding one of these elements:

• Bold, underlined, or italicized words.

• Information in boxes or with an icon/symbol.

• Headings/ subheadings on the page.

• Information the book or teacher repeats.

• Words, ideas, or events that might be on a test.

• Quotes, examples, or details that the reader might be able to use later in a paper or presentation.

**3.5.2. Identify the Purpose and Function of a Text:**

Whether students need to make notes on a whole text or just part of it, good and effective readers identify the main purpose and function of a text. This is a valuable step for clarifying the note taking purposes and saving time. This involves:

- Reading the title and the abstract or preface (if there is one)

- Reading the introduction or first paragraph.

- Skimming the text to read topic headings and noticing how the text is organised.

- Reading graphic material and predict its purpose in the text.

The aim is always to identify potentially useful information by getting an initial overview of the text, chapter, article, page, and so on that the reader has selected to read. Effective readers ask themselves whether the chosen text will give them the information they require and where it might be located in the text.

**3.5.3. Identify How Information is organised:**

Most texts use a range of organising principles to develop ideas. While most good writing will have a logical order, not all writers will use an organising principle; so it is the job of the reader to identify the skeleton of the text by looking at organisational patterns in the material and use them to guide their underlining or note taking (Irwi, 1991; Kiewra, 1988; in Woolfolk, ibid). Organising principles tend to sequence information into a logical hierarchy, some of which are:

a. Past ideas to present ideas.

b. The steps or stages of a process or event.

c. Most important point to least important point.

d. Well known ideas to least known ideas.

e. Simple ideas to complex ideas.

f. General ideas to specific ideas.

g. The largest parts to the smallest parts of something.

h. Problems and solutions.

i. Causes and results.

As an attempt of organising information according to their needs, readers can make use of diagrams drawing to illustrate relationships, matrices or maps, and so on and so forth.

### 3.5.4. Including the reader's own thoughts:

When taking notes for an assignment, for example, it is also helpful to record the students' thoughts at the time. They can record their thoughts in a separate column or margin and in a different colour to the notes you took from the text. Dunkel (1988, in Jordan, 1997, p., 50) provides an explanation of the effective L1 and L2 note takers:

> *"They were those who compacted large amounts of written discourse into propositional- type information units; transcribed content words using abbreviations, symbols and a limited number of structure words. Terseness of note taking... rather than mere quantity seems to be an essential ingredient of effective L1/ L2 note taking"*

However, Dunkel views that students should be provided with "a skeleton notes" containing the major points of information in the reading material. They would then be able to concentrate on understanding the content of the print. Orr (1993. p. 48) adds that readers should not act more like robots who respond only to their reading stimulus. That is, when the reading stops, they stop noting down. Hence, students must use their own thoughts.

### 3.6. How to Take Better and Effective Notes:

Effective note taking from lectures and readings is an essential skill especially for university study. Good note taking allows a permanent record for revision and a register of relevant points that note takers can integrate with their own writing and speaking. Good note taking reduces the risk of plagiarism. It also helps note takers to distinguish where their ideas came from and how they think about those ideas.

Note taking has received little attention from the communities of researchers and teachers that investigate issues related to second language (Chaudron, Loschky, & Cook, 1994; Clerehan, 1995; Dunkel, 1998; Famhy & Bilton, 1991; in Marie- Laure Barbier, et al., April 30, 2007). For this reason, while most students anticipate that they will have to take

notes at university, not many students take the time to discover how to take effective notes. So, as a tertiary student, it is essential to develop effective note making skills to ensure that s/he gets the most out of the time that s/he spends reading. In an academic context, note taking is as important as assignment writing, in that, the reader takes in information and then writes it back out again as a learning process (Rowntree, 1976: 112).

Effective note taking should have a purpose, should be well organised, and can be a time saving skill. They should reflect the arrangement of topics into easy- to review chunks of information that are clear and well referenced. Rowntree (1976: 112) argue that this is important if the reader is using his/ her notes to review for an examination or for a starting point in an assignment.

Taking notes on a reading book, or article...etc is significant; otherwise, it would be disadvantageous. If the reader becomes engrossed in an interesting reading, s/he may only have a vague recollection of the important and sometimes assessable issues by the end of his/ her reading. One advantage of taking notes while reading is that the material can be revisited or re- read, but this is a time consuming and sometimes tedious. Therefore, taking effective notes when reading takes place is an important academic activity that helps readers to concentrate stimulates their ability to recall and be organised.

Boyle (2010) indicates that just as the author can improve the message that is written, the reader can also improve his/ her skills at better understanding, recording and remembering the message. Because students are seldom taught note taking skills in school, the simple act of instructing students in how to record notes can prove helpful. Such instruction can include teaching students how to record short hand or abbreviations, how to record notes at a faster rate, or how to preview the topic in their textbook so that they are familiar with new terms or concepts used during reading. Readers also must be aware about how to record notes through one of the two techniques: strategic note taking or guided notes.

Woolfolk (ibid, p. 298) argues that to use underlining and note taking effectively, readers must identify main ideas. In addition, effective use of underlining and note taking depends on an understanding of the organization of the text- the connections and relationships among ideas. Van Meter (2001, in Woolfolk, ibid) indicates that some visual strategies have been developed to help students with this key element. There is some evidence that creating graphic organizers such as maps or charts is more effective than outlining in learning from texts (Robinson, 1998; Robinson &Kiewra, 1995). “Mapping” relationships by noting causal connections, comparison/ contrast connections, and examples improved recall. Amy’s molecule is a hierarchical graphic depiction of the relationships among concepts. There are other ways to visualize organization such as Venn Diagrams showing how ideas branch off each other. Time lines organise information in sequence and are useful in classes such as history or geology.

To take notes effectively, it is practical for readers to begin on short, easy, well organised readings and introduce longer, less organised and more difficult passages gradually. For each note taking, students can find or write a topic sentence for each paragraph or section. Second, identify big ideas that cover several specific points, find some supporting information for big ideas, and finally delete any redundant information or unnecessary details (Woolfolk, 2004. p. 297).

For being short, learning to make notes effectively helps in improving readers’ study and work habits and to remember important information. Often, students are deceived into thinking that because they understand everything that is read in text, they will therefore remember it. However, this is dead wrong and they should write it down and review if their notes are worth to be reviewed because later, when they go back to review their notes, there are times when they can't seem to understand or remember what those key words and phrases meant; sometimes they can't even read their own handwriting.

Here is a note-taking study tip that has proven to be effective. After finishing their class or reading text or book, immediately, students should rush to the nearest computer lab and retype their notes. They need to rewrite those phrases as complete thoughts and sentences for putting their notes into some type of a logical sequence. While retyping their notes, they use several modalities like reviewing as they read their notes aloud, using their hands to type, and rereading again as they proof read what they have typed. Research indicates that 80% of new material can be recalled if readers review their notes within the first 24 hours after reading and it is of vital importance that note-taking skills are taught (Boon 1989). Also, clean typed notes are easier to read and highlight as they study. If they retype their notes daily, they will keep the task from becoming overwhelming, they will learn good study habits that aid in memory retention and, at the same time, improve their grades.

As students make notes, they will develop skill in selecting important material and in discarding unimportant material. The secret to developing this skill is practice. Note takers should check their results constantly and strive to improve. Thus, an outline of effective note-taking strategies helps them to get the most out of lectures and readings. This guide suggests procedures such as symbols and abbreviations, diagrams and note cards.

The following tips provide suggestions on ways to take good notes effectively and use them well. The key is to develop a system that enables readers to review regularly, recite (repeating key concepts from text or print), and reflect (connecting text's ideas to other notes and readings).

**3.7. Some Hints on What Effective Note Making Requires:**

1. Not writing down everything that is read or heard. Being alert and attentive to the main points. Concentrating on the "meat" of the subject and forgetting the trimmings.

2. Notes should consist of key words or very short sentences.

3. Taking accurate notes. Usually using one's own words, but trying not to change the meaning. If quoting directly from an author, quoting correctly.

4. Thinking a minute about the material before starting to make notes. Not taking notes just to be taking notes! Taking notes that have real value to the reader when s/he looks over them at a later date.

5. Having a uniform system of punctuation and abbreviation that will make sense and works best. Using a skeleton outline and showing importance by indenting. Leaving lots of white space for later additions. Reducing the information to note and diagram format.

6. Omitting descriptions and full explanations. Keeping notes short and to the point. Condensing material so it can be grasped rapidly.

7. Not worrying about missing a point.

8. Not keeping notes on oddly shaped pieces of paper. Keeping them in order and in one place.

9. Shortly after making notes, going back and reworking them by adding extra points and spelling out unclear items. Remember, we forget rapidly. Budgeting time for this vital step just as doing for the reading itself.

10. Reviewing notes regularly. This is the only way to achieve lasting memory.

11. Recording the source of the information.

**3.8. Tips for Taking Notes Quickly:**

Orr (1993, p. 48- 57) provides some practical pointers which are reproduced here to obtain good lecture or reading notes:

- Knowing what topics will be presented. Consulting the syllabus and browsing through the reference materials before each reading.

- Noting the title of the text, the author's name, and the date on the first page of notes.

- Numbering pages in case they get out of order or dislodged from the notebook.

- Leaving plenty of open space on each page for supplementary notes.

- Organising notes while listening or reading. If the reader or the listener prefers an outlining approach, then numbering and lettering are crucial as s/he goes on.

- Having several different coloured pens available plus a highlighter to make important points more prominent.

- Making notes in the margins, such as., Know for exams! Good essay question topic. Unclear. Get help, etc.

- Being sure to note special diagrams, charts and graphs. If there is not sufficient time to record them entirely, the listener asks the lecturer for the reference and the reader checks it.

- Being flexible and adapt to the lecturer's/ author's presentation style.

- Avoiding rewriting notes as it's very time consuming. Improving note-taking skills to obtain the best possible notes during each lecture/ reading.

- When ancillary notes will be needed, writing the supplementary information on small slips of paper and taping them to the top, bottom and free side of the note sheets is significant to obtain a complete treatment on the topics.

- When the lectures are dealing with complex issues and intricate diagrams or charts, consider taking your text or reference source to class with you.

James et al., (1991, in Jordan, 1997, p., 313) provides a set of pieces of advice that help in taking notes more quickly and efficiently. He states:

1) "generally if you want to take quick notes you must:

a) Omit completely certain sentences which are not essential to the main ideas;

b) Concentrate on the important sentences, i. E., those which give most information, and on the important words, i. E., usually nouns, sometimes verbs or adjectives;

c) Write in short phrases, rather than in complete sentences;

d) Use common symbols or signs and abbreviations (see below)

2) You can show the connections between ideas by using:

a) Space: the presentation of the notes is important you should be able to see the main points clearly. The careful use of space in your notes, together with numbers and letter will make them clear, well- organised and easy to remember as Heaton and Dunmore (1992) (in Jordan, p. 315) note;

b) Numbers and letters e.g.: 1, 2, 3; (ii), (ii), (iiii); A, B, C, (a), (b), (c),

c) Underlining, to draw attention to something or to emphasise something;

d) Common symbols and signs, e.g.:

3) Abbreviations:

a) Common general abbreviations: Many of these are to be found in an appendix in a dictionary; others are commonly used by English students. They often shorten words ending in –ion by writing (n) instead of these letters, e.g.: “attent” instead of “attention”. Similarly words ending in “ment” are often represented by “t” for the letters, e.g., “develop” for “development”

b) Abbreviations of common words and phrases in an academic subject, e.g., an economist would abbreviate economics to econ., Gross National Product to G.H.P., balance of payment to b. of p., but these abbreviations will depend upon individual needs.

### 3.9. Note taking techniques:

#### 3.9.1. Strategic note taking:

It is based on the premise that readers can become more strategic during the note taking process by using metacognitive or strategic skills (Renée & Simonet, 1988, p. 128). This latter involves the use of written cues on specially prepared note taking paper which prepared prior to the reading act's happening, and the written cues serve to assist them at using metacognitive skills (i.e., organising information and combining new knowledge with prior knowledge) during reading, thereby increasing the reader's engagement while note taking. Using these metacognitive skills, make readers not only become more actively involved in the learning task, but as a result, improve their comprehension of the print. The note taking paper can be used with most reading topics because of the generic nature of the cues.

The first portion of the strategic note taking paper asks readers to quickly identify the reading topic and relate it to their own knowledge of the topic. The step makes the information more meaningful to students. Next, students cluster together three or seven main points with details from the print as they are presented. Clustering ideas together aids retention of information. At the bottom of each page, students are asked to summarise reading material. The steps of naming three or seven new main points and summarising are repeated until the text ends. The last step is intended to serve as a quick review of the text, or book, or article, etc.

The results from studies that incorporated this technique in reading found that students who used strategic note taking recorded more notes than students who relied on conventional note taking skills, regardless of topic. Moreover, students who used strategic note taking scored higher in comprehension of both immediate and long term recall of reading information.

### 3.9.2. Guided notes:

The second student technique also uses cued note paper, but the cues are specific to the text's topic and are developed by the reader/ teacher ahead of time. Using this format, students' record their own notes in the space provided under each main point listed, as the author presents information, or the material. Guided notes are typically two or three pages in length, and the author often simultaneously uses transparencies that contain the main the main points listed in the guided notes.

Regardless of which note taking technique is chosen, readers should receive formal training in the technique. This training phase should involve having readers practice the technique under both controlled and advanced conditions (Boyle. Vol., 36. No. 4 March 2001) under controlled conditions, the teacher should provide students with a text that contains familiar information and the presentation of ideas should indicate for the important information to be taken down. During this training, the primary emphasis should be on students acquiring the note- taking skills necessary to use the technique properly, with a secondary emphasis on learning the information prosecuted. Once students reach a proficient level of mastery, they are ready to apply the strategy. The level of mastery should be based on both an increase in the number of notes recorded and an increase in comprehension, as determined by tests or quizzes administered after each note taking reading session.

In summary, the reader should decide which technique would be used appropriate for each reading topic or content area. It is appropriate for each reading topic. It is possible that they need more specific cues, such as the ones used with guided notes, with less familiar reading topics.

### 3.10. Note Taking Speed:

Assigning a book or an article to be read is of course only the beginning. Once the reader has the text in his/ her hands, there are a number of different ways of using it. Because,

the reader often has more to read than s/ he has time for, s/ he needs to develop ways of reading quickly and efficiently as Nigel Fabb and Alan Duran (1993.p.55) suggest. The techniques of scanning and skimming can both be used to gain a rough idea which may be noted down of what an article or book contains, so readers can read parts in more detail later if they want to. They can scan (i.e., this kind of reading involves looking quickly at each page, to pick out anything they recognise as being relevant to their objectives, which they will read in detail; scanning involves looking for key words). They can skim, too (i.e., this involves reading the first sentence of each paragraph, and anything prominent or highlighted; in this case, it is the general sense and flow of the book they are trying to absorb.

Both of these reading techniques are examples of how reading is a selective activity and a time saving one. Even when you read intensively (that is, the reader focuses on every word) s/ he is still inevitably selective in what s/ he understands or absorbs. Reading is an active process, one where what the reader brings affects what s/he gets out of the text; in that the more s/he knows, the more s/he can understand. S/he should not go to books passively, expecting simply to absorb and be informed. Constantly ask himself/ herself about what question is reading this book going to help with? Answering this question will be the subject of his/ her notes which they should pause after each chapter or section to take them down. However, readers should be systematic about whether their notes make sense. Do they provide facts of views s/he can use. Are there particular points s/he needs to go back to, or needed to find out more about them.

Jotting down notes on a reading in the margins and/or highlighting important sections can help note takers to better understand a text to some extent. However, as their reading requirements become more extensive, it is well worth while to spend time writing effective notes that will save you time down the research/writing track.

Another technique of saving time and energy is related not to the act of reading itself but more to the device of note taking. It is the use of shorthand. This latter is not accessible to everyone but s/he can develop his /her own system. Basically readers will want to devise or range of symbols and abbreviations which allow them to take notes more rapidly and efficiently (Orr, 1993. p. 47) because most readers will most likely to be familiar with the mathematical symbols for addition, subtraction, multiplication and division. Science students will be familiar with the use of horizontal arrows indicating yields and vertical arrows symbolising gases. It would be helpful to suggest that each student develop his/ her own set of symbols which relate to the common terms, concepts and procedures frequently encountered in his/ her readings. A simple glossary of note taking symbols and abbreviations with their meanings is set below.

Though shorthand is a valuable tool for a secretary, for example, because it saves time, it is almost worthless for a student doing academic work especially for those who plan to rewrite or type their notes later. To do so is to use a double amount of time; once to take the original notes and a second to rewrite them. Moreover, notes in shorthand cannot be studied in that form. They must first be transcribed. The act of transcribing notes takes an inordinate amount of time and energy but does not significantly contribute to their mastery. Furthermore, this student, in looking over his/her notes, may decide that the notes contain only four worthwhile ideas which s/he can highlight, relegating the rest of the text to obscurity. Whereas the reading material has to be read to in its entirety including the worthwhile points as well as the "garbage," handwritten notes may be studied selectively.

From a motivational perspective, readers can start their own glossary and as new and frequently used terms emerge in their readings, they can devise a symbol or abbreviation and record it in their glossary so that they know the meaning when their notes are being revised. This because note taking is a hard work and a complex activity to the extent that readers

sometimes find it difficult if not impossible to write fast enough to get the information down and still be able to read their notes and cope with the reading act demands. For this end, the use of symbols and abbreviations in place of words is useful to achieve a certain speed when taking notes. Nevertheless, note takers should only use the abbreviations that fit their needs and the ones that they will remember easily.

Actually, this idea has been criticised and a new method of abbreviation has been introduced namely EasyScript Method. It takes a unique approach in abbreviating words by assigning them to **five** categories such as simple, prefix, suffix, prefix/suffix and compound and creating one basic rule for each category. As a result, **five basic rules** are needed to abbreviate any word of a full English vocabulary. This represents a considerable advantage over any system which assigns a unique abbreviation for each word because larger vocabularies will require adding more rules and abbreviations. Since all existing systems have a limited number of abbreviating rules they cover only a limited number of words forcing creation the user-made abbreviations. The number of EasyScript categories remains unchanged regardless of the size of the vocabulary and this provision enables users to abbreviate any word of English vocabulary and will eliminate "user made" abbreviations.

EasyScript Abbreviating Rules involve: memorization level and cognitive load is reduced because 1) user needs to memorize one rule and a list of suffixes for the entire suffix category as opposed to memorizing unique abbreviations for individual words, 2) learning time of 5 abbreviating strategies is significantly less than memorizing individual abbreviations for a full English vocabulary, 3) the EasyScript rules can be applied to translate an abbreviation to a readable form which reduces the transcription time as opposed to reconstructing the word from randomly created abbreviations. In addition, the EasyScript method allows users to customize abbreviations by selecting abbreviating symbols suitable to their individual style and application. A brief example of EasySript is illustrated below:

Longhand Text: *We submit a list of services available for your special filing.* (53 characters)

EasyScript Text: *W smit a lst o sers avab fr y spel filg.* (30 characters - reduction in writing by 43.4%)

To sum it all up, there is no magic to taking good notes, just common sense. It's simply a matter of being thorough and accurate. It can help organise the reader's ideas and keep him her focussed on his/her reading. It can also help him/her keep a record of his/her reading and locate information. There is nothing worse than having to spend time tracking down information that s/he has previously read and now require for an assignment.

**3.11. Abbreviations:**

Note Taking is hard work. If students find it impossible to write fast enough to get the information down and still be able to read their notes, they may want to use some abbreviations and symbols in place of words when taking notes. They should use only the abbreviations that fit their needs and ones that they will remember easily (Renée & Simonet, 1988, p. 130). A good idea is to introduce only a few abbreviations or symbols into their note taking at a time. Thus, Purivs (1978, p. 10) notes that "abbreviations and symbols can be divided into two kinds: those which are standard and can be found in any good dictionary (everyone knows them) and those which are personal (we invent them for our use)". By the time of reviewing, they may want to write in the complete words if they think they may have trouble remembering their abbreviations. Hence, it's important to transcribe notes as soon as possible while the subject is still fresh in the reader's mind. By re-writing or re-typing their notes, note takers become more familiar with the material. They mentally reinforce what was read in the print. And they get practice writing the information, making it easier to write the material a second time whether it will be for a test or a term paper.

Fisher and Harris (1994) found that students perform note-taking more efficiently when they are allowed "to encode information" using abbreviations. McKeachie (1994) suggests

that abbreviating of spoken information leads to an increase to the number of words in working memory and improvement of subject retention. Boyle (2001) concluded that use of abbreviations decreases hands and eyes engagement and enable to record spoken information more efficiently.

Moreover, abbreviating the printed word increases the attention and concentration span, and provides more time for students to comprehend reading material. They can process printed information into written form faster and it enhances retention of the information and can lead to improvement in overall organization of their notes. In addition, a higher writing speed allows more time to pay attention to handwriting legibility and style to make notes legible and readable. It is worth noting too that abbreviations allow for noting the maximum of information with the minimum of words though it is not useful to write word by word of what is read. Renée & Simonet (1988, p. 29) suggest that it is more workable to read and summarise keeping the same meaning that the writer intends to convey. In fact, this demands a profound attention but with training this aptitude will become a habit.

Listed below are some frequently used symbols and abbreviations which might be useful when taking notes from readings.

**3.11.1. Abbreviations and Symbols for Note Taking:**

| Abbreviations and symbols | Their meanings | cf | compare |
|---|---|---|---|
| ! | here's a surprising fact | eg | for example |
| ? | question, the question is | c/o | care of |
| @ | amount, the amount of, at | w/ | with |
| ( ) | parenthetical | w/o | without |
| c | cents | vs | against |

| | | | |
|---|---|---|---|
| $ | dollars | ie | (that is) |
| # | number | f | frequency |
| % | percent, percentage | . . | therefore |
| _ | is parallel to, parallel | wd | would |
| < | less than, is increasing to, smaller, fewer than | shd | should |
| = | equals, is the same as | cd | could |
| x | times, multiplied by | ≠ | does not equal |
| / | divided by, per | ?? | big trouble; clear this up; get help |
| - | minus | ** | extra important |
| +, & | and, plus, positive | * | important |
| w/in | within | [ ] ( ) | information that belongs together |
| > | > greater than, is decreasing to, more, larger | ___>, ----> | leads to, becomes, produces, results in |
| Dept | department | <---- | for comes from |

**Table 1:** Common Note taking Symbols and Shortcuts, adapted from *Becoming a Master Student* by David Ellis and *How to Study in College* by Walter Pauk.

**3.11.2. Ways to reduce and Streamline Notes**: here are some rules for shortening words:

1. Leave out the periods in standard abbreviations.

2. Borrow technical symbols.

3. Use standard abbreviations from English and other languages. e.g. cf. compare, e.g. for example, c/o care of, lb pound (Nicolas Ferguson & Maire O'Reilly, 1977, p. 67)

4. Use the entire first syllable and only the first letter of a second syllable. Subj. subject, cons. conservative, tot. Totalitarianism; ind. Individual.

5. Eliminate final letters. Use just enough of the beginning of a word to form an, easily recognizable abbreviation; assoc. associate, associated, ach. achievement, boil. Biological; info. Information; intro. Introduction; chem. Chemistry; conc. Concentration; max. Maximum, rep. repetition (Purvis, 1978, p. 24)

6. Omit vowels from the middle of words, and retain only enough consonants to, provide a recognizable skeleton of the word. Bkgd. background, ppd. Prepared; prblm. Problem, estmt.estimate, gvt. Government (Kieth Purvis, 1978, p. 24)

7. Use an apostrophe., gov't. government, am't. amount, cont'd. continued, educat'l. educational

8. Use "g" to represent *ing* endings., decrg. decreasing, ckg. checking, estg. establishing, exptg. Experimenting (Renée &Simonet, 1995, p. 131)

9. Generally, spell out short words such as *in, at, to, but, for, and key*. Symbols,, signs, or abbreviations for short words will make the notes too confusing with"shorthand."

10. Leave out the words *a* and *the* (Renée &Simonet, 1988, p. 130)

11. Leave out unimportant verbs.

12. If a term, phrase, or name is initially written out in full during the act of taking notes substitute initials whenever the term, phrase, or name is used again (i.e., after writing out a term once in full, use an abbreviation): Modan Massachusetts Party (MMP)

13. Use symbols for commonly recurring connective or transitional words (Renée &Simonet, 1988, p. 131)

14. Eliminate small connecting words such as: is, are, was, were, a, an, the, would, this, of.

15. Eliminate pronouns such as: they, these, his, that, them. However, be careful NOT to eliminate these three words: and, in, on (Renée & Simonet, 1988, p. 130)

16. Use symbols to abbreviate (lines, arrows and so on). For example: "The diameter of the Earth is four times greater than the diameter of the Moon." Becomes: "Earth = 4x > diameter

of Moon" (Keith Puvis, 1978, p.7). : Drop the last several letters of a word. For example, substitute "appropriate" with "approp." Drop some of the internal vowels of a word. For example, substitute "large" with "lrg." ."(Nicolas Ferguson &Maire O'Reilly, 1977, p. 67).

17. Substitute numerals with symbols, for instance: Substitute "one" with 1 ,Substitute "third" with 3rd.

19. Use a dot over a symbol or word to indicate rate, such as vibration rate or frequency rate.

20. Use symbols to group items, indicate importance, and flag sections for follow-up.

The general principle in note taking is to reduce the language by shortening sentences and words" (Jordan, p. 313). By using standard and personal abbreviations and symbols, note takers can save some time in writing (Jordan, 1997, p. 189). Nonetheless, randomly created abbreviations will require learning a significant number of randomly created abbreviations assigned to a given word. Hence, a method based on memorizing random abbreviations demands more time to study and daily practicing of all memorized symbols including the ones that note takers haven't used but they might use them in the future. It's unlikely that they will utilize all the memorized symbols on a daily basis and they are able to keep unused abbreviations in their memory. As a result, they cannot use them when needed and the effectiveness of such systems diminishes. Also, randomly selected abbreviations require constant reinforcement to keep them in their memory and limit their ability to use them for larger vocabularies

**3.12. Types of note taking:**

Traditionally, note taking is linear, i.e., one point follows another down a page. Aspects of this may be the use of layout, capital letters, headings, systems of numbering, indentation, underlining, abbreviations symbols, etc. One tendency of linear note taking is that it apt to become unnecessarily lengthy, whereas only a maximum of 10 per cent of the original is normally needed for recall purposes, as Jordan (ibid, p., 18) states.

An alternative system of note taking has been promoted by Buzan (1982) under the label of “mind maps”. The note taking starts from the topic listed in the centre of the page and then expands outwards in different directions making use of key words and images linked to each other. Buzan also calls these patterned notes; they are essentially visual.

Variations on “mind maps” have been produced: they are known as branching notes or diagrams, and may look like a spider’s web. Many people consider that branching notes are more memorable than linear notes because of their visual impact. They may be especially useful for note taking during lecture proceeds, and allow the relationships between ideas to be noted more clearly (Jordan, p. 18)

Rost (1990, in Jordan, 1997, p. 187) provides a list of types of note taking (reproduced below)

**3.12.1. Topic- Relation Notes:**

1**.** Topicalizing- writing down a word or phrase to represent a section of the text. Or outlining- writing topic sentence or main idea, major points providing information about topic, subpoint that describes the major point, supporting detail for the subpoint. Such sub points are called by Purvis (1978, p. 30) CHAINS.

2. Translating- writing down L1 equivalent of topic.

3. Copying & transcribing: writing down verbatim what is read.

4. Schematizing or Patterning: inserting graphics (flowcharts, diagrams) to organize or represent a topic or relationship.

**3.12.2. Concept- ordering notes:**

1. Sequence cuing- listing topics in order, numbering.

2. Hierarchy cuing- labelling notes as main point (key finding, conclusion, etc) or example (quote, anecdote, etc).

3. Relation ordering- left- to- right indenting, using arrows, dashes, semi- circles, or signs to indicate relation among topics.

**3.12.3. Focusing Notes:**

1. Highlighting- underlining, placing a dot or an arrow in front of a topic, circling a topic word, listing, margin notes.

2. De- highlighting- writing in smaller letters or placing topic inside parentheses.

**3.12.4. Revising notes:**

**1.** Inserting- drawing arrow back to earlier note, inserting with caret.

2. Erasing- crossing out old note.

Jordan states that "clearly notes are personal to each student, and each student may be idiosyncratic in the way that the notes are taken" (p. 188). Probably the vast majority of students are only aware of the note taking system that they have used in their mother tongue; in all probability, this will be linear system, involving the vertical listing of items and points. It can often be improved by showing the use of numbers and letters to separate sections and sub- sections, and the use of space and indentations for the layout. In addition, the use of capital letters and underlining, as well as boxing and the possible use of colour, can increase the impact (Jordan, p. 189)

Although a linear system may be perfectly satisfactory, or even the best for the purpose, it is useful for readers to be aware of alternative systems. They can then compare and discuss the merits. One that is sometimes used or demonstrated is the branching system: it may be referred to by other names, e.g., diagramming, web, mapping, or variant- mind or concept map. In its basic form, it consists of a central topic (centralised on the page and boxed or ringed) from which the points emanate, like the spokes of a wheel. The use of lines, arrows, and boxes is important for providing the linking. The system is essentially visual, and for some people it makes it easier to remember its content.

For short, each type of note taking is built upon the approach it has been derived from. There are different approaches to note taking. The one(s) chosen may depend on the level of the students and/ or the preferences of the students and teachers. One approach is to provide a framework for the notes with each main point numbered and subsidiary points numbered differently or lettered. Another one is to provide “word cues” so that students read carefully for that part of the text. Another is to list the discourse markers indicating the main points and changes of direction of the text. Yet another may give a summary of the text but leave a number of blanks to be filled by carefully reading.

If there is not time to compose a note taking exercise, but if the transcription has been completed, then a general rubric can be used to state that notes should be taken. The main points could possibly be indicated on the transcription of checking. This approach gives maximum flexibility in note taking and allows students to adapt any method or technique they prefer. It is also advanced, as it is completely open and without guidance (Jordan p. 267)

**3.13. Note Taking System:**

**3.13.1. The Cornell Method:**

The Cornell method provides a systematic format for condensing and organizing notes without laborious recopying. After writing the notes in the main space, students may use the left-hand space to label each idea and detail with a key word or "cue”. This method has advantages that it is organized and systematic for recording and reviewing notes. It has an easy format for pulling out major concepts and ideas. Moreover, it is simple and efficient. It saves time and effort. Therefore, students should "Do-it-right-in-the-first-place system"

**3.13.2. The Outlining Method:**

This method which is famous of dash or indentation use while outlining is usually best except for some science classes such as physics or math. It depends on reading and then writing in points in an organized pattern based on space indention (Renée & Simonet, 1988,

p. 40). Placement of major points farthest to the left. Indenting each more specific point to the right. Levels of importance will be indicated by distance away from the major point. Indention can be as simple as or as complex as labelling the indentations with Roman numerals or decimals. Markings are not necessary as space relationships will indicate the major/minor points.

This method is known of some advantages. It is well-organized system if done right. Outlining records content as well as relationships. It also reduces editing and is easy to review by turning main points into questions. However in the counterpart, it requires more thought in class for accurate organization. This system may not show relationships by sequence when needed. It doesn't lend to diversity of a review attach for maximum learning and question application. This system cannot be used if the reading or lecture is too fast.

The outline format can be used if the reading text is presented in outline organization. This may be either deductive (regular outline) or inductive (reverse outline where minor points start building to a major point). Use this format when there is enough time to think about the outline and make organization decisions when they are needed. This format can be most effective when the students' note taking skills are super and sharp and you can handle the outlining regardless of the note taking situation.

### 3.13.3. The Mapping Method:

Mapping is a method that uses comprehension/concentration skills and evolves in a note taking form which relates each fact or idea to every other fact or idea. Mapping is a graphic representation of the content of a text. It is a method that maximizes active participation, affords immediate knowledge as to its understanding, and emphasizes critical thinking.

This format helps the reader to visually track his text regardless of conditions. Little thinking is needed and relationships can easily be seen. It is also easy to edit his/ her notes by adding numbers, marks, and colour coding. Review will call for restructuring thought

processes which will force the reader to check understanding. Review can be done by covering lines for memory drill and relationships. Main points can be written on flash or note cards and pieced together into a table or larger structure at a later date. Nevertheless, this method has the disadvantage of the reader may not feel of the changes that happens in content from major points to facts. It is used when the book's, article's, or text's content is heavy and well-organized.

**3.13.4. The Charting Method:**

If the text's format is distinct (such as chronological), the note taker may set up his/ her paper by drawing columns and labelling appropriate headings in a table. This method is based on determining the categories to be covered in text. As the student's reads, s/he can set up his/ her paper in advance by columns headed by these categories and record information (words, phrases, main ideas, etc.) into the appropriate category.

This method helps in tracking conversation and dialogues where the reader would normally be confused and loses out on relevant content. It reduces amount of writing necessary. It provides to easy review mechanism for both memorization of facts and study of comparisons and relationships.

This system is used when tests will focus on both facts and relationships or when the content is heavy. It is used too when the student wants to reduce the amount of time s/he spends in editing and reviewing at test time. It is useful when the reader wants to get an overview of the whole text on one big paper sequence.

**3.13.5. The Sentence Method:**

This method relies on writing every new thought, fact or topic on a separate line, numbering as the reading progresses. It is slightly more organized than the paragraph and gets more or all of the information.

This method is disadvantageous in determining major/minor points from the numbered sequence. It is difficult to edit without having to rewrite by clustering points which are related. Moreover, it is difficult to review unless editing cleans up relationship.

Regarding its use, it is used when the text is somewhat organized, but heavy with content. When the reader can read the different points, but s/he doesn't know how they fit together. In this case, the author tends to present in point fashion, but not in grouping such as "three related points."

It is worth noting that if a passage contains four different types of paragraph, for instance, the note taking act will take four different methods of noting these paragraphs, as Purvis (1978, p. 49) assumes. However, the paragraph is a useful unit for students reading and note taking, because most writers use the paragraph to deal with a single subject or topic. Such paragraphs can be noted by one note taking method (Purvis, ibid., p. 55). This does not always happen, however, because:

1. One paragraph may cover more than one subject. Then more than one note taking method will be needed to note it.

2. More than one paragraph may deal with one subject. Then one note taking method may cover more than one paragraph.

### 3.14. A mind map for note taking skills

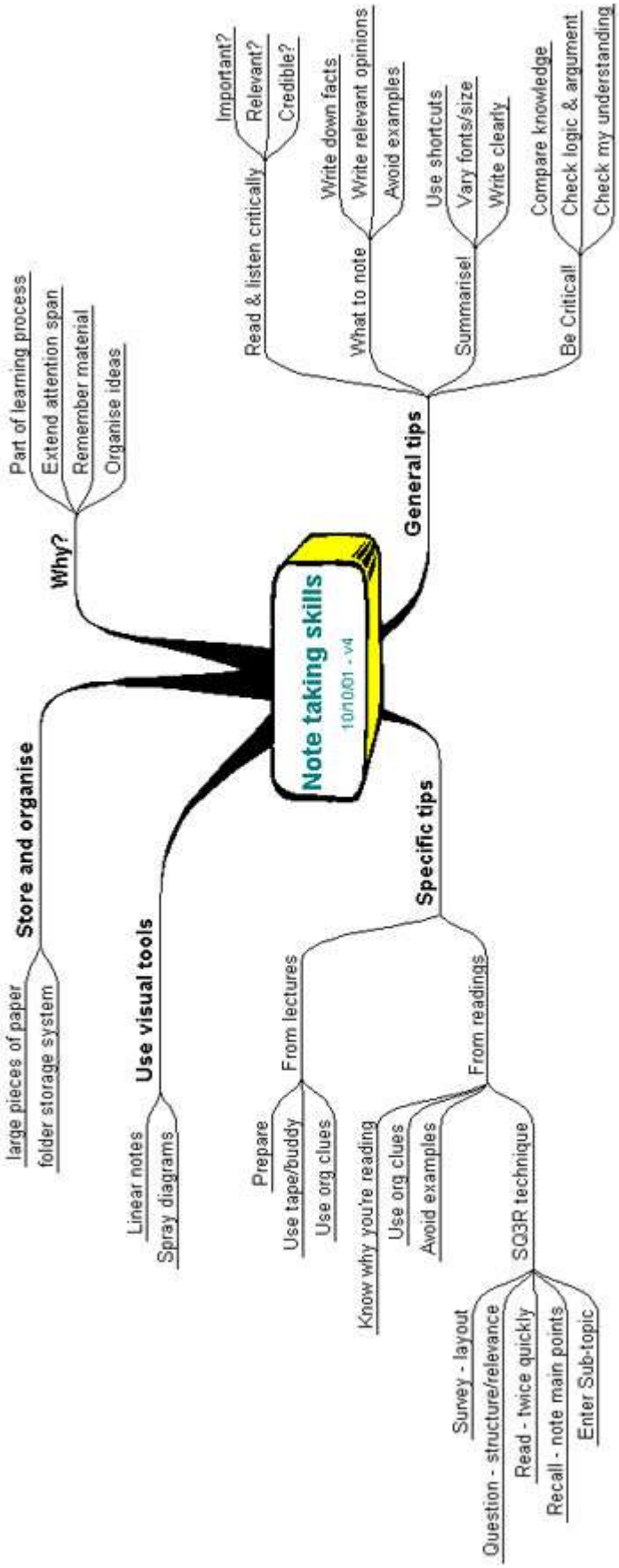


**Figure 1: A mind map for note taking skills**

### 3.15. Reading to Learn and Retain Information:

The problem of having difficulty in retaining the information which has been read and hence having very little knowledge of the material at the end stems mainly from having the reading technique which was a word by word vocalising approach (i.e., pronouncing each word to oneself as s/he progresses). Orr (ibid., p. 58-59) suggests the technique which he calls the SQ3R approach. That is an acronym standing for *survey, question, read, recite, and review*. Let's look at each of the individual processes in turn.

The *survey* function is just like the warm-up preview. Instead of preparing one's mind to listen, for instance, s/he is now obtaining an overview for increased understanding and recall of reading material. The actual process is much the same. Take perhaps five minutes to simply browse through the pages noting the important terms. The **bold-face** print and any *italics* should take your attention. Also ponder the graphs, charts and any other visual aids.

The *question* process of the SQ3R technique suggests that during the survey phase the reader turns the terms which s/he notes into questions. While mentally noting these terms in italics, for example, the reader constructs questions about them. These questions will serve to give special prominence to the important terms s/he notes during the survey process.

The next process is *read.* Because the reader is reading to retain, s/he will want to understand the material. Some reading matter will be straightforward and some will be extremely difficult. When the reader is frustrated passing through a difficult material, s/he can talk it over with several close classmates. During the reading process and setting a reading task, it is workable to break it up into small bits. Orr (ibid., p.58) stresses that reading a full chapter at one go is much more difficult than reading a series of, say, seven small sections. The benefit of reading section by section is that the reader pauses after each section and consolidate her/his thoughts.

The consolidation process leads to the next reading step, *recite.* Having just finished reading the first section of a chapter or assignment, the reader has to pause and recite the major ideas asking herself/himself what are the three most important points covered in the section. If s/he can not name any points, s/he had better reread the section. The recitation process helps to fix the concept more firmly in memory. As the reader proceeds through the subsequent sections, s/he pauses and recites the central points to herself/himself. If noting the terms on paper helps to make a greater impression, then they can do so, but they should remember to limit their writing to just the key terms. As mentioned previously, writing takes valuable time.

The final step in reading for retention is *review.* It might sound dreary having to go back over the material, but that is exactly how learning is increased. That familiar expression, `Repetition is a great teacher', is founded upon this process. This means going back and logically linking the central ideas from each of the reading sections. This process will not only help in remembering the individual points, it will also give a more sound and thorough understanding of the overall concept, as Orr (ibid.) suggests. Revising the material being read should take only several minutes. That small amount of time will be very well spent as the reader's understanding will be expanded and memory will be reinforced.

**Conclusion:**

Notes are phrases and abbreviations that we hurriedly jot down while trying to follow the thread of reading thoughts. Taking notes is essential in order to remember what one reads but it has a further use: when taking notes, it is necessary to establish the structure of the text and its key ideas and to learn to leave out unessential information. It is a difficult activity which sums up most of the strategies and implies outlining the structure of the passage; it is worth noting that note taking can be supplemented by note making i.e., briefly jotting down one's reactions and ideas about the passage (Grellet, 1981, p., 23- 24). Its significance lies too in

relating two important skills namely i.e., reading and writing (Grellet, ibid, p., 8). “written records can betake a variety of forms: card index files are one; they are flexible as far as the amount of information recorded on each card is concerned; they can be flicked though for alphabetical searching or just “browsed” in and, in most usefully of all, they can be rearranged as the user perceives new possible groupings and associations between words. The vocabulary note- book is probably the most common form of written student record. Small note books can be carried round easily and added to and studied at any time.

Redmann and Ellis believe that students should be explicitly encouraged in good note taking habits, and include a practical exercise on different note taking strategies in their note book a way with words (1989: 3- 4, in Mc Carthy, 1990: 127- 129) .

Writing down is an activity that is apparently imply, it contribute to awareness. Students either copy or reproduce without the copy in front of them. To do this accurately, they must focus their attention on the conventions of writing: spelling; capitalization; punctuation; paragraphing, ambiguous forms e.g., ‘s can represent the possessive ending , is, has, or even, does as in what’s he do?; number conventions (w6); abbreviations (etc., i.e., e.g., p.m.), and so on.

Note taking prepares for expressive writing. It is, however, useful in itself- language users need to be able to interpret and copy down printed schedules, time tables, records, details of projects, charts, formulas, processes, recipes, new words and phrases they wish to remember. They should be capable of writing down accurately and comprehensively oral arrangements and instructions for themselves and others. As students studying in the language they may need to copy accurately diagrams, details of experiments, quotations from literary works.

## CHAPTER FOUR: FIELD WORK

## RESEARCH METHODLOGY AND TOOLS

# CHAPTER FOUR: FIELD WORK

## RESEARCH METHODLOGY AND TOOLS

**Introduction:**

This study is undertaken in order to measure reading and note taking speeds of third year university students in Sétif, Algeria. Some of the held prediction is cast in the form of hypothesis which may be proved or disproved in the course of this research. The prediction made is directed to investigate the nature of the relationship that exists between students' reading and note taking speeds as they read a print written in English. Furthermore, it is intended to shed light and describe learners' reading and note taking habits and attitudes that lead to being rapid/ slow readers and note takers. In this vain, we put forward, in the reading speed questionnaire that the prime factors that appear to impede rapid reading and note taking speeds as regression, vocalization, pointing, mental translation and lack of vocabulary lead them to be slow readers and note takers at the same time.

It is by means of the reading and note taking speeds tests and questionnaires that we would get nearer to the study's hypothesis, i.e. data have been collected with the use of these two tools. In the first stage of this study, and through the reading and note taking speeds tests that we can get access to the actual speeds of learners and hence, we have tried to answer the question that the current research highlights. It lies in the possibility of having such a positive association between reading speed and note taking speed. Then, in the second stage and via the two questionnaires, we have attempted to diagnose learners' attitudes, habits, and strategies of reaction to a print and how they take notes. These may lead to slow or rapid reading and note taking. In other words, we seek mainly to investigate the source of difficulties, slowness or rapidity that learners exhibit while performing both activities which drives or brings them to be slow/ fast readers.

This chapter offers the different measures adopted in data collection to test the research hypothesis. It paves the way to two consecutive sections namely: research methodology and

materials used in the study. The first section entails research questions and hypothesis, research design and the population and the sample of the study. The second one presents a massive description of the materials used and the measures applied for their selection and implementation.

**4.1. Reading speed and note taking speed position in EFL:**

Reading is by far the most eminent skill that plays a significant role in improving readers' language proficiency, especially in a foreign language setting basically because EFL learners rely on this skill to acquire knowledge and record it by means of note taking as a secure from forgetting.

The debate over the actual relationship which exists, according to Jordan (1997, p. 143), between reading speed and note taking speed is still taking place. Indeed, the answer to the question about the extent to which these two variables are correlated and whether they are cause and effect or totally independent is not concerned in itself. Within this scope, Jordan (1997: 143) points out that

> *"Reading as a skill is normally linked with writing. This is a fundamental characteristic of the target academic situation in which students are typically reading books and journals, noting, summarizing, paraphrasing, and then writing essays, etc. In practicing a material for reading, the link with writing is normally included although the focus may be on reading; the resultant exercises usually involve writing. This makes reading for academic purposes a multifaceted subject".*

Hence, reading is a fundamental aspect which can be the starting point for other considerations like the skill of note taking. When students read, it is for a purpose. Clearly, students can have different purposes in their reading which will be noted down; those will include: a. to obtain information (facts, data, etc); b. to understand ideas or theories, etc.; c. to

discover authors' viewpoints; d. to seek evidence for their own point of view (and quote) all of which may be needed for writing their essays, etc.

Joan Carson Eisterhold (1990, p. 88), on the other hand, questioned if there is evidence that a relationship between reading and writing exists and, if so, how it might work. Stotsky (1983, in Eisterhold, ibid. p.88) surveyed first language correlational studies and found the following:

a. There are correlations between reading achievement and writing ability. Better writers tend to be better readers.

b. There are correlations between writing quality and reading experience as reported through questionnaires. Better writers read more than poorer writers.

c. There seem to be correlations between reading ability and measures of syntactic complexity in writing. Better readers tend to produce more syntactically mature writing than poorer writers.

These studies suggest that reading and writing are related but researchers have only recently begun to explore this connection. Jordan (ibid.) again states that in the process of reading, students will be concerned with the subject- content of what they read and the language in which it is expressed. Both aspects involve comprehension though of different kinds depending on the reading purpose. Different reading skills and strategies will be involved; in turn, the skill can be divided into sub- skills. Having this great significance, several reading methods have been attributed to enhance reading speed by means of self paced reading, class paced reading, repeated reading, and rate- building reading which are directed to the individual reader or to the reading class, on the one hand.

Note taking, on the other hand, considered and gained little attention and recognition of its importance among researchers and educationalists (Chaudron, Loschky & Cook, 1994; Clerehan, 1995; Dunkel, 1988, and Famhy & Bilton, 1991, in Barbier et al., 2007). In that,

they gave birth to many books that promote note taking as a helping device in reading and a significant instrument for reference or later revision. However, a few practice and training is ensured on how to take quick and effective notes the fact that turns students' readings to an unfruitful experience. Indeed, when the act of reading takes place, note takers must control variations of rate between the speed of reading and the speed of their writing (Preverly, Ramaswamy, Garner, Brown, Sumowski & Alidoost, in press, as cited in Barbier et al., 2007). For that reason, they develop adjustment strategies that rely on transcription of a reduced quantity of information (by using abbreviations and symbols) compared to that contained in the source book (Piolat, 2006, in Barbier et al., 2007). This reduction operates at a conceptual level by selecting only ideas considered as important, and at a formal level, with abbreviating procedures that are specific to note taking. This shows how much it is significant to include speed in taking notes while reading at a certain rate.

Orr (1992. p. 46) suggests that students should develop their own system or set of symbols and abbreviations which relate to the common terms, concepts, and procedures frequently encountered in their readings to cope with the speed at which they read. They have to try out symbols and abbreviations that speed up their notes during TV news broadcasts will increase the students note taking skill and speed but they have to realize that their aim is to be selective in what they note they do not need to record every utterance of the print or the reading material (Orr, Ibid, p. 50- 51). The same thing is true with the masters of speed reading who are reputed to run their eyes down the middle of the page and suck up the essential words on both sides and note them down. Orr states again that

> *"While this is theoretically possible, it is extraordinarily difficult. For some types of reading matter, such a technical, mathematical or logically complex material it may not be applicable at all. So, with most general types of reading matter, the secret is to pause less frequently and to widen their visual field. Basically, in the*

*process of scanning which involves running the eyes down each page and taking note of any terms in bold face print or italics, section headings, graphs, and charts or anything else which seems to jump off the page"*

Most textbooks and students' resources are designed to be very reader- friendly. That is, the author and editors make every effort to help the student learn from the resource. Some texts even have margin notes to tell you what the section is about, as Orr (ibid., p. 55) notes.

**4.2. Research Design:**

Any research work requires a design that reflects its type, nature, and methodological procedure. For this, categories of planning differ and vary from one research design to another.

**4.2.1. Selection of the Method:**

All approaches to second language research agree on the fact that a good design involves a systematic, planned and disciplinary inquiry, though each has developed its own way and process of investigation. In that, we may exemplify by the experimental methodology and descriptive one. Actually the distinction between both methods of methodology is important for the researcher to discern his way right from the start of his study in order to avoid misleading.

However, in both the researcher should prepare the requirements of his study before he begins its conduction. First, he needs to define his research hypothesis accurately. Second, he should decide about the study's target population and the sample which will represent it. Third, the material to be used should be prepared in advance making sure it fits the learner's intellectual level. This preparation is likely to give a good design for the study with no methodological problems.

The aim of the present research work is to give importance to the reading and note taking speeds of third year English students. The investigation is conducted through a descriptive

diagnostic methodology. It is recognized in the literature on this type of research design that the researcher is no longer an active involved participant; rather someone who tries to deal with a given phenomenon as naturally occurs as possible.

Since the topic in question is to describe and diagnose learners' reading and note taking speeds together with the habits reported on using while doing both activities, we think that the descriptive method seems to be more appropriate. According to Seliger and Shohamy (1989. p.124) *"Descriptive research involves a collection of techniques used to specify, delineate, or describe naturally occurring phenomena without experimental manipulation".* This means that the descriptive study is an exploration of an existing phenomenon. Here, no attempt is made to change behaviours or conditions, but to measure things as they are.

The present study focuses, on the other hand, on another common type of research which is the correlational one. This latter is carried out to explore the nature of the relationship among variables a researcher is interested in (J. Charles Alderson, Caroline Claphan and Dianne Wall, 1995, p. 77), that is to say, the degree or the extent to which two or more variables covary or vary together. Yet, it is worth noting that a correlation between two variables does not necessarily mean causality or that one variable causes the other (Marczyk et al., 2005: 3). Here, we have opted for a simple correlation study between two variables relying on descriptive statistics which are defined by Wine (1976: 2-3) as a scientific procedure that enables the researcher to gather, arrange, examine, explain and present a set of information in the form of numeral data. It is through the descriptive statistics that a researcher reports a set of data and investigates them. The current study is constructed following two steps: reading and note taking speeds tests correlation, and reading and note taking speeds questionnaires correlation.

### 4.2.2. The Target Population and Sample:

According to Brown (1988: 114) and Marczyk et al., (2005: 18) a population is the entire group that is of interest to the researcher in a study. These individuals are of the same type. On this context, Miller (1975: 59) defines the word population, being used in statistics, as a term applied to describe all possible objects of a particular type, being subjects or measurements. Population is known, too as the entire group of people that the researcher is seeking information about (as cited in Understanding Research, 2009, p. 88)

The sample is a sub- set selected from a target population (Stan Gibilisco, 2004, p. 39). The researcher cannot conduct his investigation on the whole population for some logical reasons. Marczyk et al., (2005) argue for the necessity of choosing a representative group which exhibits the general characteristics of the whole population of interest. It is not practical to work with every member.

Our target population is that of English students in Algeria; our study population is that of third year English students preparing for a license degree in English as a foreign language at Farhat Abbas University of Sétif during the 2010- 2011 academic year. At this level, learners receive two modules called “British literature” and “American literature”. Through these modules, readers are given the chance to read and use the different study skills namely using a dictionary, reading and taking notes. Moreover, their teachers make them read more novels and stories that will be included in their exams. All these learners have studied English as a Foreign Language for seven years: two years at the elementary level, three years at the secondary level and two years at the university. In fact, it is only at this level, compared to other levels, first, second, fourth year that both reading and note taking skills are practiced extensively by means of reading novels and noting down points of interest. This makes it possible for us to carry out this investigation.

Choosing third year English language learners at the university as a target population is not a random choice. First, students at the university (English Department) do not have a reading module which is concerned precisely with the reading skill. They do few readings related to other modules (British and American literature, for example) with no standing reading module by its own. There is an advantage in choosing a third year level which is linked to the learners' language proficiency. This level answers better language proficiency than a second year level which aids in conducting the study with less linguistic problems.

The tests were administered to a group of students that contains forty eight (48) learners. The sample is limited to this size for the sake of being time economist, practical and accurate. This sample includes students who have taken the reading speed and note taking speed tests. However, the questionnaires were directed to two hundred and sixty two (262) students. They are randomly selected from the target population. They were not informed that they are subjects in a research work of reading and note taking speeds to avoid biasing of the study's results. Subjects were in a usual reading session atmosphere in which they are supposed to read a passage and to take notes later.

In this study, the participants were assigned to three tasks: reading a text, completing a questionnaire and writing down in English their notes. It is important to note that sex differences have not been given any predictions as far as reading and note taking speeds are concerned.

### 4.2.3. Procedure and Materials used for data collection:

Gathering the precise information is a paramount step in doing a research. The present study depends mainly with one research activity with which the use of survey tests' results to determine the nature of the correlation between reading speed and note taking speed. This is an initial diagnostic phase, and then we get in depth of the matter through questionnaires, as an attempt to check in details the habits behind the slow or rapid reading and note taking of

third year English students in both performances of the tasks. Dornyei. Z (2003, p.9) illustrated that *"the main attraction of questionnaires is their unprecedented efficiency in terms of (a) researcher time,(b) researcher effort, and (c) financial resources".*

For this, questionnaires are regarded as perfect data collection instruments. In our investigation, two questionnaires will be proposed. Their aim is that they aid to approximate the picture on students' views and ideas about reading in English as a foreign language, the difficulty they may encounter while English materials, types of reading they do in class, or outside, and so on and so forth.

As it has been noted previously, 480 students, belonging to third year students, will be our target population .The questionnaire will be delivered to the half of them, with high, average, or low reading and note taking speeds, in a hope to reach randomness and reliability. It is noteworthy that every second student will be selected from a list of students consists of 480 students to constitute the sample.

**4.3. Materials used for practice**

**4.3.1. The reading speed and note taking speed tests:**

**4.3.1.1. Tests' Administration:**

An assessment or test can be defined as a measurement to sample behaviour in that a teacher or a researcher tests a limited sample and then generalizes from the results; however, an assessment of linguistic competence should not be regarded as a precise instrument like a ruler or scale that measures weight or length, because it is very difficult to measure competence accurately (Kilfoil and Van der Walt, 1997).

Before administering the tests, the students were given several instructions as regards the setting of the tests. They were reminded to work independently. The students were also briefed on how to skim and scan the text and take notes at the same time. Approximately

fifteen (15) minutes were given to the students to go through the text and to take notes simultaneously.

The correlational design has been applied in this investigation to spot light on the nature of the relationship between reading speed and note taking speed. That is to say, the extent to which they are said to be linked. To this end, the research relied on calculating a tests correlation coefficient "r" to verify whether the study variables (reading speed and note taking speed) are totally independent or correlated.

Both tests have been administered to a range of students who resemble a group (i.e., 48 students who make 11% of the population) selected randomly from both sexes from a total population that consists of 460 third year students, frequenting Farhat Abbas University in Sétif, Algeria. It is important to note that this group of students does not belong to a special class but it is selected randomly as mentioned before.

The design of the reading test would have been difficult to be chosen without recourse to the university curricula content of the sample. In other words, students get used to read novels and narrative texts the fact that may influence their reading abilities. This would give us an idea about the type of texts they are able to go through in the reading and note taking processes. Thus, we have relied heavily on the content of curricula of subjects like British and American literature modules of English as a foreign language.

We have decided that administering both tests on one Monday morning would be the best way to avoid many disturbances. We have a point in thinking like that because we believe that on Monday, students would find it neither difficult to prepare for a new day to begin the week nor too tired because of their whole week university work. So then they have taken both tests in a classroom session, starting at 9 o'clock. In addition, we have decided for both tests that the administration time would not exceed one hour.

Students in this investigation go through a timed reading task in which they read the passage for the first time at their casual normal and comfortable speed. When they finish reading, they have to note their starting and finishing reading time. After that, a calculation of their reading speed is done by dividing the number of words in the text by the time they have taken to read it (Nuttall, 1985: 36; Champean de Lopez, 1993: 50; Comon and Heavers, 1998: 82). For example, if they took four minutes to read a 500 word text, their reading speed would be 500: 4: 125 words per minute.

The analysis of the reading speed test and the note taking speed test have helped us have better insights into these speeds and the difficulties as well as the faulty habits learners encounter when reading and taking notes and hence would slow them down . The tests are seen as an important resort to drive conclusions which confirm or disconfirm the study stated hypothesis.

**4.3.1.2. Description of the tests:**

**4.3.1.2.1. Content of the Tests (The reading passage):**

To reach our objective which is measuring third year English students' reading and note taking speeds, one tool comes to be used which is the reading passage. The text used in the tests is taken from "How to Read Faster and Recall More" (Wainwright, 2007, p. 41- 42). The opted text is taken and administered the way it is designed in the book, i. e., with no modification. The source of the text offers a course by providing learners with tips of how to read at faster rates and recall more by means of remembering and not guessing. The programme which is exposed in the source book is based on the recognition that if post-reading recall is not good immediately after reading something, it is not likely to improve later. In that, it is not workable to try as the student reads to memorize isolated bits of information on the off chance that they may be required. Wainwright (2001) stresses the

importance of reading faster and post- reading recall because neither of these is assessed in school comprehension tests, yet good recall is essential for better comprehension.

The difficulty level of the text is largely determined by its linguistic, organizational, propositional, and discourse features. It is also determined by such individual variation as background knowledge and purpose of reading (Urquhart and Weir, 1998). Furthermore, the wording of reading test items should not cause test-takers any difficulties of comprehension. It should always be well within their capabilities and less demanding than the text itself. In the same way, responses should make minimal demands in writing ability (Hughes, 1989).

During the tests' (reading) administration, we have observed that learners did not refer to or use their dictionaries. The fact that implied no or rare difficult words in the selected text and the thing that will distract them and will very likely to slow them down out of referring each time to a dictionary (Nuttall, 1982, p. 26). Since we have found that the selected text does not contain a lot of unfamiliar words, we have decided to keep it as it is. Furthermore, the chosen texts are not domain specific. Thus, no technical terminology is encountered in the text. Learners will read texts centering on events of the story which are likely to be found in the general daily life.

The familiarity of the text can be established through the mass interaction with narrative texts (i.e., novels) by students out of their teachers' demand. Conversely, when the level of topic familiarity is too high, the test-takers will be able to take some notes without recourse to the text itself (Roller, 1990). A text should bear a certain degree of unfamiliarity in order to engage the reader's attention and motivate interest. However, it does appear that the contribution of background knowledge to comprehension is more important when the text is more specific, but when the text is less specific, language proficiency plays a more important role in comprehension (Clapham, 1994).

In the study, learners are directed to go through two steps. As a first step, students have been required to skim the narrative text to have an idea about the topic that is dealt with. Then, as a second step, they are asked to scan the narrative text and take notes at the same time.

The students were provided with the same text to practice scanning strategy after it has been explained and compared to the skimming strategy. These exercises involve the learners to take specific notes about precise places, names of characters which are mentioned in the text (see appendix4). These notes center on the text's ideas. In other words, they serve to reflect the reader's understanding of the text's meaning. The instruction for the exercise is the following: read and make notes on the following text and remember your reading purpose is. Remember to reduce language wherever possible by omitting words, shortening by using abbreviations and symbols. Thus, the reader is supposed to read the question statement and to read the text and take notes according to how s/ he has understood the reading passage.

In practicing both reading strategies, Readers read in a silent way. This type of reading is the suitable way for the study. Through this type of reading, students read the two texts without uttering them. That is to say, they do not produce voice or even murmur with their two lips while reading. Readers are likely to focus on understanding the meanings expressed through the two texts rather than wasting time on pronouncing accurately the texts' words. Reading in a silent way is likely also to speed reading hence save the reading time. Because it establishes a silent way of work, silent reading helps in keeping class discipline by avoiding noise.

Readers practice the second reading strategy and take notes. They can go back into the text. In other words, the text is not removed the moment students end up with its reading. They are allowed to go into the text for the sake of checking their notes. Readers feel free to copy from the text or make use of the text’s meanings which remained in their memories.

**4.3.1.2.2. Type of Text:**

The decision on text type is best informed by needs analysis of the students target situation and by careful examination of texts (and tasks) used in other tests (Urquhart and Weir, 1998). In selecting texts, various factors have to be taken into account to determine their suitability for testing the targeted skills and strategies. These factors involve topic familiarity, language difficulty, channel of presentation and the skills and strategies we want to test.

Speaking about the type of text used in the tests, we put what Alderson (2000: 61-62) into consideration and opted for the narrative text. Alderson (ibid.) notes that just as it is commonly assumed that what readers know will affect what they understand when reading, so too it is commonly that text content will affect how readers process text. Further, he claims that it is generally assumed that abstract texts will be harder to understand than texts describing real objects, events or activities. The more concrete, imaginable and interesting, the more readable the text and texts located in familiar settings, or everyday topics, are likely to be easier to process than those that are not. Furthermore, the quantity of information in a text affects understanding and recall, as does the density of propositions. The extent to which information is stated explicitly in the text, requiring less infrencing, has an effect on recall.

Actually, a great deal of research on text structure has examined the narrative. Graesser, Golding, and Long (1996, in Hudson, 2007, p. 179) note that narrative discourse has a special status in research and theories of discourse, language use, and literacy in general. Further and because narrative texts are read more quickly than expository text, and scores on recall and comprehension tests are generally higher for narrative texts than for expository texts. The conceptual basis for narratives lies in sequences of experiences and events that are based in a culture. Narratives represent experiences based on events that are organized in knowledge structures that can be predicted by the reader. Several narrative prose studies have looked at

schematic textual superstructures (Rumelhart 1975; Van Dijk and Kintsh 1983, in Hudson, ibid. p. 179). This research has shown that narratives have a rather hierarchical structure that can be used by readers to aid comprehension. According to Mulcathy and Samuels (1987: 148, in Hudson, 2007, p. 179), these narrative text structures help identify, define, and explore the goals of a protagonist and reveal the problem- solving strategies of story characters as they attempt to reach a goal". All these aspects of the narrative formed the second motive which led us to make choice of the narrative text in particular.

Several "story grammars" have been proposed to account for the internal structure that ties the individual sentences within a narrative together (Mandle, 1948, et al., in Hudson, ibid. Op.cit). A story grammar is designed to present the hierarchical relationships among story components such as setting and episode, hierarchical relationships that are represented by the story schema. A reader familiar with the narrative schema will look for these components in processing the text and they will guide the reader. The story grammar attempts to describe what elements of a narrative will be most salient to readers, and by implication, what will be most and least comprehensible.

In addition is the fact that narrative texts have one interesting feature. It is that they appear to induce visualization in the reader as part of the reading process (Denis, 1982) - readers report seeing scenes in their head when they read such texts. What is interesting about this process is that different readers are likely to visualize different scenes, depending upon their prior experience and expectations. However, the visualization appears to become part of the emerging understanding, and subsequent summaries or recall protocols of texts where much visualization is either possible or has been reported often incorporate information that has been visualized, but was not in the original text.

Thirdly and lastly, our text selection stemmed from the knowledge that third year students had been exposed and will come across a great deal of extensive reading during second and

third pedagogical years. In other words, our text's selection is based on the assumption that most of the knowledge third year English students receive or read about in their lectures in English as a foreign language at Sétif University is narrative in nature. The latter is instructed in the modules of American Literature and British Literature. In these modules, facts and events are presented in forms of story by their writers.

Whenever the level of difficulty is set, the second point in the selection of the reading material for fluency practice is the length of the text. Researchers have agreed on using texts that are relatively short. As for length of texts, this varies according to the skill and strategies being focused on. It may not be possible to test expeditious reading strategies (search reading, skimming and scanning) if texts are too short. According to Hughes (1989), scanning may call for passages up to 2000 words, whereas detailed reading can be tested using passages of just a few sentences. It is only when decisions have been taken in relation to selection of texts and tasks for a test that the issue of format can be settled. On the other hand, in careful reading, the text may not necessarily have explicit main ideas comprehension for selection in which case the reader might have to construct them through propositional inferencing, whereas in skimming and search reading the main ideas should be clearly stated (Urquhart and Weir, 1998).

The reading passage used in both tests is entitled "The Missing Painting". It is about 550 words long. This text is a narrative one. The reader is exposed to the different happenings and discussion that take place in the story. The readers are likely to possess knowledge about the topic being treated in the story. Hence, they would pour out ideas about it in their notes. The text does not include technical words or any culture specific ideas. This aids foreign language readers in tackling the text and helps them in achieving comprehension and take notes easily.

### 4.3.2. The students' reading speed and note taking speed questionnaires:

#### 4.3.2.1. The students' reading speed questionnaire:

It is stated before( in 4.2.1) that the overall aim of this study is to investigate, diagnose and describe the different speeds and the habits reported and faced by third year English learners while reading and taking notes with clear specific reference to the speed at which learners' do both tasks. We have assumed that reading is amongst the top major language competencies those students need to acquire in order to be effective independent readers, so that efficient users of English which they will require in their studies. Further, the act of reading is not an isolated activity. It is an active process which is almost always followed by the task of note taking.

##### 4.3.2.1.1. Aim of the questionnaire:

The rationale behind this questionnaire is to find out wealthy information about the students' reading backgrounds and attitudes, habits, speed and type of strategies mostly used by English students. It aims at checking the main habits and behaviours which can act negatively or positively, either directly or indirectly, on their reading speeds.

After finishing the questionnaire's completion, respondents are said to have gone through retrospective reporting where the verbalization is given after the completion of task directed process, or it may sometimes be unrelated to any specific task. Retrospective verbalizations thus involve retrieval of information from long-term memory, which must be transferred to short term memory before it can be reported. In most retrospective verbalizations, subjects are asked to tell researchers what they have thought and done while performing a particular task that has already been completed (the case of subjects who participated in both reading speed and note taking speed tests), either immediately after the task completion or quite some time after a specific language task is given. Retrospective reports may also be unrelated to any specific task, but they are based on the learner's past

learning experience in general (the case of respondents who have participated just in questionnaires' completion). Retrospective verbal reporting may be completed by using questionnaires, interviews or diary-keeping.

The designing of the questionnaire was guided by the principle of combining theoretical input suggested in the literature. A twenty one item questionnaire in each questionnaire was developed to explore the different aspects the research intended to investigate. The questionnaire includes closed or dichotomous questions, rank order or multiple choice questions, and rating scale questions. However, it doesn't contain open-ended questions which aim to identify students' reasons for preferring an option rather than the others for the simple reason that the responses are difficult to be scored or analysed using the SPSS format of analysis though open- ended items are comparatively easy to design and good for exploratory research where the range of responses are difficult to be anticipated (Wallace, 1998, p.135). Furthermore, since we have directed the questionnaires to a relatively large sample (262 students out of 480 students), the matter will be more difficult and tiring to score the open- ended responses and analyse them using the SPSS. Through the closed questions the respondents had to tick one or more options. It is worth noting that some questions required the students to complete them by using numbers from 1 to 5 following a scale of decreasing order of priority or difficulty. The twenty two items are categorized into four interrelated sections.

The results obtained from this questionnaire would help to come up with some recommendations which would serve in the improvement of teaching / learning of reading speed.

**4.3.2.1.2. Administration of the questionnaire:**

Regarding the administration of the questionnaire, it is significant to point out that during the course of our investigation; questionnaires are directly handed and explained by us during

their lecture, with the help of our colleague teacher to 262 students distributed in three different classes in a way to guarantee that the questionnaires won't be filled by the same students twice. We asked students to take the questionnaires with them and to hand them back the moment they finish but they should not take more than a week. This compelled us to have some students answered it directly after finishing their lecture, some took it to their homes or campus ,and handed it back five days later to their administration. All the questionnaires were completed, some with our presence, and some with the help of our colleague teacher and her students. We collected all of them just right after the students brought them to their administration. It is only like this that we were able to fill them on time.

**4.3.2.1.3. Description of the questionnaire:**

The questionnaire of reading speed is made of four sections: Background of Learners towards Reading and general information, Reading Strategies, Students' Reading Speed, and Students' Reading Habits.

**Section One: Background of Learners towards Reading and general information (Q1-Q5):**

This section allows us to get general information and closer understanding about the respondents' interest in the reading skill and taking notes every time they read any sort of informative data (Q1); and whether they choose the time in which they like to read (Q2) and if so do they had time recently to read in English (Q3) and if yes again, do they manage to reply the questions that generally follow- up the text (Q4). Then, this section intends to give us an idea about whether learners put purposes for themselves every time they read (Q5) and if their time tables prevent them sometimes from reading as an attempt to see if they practice reading outside the university (Q5).

**Section Two: Reading Strategies (Q6- Q11):**

In this section, we seek to gather information about the students' use of reading strategies. These latter are said to ensure effective reading and this, in turn, is then about reading in a way that allows the students to understand the writer's message without spending too much time in the process. It is also about reading with a clear purpose in mind so that they only read material that is relevant (Q6). Question 7 is concerned with pre-reading strategies and more precisely with "setting a purpose for reading". Reading strategies include also

a. The types of reading students generally do (extensive/ intensive) (Q7- a) and how often they practice the type they prefer (Q7- b).

b.The technique they use when reading or wanting to get information at the text's level (skimming "identifying main ideas" / scanning "reading in detail" or "reading for specific Information") (Q8).

c. Paying attention to the structure and the organization of the text (Q9)

d. Questions 10 to11 are all concerned with strategies that the students likely use while reading. They involve word-level strategies which seek information about the 'importance laid to vocabulary and students' reactions when meeting an unknown word or a new structure (i.e., how they handle a vocabulary problem). This, in turn, involves: a- guessing word meaning from the context of the text, b- ignoring or deleting or skipping the difficult words, c- cutting the word into letters and syllables to read it correctly, d-asking another student about it, e- using the dictionary to look for the definition, f- looking at its grammatical class, g- analyzing the word for being closer to its meaning and looking at the words which are used with it.

This section ends up by asking respondents if they face difficulties in recognizing words and knowing their meanings (Q11)

**Section Three: Reading Speed (Q12- 18):**

This section intends to inform us about the way students take in reading (i.e., the rate at which they read and to what extent they are slow or rapid readers). It begins by asking informants to identify the type of reading material they best like to do and how fast they think they can do it (very fast, fast, moderate, slow , very slow) (Q12). Then, it goes deeper and asks them if they pause or stop briefly after each phrase or each word (Q13). This question is further confirmed by (Q14) which inquires about whether they read a lot of separate words (i.e., word by word). Then, the idea has been more clarified by giving an example about the way learners' take in reading the first or the second (Q15). Moreover, it asks respondents about how they would rate their reading speed in English (Q16). The following question intends to ask informants if they have ever trained their eyes to move very quickly through a reading material by skipping over words or whole lines (Q17). Question 18 asks if they had tried to find their reading rate (i.e., words read per minute by marking the reading time using a stop watch and counting the number of pages being read.

**Section Four: Students' Reading Habits (Q19- Q21):**

This section tends to highlight the faulty reading habits of students that may lead them to be slow readers. By reading habits we mean frequency, and type of reading as well as the ease/difficulty with which they read in the different languages. It is intended to bring learners to be aware and draw their attention to the faulty reading habits that slow them down while reading silently (Q19-a). These include:

a. Moving the lips while reading in a silent way.(Q19-b)

b. Pronouncing the words for one 'self first (murmuring them) before saying them aloud (Q19-c)

c. Following the words they read with their fingers, a pencil, or a ruler, for example, and hence, their eyes move line by line (Q19-d).

d. Translating into their native language and after writing these translations in the margin of the text (Q19- e).

e. Moving the eyes backward (regression) (Q19- f).

The question before the last in this section diagnoses the preferred way of students' reading (silent or aloud) and how often they do it (Q20). However the last question requests the respondents' opinions about whether it is true that who reads slowly understands better (Q21).

**4.3.2.2. The Students' Note- Taking Questionnaire:**

**4.3.2.2.1. Aim of the questionnaire:**

The second important element we seek to get information about is the students' application of the post reading strategy which is note taking. The questionnaire of note taking tends to serve as the second variable in our study since it is a correlational one in nature. It aims at diagnosing the students' backgrounds about this tool and their attitudes towards it. What forms they follow in devising their notes, what strategies come to work while taking notes. Thus, we will see if our findings will correlate with the ones of the reading speed questionnaire.

Again, this part of the dissertation is devoted to describe students' questionnaires .On the basis of the theoretical review given in this research (i.e., this chapter), we have attempted to prepare it so as to touch the points we have raised earlier.

**4.3.2.2.2. Administration of the questionnaire:**

The questionnaire of note taking too has been administered under the same sample, conditions and time that the reading speed questionnaire has passed through. We were aware that each student takes both questionnaires so that we will see the different opinions of the same student concerning reading speed and note taking speed as an attempt for insuring and increasing reliability. Our broader aim is to compare (i.e., to see if the elements that both

questionnaires treats match together) the results of both questionnaires together and draw a conclusion that our variables correlate or not.

**4.3.2.2.3. Description of the questionnaire:**

The note taking questionnaire, on the other hand, focuses on some significant elements. This questionnaire too is divided into four sections. Each flows in the designed aim that the dissertation tries to serve.

**Section One: Students' backgrounds and strategies Towards Note- Taking (Q1- Q6)**

This introductory section aims at giving us general information about the informants' backgrounds in reading and taking notes simultaneously. It tells us about the respondents strategies reported to be used while performing both activities. First, it allows us to know whether students' construct their notes out of the teacher's demand (Q1) and the extent to which they set goals and objectives before they start noting down (Q2). The following question inquires about whether they reach the level of comprehension through producing what they have read in a form of notes (Q3). Question 4, on the other hand, asks respondents if they give interest to the mastery of the structure while taking notes and if yes, does this mean that they hesitate to put the words on paper and they find difficulty in selecting the appropriate words that convey what they want to say. This question is further confirmed or disconfirmed by question 5 which is divided into two sub questions: the first intends to ask informants whether they take the structure of the notes proposed by the writer of the text (Q5-a). If no, the other part of the question gives another alternative which is if they use their own plan that may help them to read for the intended purpose of reading and taking notes (Q5- b). The last question (Q6) seeks to inform us about the kind of ideas respondents include in their notes (main (Q6-a) or secondary (Q6- b).

**Section Two: Note- Taking Habits (Q7- Q9):**

Actually, there are certain aspects in note taking that may lead readers to be slow or inefficient note takers. These include:

a. Thinking in one's own mother tongue while trying to express their ideas and words (Q7)

b. Noting down ideas on the spot i.e., immediately after reading them (Q8- a).

c. Or leaving what they want to note down until they finish reading the whole paragraph/ text then they rely on their memory to take them down (Q8- b)

The final question in this section asks respondents if they often make their notes as a reminder for immediate use (e.g. exams) (Q9)

**Section Three: Note- Taking Forms (Q10- Q14):**

This section seeks information about the different forms that respondents' notes may take as a way of expressing their notes. Verbally in words (Q10-a) or non- verbally (in outlines, charts, tables, etc) (Q10-b). This question is confirmed by the one that it follows which is if they vary their techniques and strategies of note taking (Q11-a) or they prefer to follow one form (Q11-b). Question 12 tends to diagnose the informants' preferences by giving a set of choices about the form that learners plan to take while taking notes like: graphs, headings and sub heading, drawings, signs or abbreviations, tables, charts, diagrams, maps, models, drawings, graphs. As a technique of taking notes, students may underline, circle, or highlight their notes on the same text they are reading (Q13). The last question in this section asks informants if they find their notes different from their colleagues' notes in case they have borrowed them as far as the use of abbreviations and symbols and the reason behind taking them down (Q14).

**Section Four: Note- Taking Speed (Q15- Q21):**

this last part of the questionnaire tends to cast light on the aspects related to note taking that are said to speed up or slow down learners' speed while taking notes. Hence, like the reading

speed section, this section feeds directly in the heart of our study. This section begins with investigating the extent to which learners use abbreviations and symbols (Q15). Second, if they use arrows to show interrelations with the topic and subtopics when putting them as an outline (Q16). Note taking speed too involves:

a. Shortening notes by leaving out unnecessary words (Q17).

b. Stopping from time to time while taking notes and thinking of what might be written and how to express their ideas and understanding (Q18).

c. If they use every word they read (the writer's words) from the reading material (Q19-a) and if no do they try to sum up and select the main ideas relying on their own words (Q19-b).

d. If they happen to note down every new information or definition or term (Q20).

e. If they try to vary their vocabulary when taking notes (Q21)

This correlational study is undertaken in order to test the hypothesis stated in the introduction of this paper. In other words, we need to prove that there is a positive correlation between intelligence and reading comprehension. To be able to examine the nature of the relationship between intelligence and reading comprehension, the use of the correlation coefficient (r) is indispensable.

**Conclusion:**

The combination of a reading and note taking speeds tests with their questionnaires will gather multiple perspectives and gain a richer and less subjective picture of the situation being studied. The next chapters (five and six) will present the results of the above instruments and depict the students' speeds and elicit their reading processes, habits and strategies.

A biased assessment of reading that might result from using a single or a limited number of techniques will necessarily provide a limited picture of the reading behavior which is basically individual and private in nature. Therefore, and in order to report on a variety of the readers' ability to understand through reading and note taking speeds tests, one should seek to use multiple techniques. However a good given test might be, a single score will always mislead (Spolsky, 1994). In addition to tests and through the use of questionnaires, informants are asked about their reading habits, problems and performance and using self-report techniques, for a combination of introspective verbal methods with other techniques such as tests would not only yield accurate and valid data on learners' cognitive processes but would also compensate for the problems inherent in each method (Matsumoto, 1993). Questionnaires are meant to investigate the reading strategies used in performing academic reading. The application of these methods and the details of the results obtained with their analyses will be presented in the following chapters.

# CHAPTER FIVE: RESULTS AND DATA ANALYSIS

## CORRELATING READING SPEED AND NOTE- TAKING SPEED

# CHAPTER FIVE: RESULTS AND DATA ANALYSIS

## CORRELATING READING SPEED AND NOTE- TAKING SPEED

**Introduction:**

This chapter concerns with reporting the speeds of learners and describing, analyzing, and interpreting results obtained from the two data collection instruments: tests and questionnaires. It lists in the end some conclusions developed as a result of the analyses. It aims too at testing the research hypotheses raised in this study which consist mainly in eliciting and depicting rapid and slow-achievers' differences in reading and note –taking.

To explore how reading speed and note taking speed covary, and to diagnose how students' preferences, habits and behaviours in terms of speed are associated when they come across a print reading and taking notes at the same time. Hence, the correlation coefficient is applied to determine the extent to which these two variables are related.

### 5.1. The Correlation Coefficient:

#### 5.1.1. Defining the Correlation Coefficient:

The two core purposes of statistics are to look at the difference between variables and to examine the relationship between variables. The statistical procedure to achieve the second purpose is called "correlation analysis". Hence, correlations are the most fundamental and convenient tool of measuring associations between two or more variables (Marczyk, op.cit., 2005:216). This type of data analysis allows us to look at two variables and evaluate the strength and direction of their relationship of their relationship or association with each other. Hence, the aim of the correlation coefficient is to determine:

(1) Whether there is a real relationship between two interval/ratio variables

(2) The direction of the relationship, and

(3) The strength of the relationship. Robert L. Miller, Ciaran Acton, Deirdre A. Fullerton and John Maltby (2002.p.160).

A correlation coefficient "r" expresses the degree of correspondence, or relationship between two sets of scores. It is a relation between two or more variables that shows that increases in the magnitude of one variable is accompanied by increases or decreases in the magnitude of the other variable. Pearson's Moment-Product Correlation Coefficient is the most common correlation coefficient and it is used in this study.

The degree to which two sets of scores covary together is estimated by calculating a correlation coefficient (r). It can range from a perfect positive relationship of +1.0 to no systematic relationship at 0.0 to a perfect negative relationship of -1.0. When such a coefficient is further away 0.0 towards +1.0 or-1.0, the relationship represented between two sets of scores (variables) is stronger (ibid., 216-217).

The study of the correlation is undertaken in order to explore the relationship between reading and note taking in terms of speed. In fact, it seeks to investigate the association between these two variables relying on the theoretical framework in chapters one, two and three. However, there is always the possibility that the results might show no relationship between them. This lead to the need for a special type of hypothesis called the null hypothesis. It is a hypothesis of no association in a correlational study (Brown, op. cit., 1988: 110). The null hypothesis is defined according to Kirk (1982: 26) as "a statement about one or more parameters of a population distribution that requires verification"; that is to say, it is subject to statistical testing. It is either confirmed or rejected. If the null hypothesis is rejected, the researcher may conclude that there is a relationship between the variables being studied. Once the null hypothesis is rejected the alternate one or "the research" or "experimental" hypothesis remains tenable. For Kirk (ibid., 26),

> *"The null hypothesis is the one whose tenability is actually tested. If on the basis of this test the null hypothesis is rejected, only the alternative hypothesis remains tenable. According to convention, the alternative hypothesis is formulated so that*

*it corresponds to the experimenter's scientific hunch. The process of choosing between H0 and H1 is called hypothesis testing". (Kirk, 1982:26)*

On this basis, the null hypothesis in the current study is:

**Null hypothesis (**H0): there is no statistically significant and systematic relationship between the speed at which third year English students read a print written in English as a foreign language and the amount of notes taken down during the reading task. That is to say, H0: r = 0.

**Hypothesis (**H1): there is a statistically significant positive relationship between the speeds at which third year students read a print written in English as a foreign language and their amount of notes taken down simultaneously while reading; in other words, H0: r > 0

This hypothesis requires both a quantitative and qualitative analysis in terms of rapid versus slow speeds of learners by comparing the subjects' scores in both tests, on the one hand and rapid versus slow habits and strategies by comparing the subjects' answers in the questionnaires. The analysis covers the partial correlation between the different elements that both questionnaires tend to focus on.

After collecting data, it has been defined and categorized according to the SPSS (Statistical Package for the Social Sciences). It is the software package the most commonly used in applied linguistics and educational research. The SPSS is chosen in the current study because running an "ordinary" correlation (i.e. Pearson product- moment correlation is straightforward: ANALYSE→ CORRELATE→ EXPLORE. The SPSS can adjust calculations automatically and accordingly for variables having two values. Furthermore, it enables us to extract the different results by which our study hypothesis will be proved or disproved. Hence, we make use of these measures following these steps.

**5.2. Measures adopted for the analysis of the reading speed and note taking speed tests:**

**5.2.1. The Mean**: it is the most common descriptive measure because it takes into account all the scores. It is the average, calculated by adding all of the scores together and then dividing by the number of scores. This procedure is referred to as the "Arithmetic Mean". This because "average" as a term in common use suffers from being precise-some other more-or-less mid value might also be referred to as average. In the present study, it aims at knowing the average of students' scores in both reading speed and note taking speed.

**5.2.2. Standard Deviation**: it is a square root of the variance. Zoltan Dorneyi (2007: 209) defines the standard deviation as an index of the average disparity among the scores. Together with the variance and its square root, the standard deviation is an indicator of the average distance of the scores from the mean. They are high if the sample is heterogeneous and contains extreme scores, whereas they are low in a homogeneous sample with all the scores clustered around the mean.

**5.2.3. Pearson Product- Moment Correlation**: this study depends on this type of correlation. It is considered as the standard type of correlation, computed between two continuous variables. Zoltan Dorneyi (2007: 224) states that when we talk about "correlation in general", this is what we usually mean. The Pearson product- moment correlation coefficient is symbolized by the lower- case letter "r" (pronounced "rho"). Pearson's product-moment correlation coefficient is a parametric test. We use hypothesis testing criteria and confidence levels in order to determine whether a significant correlation occurs between two variables, and the direction of this correlation (positive or negative). The correlation coefficient can take values ranging from +1.00 through 0.00 to _1.00.

**5.2.4. The Scattergram:** it is also known as a scatterplot or scatter diagram. It is a graphical representation of the relationship between two variables. It only makes sense when it is possible to order the values for each of the variables in some non- arbitrary manner. The

Scattergram is a powerful pictorial device, giving a clear picture of the nature and strength of the relationship between the variables. Robert L. Miller, Ciaran Acton, Deirdre A. Fullerton and John Maltby (2002: 158) describe a scattergram as an exploratory data analysis-type technique since it provides a visual depiction of the relationship between two quantitative variables. However, it is noteworthy that the scattergram alone is not a confirmatory statistical procedure. The scattergram allows checking visually the validity of a general linear confirmatory procedure which is used (such as correlation or regression).

**5.3. Measure adopted for the analysis of the reading and note taking speeds questionnaires:**

**5.3.1. Frequency and percentage:** frequency is a simple means of exploring and recasting many data sets in a way which counts the frequency (i.e., the number of times) that certain things happen, or to find ways of displaying that information. It is used in this study because of having qualitative data. It aims at identifying the direction of the respondents' preferences, opinions as well as habits and strategies towards every question in the questionnaires. A frequency distribution is drawn in tables below. They give simply the number of students "count" and their frequency. Adding the percentage column in these tables helps to produce a standard format, so that groups of different sizes can be more easily compared.

**5.3.2. Diagrams or Histograms**: the convention about histograms is that they are used only for continuous variables. What is special about histograms is that the bars are joined together rather than separated from each other like in the Bar Charts. Histograms are the preferred ways of summarizing data to the corresponding tables of frequency distributions. They are quickly and easily understood by a variety of audience. Thus, they are used to clarify the obtained results characterized in percentages.

**5.3.3. Pearson Chi- Square**: the Chi- Square statistic is an index of the discrepancy between the observed and expected frequencies. The expected values of frequencies for the data are the

values which would be expected or predicted if there were no relationship between the variables. The greater the overall difference between the observed frequencies and the expected frequencies, the larger the value of Chi-square and the more confident we can be that there is a real association between these two variables in the population, as Robert L. Miller, Ciaran Acton, Deirdre A. Fullerton and John Maltby (2002:127) state. A 'positive relationship', the low values on one variable tend to go with low values on the other variable and high values on one variable tend to go with high values on the other. With a negative relationship we would find the opposite. If this probability is 0.05 or less, then the Chi-square is conventionally referred to as statistically significant. If the variables are not associated they are said to be statistically independent (hence Chi-square is often referred to as the 'Chi-square test of independence'). As an inferential statistic it allows us to draw conclusions about the population on the basis of our sample results. The Chi-square test allows us to choose between H0 and H1 and determine whether or not there is a statistical association between the two variables. Hence, it is thanks to this measure that we can know the extent to which our results are significant. The Chi-square can also be used to compare frequencies on a single variable to see how closely they fit to those expected or predicted on some theoretical basis.

**5.4. Results of the test:**

It is observed from this table that we used a paired sample tests which are known also as matched tests, matched pairs tests or pairs tests. Actually we want to compare two sets of scores (i.e., two variables) obtained from the same group or when the same participants are measured more than once. That is, this procedure examines different results obtained from the same group. In our case, we want to measure the reading and note taking speeds of a group of students (48 students) belonging to third year English students. We measured the speed at which students read by dividing the number of words read by the reading time spent to cover the text and in note taking test we seek to give the number of words noted. In other words, for

each note taker, the number of words noted corresponded to the ratio between the number of words written down and the total number of words in the source text. Fort the word count, every group of letters bounded by a space or a punctuation mark, including function words like articles, pronouns, etc., was counted as a word like what (Barbier *et al*., 2003; Chaudron, Loschky & Cook, 1994; Clerehan, 1995) do in their study. For example, *today* in English – was regarded as only one word.

**Table 2: Reading speed and note taking speed tests' results (students' average speeds in the tests.**

**Group statistics**

| | | Mean | N | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|---|
| 1 pair speed | Reading Speed | 109.33 | 48 | 20.36 | 2.94 |
| | Note-Taking | 13.15 | 48 | 3.41 | .49 |

**5.4.1. Interpretation of results:**

In our study we predicted a positive correlation between reading speed and note taking speed relying on the theoretical framework of the study. Hence, it is clear from this table that the mean value for the reading speed is 109.33 with 20.36 as a standard deviation. This means that the sample we took from third year English students to work on in the reading speed test in general are rapid readers in comparison to 150w/m though there are individual differences. However, the mean of the note taking speed, on the other hand, is 13.15 with 3.41 as a standard deviation. Thus, on the other hand means that this sample from third year English students are rapid note takers too though there are great individual differences between them.

### 5.4.2. The global correlation between reading speed and note taking speed in the tests:

**Table 3: Pearson product-moment correlation coefficient between students' reading and note taking speeds**

**Correlations**

| | | Reading Speed | Note-Taking |
|---|---|---|---|
| Reading speed | Pearson Correlation<br>Sig. (2-tailed)<br>N | | |
| Note- taking | Pearson Correlation<br>Sig. (2-tailed)<br>N | , 662**<br>, 000<br>48 | |

**. Correlation is significant at the 0.01 level (2-tailed).

In Figure, each 'box' contains:

a. The correlation coefficient: Pearson Correlation

b. The statistical significance, Sig (2-tailed) =.xxx

c. The number of cases: N

d. ' . ' is printed if a coefficient cannot be computed.

#### 5.4.2.1. Description of results:

We use each of the Pearson correlations to inform us of three things: (1) the direction of the correlation; (2) whether the relationship is significant; and (3) the strength of the relationship. For instance, the box above the diagonal in the lower left hand part of the table, report the following.

For the first box in the reading speed row, where the variable is correlated with note taking speed, the Pearson Correlation (r ) is .662, the Sig (2-tailed) is .000 and N=48. The correlation is positive at a significance level of .000 means that the probability of the correlation not being statistically significant is below the 0.01 confidence level.

### 5.4.3. Interpreting results:

The correlation is (+0.662) and it is significant at 0.01 as a level of error with the 0.00 level of significance (i.e., .662, p<0.01). Therefore, we conclude that there is a significant relationship between the two variables. What is important in interpreting this relationship is to remember what higher scores on each of the variables mean. That is, the higher respondent's scores are on reading speed, the higher his/her note taking speed would be and the lower the respondent's scores in reading speed the lower is his/ her score in note taking speed. In other words, the more the student reads rapidly, the more he/she notes down or takes notes rapidly. The more the student reads slowly, the slower s/he would be at note taking.

It is important to take into account the strength of relationship as well as its statistical significance. Correlations can range from highly negative (_1.00) to highly positive (+1.00). Within this range, we use the actual value of r to determine the strength of relationship. Therefore a correlation of 0.50 (regardless of whether it is either positive or negative) is stronger than one of only 0.10. Note here that the correlation between reading speed and note taking speed is very high, close to 1.000 (r=.662). This means that there is a strong (**) positive correlation between reading speed and note taking speed. In other words, when the student is rapid in his reading he will be rapid too in note taking and vice versa. The following diagrams (figures 5.4.3.1. and 5.4.3.2..) clarify the nature and the strength of this relationship. Therefore, with Pearson's product-moment correlation, we have examined the association between variables. However, it is important to note that we have not shown that one causes another.

**Figure 2: Histogram for the relationship between reading speed and note taking speed.**

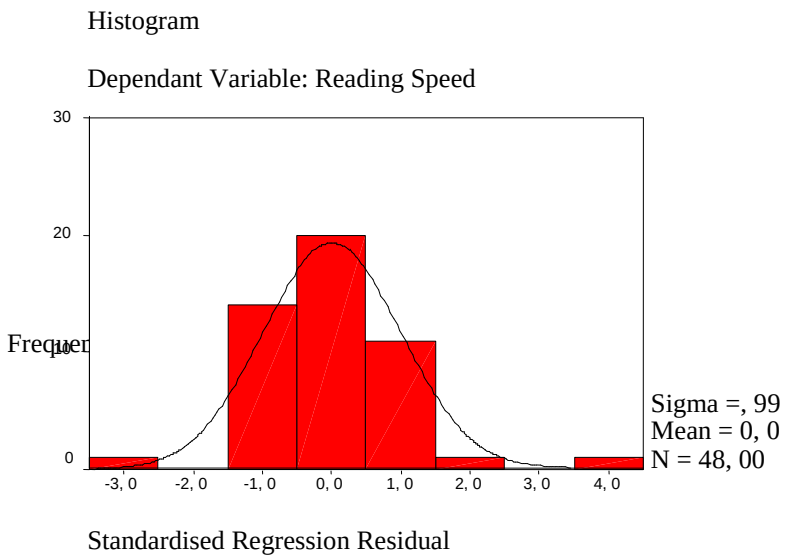
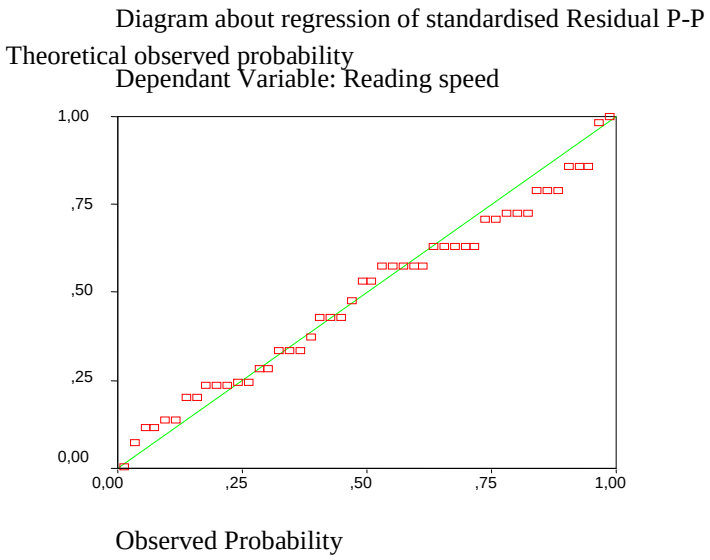



**Figure 3: Scattergram showing relationship between reading speed and note taking speed clarifying a positive relationship between the two variables**




Each point of this diagram indicates the score of one person in both reading speed (horizontal axis) and note- taking speed (vertical axis). We notice that the group of points follows each other. This means that both reading speed and note- taking speed go hand in hand. That is, higher scores in reading speed lead to a high degree of reading note- taking speed. Figure: is an example of a positive relationship between two variables. Here SPSS has plotted the relationship between two variables: reading speed and note taking speed on to a

chart called a scattergram. These two variables are not identical, but we would expect a strong positive relationship between them. When we have a 'positive relationship', the low values on one variable tend to go with low values on the other variable and high values on one variable tend to go with high values on the other. Here, we would expect that people reading on low speeds should tend to score low on the note taking test, and reading on high speeds should tend to score high in the note taking speed test. Therefore a positive relationship on a scattergram plot of points will look like that in Figure, the plotted points moving from the lower left-hand corner upwards to the upper right-hand corner of the chart.

### 5.5. Results of the Questionnaires:

#### 5.5.1. Partial Correlations

In order to have as accurate comparison as possible, we made sure we compare an equal number of items from the reading speed questionnaire with that corresponds in the note taking speed questionnaire. These are the findings.

The aim of the following partial correlations is to find out specific abilities that help in making up the general reading abilities and hence feed directly to their reading speed and note taking speed whether positively or negatively.

**Crosstabulation 1: for noting down every new definition and the interest in taking notes whenever reading any sort of informative data.**

| | | Noting down every new information or definition or term S 4- Q 20 | | | | Total | |
|---|---|---|---|---|---|---|---|
| | | Yes | | No | | | |
| | | fr | % | fr | % | fr | % |
| Interest in taking notes whenever reading any sort of informative data S1- Q1 | Yes | 77 | 86,5% | 12 | 13,5% | 89 | 100,0% |
| | No | 50 | 86,7% | 23 | 13,3% | 173 | 100,0% |
| Total | | 227 | 86,6% | 35 | 13,4% | 262 | 100,0% |

It is clear from this table that the majority of students who represent 86.6% are interested in noting down every new information, definition or term and it is likely the same percentage with those who are not interested in taking notes whenever reading any sort of informative data. They represent 86.7 in comparison to 13.4 who are not interested in noting every definition, term, or information and it is likely the same percentage with those who have the interest in taking notes whenever reading any sort of informative data with 13.5%. We conclude that more than ¾ are interested in noting down every new information, definition or term and the majority of them are those who are not interested in taking notes whenever reading any sort of informative data

Hence, we can say that since our respondents are interested in noting down every new information, definition, or term, they vary their vocabulary while taking notes and thus, they spend more time writing may be unnecessary words or sentences. The second responses concerning taking notes whenever reading any sort of informative data demonstrate that students are interested in taking notes just on materials that are relevant to their needs and study purposes and the following table clarifies the significance of these findings.

**Table 4: Sample SPSS output reporting Chi-Square statistics for noting down every new term and the interest in taking notes whenever reading any sort of informative data.**

**The Chi- Square test**

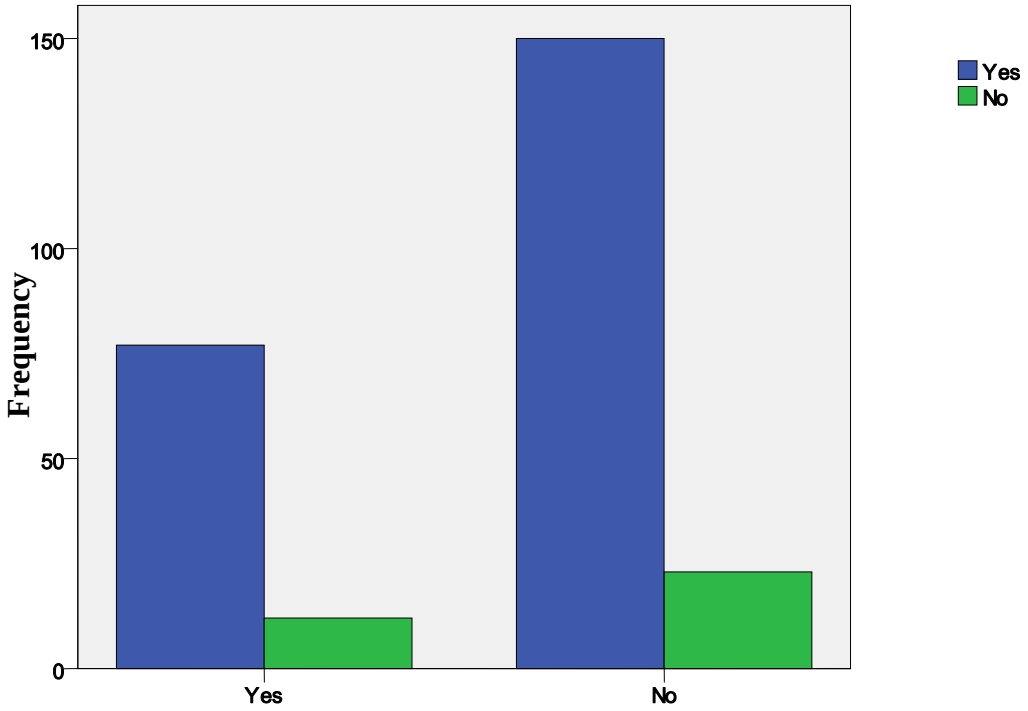
| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,002[a] | 1 | ,966 | | |
| Continuity Correction | ,000 | 1 | 1,000 | | |
| Likelihood Ratio | ,002 | 1 | ,966 | | |
| Fisher's Exact Test | | | | 1,000 | ,553 |
| Linear-by- linear association | ,002 | | ,966 | | |
| Number of valid cases | 262 | | | | |

**a.** Calculated only for tables of 2×2.

**b.** 0 cells (.0%) have expected count less than 5. The minimum expected count is 11, 89.

With two-tailed questionnaires at 0.05 level of significance with (01) degree of freedom, the Pearson Chi- Square value "r" (0, 002[a]) is significant at the (0.966) level of asymptotic significance which means that there are no statistical individual differences. In other words, informants' answers vary which means that they are different. Since the value of "r" obtained in the correlation between interest in taking notes whenever reading any sort of informative data and interest in noting down every new information, definition or term equals 0.002 and is well below the value required (0.05), we conclude that there are significant statistical difference between respondents' interest in taking notes whenever reading any sort of informative data and interest in noting down every new information, definition or term (i.e., there are great differences between informants answers). The following diagram is a representation of the results**.**

**Figure 4: for noting down every new term and the interest in taking notes whenever reading any sort of informative data.**



**Crosstabulation 2: for varying vocabulary when taking notes and ignoring, deleting or skipping over difficult words.**

| | | | S4.21 varying vocabulary when taking notes | | |
|---|---|---|---|---|---|
| | | | Yes | No | Total |
| S2.10b Ignoring or deleting that difficult word or part of the text (skip over and continue reading) | yes | Frequence | 17 | 7 | 24 |
| | | percentage (%) | 70,8% | 29,2% | 100,0% |
| | no | Frequence | 189 | 49 | 238 |
| | | percentage (%) | 79,4% | 20,6% | 100,0% |
| Total | | Frequence | 206 | 56 | 262 |
| | | percentage (%) | 78,6% | 21,4% | 100,0% |

Regarding varying vocabulary when taking notes, this table illustrates that the majority of our informants which represent 78.6 % answered that they do vary their vocabulary when taking notes especially those who do not ignore, skip or delete the difficult words they meet while reading. They make up 79.4% in comparison to those who do not vary their vocabulary when taking notes (21.4%) especially those who ignore, skip or delete the difficult words they meet while reading (29.2%).

These responses demonstrate immensely that our students spend more time thinking of what might be written down for the purpose of varying their vocabulary instead of writing down just what serves their purpose. On the other hand, they spend greater time reading word by word and do not skip over difficult words to get the general understanding. In other words, when students try to vary their vocabulary and do not ignore difficult words or parts of the text to get the gist of the reading text, this may slow down their reading and note- taking process the fact that means that they are slow readers and turn them to be just simple decoders.

**Table 5: Sample SPSS output reporting Chi-Square statistics for varying vocabulary when taking notes and ignoring, deleting or skipping over difficult words.**

**Chi- square test**

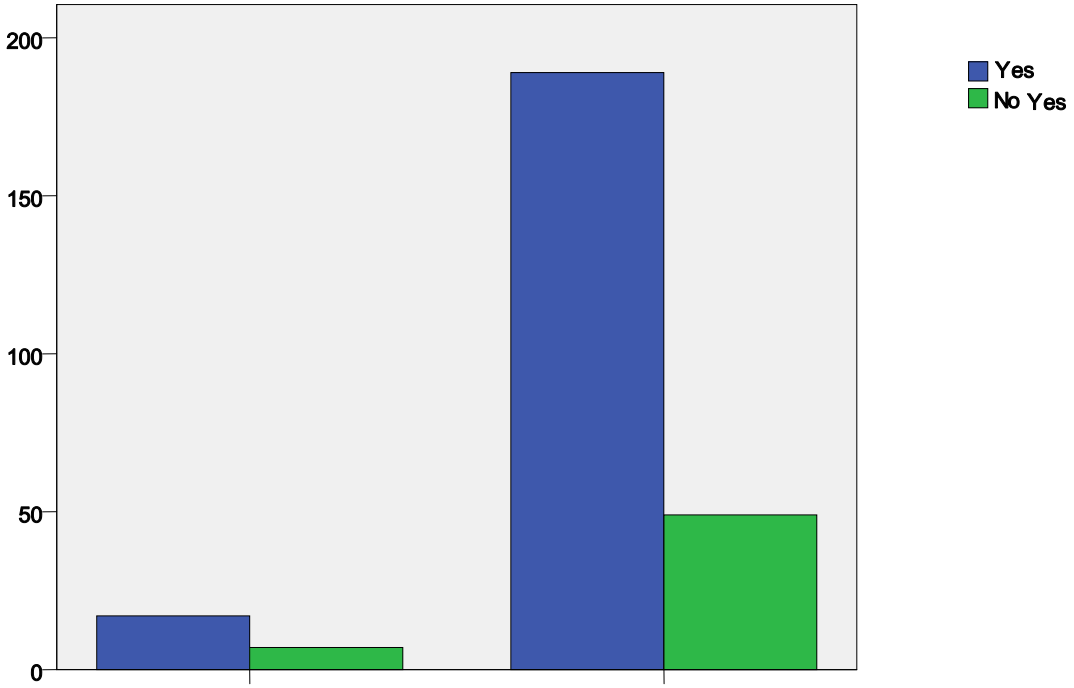
| | Value | df | Asymp.Sign. (2-sided) | Exact Sign. (2-sided) | Exact Sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,955[a] | 1 | ,329 | | |
| Continuity Correction | ,512 | 1 | ,474 | | |
| Likelihood Ratio | ,891 | 1 | ,345 | ,308 | ,231 |
| Fisher's Exact Test | | | | | |
| Linear-by- linear association | ,951 | 1 | ,329 | | |
| Number of valid cases | 262 | | | | |

**a.** Calculated only for tables of 2×2.

**b.** 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,13.

The chi- square test's table illustrates that with our two-tailed test at 0.05 level of significance, with (01) degree of freedom, the critical value "r" is 0.955[a] with an asymptotic significance (2-sided) (,329). Since the value of "r" obtained is well above the value required, there are no significant statistical differences between students answers on varying vocabulary when taking notes and ignoring, deleting or skipping over words while reading in favour of the majority of students who represent 79,4%. That is to say, the majorities of students who make up ¾ from the population vary their vocabulary when taking notes and do not ignore, delete or skip over words while reading. The following diagram allows us to clarify the results obtained.

**Figure 5:** for varying vocabulary when taking notes and ignoring or deleting that difficult word or part of the text**.**



**Crosstabulation 3: for noting down every new term and and ignoring, deleting or skipping over difficult words.**

| | | S4.20 noting down every new information or definition or term | | | |
|---|---|---|---|---|---|
| S2.10b deleting that difficult word or part of the text (skip over and continue reading) | | | Yes | No | Total |
| | Yes | Frequence | 19 | 5 | 24 |
| | | percentage (%) | 79,2% | 20,8% | 100,0% |
| | No | Frequence | 208 | 30 | 238 |
| | | percentage (%) | 87,4% | 12,6% | 100,0% |
| Total | | Frequence | 227 | 35 | 262 |
| | | percentage (%) | 86,6% | 13,4% | 100,0% |

Among our 262 research participants, 227 of them i.e.86.6 % said that they note down every new information definition or term while 35 of them who represent 13.4 % gave negative answers. On the encounter part, among 262 students, 208 of them i.e. 87,4% said that they do not delete difficult words or part of the text (skip over and continue reading) while 5 of them who represent 20,8% gave negative answers.

This question is indeed to complement and check what has been mentioned in the former questions. Thus the results shown in this table and graph confirm that the great majority of our informants do really note down every new information or definition or term especially those who do not delete difficult words or part of the text (skip over and continue reading), and this in fact confirms the previous results found in table 2. That is to say, students give importance, interest and direct attention to vocabulary while taking notes and place much attention to word decoding by not delete difficult words or part of the text (skip over and continue reading) while reading on the other hand.

**Table 6: Sample SPSS output reporting Chi-Square statistics for noting down every new term and Ignoring, deleting, skipping over the difficult words and continue reading**.

**The Chi-square Tests**

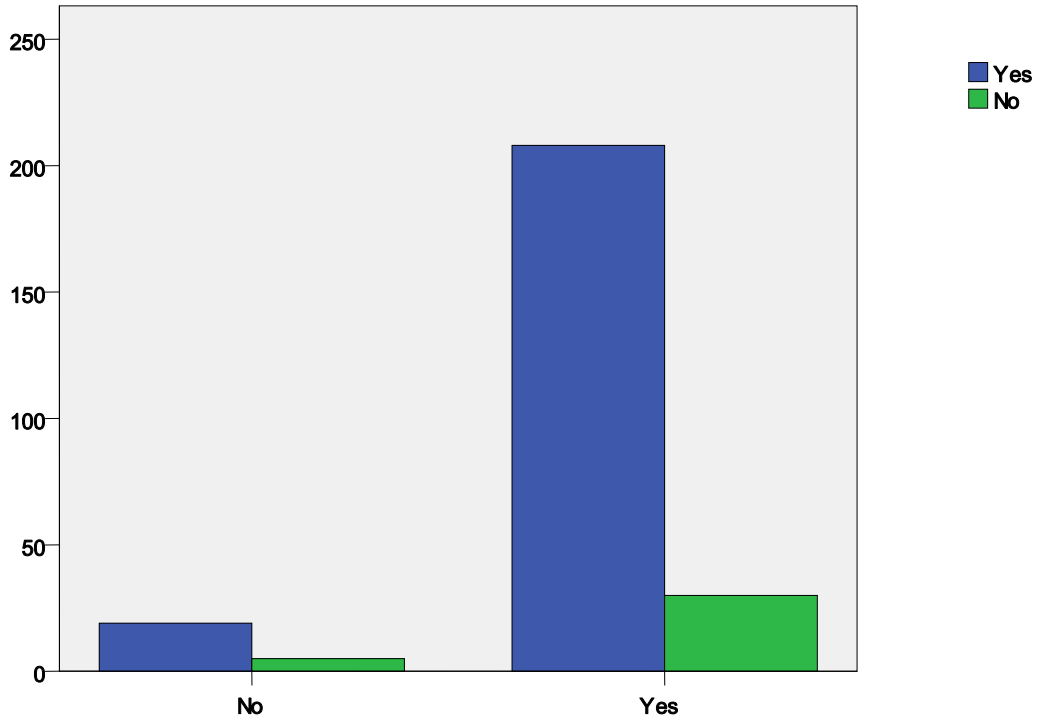
| | Valeur | ddl | Asymp.Sign. (2-sided) | Exact Sign. (2-sided) | Exact Sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 1,275[a] | 1 | ,259 | | |
| Continuity Correction | ,663 | 1 | ,415 | | |
| Likelihood Ratio | 1,134 | 1 | ,287 | | |
| Fisher's Exact Test | | | | ,339 | ,201 |
| Linear-by- linear association | 1,270 | 1 | ,260 | | |
| Number of valid cases | 262 | | | | |

**a.** Calculated only for tables of 2×2.

b. 1cells (25.0%) have expected count less than 5. The minimum expected count is 3,21.

The Chi-square result of 1.275[a] has a significance level of (,259) at a degree of freedom (01). We conclude that since the critical value (r) is well above the mean, there is a significant statistical difference between noting down every new information or definition or term and deleting difficult words or part of the text (skip over and continue reading) in favour of the majority of informants who represent 87,4% which means that the majority of students who represent ¾ from the population note down every new information or definition or term and do not delete difficult words or part of the text (skip over and continue reading). This identifies again that our informants spend much time concentrating on individual words and stick to the word's level in note taking and reading that fact that hamper their reading and note taking speeds.

**Figure 6: for noting down every new term and Ignoring, deleting, skipping over the difficult words and continue reading.**



**Crosstabulation 4: for reaching the level of comprehension through note taking and answering the exercises or questions which follow- up the text.**

| | | Q3 -S1 reaching the level of comprehension through producing what have been understood in a form of notes | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| Q4 -S1 answering the exercises or questions which follow- up the text | Yes | 21<br>80,8% | 15<br>19,2% | 26<br>100,0% |
| | No | 185<br>78,4% | 51<br>21,6% | 236<br>100,0% |
| Total | | 206<br>78,6% | 56<br>21,4% | 262<br>100,0% |

A closer examination of the individual cells in the crosstabulation table shows that the majority of students (78.6%) reach the level of comprehension through producing what have been understood in a form of notes especially those who answer the exercises or questions which follow up the text (80.8%) in comparison to those who do not reach the level of comprehension through producing what have been understood by means of note taking (21.4%) with the same percentage approximately of those who answer the exercises or questions which follow up the text (21, 6%). Hence, this means that the act of note taking is an active process that leads to understanding and it is not an active process to copy paste words or sentences from the reading material without minimum of comprehension. Figure (5.5.4) will provide us with more detailed information on these results.

**Table 7: Sample SPSS output reporting Chi-Square statistics for reaching the level of comprehension and answering the exercises or questions which follow- up the text.**

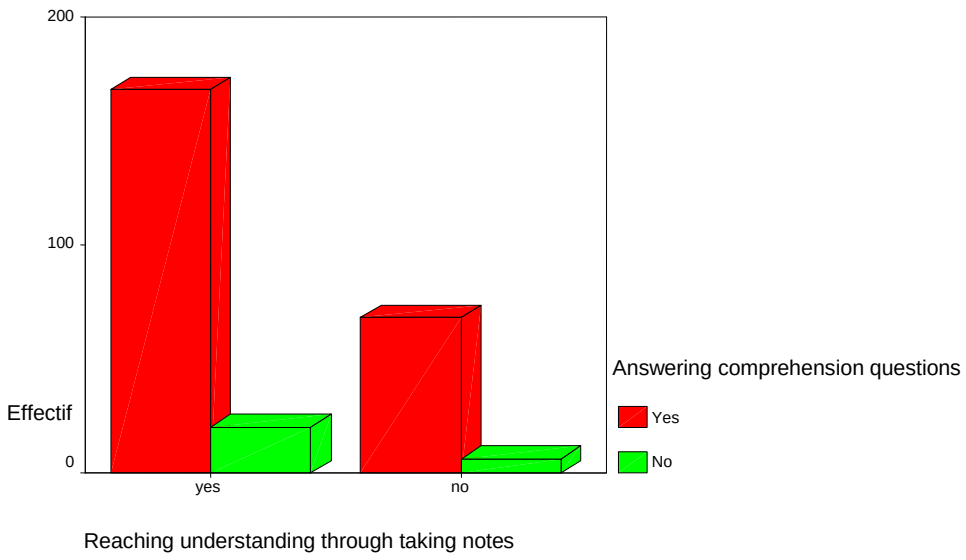
**The Chi- Square test**

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,079[a] | 1 | ,779 | | |
| Continuity Correction | ,001 | 1 | ,977 | | |
| Likelihood Ratio | ,081 | 1 | ,776 | | |
| Fisher's Exact Test | ,079 | 1 | ,779 | 1,000 | ,504 |
| Linear-by- linear association | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,56.

The chi- square test's table illustrates that with our two-tailed test at 0.05 level of significance, with (01) degree of freedom, the critical value "r" is 0.79[a] with an asymptotic significance (2-sided) of (,779). Since the value of "r" obtained is well above the value required, there are no asymptotic (statistical) significant differences between reaching the level of understanding through producing what have been understood in a form of notes and answering the questions that follow up the text in favour of the majority of students who represent 80,8%. That is to say, the majorities of students who make up ¾ from the population reach comprehension through taking notes (putting ideas into paper) and answering comprehension questions about the reading text. Therefore, we can say that note taking is a real world reflection of what has been understood. The following diagram allows us to clarify the results obtained.

**Figure 7: students' opinions about reading comprehension and reaching it by means of taking notes.**




**Crosstabulation 5: for constructing notes out of the teacher's demand and the widely practiced reading type.**

| | | Q1 -S1 constructing notes out of the teacher's demand | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S1-Q 7a: the reading type that is widely practiced | a. Extra | 68<br>68,0% | 32<br>32,0% | 100<br>100,0% |
| | b. Extensive | 41<br>57,7% | 30<br>42,3% | 71<br>100,0% |
| | c. None of them | 51<br>56,0% | 40<br>44,0% | 91<br>100,0% |
| Total | | 160<br>61,1% | 102<br>38,9% | 262<br>100,0% |

Among 262 students, more than a half of them (160 students) that equals 61.1% answered that they construct notes out of the teacher's demand especially those who do extra reading (68,0%) in comparison to those who do not construct notes out of the teacher's demand (102 students) that equals 38,9% especially those who neither do extra nor extensive reading (44.0%). Actually, this implies that students' practice of note taking is restricted to the

teaching instruction since they do not construct notes only out of the teacher's demand. However, the answer of those who have the motivation to practice note taking not out of the teacher's demand but on their own interest are those who do neither extra nor extensive reading (44.0% ) and extensive reading (42.3%).

**Table 8: Sample SPSS output reporting Chi-Square statistics for constructing notes out of the teacher's demand and the more practiced type of reading.**

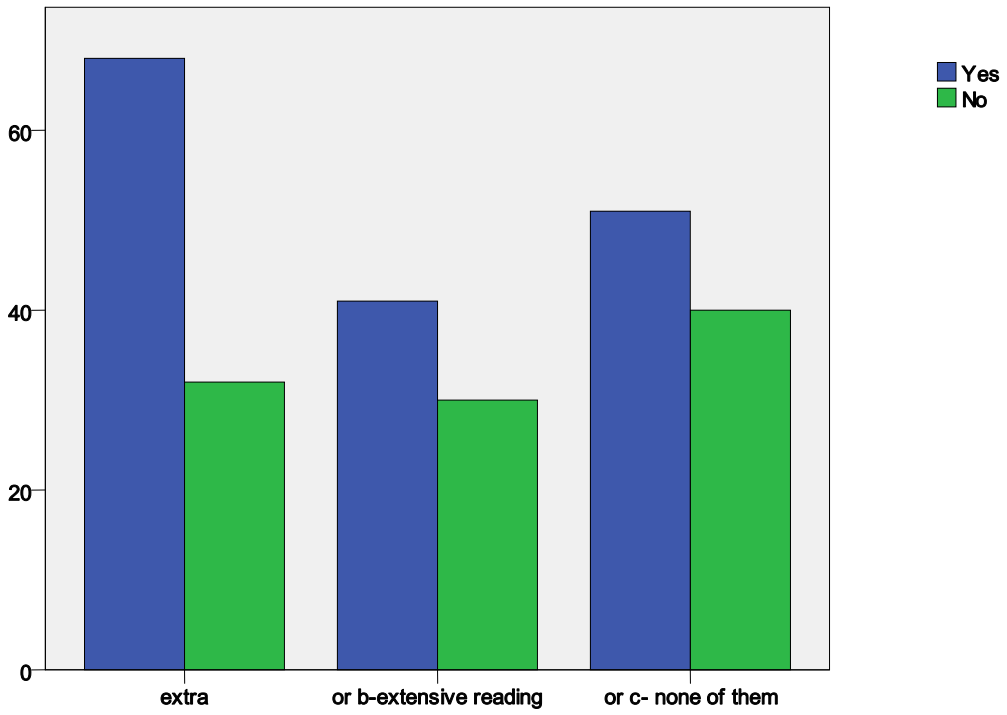
**The Chi- Square test**

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 3,317[a] | 2 | ,190 |
| Likelihood Ratio | 3,353 | 2 | ,187 |
| Linear-by- linear association | 2,908 | 1 | ,088 |
| Number of valid cases | 262 | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27,64.

The Chi- Square test's table shows that with our two-tailed test at 0.05 level of significance, with (02) degree of freedom, the critical value "r" is 3.317[a] with an asymptotic significance (2-sided) of (,190). Since the value of "r" obtained is well above the value required, there are no asymptotic (statistical) significant differences between constructing notes out of the teacher's demand and practicing extra or extensive reading in favour of the majority of students (68,0%) who do neither extra nor extensive reading. That is to say, the majorities of students who make up < 1/2 from the population who practice note taking out of the teacher's demand and do neither extra nor extensive reading. Therefore, we can say that practicing or developing the habit of taking notes needs an extra or extensive environment as being the most suitable source of developing this skill. In other words, the more students read, the greater they practice the skill of taking notes down and this figure illustrates the results clearly.

**Figure 8: for constructing notes out of the teacher's demand and the more practiced type of reading.**



**Crosstabulation 6: for constructing notes out of the teacher's demand and The extent of practicing the wider practiced type of reading.**

| | | Q 1 -S1 constructing notes out of the teacher's demand | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S1-Q 7b The extent of practicing the most widely practiced type of reading | always | 44<br>66,7% | 22<br>33,3% | 66<br>100,0% |
| | sometimes | 46<br>59,0% | 32<br>41,0% | 78<br>100,0% |
| | regularly | 6<br>75,0% | 2<br>25,0% | 8<br>100,0% |
| | rarely | 13<br>68,4% | 6<br>31,6% | 19<br>100,0% |
| Total | | 109<br>63,7% | 62<br>36,3% | 171<br>100,0% |

This question would be joined with the previous one. Out of all the respondents, 109 students, that is 63,7 %, opted for the first choice. They answered that they construct notes out of the teacher's demand especially those who regularly do extra reading (75,0%). 62 students (i.e. 36,3 %) said that they do not construct notes out of the teacher's demand especially those who sometimes do have extra or extensive reading (32 students) i.e., 41.0%, whereas 22 students (33,3%) are always interested in having extra reading and taking notes not out of the teacher's demand. However, only 6 students (31.6%) do regularly practice extra or extensive reading especially those who do are not restricted to the teaching instruction. Again, this means that the second question corresponds with the former one. From the two questions, we could note that motivation for taking notes might be linked to the fact and the extent of practicing extra or extensive reading. Both Tables (1-2) illustrate well the good positive attitudes towards having extra or extensive reading without constructing notes out of the teacher's demand. Here, we might also say, in discretion, that having a positive attitude does not necessarily mean that our students are very much interested in taking notes or doing an

extra or extensive reading, and hence they are proficient advanced learners who do not encounter difficulties in their studies.

**Table 9: Sample SPSS output reporting Chi-Square statistics for constructing notes out of the teacher's demand with the extent of practicing extra or extensive reading.**

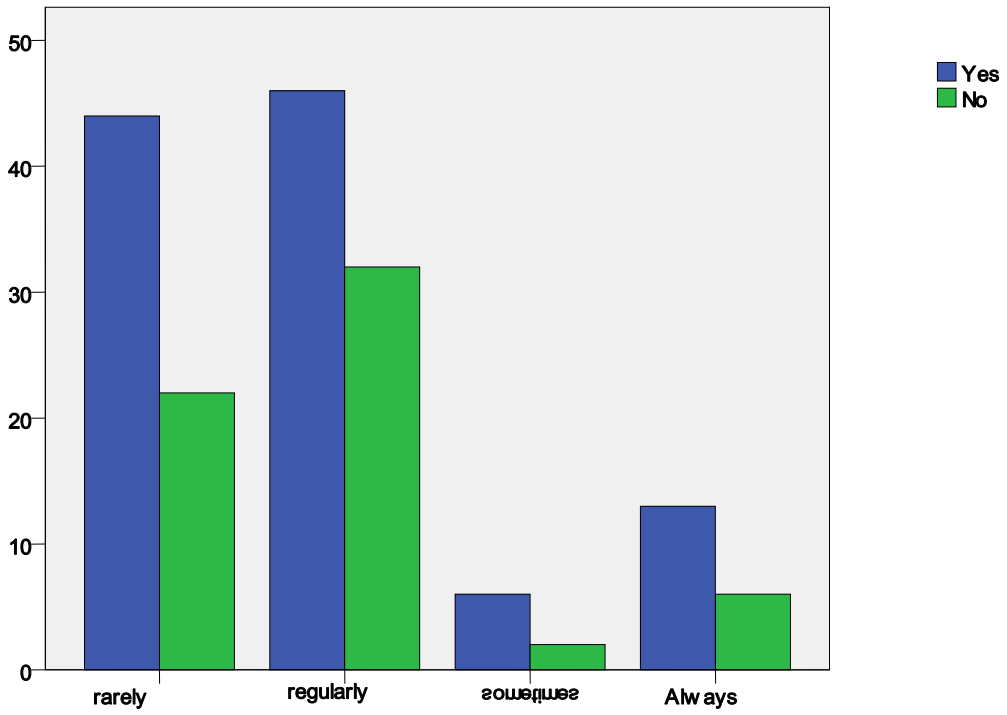
**The Chi- Square test**

| | Value | df | Asymp.Sign. (2-sided) |
|---|---|---|---|
| Pearson Chi-square | 1,630[a] | 3 | ,653 |
| Likelihood Ratio | 1,650 | 3 | ,648 |
| Linear-by- linear association | ,016 | 1 | ,898 |
| Number of valid cases | 171 | | |

a. Calculated only for tables of 2×2.
b. 1 cells (12,5%) have expected count less than 5. The minimum expected count is 2, 90.

The Chi- Square test's table clarifies that at 0.05 level of significance, with (02) degree of freedom, the critical value "r" is 1.630[a] with an asymptotic significance (2-sided) of (,653). Since the value of "r" obtained is well above the value required, there are no asymptotic (statistical) significant differences between constructing notes out of the teacher's demand and the extent to which informants practice extra or extensive reading in favour of the majority of students who regularly do extra reading (75,0%) and construct notes out of the teacher's demand. That is to say, the majorities of students who make up ¾ from the population practice note taking out of the teacher's demand and rarely do extra or extensive reading. Thus, we reach the same conclusion that the more students read, the greater they practice the skill of taking notes down and this figure illustrates the results clearly.

**Figure 9: For constructing notes out of the teacher's demand with the extent of practicing extra or extensive reading.**




**Crosstabulation 7: noting down every new information or definition or term and trying to get every detail from the print when reading**

| | | S4 - Q 20 noting down every new and essential information or definition or term | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S1 - Q 8 trying to get and remember every detail from the print when reading | Yes | 100<br>87,0% | 15<br>13,0% | 115<br>100,0% |
| | No | 127<br>86,4% | 20<br>13,6% | 147<br>100,0% |
| Total | | 227<br>86,6% | 35<br>13,4% | 262<br>100,0% |

As shown in Table 7, the majority of students who represent 86.6% note down every new term or information they think essential. The same percentage of students answered that while reading they try to get and remember every detail in the reading material in comparison to

those who are not interested in noting down every new and essential information or definition or term (13.4%) and do not try to get and remember every detail from the print when reading. Therefore, we can say that there seems to be a link between those who stick to noting down every new term and those who try to get every detail from the print.

**Table 10: Sample SPSS output reporting Chi-Square statistics for noting down every new term and trying to get every detail from the print when reading**

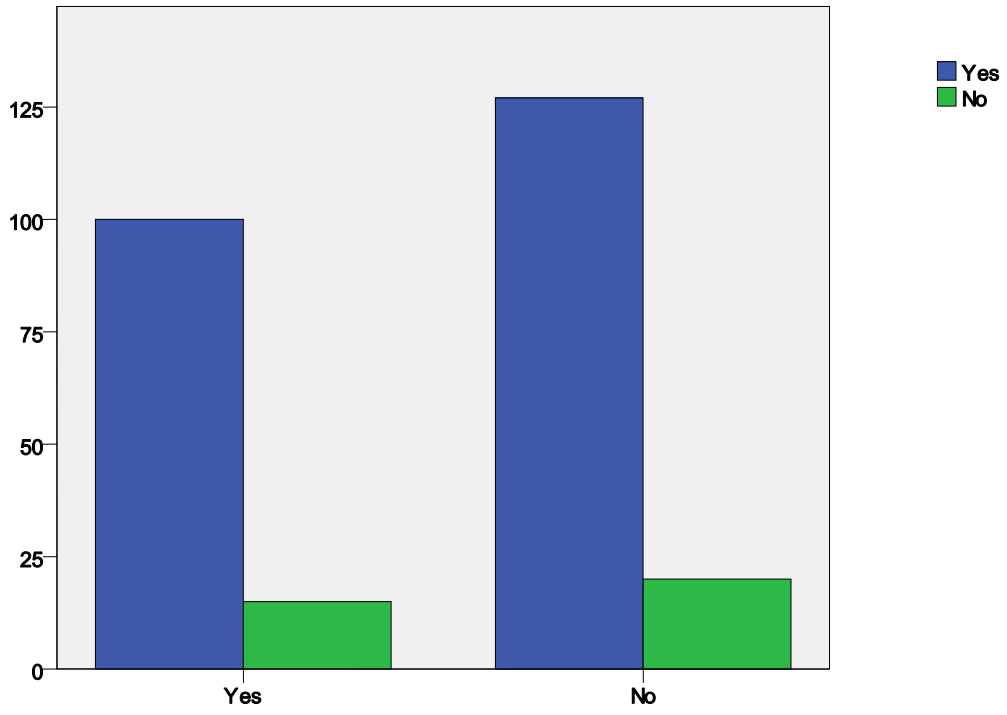
**The Chi- Square test**

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,018[a] | 1 | ,894 | | |
| Continuity Correction | ,000 | 1 | 1,000 | | |
| Likelihood Ratio | ,018 | 1 | ,894 | | |
| Fisher's Exact Test | | | | 1,000 | ,522 |
| Linear-by- linear association | ,018 | 1 | ,895 | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is15,36

The Chi-square result of .018[a] has a significance level of (,894) at a degree of freedom (01). We conclude that since the critical value (r) is well below the mean value (0.05), there is no significant statistical difference between noting down every new information or definition or term and trying to get every detail from the print while reading in favour of the majority of informants who represent 87,0% which means that the majority of students who represent ¾ from the population note down every new information or definition or term and try to get every detail from the print while reading. This identifies again that our informants spend much time concentrating on individual words and stick to the word's level reading and note taking the fact that hamper their reading and note taking speeds and drive them to be slow readers and note takers at the same time. The following bar graph indicates this result.

**Figure 10: for noting down every new term and trying to get every detail from the print when reading**




**Crosstabulation 8: for the kind of ideas included in students' notes and the reading technique that is used while reading**

| | | S1 - Q 6 The kind of ideas included in students' notes | | Total |
|---|---|---|---|---|
| | | Secondary | Main | |
| S1 -Q8 The reading technique that is used while reading | Detailed (scan) | 3<br>3,6% | 168<br>94,4% | 171<br>100,0% |
| | General (skim) | 10<br>5,6% | 81<br>96,4% | 91<br>100,0% |
| Total | | 13<br>5,0% | 249<br>95,0% | 262<br>100,0% |

According to what is suggested in this table, we could notice that nearly all students (249 represent 95.0%) prefer to take the main ideas in their notes especially those (81) who make use of the skimming strategy (96.4%) while few students (13 equals 5.0%) prefer to include secondary ideas in their notes especially those who scan the reading text (3 students equals

3.6%). Hence, there seems to be an association between students who take down the main ideas with those who search for general information while reading and this is something encouraging for developing the reading and note taking speeds of learners.

**Table 11: Sample SPSS output reporting Chi-Square statistics for the kind of ideas included in note students' notes and the reading technique that is used while reading**

**The Chi- Square test**

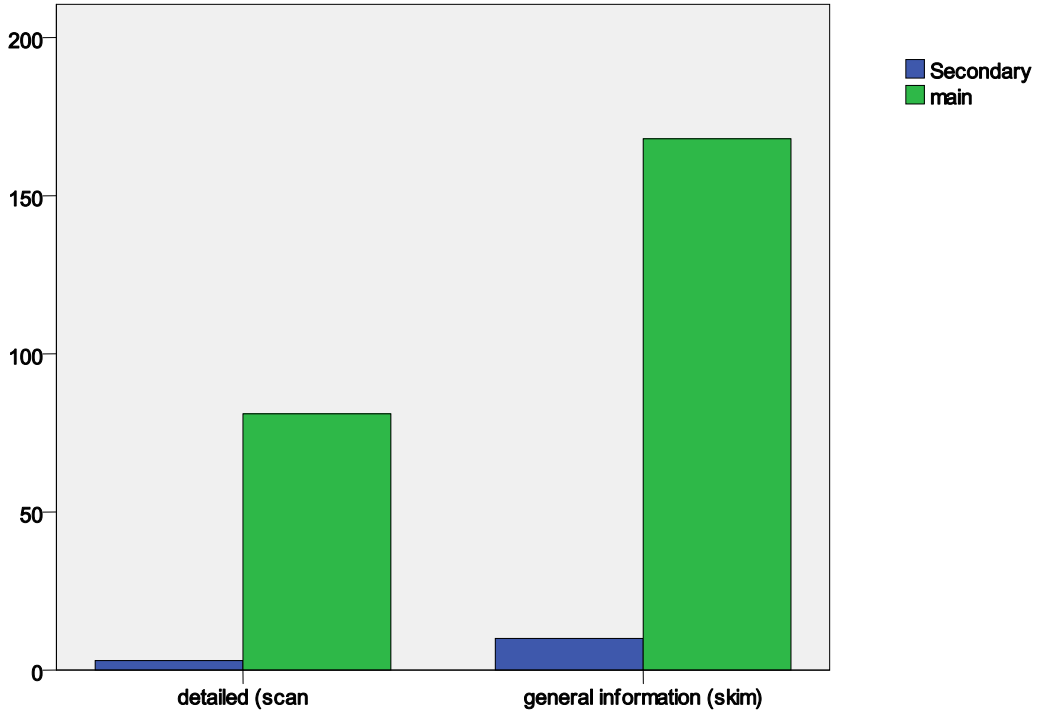
| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,507[a] | 1 | ,476 | | |
| Continuity Correction | ,166 | 1 | ,684 | | |
| Likelihood Ratio | ,536 | 1 | ,464 | | |
| Fisher's Exact Test | | | | ,559 | ,354 |
| Linear-by- linear association | ,505 | 1 | ,477 | | |

a. Calculated only for tables of 2×2.
b. Cells (25, 0%) have expected count less than 5. The minimum expected count is 4, 17.

The Chi- Square test's table clarifies that at 0.05 level of significance, with (01) degree of freedom, the critical value "r" is ,507[a] with an asymptotic significance (2-sided) of (,476). Since the value of "r" obtained is well above the value required, there are no asymptotic (statistical) significant differences between the kind of ideas included in students' notes (main or secondary) and the reading technique that is used while reading (skimming or scanning) in favour of the majority of students (95.0%) who prefer to take the main ideas in their notes and those (81) who make use of the skimming strategy (96.4%). That is to say, the majorities of students who make up more than 1/8 from the population prefer to take notes of main ideas by skimming. Thus, we come to the conclusion that the majority of students focus on main ideas while reading to take them down. In fact, this turns their reading and note taking act to a

rapid, an enjoyable one rather than a boring experience and it may be the starting point for developing reading and note taking speeds of students.

**Figure 11: Sample SPSS output reporting Chi-Square statistics for the kind of ideas included in note students' notes and the reading technique that is used while reading.**



**Crosstabulation 9: Varying techniques and strategies of note taking and paying attention to the structure of the text**

| | | S3- Q11a Varying techniques and strategies of note taking | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S1 – Q9 paying attention and seeking to understand the structure and the organisation of the text | Yes | 109<br>54,5% | 91<br>45,5% | 200<br>100,0% |
| | No | 31<br>50,0% | 31<br>50,0% | 62<br>100,0% |
| Total | | 140<br>53,4% | 122<br>46,6% | 262<br>100,0% |

This table tends to show that most of students (140 represent 53.4%) vary their techniques and strategies while taking notes with nearly the same number (109 represent 54.5%) of students who pay attention and seek to understand the structure and the organization of the text while 122 students (equally 46.6%) do not vary their techniques and strategies of note taking and do not pay attention and seek to understand the structure and the organization of the text (31 students who represent 50.0%). Therefore, we conclude that students who vary their techniques and strategies while taking notes and pay attention to the structure of the reading text tend to be slow readers and note takers and they compose the majority of students. However, ½ half of students who do not vary their techniques and strategies of note taking do not pay attention to the structure and the organization of the text too. This group of students may be rapid readers and rapid note takers since they don't waste time varying techniques and strategies of note taking and seeking to understand the structure and the organisation of the text while reading.

**Table 12: Sample SPSS output reporting Chi-Square statistics for varying techniques and strategies of note taking and paying attention to the structure of the text.**

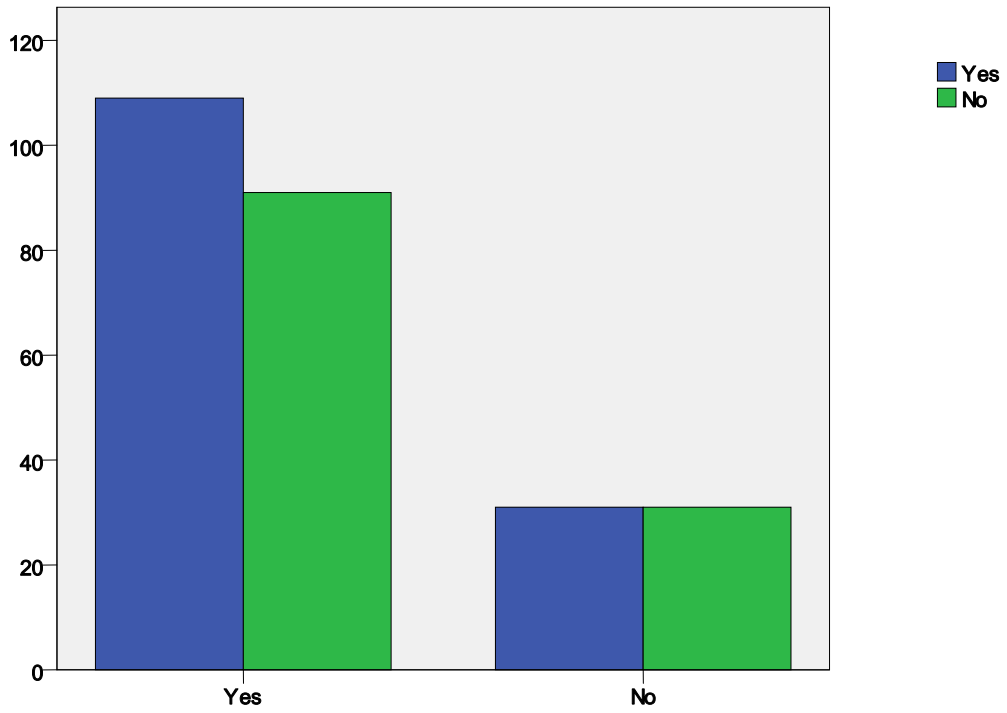
**The Chi- Square test**

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,385[a] | 1 | ,535 | | |
| Continuity Correction | ,226 | 1 | ,635 | | |
| Likelihood Ratio | ,385 | 1 | ,535 | | |
| Fisher's Exact Test | | | | ,562 | ,317 |
| Linear-by- linear association | ,384 | 1 | ,536 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28,87.

This table illustrates the value of Pearson Chi- Square which is (,385 [a] ) and it is significant at the level of asymptotic significance of ,535 with (01) degree of freedom. Since the value of "r" obtained is well above the value required, there are no asymptotic (statistical) significant differences between varying techniques and strategies while taking notes and paying attention to the structure of the reading text in favour of most students (140 represent 53.4%) who vary their techniques and strategies while taking notes and pay attention to the structure and the organization of the text (54.5%). In other words, the majorities of students who vary techniques and strategies while taking notes pay attention to the structure of the reading text. We conclude that there seems to be a relation between varying techniques and strategies while taking notes and paying attention to the structure of the reading text. Nevertheless, this again turns them to be slow readers and note takers at the same time.

**Figure 12: for varying techniques and strategies of note taking and paying attention to the structure of the text.**




**Crosstabulation 10: Following one form of note taking and seeking to understand the organisation of the text.**

| | | S3 – Q11b: Following one form of note taking | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S1 –Q9 paying attention and seeking to understand the structure and the organisation of the text | Yes | 90<br>45,0% | 110<br>55,0% | 200<br>100,0% |
| | No | 31<br>50,0% | 31<br>50,0% | 62<br>100,0% |
| Total | | 121<br>46,2% | 141<br>53,8% | 262<br>100,0% |

Most of students (141 equals 53,8 %) replied that they do not Follow one form of note taking especially those who pay attention or seek to understand the structure of the text. These

students represent 55,0% from the population whereas 121 students who make up 46.2% , on the other hand, follow one form of note taking and do not pay attention or seek to understand the organization of the text (50.0%). This confirms the results of the previous table (Q11a, Q9). Coming back to the previous findings, we might assume that most students give importance to the variation of strategies and techniques while taking notes and hence they do not follow one form of note taking by seeking to understand the structure and the organization of the text. This could parallel the last results where they answered that they try to vary their techniques and strategies while taking notes.

Here an explanation might be possible. Students give importance to the mastery of structure by varying techniques and strategies of note taking and paying attention to the organization of the text and they disregard the speed at which they read and take notes together with gaining general understanding. To this point, we could note that both varying techniques and strategies of note taking and placing much attention on the structure and the organisation of the text are among the factors that impede the good rapid performance of our students in reading and note taking speeds.

**Table 13: Sample SPSS output reporting Chi-Square statistics for following one form of note taking and seeking to understand the organisation of the text**

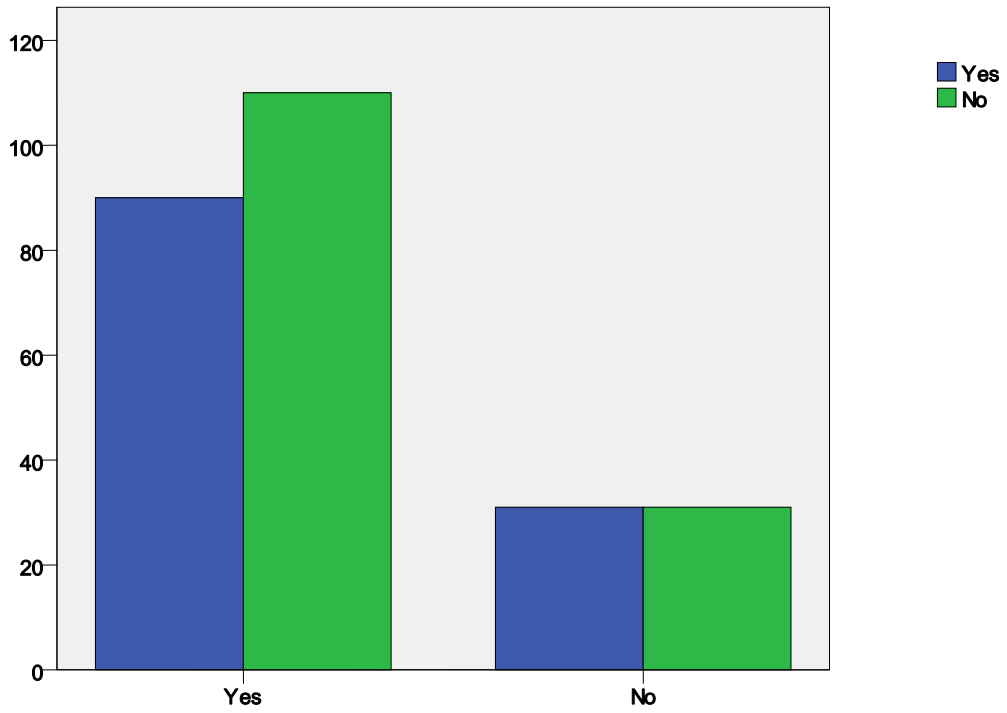
**The Chi- Square test**

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,476[a] | 1 | ,490 | | |
| Continuity Correction | ,296 | 1 | ,586 | | |
| Likelihood Ratio | ,475 | 1 | ,491 | | |
| Fisher's Exact Test | | | | ,560 | ,293 |
| Linear-by- linear association | ,474 | 1 | ,491 | | |
| Number of valid cases | 262 | | | | |

c. Calculated only for tables of 2×2.
d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28,63

This table of the Chi- Square test's results identify the critical value that equals (, 476 [a] ) with (01) degree of freedom at (,490) level of asymptotic significance. Since the critical value is well above the required value, we can say that there is no statistical significant differences between following one form of note taking and paying attention or try to understand the organisation of the reading text in favour of most students (53,8 %) who do not follow one form of note taking especially those who pay attention or seek to understand the structure of the text (55,0% ). This is an indication that varying techniques and strategies by not following one form of note taking is a means by which those students could get access to the information they need in their studies and each note taking structure depends on their reading purpose. However, any exaggeration in varying techniques and strategies by not following one form of note taking and giving much interest to the structure and the organization of the text may hamper their reading and note taking speeds. The following bar diagram illustrates and clarifies the results.

**Figure 13: Sample SPSS output reporting Chi-Square statistics for following one form of note taking and seeking to understand the organisation of the text**



**Crosstabulation 11: forms of notes and the text's structure.**

| | | S3 – Q 12: The kind of forms the notes may take | | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | graphs | Headings and sub heading | Drawings | Signs and abbreviations | Tables | Charts | |
| S1-Q9 paying attention and seeking to understand the structure and the organisation of the text | Yes | 20<br>10,0% | 28<br>45,2% | 5<br>8,1% | 19<br>9,5% | 58<br>29,0% | 4<br>2,0% | 134<br>100% |
| | No | 5<br>8,1% | 61<br>30,5% | 15<br>7,5% | 9<br>14,5% | 9<br>14,5% | 0<br>,0% | 99<br>100% |
| Total | | 25<br>9,5% | 89<br>34,0% | 20<br>7,6% | 28<br>10,7% | 67<br>25,6% | 4<br>1,5% | 233<br>100% |

This table tends to confirm the findings of the previous one. As suggested in this table, we could notice that most respondents (89 students 34.0%) make use of headings and sub headings as a form of taking notes especially those who pay attention and seek to understand the structure and the organisation of the text (28 students equal 45.2%). Not far from this percentage (67 students represent 25.2%) fill their notes in tables especially those who pay attention and seek to understand the structure and the organisation of the text (29.0%). However, with low percentages, some informants (67) use signs and abbreviations (10, 7%) while taking notes especially those who pay attention to the text's structure (19 students who represent 9.5%). Other informants are interested in putting their notes in a form of drawings, graphs or charts.

Actually, this variation in forms of note taking inside the population may identify students' flexibility in note taking and this may be a positive point and good beginning for training on rapid note taking though very few students use signs and abbreviations for shortening words and sentences in their notes.

**Table 14: Sample SPSS output reporting Chi-Square statistics for forms of notes and the text's structure.**

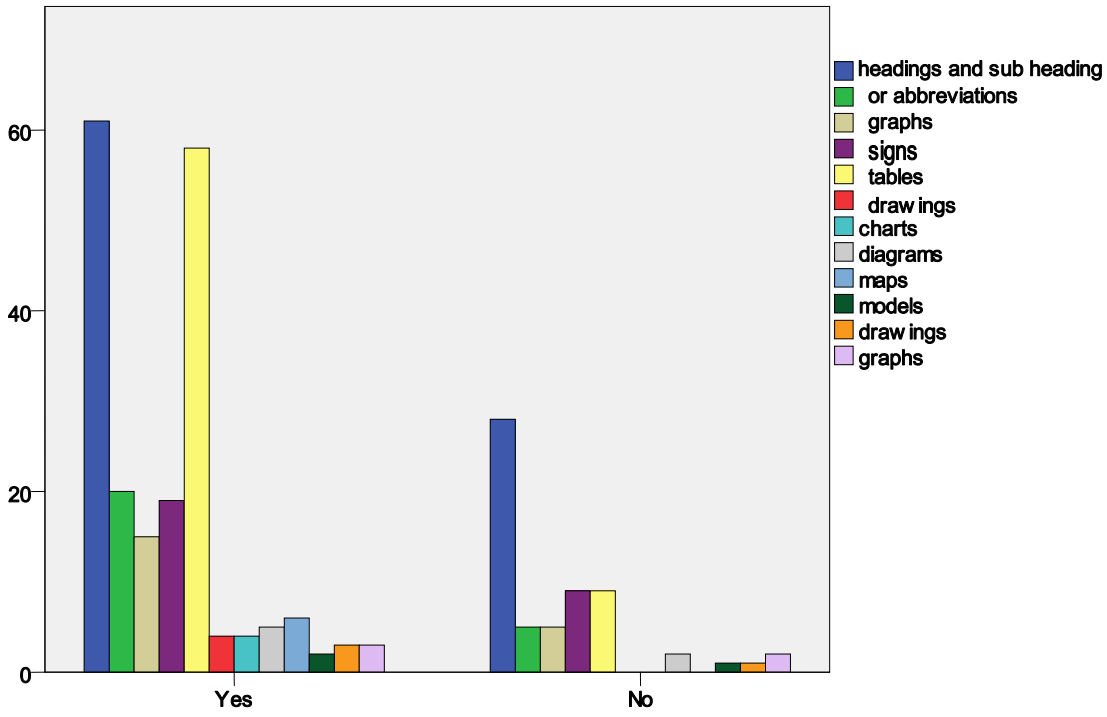
**The Chi- Square test**

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 13,528[a] | 11 | ,260 |
| Likelihood Ratio | 16,904 | 11 | ,111 |
| Linear-by- linear association | 2,282 | 1 | ,131 |
| Number of valid cases | 262 | | |

a. Calculated only for tables of 2×2.
b. 14 cells (58,3%) have expected count less than 5. The minimum expected count is ,71

As it could be grasped from the above table Pearson Chi- Square value is 13.528[a] at (11) degree of freedom with an asymptotic significance (,260). Hence, we can declare that since the critical value (r) is well above the required value (0.05), there is no statistical significant difference between the forms that students prefer to take while taking notes and seeking to understand the structure and the organization of the text. Therefore, we can say that there seems to be a correlation between those who seek to understand the organization of the reading text and variation in using the different forms of note taking. In other words, students who prefer to vary their note taking forms are the ones who pay attention to the structure of the reading text. This indicates that they spend much time varying their note taking forms and seeking to understand the organization of the text (i.e., each text's part may take a different form depending on its type whether it deals with statistics, categories, headings, etc). To illustrate the results more, the following diagram will do.

**Figure 14: forms of notes and the text's structure.**




**Crosstabulation 12: text's structure and the extent to which students underline, Circle, or highlight their notes.**

| | | S3- Q13 The extent to which students **underline**, **circle**, or **highlight** their notes | | | | Total |
|---|---|---|---|---|---|---|
| | | Always | Sometimes | regularly | Rarely | |
| S1 -Q9 Paying attention and seeking to understand the structure and the organisation of the text | Yes | 30<br>48,4% | 78<br>39,0% | 11<br>17,7% | 13<br>6,5% | 200<br>100,0% |
| | No | 94<br>47,0% | 17<br>27,4% | 15<br>7,5% | 4<br>6,5% | 62<br>100,0% |
| Total | | 124<br>47,3% | 95<br>36,3% | 26<br>9,9% | 17<br>6,5% | 262<br>100,0% |

In this table, we discussed the question of paying attention and seeking to understand the structure of the text in relation to question 13 which focuses on the extent to which students

underline, circle, or highlight their notes. Most students (124 with 47.3% from the population) always underline, circle or highlight their notes on the reading text itself. This is quite similar to those who pay attention to the structure of the text (48.4%). However, by way of balance, 95 students who represent 36.3% sometimes circle, underline, or highlight their notes quite similar to those who pay attention to the organization of the text (78 students who represent 47.0%). This demonstrates that the students' note taking speed is relatively low basically for those who do not seek to understand the structure of the reading text.

**Table 15: Sample SPSS output reporting Chi-Square statistics for text's structure and the extent to which students underline, Circle, or highlight their notes.**

The Chi- Square test

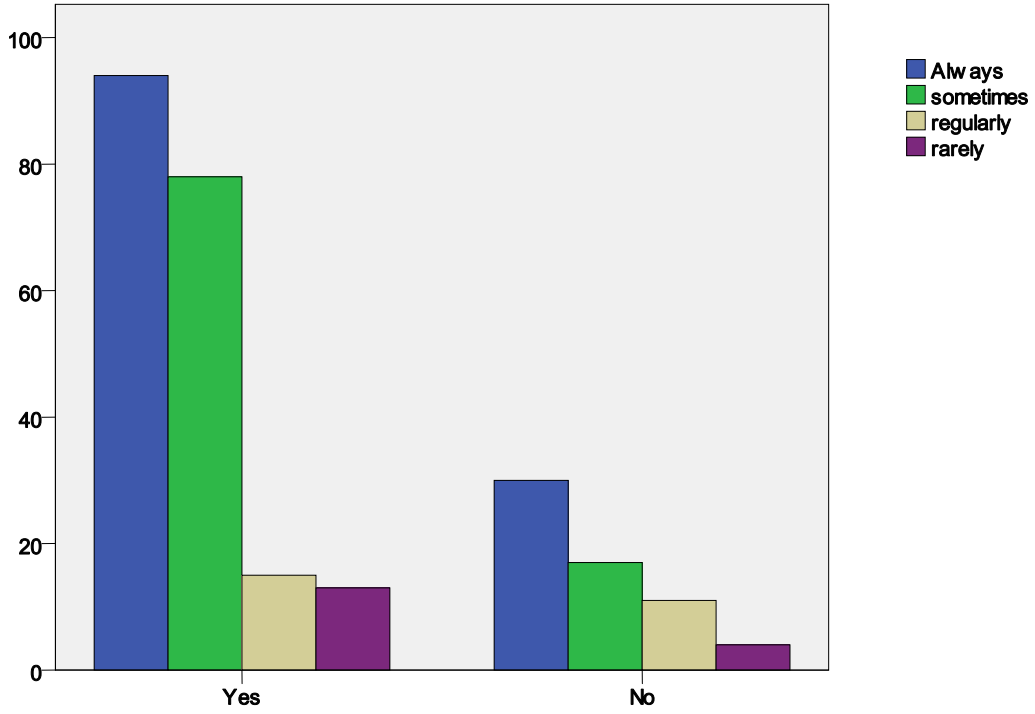
| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 6,773[a] | 3 | ,080 |
| Likelihood Ratio | 6,266 | 3 | ,099 |
| Linear-by- linear association | ,468 | 1 | ,494 |
| Number of valid cases | 262 | | |

a. Calculated only for tables of 2×2.
b. 1 cell (12, 5%) has expected count less than 5. The minimum expected count is 4, 02.

As it could be analysed from the Chi- Square test's table, the critical value (r) equals (6,773[a] ) at a degree of freedom (03) with an asymptotic significance of (,080). Hence, we can say that since the critical value (r) is well above the required value (0.05), there is no statistical significant difference between the extent to which students **underline**, **circle**, or **highlight** their notes and paying attention and seeking to understand the structure and the organisation of the text. The point may show that there seems to be an association between students who underline, circle, or highlight their notes while reading and those who do not give interest to the text's structure. That is to say, underlining, circling, or highlighting notes on the reading print may speed up the process of note taking and therefore, will not take much

time as putting them on paper in relation to seeking to understand the organisation of the text which consumes much time and requires much thinking and concentration.

**Figure 15: text's structure and the extent to which students underline, Circle, or highlight their notes.**



**Crosstabulation 13: Frequencies and percentages of answers for Setting a Purpose for reading and note taking.**

| | | The extent to which note takers set goals S1-Q2 | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | always | sometimes | regularly | rarely | never | |
| Setting purposes when reading S2-Q6 | Yes | 83<br>36.2% | 118<br>51.5% | 21<br>9.2% | 6<br>2.6% | 1<br>,4% | 229<br>100.0% |
| | No | 10<br>30.3% | 12<br>36.4% | 5<br>15.2% | 5<br>15.2% | 1<br>3.0% | 33<br>100.0% |
| Total | | 93<br>35.5.% | 130<br>49.6% | 26<br>9.9% | 11<br>4.2% | 2<br>,8% | 262<br>100.0% |

According to our respondents' answers to these questions, most of them (130 informants 49,6 %) sometimes set purposes for themselves as they take notes especially those who do the same thing while reading English texts. With lower percentage (93 students who make up 35.5%) always set purposes for noting down what they need with relatively the same number for those who put goals for themselves while reading. Nevertheless, few respondents (26 students represent 9.9%) regularly set goals for themselves as they note down and 21 (9.2%) of them put purposes while reading. In addition, only 11 students rarely have an objective for their notes especially those who have a purpose of reading. These results indicate that the number of students who read and take notes at the same time having a purpose in mind is relatively low. This again, may lead them to be not straightforward in their reading and note taking. In that they may read everything and note down anything the fact that may bring them to get bored with the reading material and slow down the reading and note taking processes.

**Table 16: sample SPSS output reporting Chi-Square statistics for Setting a Purpose for reading and note taking.**

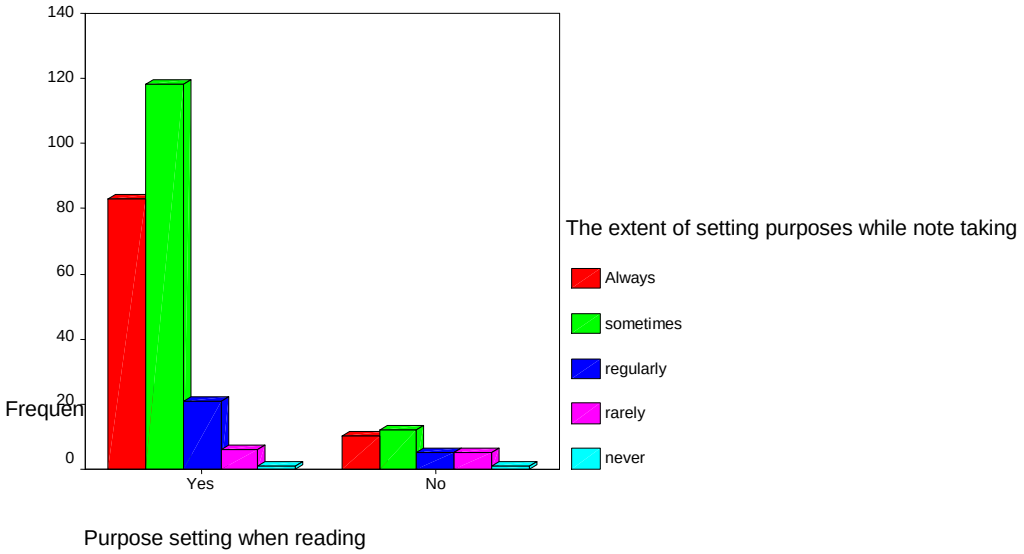
The Chi- Square test :

| | Value | df | Asymp. Sign. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 15.994[a] | 4 | ,003 |
| likelihood Ratio | 11.487 | 4 | ,022 |
| Linear-by- linear association | 8.611 | 1 | ,003 |
| Number of valid cases | 262 | | |

a. Calculation only for table of 2×2
b. 4 cells (40.0%) have expected count less than 5. The minimum expected count is ,25.

As it can be deduced from the Chi- Square test's table, the Pearson Chi- Square value 15.994 [a] at a degree of freedom that equals (04) with an asymptotic significance of (,003), indicates that the critical value (r) is well below the required value (0.05), there is a there is a highly statistical significant difference between the extent to which respondents set purposes for themselves as they read or take notes. Here, one might say that it is very important to set goals for taking notes while reading though the majority of students are not aware of it especially with regard to reading and note taking speeds because setting a purpose for reading or note taking highly contribute to the speed at which learners perform these two tasks.

**Figure 16: statistics for Setting a Purpose for reading and note taking.**




**Croostabulation 14 : frequencies and percentages of answers for "the structure of the text"in reading and note taking.**

| | | Taking the structure which is proposed by the writer in constructing notes S1- Q5a | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| Seeking to understand the structure and organisation of the text S1 - Q9 | Yes | 49<br>79.0% | 13<br>21.0% | 200<br>100.0% |
| | No | 136<br>68.0% | 64<br>32.0% | 62<br>100.0% |
| Total | | 77<br>29.4% | 185<br>70.6% | 262<br>100.0% |

This question is intended to complement and check what has been mentioned in the former questions (S3- Q12 and S3 – Q11b). Out of all the respondents, the majority of students do not take the structure which is proposed by the writer in constructing notes. They represent 70.6% from the whole population (185 students) especially those who do not seek to understand the structure and the organisation of the text (64 students who make up 32.0% from the population) in comparison to 29.4% who take the structure which is proposed by the writer in constructing notes especially those who seek to understand the structure and the

organisation of the text (49 students who represent 79.0%). These results show that students who follow the structure of the text used by the writer in their notes are those who seek to understand the organisation or how the text is built whenever they read. Thus, they will not spend much time thinking of which form their notes will take. These results identify again once more that our informants are slow readers and note takers.

**Table 17: sample SPSS output reporting Chi-Square statistics for the text's organization and the structure proposed by the writer for their notes.**

The Chi- Square test :

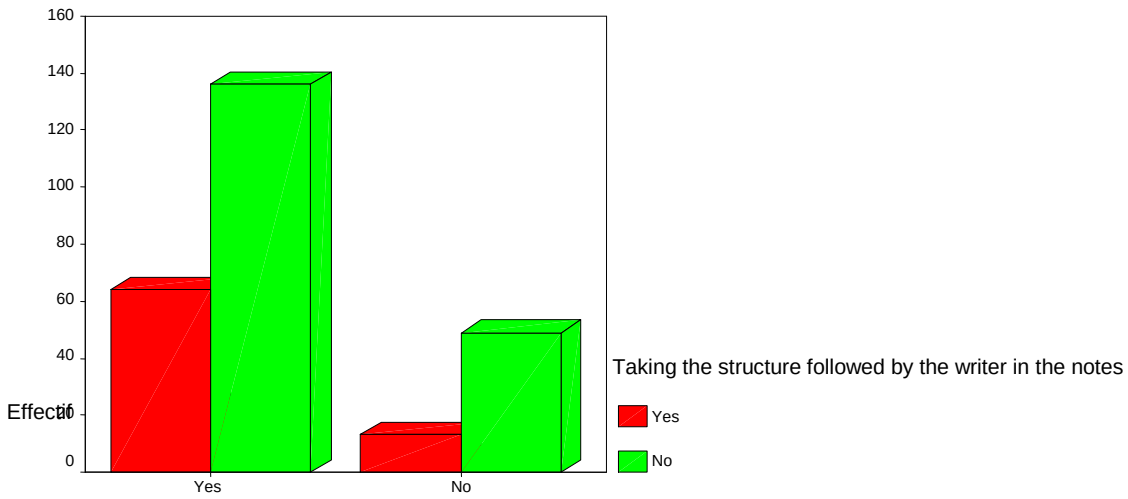
| | Value | df | Asymp. Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi- Square | 2.776[b] | 1 | ,096 | | |
| Continuity Correction | 2.270 | 1 | ,132 | | |
| Likelihood Ratio | 2.909 | 1 | | | |
| Fisher's Exact Test | | | ,088 | ,111 | ,064 |
| Linear-by-linear association | 2.765 | 1 | ,096 | | |
| Number of valid cases | 262 | | | | |

a. Calculation only for table of 2×2
b. 0 cells(,0%) have expected count less than 5. The minimum expected count is 18.22

The Pearson Chi- Square value in this table illustartes that it is 2.776[b] with a degree of freedom that equals (01) at (,096) level of significance which means that it is highly well above the required value. That is to say, there is no statistical significant difference between students who take the structure which is proposed by the writer in constructing notes and seeking to understand how the text is organised in favour of the majority who neither follow the text's structure used by the writer in their notes nor pay attention to how it is built. In fact,

this explains again why our students are slow readers and note takers. The following diagram identify the results.

**Figure 17: for the text's organization and the structure proposed by the writer for their notes.**




Seeking to understand the text's organisation

**Crosstabulation 15: self- planning and the reading text's structure**

| | | The note taker uses his own plan which may help him achieve what he wants S1- Q5b | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| Seeking to understand the structure and the organisation of the text S9- Q2 | Yes | 146<br>73.0% | 54<br>27.0% | 200<br>100.0% |
| | No | 48<br>77.4% | 14<br>22.6% | 62<br>100.0% |
| Total | | 194<br>74.0% | 68<br>26.0% | 262<br>100.0% |

Among 262 students' informants, the majority of them (194 students) that equals 74.0% answered that they use their own plans of note taking depending on their needs.

Approximately the same number proved the opposite concerning seeking to understand the structure and the organisation of the text (48 students who represent 77.4%). Nonetheless, only 68 who make up 26.0% from the population do not self plan while taking notes (i.e. they may use the same text's structure followed by its writer) especially those who seek to understand the organisation of the text (54 students 27.0%). The results found here would be of two interpretations: first to show that the students' previous answers were not contradictory, or to obviously imply that students do not actually know how to plan for their notes and which plan does correspond to which purpose. Thus, students lack to be trained on this skill in which they could discover themselves and exploit their capacities and talents.

**Table 18: sample SPSS output reporting Chi-Square statistics for students' self planning and seeking the understanding of text's structure.**

The Chi- Square test

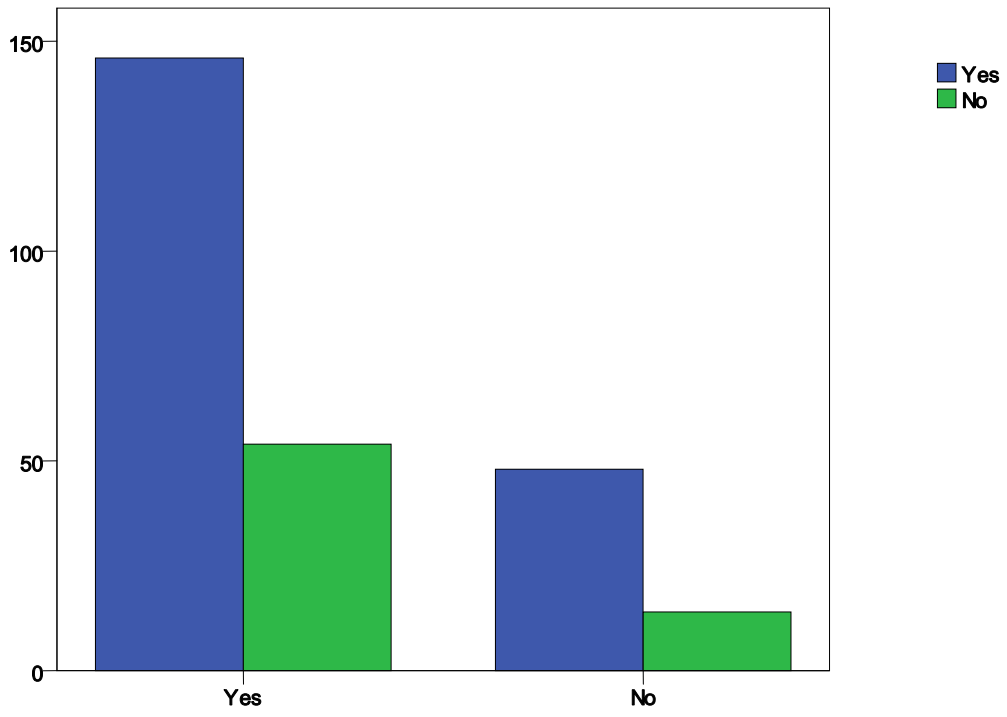
| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,481[b] | 1 | ,488 | | |
| Continuity Correction | ,279 | 1 | ,598 | | |
| Likelihood Ratio | ,491 | 1 | ,483 | | |
| Fisher's Exact Test | | | | ,619 | ,303 |
| Linear-by- linear association | ,479 | 1 | ,489 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for table of 2×2
b. 0 cells (,0%) have expected count less than 5. The minimum expected count is 16.09

As shown in this table, the Pearson Chi-square value is ,481[b] with a degree of freedom that equals (01) at a level of an asymptotic significance ,488. Since the critical value is well above the required value, we can say that there is no statistical significant difference between self planning and seeking to understand the structure of the text in favour of the majority who self-plan for their notes (194 students who equals 74.0% from the population) especially those who do not pay attention to the text's organization (48 students who represent 77.4%). The

results obtained are quite interesting, because the awareness of students about the significance of self planning depending on the reading purpose is like an engine which moves and augments their motivation to learn the language and be independent rapid readers and note takers and not blind copy pastors of the language from the print.

**Figure 18: self- planning and the reading text's structure**



**Crosstabulation 16: for interest in the mastery of structure by paying attention to the organisation of the text.**

| | | S1-Q4a giving interest to the mastery of structure | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S2 - Q9 paying attention and seeking to understand the structure and the organisation of the text | Yes | 153<br>76,5% | 47<br>23,5% | 200<br>100,0% |
| | No | 34<br>54,8% | 28<br>45,2% | 62<br>100,0% |
| Total | | 187<br>71,4% | 75<br>28,6% | 262<br>100,0% |

What is understandable from this table is that the majority of respondents give interest to the mastery of structure (187 students who represent 71.4% from the population) especially those who pay attention to the organisation of the text in hand (153 students who equal 76.5%). However, most students (75 informants who make up 28.6% from the whole sample), do not give interest to the mastery of structure especially those who do not pay attention or seek to understand the organization of the text (28 students who represent 45.2%). Hence, we can deduce that though mastery of the structure is important and most students recognize this fact, the majority of them forget about the speed at which they read and take notes. Consequently, this turns them to be slow readers and inefficient note takers.

**Table 19: Sample SPSS output reporting Chi-Square statistics for interest in the mastery of structure and paying attention to the organisation of the text.**

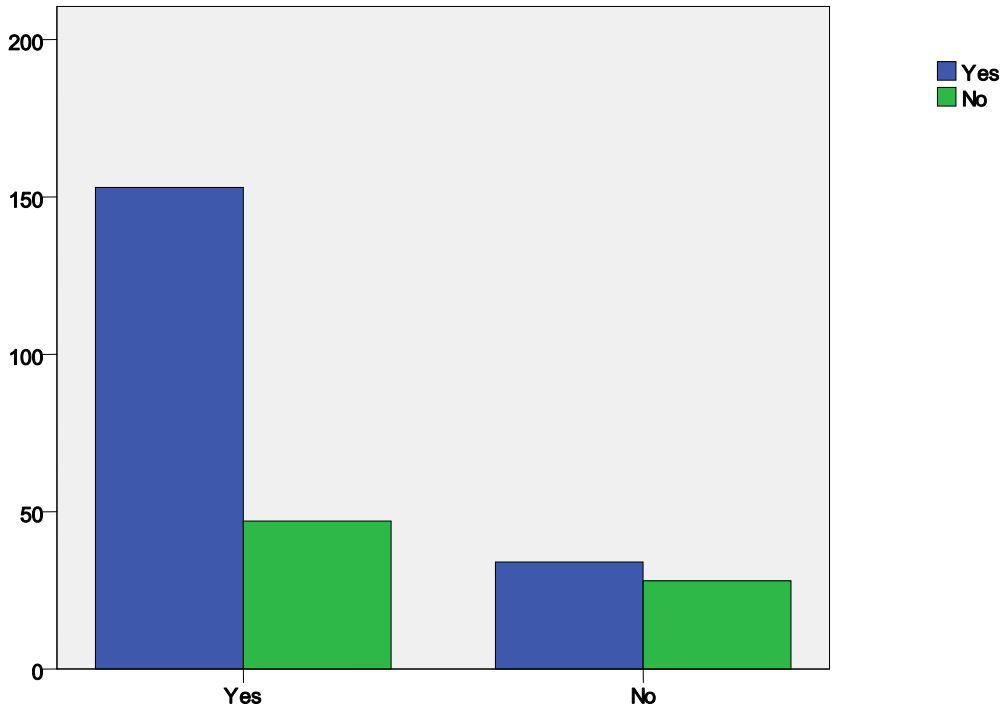
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 10,869[a] | 1 | ,001 | | |
| Continuity Correction | 9,835 | 1 | ,002 | | |
| Likelihood Ratio | 10,287 | 1 | ,001 | | |
| Fisher's Exact Test | | | | ,002 | ,001 |
| Linear-by- linear association | 10,827 | 1 | ,001 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17,75.

After having a look at students' frequencies and percentages on giving interest to the mastery of structure and paying attention to the organization of the text, the Chi- Square test's table came to test the significance of our results. The value of the Pearson Chi- Square is 10.869[a] . it is well above the required value at a level of asymptotic significance of ,001 with a degree of freedom that equals (01). Hence, we can say that there is no statistical significant differences between individual answers on giving interest to the mastery of structure and paying attention to the writer's text organization in favour of the majority who give importance to the mastery of structure (71.4% from the population) especially those who pay attention to the organisation of the text in hand (76.5%). Actually, this may affects the speed at which these students read and take notes on their reading material. The following diagram clarifies this relation.

**Figure 19: for interest in the mastery of structure and paying attention to the organisation of the text.**




**Crosstabulation 17: for hesitation to put words on paper and the text's structure.**

| | | S1 - Q4b hesitation to put the words on paper and the difficulty in selecting the appropriate words that convey the intended meaning. | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S2- Q9 Pay attention and seek to understand the structure and the organisation of the text | Yes | 106<br>69,3% | 47<br>30,7% | 153<br>100,0% |
| | No | 20<br>58,8% | 14<br>41,2% | 34<br>100,0% |
| Total | | 126<br>67,4% | 61<br>32,6% | 187<br>100,0% |

This table reveals that the biggest number of students (126 that is 67.4 %) hesitates to put words on paper and find a difficulty in selecting the appropriate words that would convey the

meaning they want to express while taking notes. This phenomenon is present especially with those who pay attention and seek to understand the structure of the text (106 equals 69.3%) in comparison to those who do not hesitate to put words onto paper and do not find a difficulty in conveying the intended meaning (61 students who represent 32.6%) especially those who do not pay attention or seek to understand the structure of the text (14 that is 41.2%). As mentioned and presented in question 7 section 1, the majority of students give importance to the mastery of structure (71.4%). This conveys that our students could be considered as slow readers and note takers.

**Table 20: Sample SPSS output reporting Chi-Square statistics for hesitation to put words on paper and the text's structure.**

The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 1,384[a] | 1 | ,239 | | |
| Continuity Correction | ,949 | 1 | ,330 | | |
| Likelihood Ratio | 1,344 | 1 | ,246 | | |
| Fisher's Exact Test | | | | ,312 | ,165 |
| Linear-by- linear association | 1,377 | 1 | ,241 | | |
| Number of valid cases | 262 | | | | |

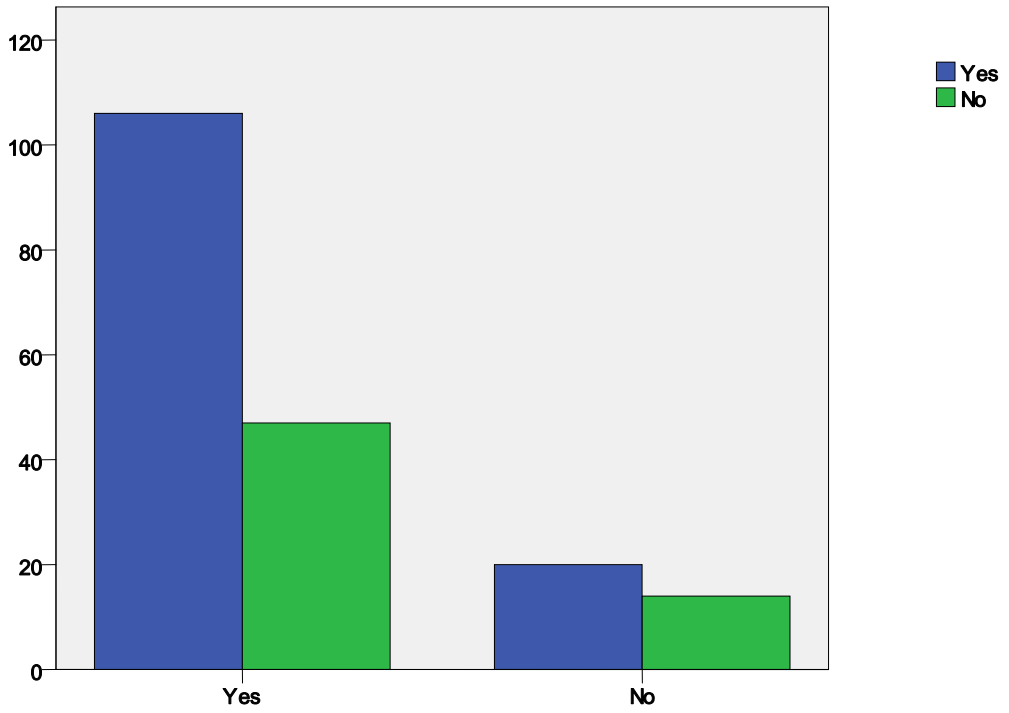
a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11,09.

What could be extracted from the Chi- Square test's table is that the chi- square test's table illustrates that at 0.05 level of significance, with (01) degree of freedom, the Pearson Chi-square value is 1.384[a] with an asymptotic significance (2-sided) (,239). Since the Pearson value of obtained is well above the required mean value, there are no significant statistical differences between hesitating to put words on paper and the difficulty in selecting the appropriate words for the notes and paying attention to the structure of the text in favour of the majority of students who represent 67.4 % in the former and 69, 3% in the latter. That is to say, the majorities of students who make up more than a half from the population hesitate to put words on paper while taking notes especially those who pay attention to how the text is built. It appears, then, that instead of reading in general to get the main ideas readers tend to plough for seeking to understand the structure and the organization of the text being read and

this takes much time and needs much concentration from their part and once they come to take notes they hesitate to put words onto paper and find difficulty in exhibiting and demonstrating their understanding in note taking.

The following diagram allows us to clarify the results obtained.

**Figure 20: for hesitation to put words on paper and the text's structure.**



**Crosstabulation 18: Noting down every new information or definition and paying attention to the structure of the text**

| | | S4 -Q20 Noting down every new information or definition or term | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S2- Q 9 paying attention and seeking to understand the structure and the organisation of the text | Yes | 177<br>88,5% | 23<br>11,5% | 200<br>100,0% |
| | No | 50<br>80,6% | 12<br>19,4% | 62<br>100,0% |
| Total | | 227<br>86,6% | 35<br>13,4% | 262<br>100,0% |

This question is the opposite of the former one. Among 262 students whose answers were "yes", 227 of them (86, 6 %) said that note every new information, definition or term they meet while reading in their notes especially those who pay attention to the structure of the text (177 that is 88.5%). Some students (35 that is 13.4), on the other hand, are not interested in noting down every new information, definition or term especially those who do not seek to understand the organisation of the text (12 students represent 19.4% from the whole population). These responses reveal that the majority of students focus on a word by word note taking and they are those who focus attention on the structure and the organisation of the text. Therefore, they may spend their time looking for new terms, information or definition in the reading text and invest a part of it seeking to understand its structure.

**Table 21: Sample SPSS output reporting Chi-Square statistics for noting down every new information or definition and paying attention to the structure of the text.**

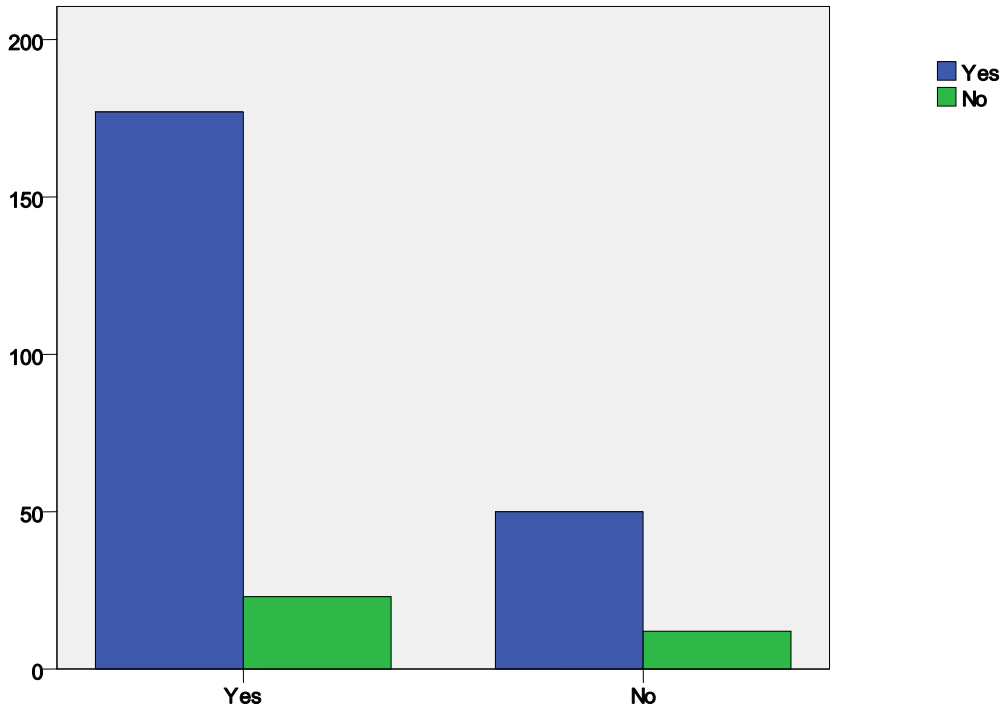
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 2,523[a] | 1 | ,112 | | |
| Continuity Correction | 1,890 | 1 | ,169 | | |
| Likelihood Ratio | 2,349 | 1 | ,125 | | |
| Fisher's Exact Test | | | | ,134 | ,088 |
| Linear-by- linear association | 2,513 | 1 | ,113 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8,28.

In this table, Pearson Chi-square value is 2.523 [a] < 0.05 with a degree of freedom that equals (01) at a level of asymptotic significance of (,112). We can conclude that since Pearson Chi-square value is well highly above the mean value, there is no statistical significant difference between noting down every new information or definition and paying attention to the structure of the text in favour of the majority (227 that is 86,6%) who note down every new information, definition or term they come across while reading especially those who pay attention to the structure of the text (177 that is 88,5%). Again, this demonstrates clearly that our students still suffer from word for word technique. They may find it difficult to extract the general sense from the context. Sticking on the meaning of individual new words may drive them to give up reading at all.

**Figure 21: for noting down every new information or definition and paying attention to the structure of the text.**




**Crosstabulation 19: for using arrows to show interrelations with the topic and subtopics and paying attention to the structure of the text.**

| | | S3- Q16 using arrows to show interrelations with the topic and subtopics when putting them as an outline, for example | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S2- Q9 paying attention and seeking to understand the structure and the organisation of the text | Yes | 172<br>86,0% | 28<br>14,0% | 200<br>100,0% |
| | No | 48<br>77,4% | 14<br>22,6% | 62<br>100,0% |
| Total | | 220<br>84,0% | 42<br>16,0% | 262<br>100,0% |

As it is predicted, nearly all students (220 that is 84,0 %) use arrows to show interrelations with the topic and subtopics when putting them as an outline for the notes, for

example especially those who pay attention to the text's structure (172 that is 86.0%). However, only 42 students who represent (16.0%) from the whole population do not use arrows to show interrelations between the topic and sub topics for example especially those who do not pay attention to the structure of the text (14 that is 22.6%). To conclude, we can say that and this in turn could mean that the majority of students who use arrows to organise their notes tend to be rapid note takers especially those who pay attention to the structure of the reading text. In other words, instead of writing down whole words and sentences, they contract sentences using arrows.

**Table 22: Sample SPSS output reporting Chi-Square statistics for using arrows to show interrelations and the text's structure.**

The Chi- Square test

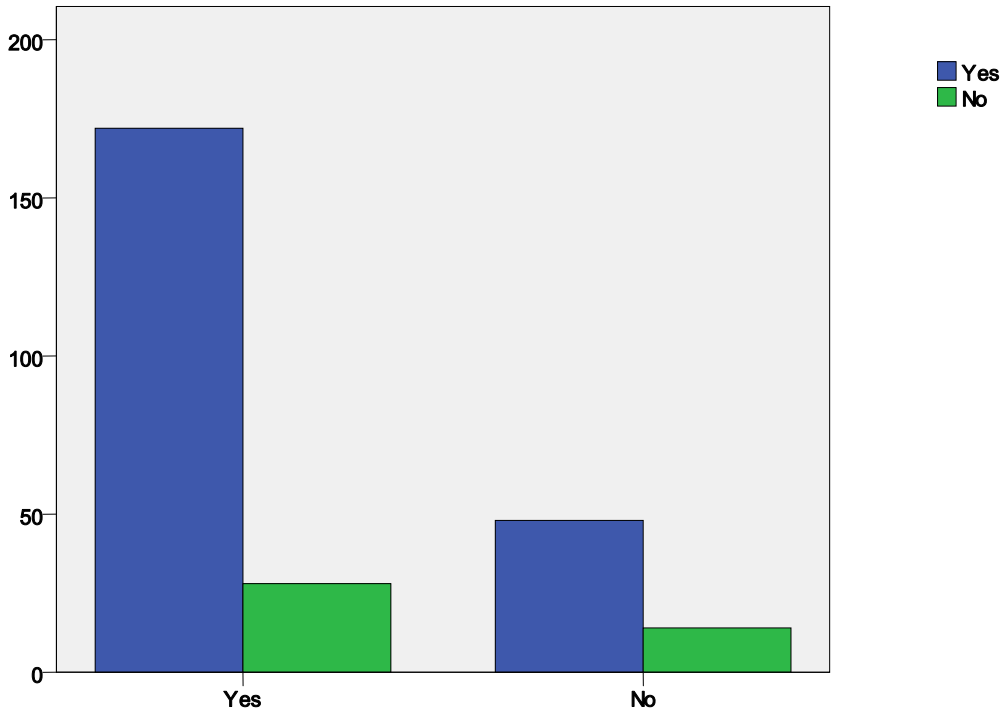
| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 2,589[a] | 1 | ,108 | | |
| Continuity Correction | 1,991 | 1 | ,158 | | |
| Likelihood Ratio | 2,431 | 1 | ,119 | | |
| Fisher's Exact Test | | | | ,116 | ,082 |
| Linear-by- linear association | 2,579 | 1 | ,108 | | |
| Number of valid cases | 262 | | | | |

c. Calculated only for tables of 2×2.
d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9,94

This table tends to show the significance of the previous results. It shows the Pearson Chi-square value that equals (2.589 [a]) with (01) as a degree of freedom at an asymptotic significance of (, 108). Hence, we can assume that since the Chi- Square value is above the required mean value (0.05), there is no statistical significant difference between using arrows to show interrelations with the topic and subtopics and paying attention to the structure of the text in favour of the majority of informants (220 that is 84,0 %) who use arrows to show interrelations with the topic and subtopics when putting them as an outline for the notes, for example especially those who pay attention to the text's structure (172 that is 86.0%).

Therefore, we can say that using arrows while taking notes helps in speeding up the process especially for those who seek to understand the structure of the text.

**Figure 22: for using arrows to show interrelations and the text's structure.**



**Crosstabulation 20**: **the role of vocabulary strategies in reading and varying it in note taking**

| | | S4- Q21: varrying vocabulary while taking notes. | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S2- Q10 Readers reactions when meeting an unknown word or a new structure | Reread the word many times (repetition) and try to guess the meaning of the word from the context. | 68<br>81.0% | 16<br>19.0% | 84<br>100.0% |
| | Ignore or delete that difficult word or part of the text (skip over and continue reading) | 17<br>70.8% | 7<br>29.2% | 24<br>100.0% |
| | Cut it into letters and syllables (prefix, root, and suffix) to read it correctly. | 13<br>76.5% | 4<br>23.5% | 17<br>100.0% |
| | Ask another student about the meaning | 22<br>62.9% | 13<br>37.1% | 35<br>100.0% |
| | Look up the definition in the dictionary. | 66<br>88.0% | 9<br>12.0% | 75<br>100.0% |
| | Look at its grammatical class which the words belongs to. | 7<br>77.8% | 2<br>22.2% | 9<br>100.0% |
| | Look at the words which are used with it to analyse the word for clues to its meaning. | 13<br>72.2% | 5<br>27.8% | 18<br>100.0% |
| Total | | 206<br>78.6% | 56<br>21.4% | 262<br>100.0% |

As it is shown in this table, among the whole sample, 206 students (78,6 %) replied that they try to vary their vocabulary while taking notes especially those who selected option “e”. That is, they (66 students who represent 88.0%) tend to look up the definition or the explanation of the word in the dictionary in comparison to those who do not vary their vocabulary while taking notes (56 that is 21.4%) especially those who ask another student about the meaning of the difficult word while reading (13 that is 37.1%). Other students’ strategy (68 students represent 81.0%) to understand an unfamiliar item is to reread the word many times and try to guess its meaning from the context especially those who. Other respondents (7 that is 77.8%) believe that the best way to understand the word is to look at its grammatical class or cut it into letters and syllables to read it correctly (13 students o make up 76.5% from the population). This explains once more their eagerness in having as many vocabulary as possible .They believe that it is the key solution to all the problems they meet while reading and note taking.17 students (70,8 %) answered that they ignore the new word and try to understand the general sense "f".

13 students (72.2 %) preferred strategy "g", in which they look at the words which are used with it and to analyse it by looking for clues to its meaning.

**Table 23: sample SPSS output reporting Chi-Square statistics for vocabulary strategies in reading and varying it in note taking**

**The Chi- Square test**

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 10.728[a] | 6 | ,097 |
| Likelihood Ratio | 10,538 | 6 | ,104 |
| Linear-by- linear association | ,016 | 1 | ,900 |
| Number of valid cases | 262 | | |

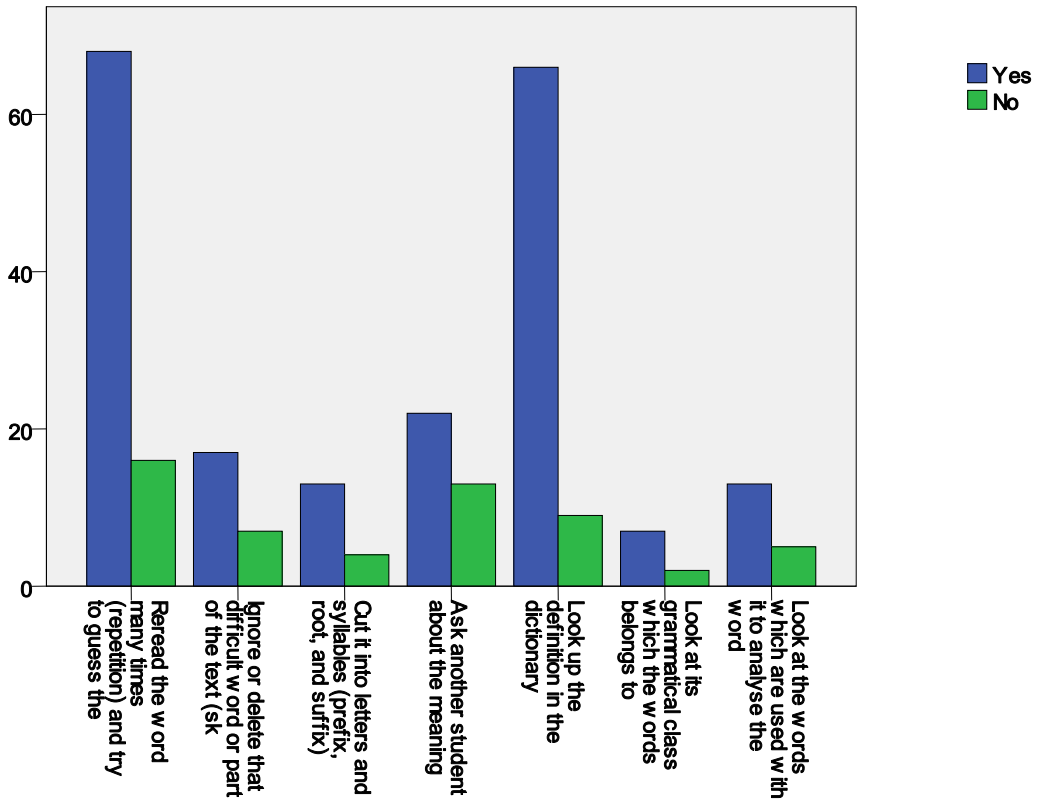
a. Calculation only for table of 2×2
b. 3 cells (21.4%) have expected count less than 5. The minimum expected count is 1.92

This table shows that the pearson Chi- Square equals 10.728 [a] with (06) degree of freedom at a level of asymptotic significance which is ,097. Since the Chi- Square value is above the required mean, there is no statistical significant differences between seeking to varry vocabulary while note taking and students' strategies to understand an unfamiliar item in favour of the majority (206 students 78,6 %) who vary their vocabulary while taking notes especially those (66 students who represent 88.0%) who tend to look up the definition or the explanation of the word in the dictionary. In fact, this identifies the extent to which students are bound to the word's level reading and couldn't move further to reach the level of fluent reading in the sense that they base their attention on rereading the word many times to guess its meaning from the context, cutting it into letters and syllables (prefix, root, and suffix) to read it correctly, asking another student about the meaning, looking up the words in the dictionary, looking at the grammatical class that the word belongs to, and contextualizing the words (i.e., looking at the words which are used with it to analyse the word for clues to its meaning).

As we can deduce from this that all these strategies which are reported on to be used by our informants while reading consume much time, the thing that make them slow readers and note takers when they try to vary their vocabulary while taking notes. That is , the majority of them aim to enhance their vocabulary moved by the belief that understanding

the dictionary meaning of a lot of unfamiliar words is the prime concern in language learning .Here, one might say that though this is very important, it is not enough, i.e. acquiring language is not just understanding a set of vocabulary items. The point which we referred to, at the beginning of this piece of research.

**Figure 23**: **vocabulary strategies in reading and varying it in note taking**.




After having a look on some general points about students' needs in English, we may get now in the centre of the matter to see and explore their reading and note taking speeds.

**Crosstabulation 21: for stopping from time to time while taking notes thinking of how to express understanding and facing difficulties in recognizing words and knowing their meanings**

| | | S4 - Q18: stopping from time to time while taking notes thinking of what might be written and how to express the understanding | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S2-Q11 facing difficulties in recognizing words and knowing their meanings | Yes | 177<br>94,1% | 11<br>5,9% | 188<br>100,0% |
| | No | 69<br>93,2% | 5<br>6,8% | 74<br>100,0% |
| Total | | 246<br>93,9% | 16<br>6,1% | 262<br>100,0% |

In this question, students are kindly asked to describe their reading process. The majority of them (246 students who represent 93.9%) said that they stop from time to time while taking notes thinking of what might be written and how to express their understanding with approximately the same percentage with those who face difficulties in recognising words and knowing their meanings. These students represent 177 and 94.1%. In fact, this is a very high number in comparison to those who do not stop from time to time while taking notes thinking of what might be written and how to express their understanding. They make up only 16 students (6.1 %) from the population especially those who do not face difficulties in recognising words and knowing their meanings (5 that is 6.8%). This indicates again, the extent to which our informants are slow readers since they face difficulties in recognising words and knowing their meanings the thing that takes much time and turns their reading experience to a boring one. This phenomenon is also common in note taking as it extends to make them stop from time to time thinking of what would be written down and how to put ideas on paper.

**Table 24: Sample SPSS output reporting Chi-Square statistics for stopping from time to time while taking notes thinking of how to express understanding and facing difficulties in word recognition and knowing the meaning of words.**

The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,076[a] | 1 | ,783 | | |
| Continuity Correction | ,000 | 1 | 1,000 | | |
| Likelihood Ratio | ,075 | 1 | ,785 | | |
| Fisher's Exact Test | | | | ,778 | ,489 |
| Linear-by- linear association | ,076 | 1 | ,783 | | |
| Number of valid cases | 262 | | | | |

e. Calculated only for tables of 2×2.
f. 1 cell (25, 0%) have expected count less than 5. The minimum expected count is 4.52

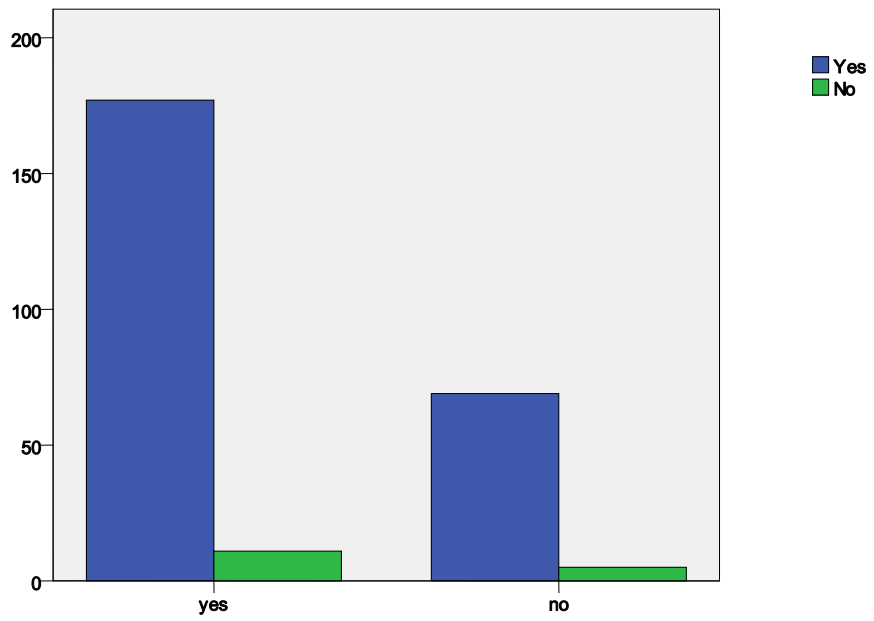
As it is shown in the Chi- Square test's table, the Pearson Chi-square value is (,076[a]) with a degree of freedom (01) at a level of asymptotic significance that equals ,783. Hence, since the Pearson Chi-square value is well above the required mean value, there is no statistical significant differences between stopping from time to time while taking notes thinking of how to express understanding and facing difficulties in recognizing words and knowing their meanings in favour of the majority of students (246 students who represent 93.9%) who stop from time to time while taking notes thinking of how to express their understanding with almost the same number of informants (177 and 94.1%) who face difficulties in recognising words and knowing their meanings.

As evidenced by the results, we think and claim again that placing great attention on word recognition and understanding through while topping from time to time while taking notes or facing difficulties and recognising words and knowing their meanings lead to slow reading and note taking and hamper the speed at which our respondents do these tasks rather than enhancing it. A further analysis of this question might either confirm the fact that our students are word by word readers (i.e. they focus on individual words rather than reading in chunks). Having more than ¾ of the population stop from time to time while taking notes thinking of what might be written down or out of having difficulties in knowing the meaning of the words

being read, would seem a sign of inefficiency in both in reading and note taking processes. We could say at this stage that a call has to be made to unify all efforts to have more motivating students and enhancing them to get rid of the faulty reading and note taking habits and look for more fluency in dealing with both activities.

The following diagram illustrates the findings.

**Figure 24: for stopping from time to time while taking notes thinking of how to express understanding and facing difficulties in word recognition and knowing the meaning of words.**



**Crosstabulation 22: Noting down ideas on the spot and pausing after each phrase or every word.**

| | | S2- Q8a: Noting down ideas on the spot i.e. immediately after reading them | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3 - Q13 pausing (making a pause or stop) briefly after each: | a- phrase | 99<br>62,3% | 60<br>37,7% | 159<br>100,0% |
| | b- every word | 68<br>66,0% | 35<br>34,0% | 103<br>100,0% |
| Total | | 167<br>63,7% | 95<br>36,3% | 262<br>100,0% |

As shown in this table, more than half of students (167, i.e., 63,7 %) portrayed that they note down ideas on the spot (i.e. immediately after reading them) especially those who pause after each word while reading (68, i.e., 66.0%) in comparison to those who do not note down ideas on the spot (95, i.e., 36.3%) with almost the same percentage with those who pause after each phrase as they read (60, i.e., 37.7%). Consequently, we may note that students who pause after each word tend to note what they want immediately after reading it and they compose the majority from the population. This makes their reading fragmentary, their speed very slow and it would delay their understanding of the general text's meaning. But informants who pause after each phrase tend to put down their notes once they finish reading the whole sentence though they make the minority.

To sum it up, we would say that reading speed is a problem encountered by most of our students. At this stage reading speed, or reading fluency is hardly achievable since more steps and skills are rather fundamental to ameliorate reading comprehension. Reading fluency means that students meet no problems at the level of word-recognition. Though this latter is important, it seems not sufficient. Students need more practice to read with accuracy, ease and more importantly understanding and therefore take notes more efficiently.

**Table 25: Sample SPSS output reporting Chi-Square statistics for Noting down ideas on the spot and pausing after each phrase or every word.**

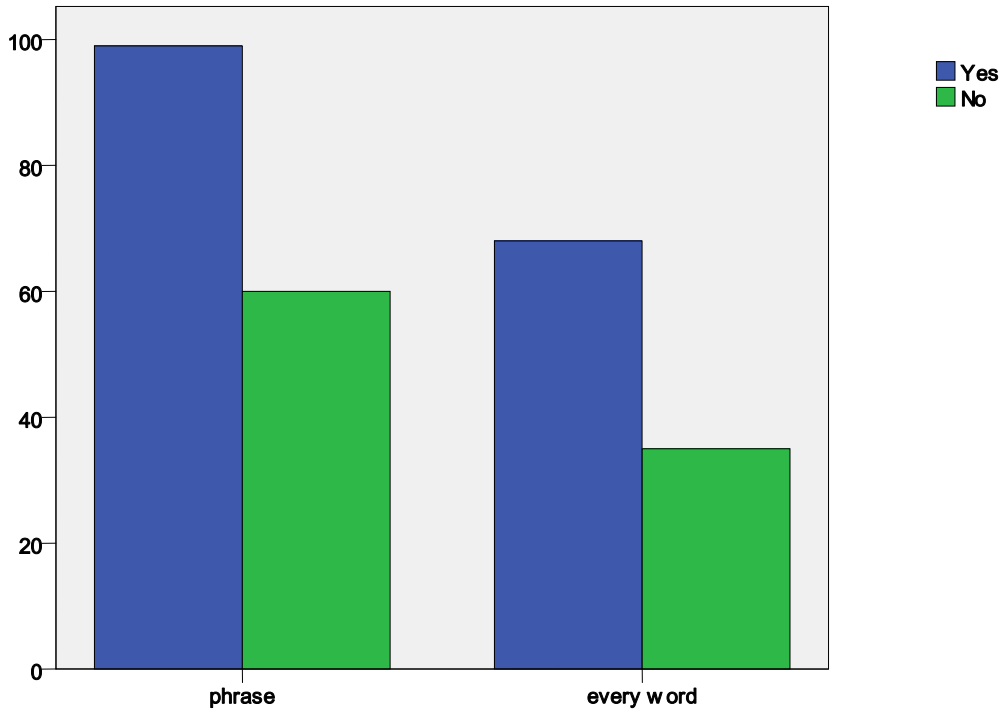
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,381[a] | 1 | ,537 | | |
| Continuity Correction | ,236 | 1 | ,627 | | |
| Likelihood Ratio | ,383 | 1 | ,536 | | |
| Fisher's Exact Test | | | | ,599 | ,314 |
| Linear-by- linear association | ,380 | 1 | ,538 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 37,35

The table reveals quite interesting results concerning noting down ideas on the spot and pausing after each phrase or every word. As we can see, the Pearson Chi-square value is ,381[a] which is well above the required mean value with a degree of freedom that equals (01) at a level of significance of ,537. The obtained Pearson Chi-square value shows that there is a satistical significance differences between students answers on both questions (S2- Q8a and S3- Q13) which means that our informants suffer from word- by- word reading and note taking the thing that may be caused by lack of comprehension, having problems in word recognition, not having enough vocabulary to understand the writer's intended meanings, or suffering from shortages in memory through the problem of forgetting. The following diagram illustrates the results.

**Figure 25: for Noting down ideas on the spot and pausing after each phrase or every word.**



**Crosstabulation 23: Leaving what is intended to be written down until finishing reading the paragraph being read and pausing after each word or phrase.**

| | | S2 - Q8b: Leaving what is intended to be written down until finishing reading the paragraph being read then relying on memory to take them down | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3- Q13 pausing (making a pause or stop) briefly after each: | a- phrase | 60<br>37,7% | 99<br>62,3% | 159<br>100,0% |
| | b- every word | 35<br>34,0% | 68<br>66,0% | 103<br>100,0% |
| Total | | 95<br>36,3% | 167<br>63,7% | 262<br>100,0% |

This table is an extension to the previous one. It tends to explore students answers concerning leaving what is intended to be written down until finishing reading the paragraph being read then relying on memory to take them down and pausing (making a pause or stop) briefly after each word or each phrase. As it could be observed from this table, most students (167) who represent (63.7%) do not leave what they want to note down until they finish reading the paragraph being read especially those who pause after each word (68, i.e., 66.0%). Nevertheless, 95 students (i.e., 36.3%) leave what they intended to note down until they finish reading then they rely on their memory to take them down especially those who pause after each phrase (60, i.e., 37.7%). We come to the same conclusion with the previous table which is that students who read and pause after each phrase tend to take notes after finishing and reaching the complete meaning of the sentence or the paragraph but students who pause after each word tend to take notes immediately after reading them.

**Table 26: Sample SPSS output reporting Chi-Square statistics for leaving what is intended to be written down until finishing reading the paragraph being read and pausing after each word or phrase**.

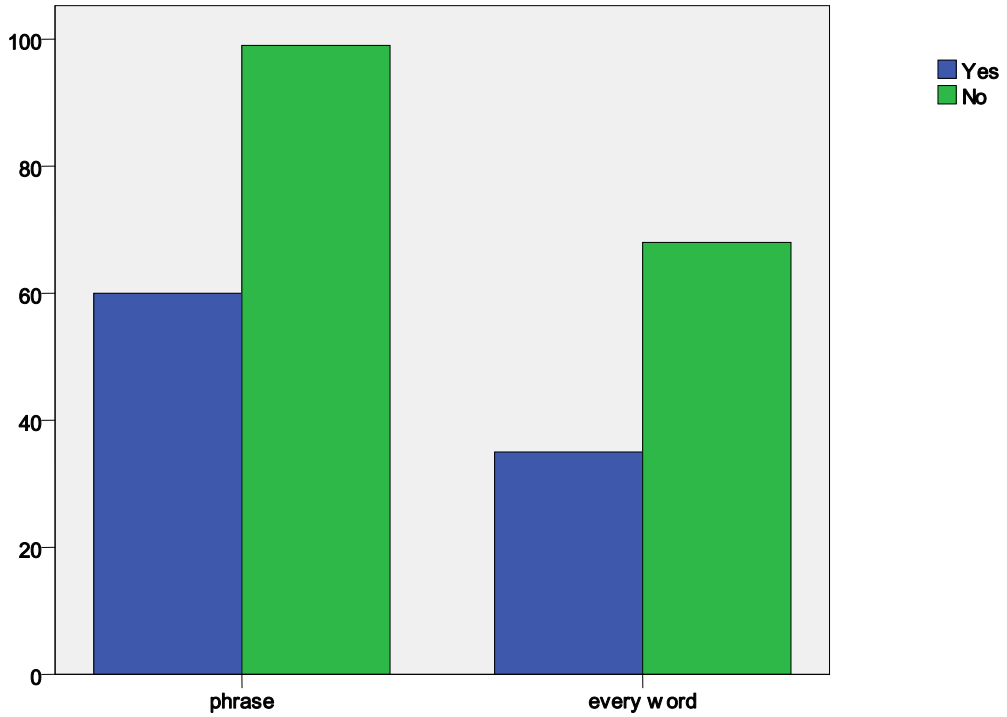
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,381[a] | 1 | ,537 | | |
| Continuity Correction | ,236 | 1 | ,627 | | |
| Likelihood Ratio | ,383 | 1 | ,536 | | |
| Fisher's Exact Test | | | | ,599 | ,314 |
| Linear-by- linear association | ,380 | 1 | ,538 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 37,35

Like the previous Chi- Square test's table, this one indicates its value as equal to,381[a] with a level of freedom (01) at a level of asymptotic significance of ,537. It proves again that it is well above the mean value which means that there is a statistical significant difference between leaving what is intended to be written down until finishing reading the paragraph being read and pausing after each word or phrase. In other words, there seems to be a relation between those who pause after each word or phrase and the moment in which students start putting notes on paper. In all, the results obtained indicate that reading and note taking speeds in English actually cause a hurdle for those students especially if we know that the majority of them are slow readers who pause after each word and write down their notes on the spot. Hence, motivation and more practice of reading would help in reducing some of this hardship. It would help learners too to read fluently and take notes efficiently.

**Figure 26: for leaving what is intended to be written down until finishing reading the paragraph being read and pausing after each word or phrase.**




**Crosstabulation 24: using <u>every word</u> being read (the writer's words) from a reading material and pausing after each phrase or word.**

| | | S4- Q19a: using every word being read (the writer's words) from a reading material | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3 - Q 13 pausing (making a pause or stop) briefly after each: | a- phrase | 125<br>78,6% | 34<br>21,4% | 159<br>100,0% |
| | b- every word | 86<br>83,5% | 17<br>16,5% | 103<br>100,0% |
| Total | | 211<br>80,5% | 51<br>19,5% | 262<br>100,0% |

According to our respondents' answers to this question, 211 of them (80,5 %) use every word being read (the writer's words) from the reading material especially those who pause

after each word or read a lot of separate words. However, few students (51, i.e., 19.5%) who do not use every word from the reading material pause after each phrase (34 that is, 21.4%). Here, one might say that though this is very important to denote that our respondents really lack the ability to read in chunks, i.e. reading whole phrases altogether and not word by word. This is an indication that acquiring language is not just understanding a set of vocabulary items or focusing on separate words while reading or taking notes. Fluent rapid reading and note taking need students to be flexible enough in performing these tasks (i.e., adjusting the speed at which they read and take notes according to the reading text and the their needs and not reading the whole text with a constant speed that never change whatever the reading material or the reading purpose is). It is wrong to read words by word and exhibit this in note taking as they would affect the general understanding of learner's to their reading text.

**Table 27: Sample SPSS output reporting Chi-Square statistics for using <u>every word</u> being read (the writer's words) from a reading material and pausing after each phrase or word.**

The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,949[a] | 1 | ,330 | | |
| Continuity Correction | ,663 | 1 | ,415 | | |
| Likelihood Ratio | ,964 | 1 | ,326 | | |
| Fisher's Exact Test | | | | ,344 | ,208 |
| Linear-by- linear association | ,945 | 1 | ,331 | | |
| Number of valid cases | 262 | | | | |

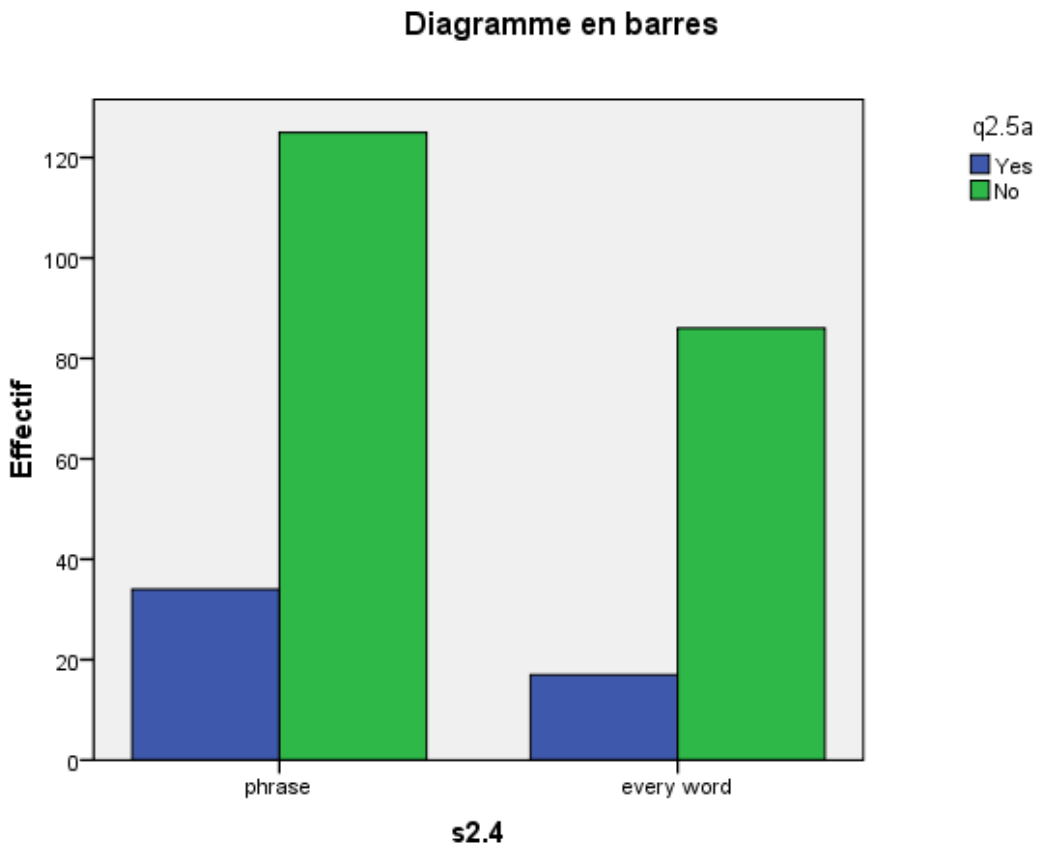
a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20,05

The value of Chi-square provides a measure of the overall difference between the observed frequencies and the expected frequencies. The greater the overall difference, the larger the value of Chi-square and the more confident we can be that there is a real association between these two variables in the population.

A closer examination of the individual cells in the previous crosstabulation table will provide us with more detailed information on these results. The output from this double-variate analysis is shown in this table concerning the Chi-square test. If we look at the Chi-

square results, we can see that there is a significant association between using every word being read (the writer's words) from a reading material and pausing after each phrase or word (Chi-square ,949[a] significance level ,330). To put it another way, there is statistical significance between using every word being read (the writer's words) from a reading material and pausing after each phrase or word.

**Figure 27: for using every word being read (the writer's words) from a reading material and pausing after each phrase or word.**



**Crosstabulation 25: for trying to sum up and select the main ideas relying on one's own words and pausing after each word or phrase.**

| | | S4 - Q19b: trying to sum up and select the main ideas relying on one's own words | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3 - Q13: pausing (making a pause or stop) briefly after each: | a- phrase | 84<br>81,6% | 19<br>18,4% | 103<br>100,0% |
| | b- every word | 126<br>79,2% | 33<br>20,8% | 159<br>100,0% |
| Total | | 210<br>80,2% | 52<br>19,8% | 262<br>100,0% |

The intent behind this question is to find out what learners do when they take notes and which way they take while reading. Question S4- Q19b is the opposite of S4- Q19a discussed in the previous table. It is also to explain and confirm the former question. Among 210 (i.e., 80.2%) students who said that they try to sum up and select the main ideas relying on their own words, 84 (81.6%) of them replied that they pause after each phrase. However, only 19.8% do not try to sum up the text while taking notes especially those who pause after each word having the percentage of 20.8%. It can be said that learners need to be provided with what is necessary to overcome word by word reading and note taking to enhance their speed and become more fluent and efficient in performing both activities whenever needed trying to take into accounts meeting general / specific, easy / difficult principles of reading materials.

**Table 28: Sample SPSS output reporting Chi-Square statistics for trying to sum up and select the main ideas relying on one's own words and pausing after each word or phrase**

The Chi- Square test

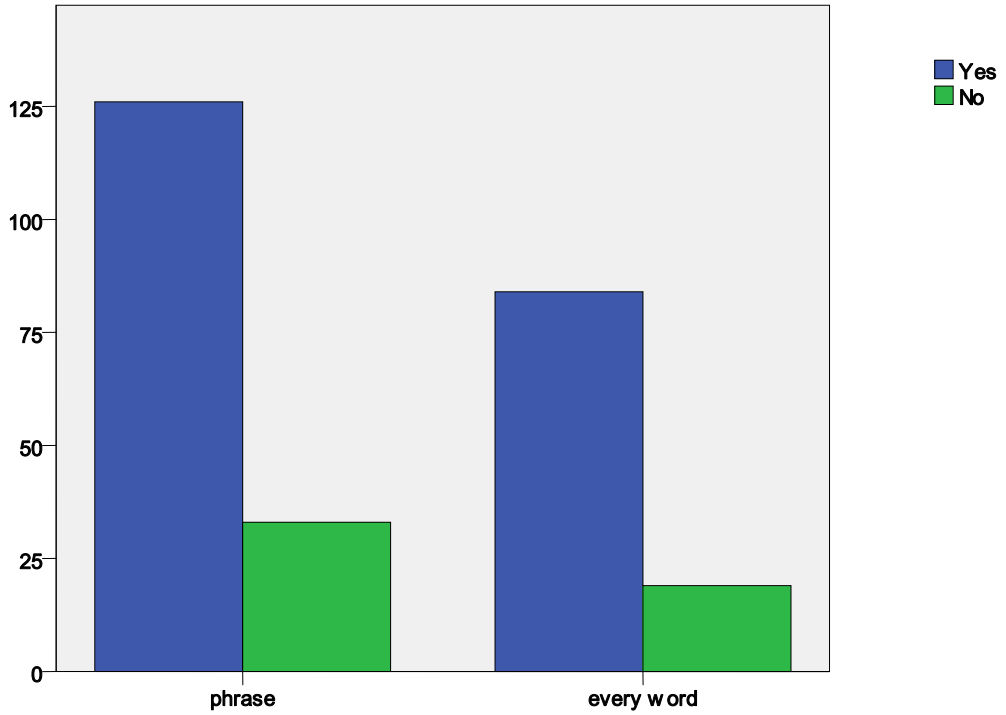
| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,209[a] | 1 | ,647 | | |
| Continuity Correction | ,089 | 1 | ,765 | | |
| Likelihood Ratio | ,211 | 1 | ,646 | | |
| Fisher's Exact Test | | | | ,752 | ,385 |
| Linear-by- linear association | ,209 262 | 1 | ,648 | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20,44

A closer examination of the individual cells in the previous crosstabulation table will provide us with more detailed information on these results. We will begin with the Chi-square table for making sure of the significance of our results. The Chi-square value is ¼ (i.e. ,209) at a significance level of .647 with a degree of freedom (01). Since the Chi-square value is above the required mean value, we can see that students have similar opinions on trying to sum up main ideas while note taking and pausing after each phrase while reading. Hence, the Chi-square value identifies a significant association between trying to sum up and selects the main ideas relying on one's own words and pausing after each phrase. In other words, students who tend to focus on noting down main ideas and seeking to summarise the ideas being read tend to pause after each phrase. This shows that this category of students is not word by word readers and note takers. Whereas over 79.2 per cent of students felt that

They pause after each word and they don't sum up the ideas they read for noting down just the gist of the text.

**Figure 28: for trying to sum up and select the main ideas relying on one's own words and pausing after each word or phrase**



**Crosstabulation 26: the extent of making use of abbreviations and the different symbols and thinking that doubling one's reading speed will lead to better academic performance and success.**

| | | S4- Q15: the extent of making use of abbreviations and the different symbols and signs | | | | Total |
|---|---|---|---|---|---|---|
| | | Always | Sometimes | Regularly | Rarely | |
| Q14 -S3 thinking that doubling one's reading speed will lead to better academic performance and success | Yes | 29<br>31,5% | 84<br>49,4% | 10<br>10,9% | 16<br>9,4% | 170<br>100,0% |
| | No | 52<br>30,6% | 44<br>47,8% | 18<br>10,6% | 9<br>9,8% | 92<br>100,0% |
| Total | | 81<br>30,9% | 128<br>48,9% | 28<br>10,7% | 25<br>9,5% | 262<br>100,0% |

Questions in this table contribute directly to the heart of our research aim in that it deals with the extent of making use of abbreviations and the different symbols and signs and thinking that doubling one's reading speed will lead to better academic performance and success. This table highlights students' beliefs and opinions about the extent of using abbreviations while taking notes and whether they think that doubling their reading speed will lead to better academic performance and success. We could observe that most informants 48.9% sometimes use abbreviations and symbols as a form of shortening words and sentences especially those who think that doubling the speed at which they read will enhance the learning process. However, only 30.9 per cent of respondents said that they always abbreviate while taking notes and they held the belief that doubling reading speed will ensure better success. Turning to the opposite end of the attitude scale we can see that over 10 per cent of informants stated that regularly used symbols and abbreviations for words and sentences while note taking with approximately the same percentage of respondents who said that doubling reading speed will lead to better academic performance (10.9%). In contrast to this, only 9.5 per cent of students rarely abbreviate while note taking and they are those who do not confess of the importance of doubling reading speed while reading (9.8%). Though, most

students (49,4%) recognise the necessity of doubling reading speed to lead to better academic performance and success and sometimes use abbreviations in their notes (48.9%), a minority of 9 students expressed that doubling reading speed is not so vital for their graduation and so they do not need it.

The results obtained are quite interesting, because the awareness of students about the status and the significance of doubling reading speed and using abbreviations and symbols while note taking is necessary as it makes the platform for applying reading and note taking speeds training programme on these students.

**Table 29: Sample SPSS output reporting Chi-Square statistics for the extent of making use of abbreviations and the different symbols and thinking that doubling one's reading speed will lead to better academic performance and success.**

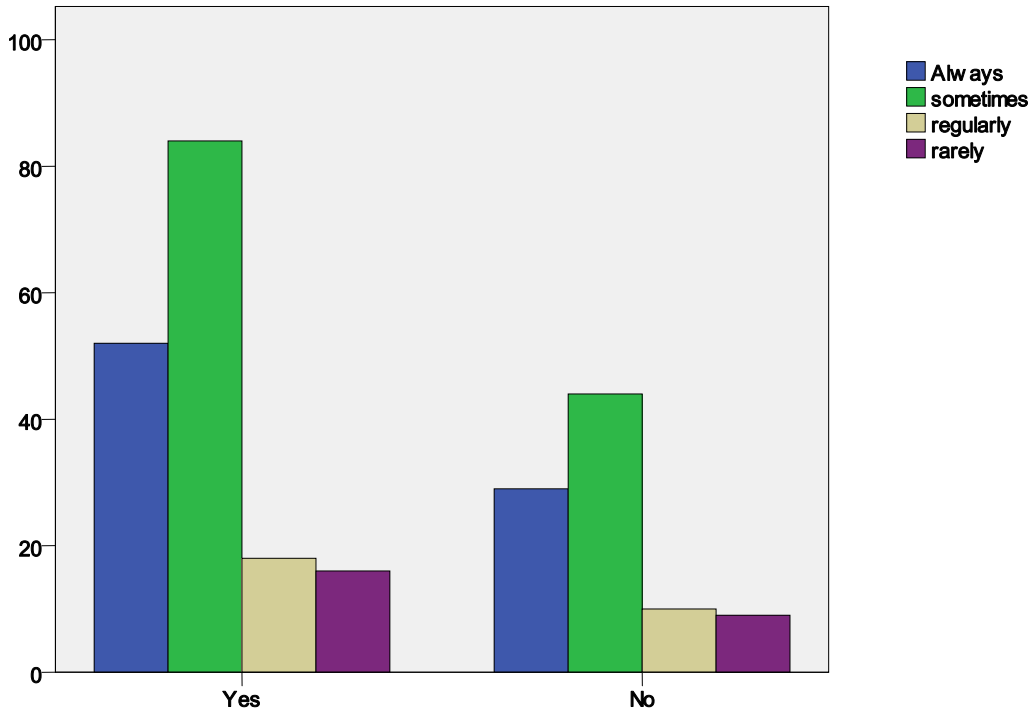
The Chi- Square test

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | ,061[a] | 1 | ,996 |
| Likelihood Ratio | ,061 | 1 | ,996 |
| Linear-by- linear association | ,000 | 1 | ,994 |
| Number of valid cases | 262 | | |

c. Calculated only for tables of 2×2.
d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8,78.

As the Chi-square results for the two questions are significant at the level of (,061), we would not expect to find statistical difference between students' answers on both questions. Indeed if we look at the column percentages we can see that there is no difference in the attitudes and answers of respondents towards the extent of making use of abbreviations and the different symbols and thinking that doubling one's reading speed will lead to better academic performance and success. Finally, Figure 28 provides information on the relationship between the two statements. We can see from the table that the degree of freedom is (01) at a level of significance that equals (,996) indicating that the results are significant.

**Figure 29: for the extent of making use of abbreviations and the different symbols and thinking that doubling one's reading speed will lead to better academic performance and success.**



**Crosstabulation 27: for analysing the ideas have been read while taking notes and the followed way in reading.**

| | | S2- Q6: analysing the ideas have been read while taking notes | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3 - Q15 the followed way in reading these two sentences: The first or the second | a- The good/ old man/ raised his hand/ in blessing. | 197<br>84,2% | 37<br>15,8% | 234<br>100,0% |
| | b- The good/ old man/ raised his/ hand in/ blessing | 26<br>92,9% | 2<br>7,1% | 28<br>100,0% |
| Total | | 223<br>85,1% | 39<br>14,9% | 262<br>100,0% |

Students' answers in Table 27 reveal that 223 of them (85,1 %) analyse the ideas have been read while taking notes especially those who take the second way while reading (i.e., read word by word 92.9%).39 students (14,9 %) do not analyse the ideas they want to take down while reading and they make the minority especially those who follow the first way of reading (i.e. reading group of words 37 students represent 15.8%).

In conclusion, these results show that most of our students read word by word and once it comes to taking notes, they spend more time focusing on the analysis of the ideas they want to put down. This demonstrates their reliance and dependence on the word's level and can't get rid of it. And this, in turn is a kind of impediment to their reading and note taking speeds which they are not aware of. So teachers should show this.

**Table 30: Sample SPSS output reporting Chi-Square statistics for analysing the ideas have been read while taking notes and the followed way in reading.**

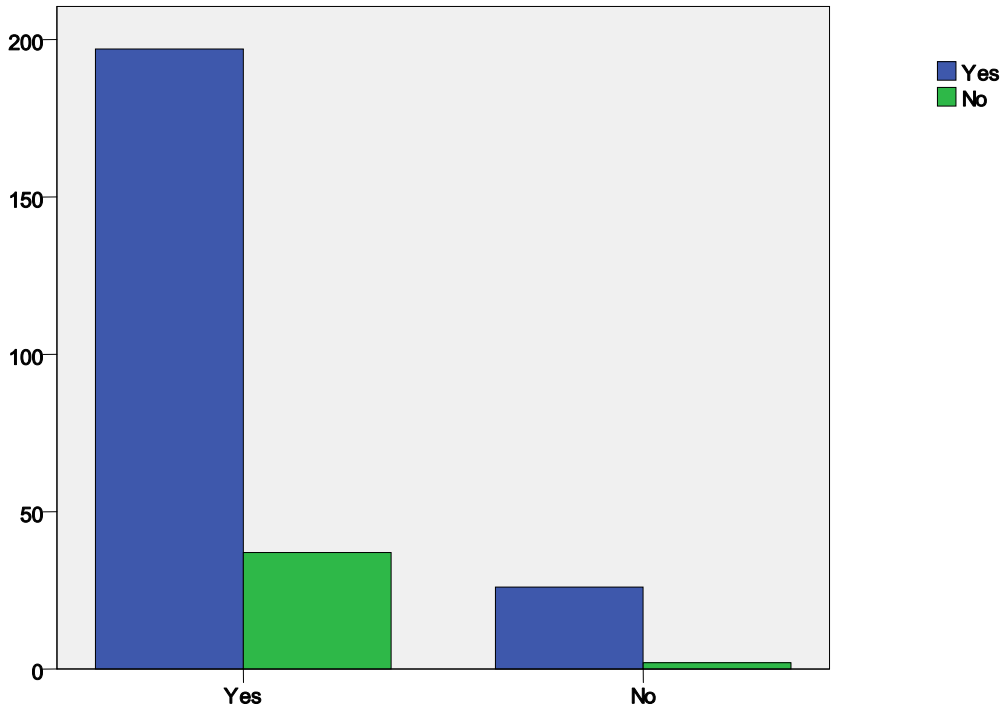
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 1,483[a] | 1 | ,223 | | |
| Continuity Correction | ,878 | 1 | ,349 | | |
| Likelihood Ratio | 1,746 | 1 | ,186 | | |
| Fisher's Exact Test | | | | ,396 | ,176 |
| Linear-by- linear association | 1,478 | 1 | ,224 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 4,17

The Chi-square statistic is 1.483 with a significance level of .223 (remember that we read .000 as .0005). However, if we look at the Chi-square value, we notice that it is well above the required mean value. Thus, the Chi-square results for respondents with regard to whether they analyse the ideas have been read while taking notes and the followed way in reading, we can see that there is no significant difference between students' answers in favour of the majority who (85, 1 %) analyse the ideas have been read while taking notes especially those who take the second way while reading (i.e., read word by word 92.9%). we in can see that students have very different opinions on these two questions. This indicates once again the informants' weaknesses in skipping their stickiness to the word's level reading and note taking, the matter that turned them to be slow readers and note takers and may affect their learning outcomes. Finally, the bottom section of Figure 29 illustrates the relation between these two variables.

**Figure 30: for analysing the ideas have been read while taking notes and the followed way in reading.**




**Crosstabulation 28: for analysing the ideas have been read while taking notes and reading a lot of separate words i.e. word by word**

| | | S2- Q6 analysing the ideas have been read while taking notes | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3- Q 14 reading a lot of separate words i.e. word by word | Yes | 69<br>87,3% | 10<br>12,7% | 79<br>100,0% |
| | No | 154<br>84,2% | 29<br>15,8% | 183<br>100,0% |
| Total | | 223<br>85,1% | 39<br>14,9% | 262<br>100,0% |

This table rather focuses on one just way of reading that is followed by the majority of students (87.3%) who read a lot of separate words while reading especially those who analyse the ideas they want to take down (85.1%). Informants who do not analyse the ideas have been read, on the other hand, make only 14.9% in comparison to those who do not read a lot of

separate words who represent 15.8%. in fact, this confirms the previous results obtained in crosstabulation 27 and lead us to the same conclusions.

**Table 31: Sample SPSS output reporting Chi-Square statistics for analysing the ideas have been read while taking notes and reading a lot of separate words i.e. word by word**

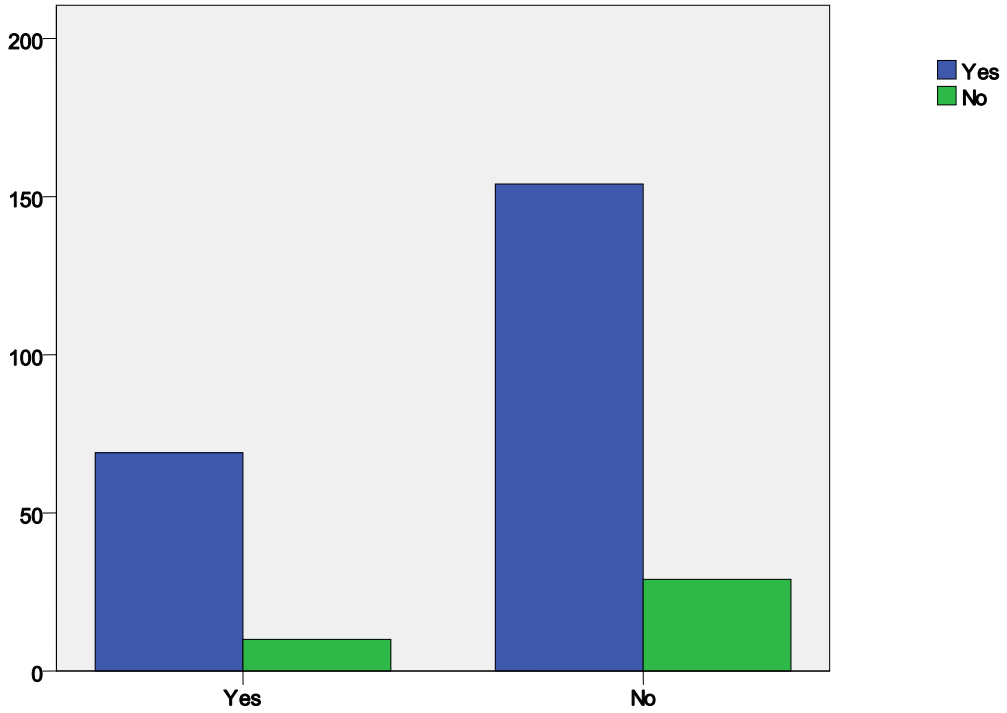
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,443[a] | 1 | ,506 | | |
| Continuity Correction | ,227 | 1 | ,634 | | |
| Likelihood Ratio | ,454 | 1 | ,500 | | |
| Fisher's Exact Test | | | | ,574 | ,322 |
| Linear-by- linear association | ,441 | 1 | ,507 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11,76

The Chi- Square table 30 illustrates again that the majority of our respondents follow one way of reading which is the word based level and this is manifested once more while note taking, in that students tend to stop thinking and analyzing the ideas if not the words being read. Hence, this table shows that the Pearson Chi-square value is (,443) with a degree of freedom that equals (01) at a level of asymptotic significance (,506). It appears from this that since this value is well above the required mean value, there are no significant statistical difference between students' answers on analysing the ideas have been read while taking notes and reading a lot of separate words (i.e. word by word) in favour of the majority (87.3%) who responded that they read a lot of separate words while reading especially those who analyse the ideas they want to take down (85.1%).

**Figure 31: for analysing the ideas have been read while taking notes and reading a lot of separate words i.e. word by word.**



**Crosstabulation 29: for noting down ideas on the spot and the followed way in reading**

| | | Q8a -S2 Noting down ideas on the spot i.e. immediately after reading them | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3 - Q15 the followed way in reading these two sentences: The first or the second | a- The good/ old man/ raised his/ hand in/ blessing | 152<br>65,0% | 82<br>35,0% | 234<br>100,0% |
| | b- The good/ old man/ raised his hand/ in blessing. | 15<br>53,6% | 13<br>46,4% | 28<br>100,0% |
| Total | | 167<br>63,7% | 95<br>36,3% | 262<br>100,0% |

In this crosstabulation table 29, the most students (167 represent 63.7%) replied that they note down ideas on the spot i.e., immediately after reading them with a slight big difference for those who represent (65.0%) and who take the first way of reading which is reading word by word. Students who do not note down ideas immediately after reading them represent 36.3% especially those who follow the second way of reading (pausing after each phrase). These students make up 46.4% and they are chunk readers. These findings illustrate that the majority of informants who note down ideas on the spot and who read word by word may have memory problems. That is they may be afraid from forgetting what they want to note down after spending some time until finishing the whole idea and getting the gist of the paragraph.

**Table 32: Sample SPSS output reporting Chi-Square statistics for noting down ideas on the spot and the followed way in reading**

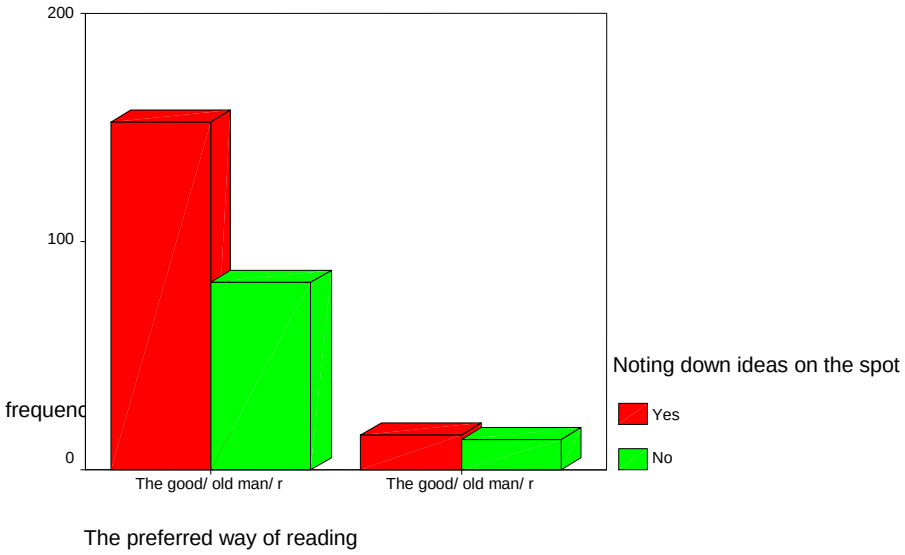
**The Chi- Square test**

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 1,403[a] | 1 | ,236 | | |
| ContinuityCorrection | ,953 | 1 | ,329 | | |
| Likelihood Ratio | 1,364 | 1 | ,243 | | |
| Fisher's Exact Test | | | | ,298 | ,164 |
| Linear-by- linear association | 1,397 | 1 | ,237 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10,15

It is important to point out that the Pearson Chi-square value is 1.403 with a degree of freedom that equals (01) at a level of asymptotic significance (,236). Hence, we can assume that the Chi- Square value provides a measure of the overall difference between students' answers on whether they note down ideas on the spot i.e., immediately after reading them and those who take the first way of reading which is reading word by word in favour of the majority who take notes on the spot (63.7%) especially those who read word by word who represent (65.0%). Therefore, we can see that there is no significant association between the time at which students stop reading and start taking notes and their way of reading (reading in words or in chunks).

**Figure 32: for noting down ideas on the spot and the followed way in reading**




**Crosstabulation 30: stopping from time to time while taking notes thinking of what might be written and how to express understanding and training the eyes to move very quickly through a reading material.**

| | | S4- Q18: stopping from time to time while taking notes thinking of what might be written and how to express understanding | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S3- Q17: training the eyes to move very quickly through a reading material by skipping over words or whole lines | Yes | 190<br>93,1% | 14<br>6,9% | 204<br>100,0% |
| | No | 56<br>96,6% | 2<br>3,4% | 58<br>100,0% |
| Total | | 246<br>93,9% | 16<br>6,1% | 262<br>100,0% |

As it is predicted, the majority of students (246 that is 93,9 %) answered that they stop from time to time while taking notes thinking of what might be written and how to express their understanding especially those who do not train their eyes to move very quickly through the reading material by skipping over words or whole lines. They make up 96.6% from the population. However, only 16 students (that is 6.1%) do not stop from time to time while

taking notes thinking of what might be written and how to express their understanding especially those (14) who train their eyes to move very quickly through a reading material by skipping over words or whole lines (6.9%). The results obtained imply that our students truly face difficulties at the level of vocabulary while taking notes and therefore they stop from time to time thinking of how to express their understanding especially those who didn't experience any training on how to make their eyes move very quickly through the reading material by skipping over words or whole lines. And this in turn could mean that teachers do not make things explicit for students on how to be effective fluent readers and note takers at the same time. Thus we could say that students should have enough practice of reading and note taking speeds with a conscious knowledge and use.

**Table 33: Sample SPSS output reporting Chi-Square statistics for stopping from time to time while taking notes thinking of what might be written and how to express understanding and eye movement.**

The Chi- Square test

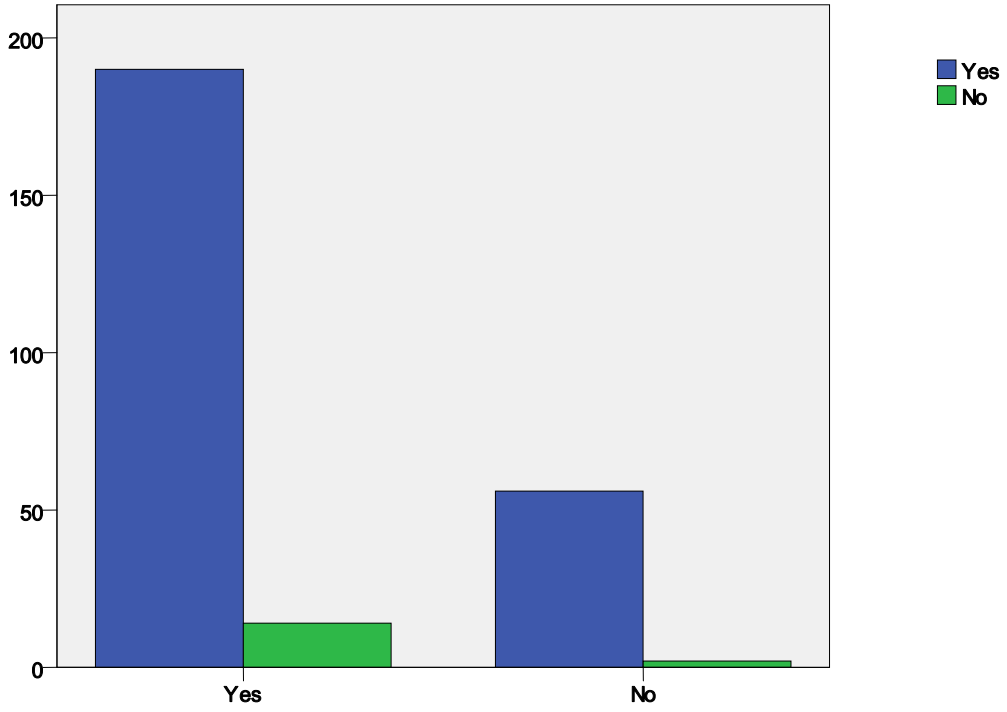
| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,918[a] | 1 | ,338 | | |
| Continuity Correction | ,419 | 1 | ,517 | | |
| Likelihood Ratio | 1,037 | 1 | ,309 | | |
| Fisher's Exact Test | | | | ,535 | ,270 |
| Linear-by- linear association | ,915 | 1 | ,339 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 1 cell (25%) has expected count less than 5. The minimum expected count is 3,54

This table demonstrates the Pearson Chi-square value of students' answers. It is estimated to equal ,918 with a degree of freedom (01) at a level of asymptotic significance of ,338. These statistical findings show the Chi- Square value to be well above the required mean value which indicates significant statistical difference between students' answers which vary greatly concerning stopping from time to time while taking notes thinking of what might be written and how to express understanding and training the eyes to move very quickly through a reading material by skipping over words or whole lines. As it is clear from the previous

crosstabulation table 30, the majority of students experience vocabulary difficulties which may delay their understanding to the reading material and may take much from their time to put their understanding onto paper especially for informants who has never experienced and been trained on how to move their eyes quickly by means of skimming to get only what they are in need of.

**Figure 33: bar diagram for stopping from time to time while taking notes thinking of what might be written and how to express understanding and training the eyes to move very quickly through a reading material**.



**Crosstabulation 31: for the way students express their notes and the preferred way of reading:**

| | | S3 - Q10 expressing notes: a- Verbally i.e., in words | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S4-Q20 : the preferred way of reading: | a- silently: | 70<br>72,9% | 26<br>27,1% | 96<br>100,0% |
| | b. loudly | 127<br>76,5% | 39<br>23,5% | 166<br>100,0% |
| Total | | 197<br>75,2% | 65<br>24,8% | 262<br>100,0% |

The type of questions that this table contain help in giving us an idea about the type of notes students may use and their preferred way of reading. According to our respondents' answers to these questions, 197 of them (75,2 %) said that they express their notes verbally in words especially those who like to read loudly (76.5%). That is, the majority of them aim to write down their notes in words and not in diagrams, maps, charts, etc especially for those who read loudly. This implies that this category of students tend to invest their time and efforts reading aloud and this would take more time than reading in a silent way and when they start taking notes they express them in words the thing that needs time and efforts to be done. Actually, this may be due to some reasons like aiming at practicing intonation, rhythm or stress through reading aloud and it needs much efforts and energy from the part of the students to write down complete words and sentences rather than abbreviating them. This makes our students slow readers and note takers.

**Table 34: Sample SPSS output reporting Chi-Square statistics for the way students express their notes and the preferred way of reading:**

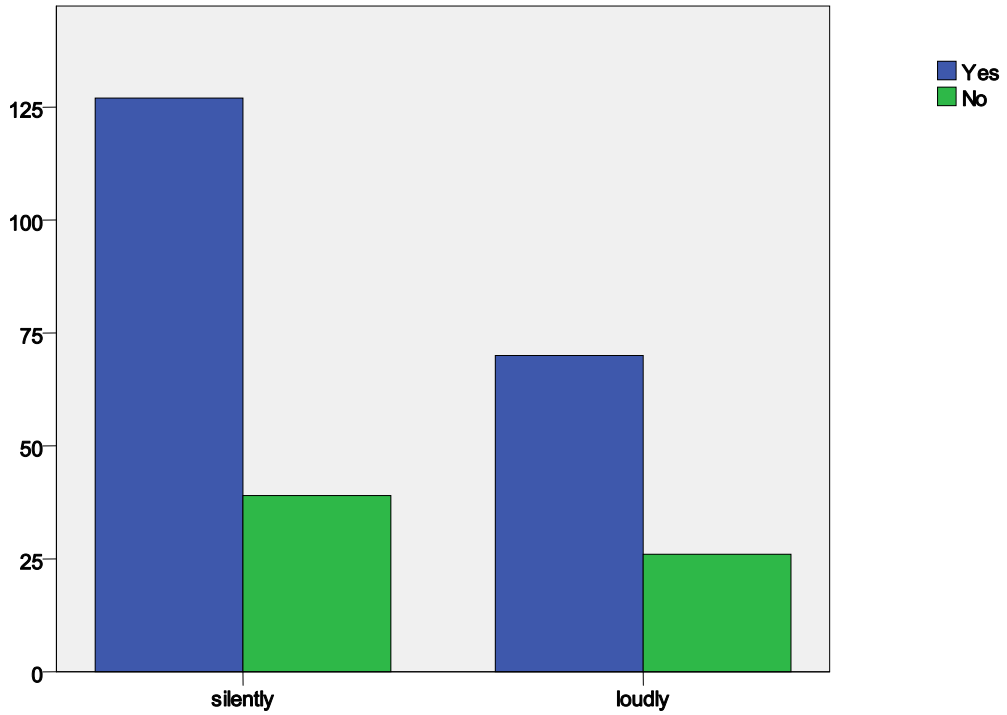
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,420[a] | 1 | ,517 | | |
| Continuity Correction | ,250 | 1 | ,617 | | |
| Likelihood Ratio | ,417 | 1 | ,519 | | |
| Fisher's Exact Test | | | | ,554 | ,307 |
| Linear-by- linear association | ,418 | 1 | ,518 | | |

c. Calculated only for tables of 2×2.
d. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23,82

This table demonstrates the Pearson Chi-square value of students' answers. It is estimated to equal ,420 with a degree of freedom (01) at a level of asymptotic significance of ,517. These statistical findings show the Chi- Square value to be well above the required mean value which indicates no significant statistical difference between students' answers which vary greatly concerning the way students express their notes and the preferred way of reading**.** As it is clear from the previous crosstabulation table 31, the majority of students aim to write down their notes in words and not in diagrams, maps, charts, etc especially for those who read loudly. This implies that this category of students tend to invest their time and efforts reading aloud and this would take more time than reading in a silent way and when they start taking notes they express them in words the thing that needs time and efforts to be done.

**Figure 34: for the way students express their notes and the preferred way of reading:**




**Crosstabulation 32: for how students express their notes and their preferred way of reading.**

| | | S3- Q10b : Non verbally (e.g. preparing tables, diagrams, maps, models) | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| Q 20 -S4: the preferred way of reading: | a- silently | 26<br>27,1% | 127<br>76,5% | 166<br>100,0% |
| | b- loudly | 39<br>23,5% | 70<br>72,9% | 96<br>100,0% |
| Total | | 65<br>24,8% | 197<br>75,2% | 262<br>100,0% |

As an attempt to see whether our informants express their notes non verbally through diagrams, charts, tables, etc in relation to the preferred way of reading, this crosstabulation table shows that the majority of respondents (197 represent 75.2%) do not use the different

forms that their notes may take especially those (127 represent 76.5%) who follow the silent way in their readings. That is students who read silently do not express their notes non-verbally. This implies that our informants are not aware of the different forms of note taking. Hence, it is the job of the teacher to make these students know how to practice the

**Table 35: Sample SPSS output reporting Chi-Square statistics for how students express their notes and their preferred way of reading.**

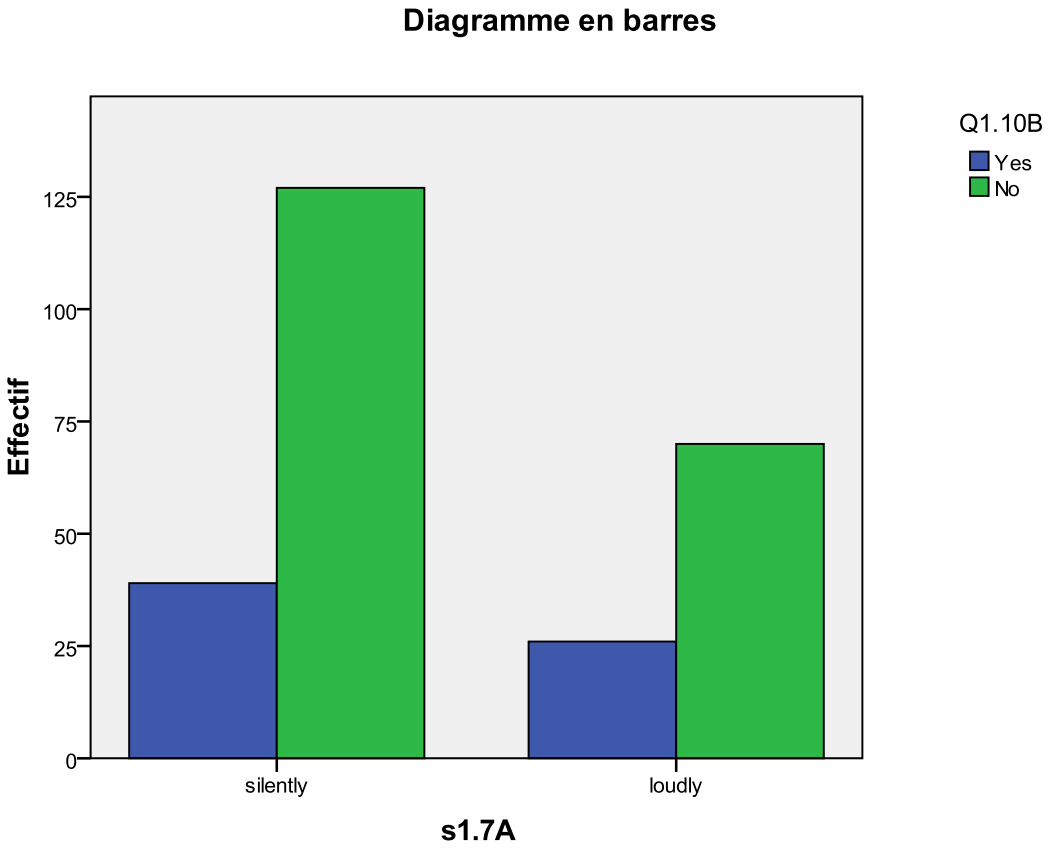
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,420[a] | | ,517 | | |
| Continuity Correction | ,250 | | ,617 | | |
| Likelihood Ratio | ,417 | | ,519 | | |
| Fisher's Exact Test | | | | ,554 | ,307 |
| Linear-by- linear association | ,418 | | ,518 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 23.82

This table demonstrates the Pearson Chi-square value of students' answers. It is estimated to equal ,420 with a degree of freedom (01) at a level of asymptotic significance of ,517. These statistical findings show the Chi- Square value to be well above the required mean value which indicates significant statistical difference between students' answers which vary greatly concerning the way students express their notes and the preferred way of reading**.** As it is clear from the previous crosstabulation table 31, the majority of students aim to write down their notes in diagrams, maps, charts, etc especially for those who read silently. This implies that this category of students tend to invest their time and efforts reading and expressing their notes in diagrams, maps, charts, etc., the thing that will save time and efforts.

**Figure 35: bar diagram for how students express their notes and their preferred way of reading.**



**Crosstabulation 33: for the way of students' express their notes and the extent to which they read loudly.**

| | | S3 - Q10a The way of expressing notes: a- Verbally i.e., in words | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S4- Q20b The extent of reading loudly | Always | 6<br>85.0% | 16<br>34.0% | 22<br>100,0% |
| | Sometimes | 28<br>75.7% | 9<br>24.3% | 37<br>100,0% |
| | Regularly | 5<br>100.0% | 0<br>.0% | 5<br>100,0% |
| | Rarely | 31<br>66.0% | 1<br>14.3% | 32<br>100,0% |
| Total | | 70<br>72,9% | 26<br>27,1% | 96<br>100,0% |

Among our 262 research participants, 70 of them i.e.72.9 % said that they like to express their notes verbally in words especially those who regularly read aloud, while 6 of them who represent 85.0 % answered that they always read aloud. However 28 students replied that they sometimes read loudly and finally 31 students who represent 66.0% rarely read loudly in comparison only 26 students (27.1%) who represent the minority said that they do not express verbally their notes especially those who do not always read aloud. The rest of students who are very few gave negative answers. Thus the results shown in this table and graph confirm that the great majority of our informants do really spend much time reading since they regularly read loudly and like to express their notes verbally in words and this in fact is something that may push them to be slow readers.

**Table 36: Sample SPSS output reporting Chi-Square statistics for the way of students' express their notes and the extent to which they read loudly.**

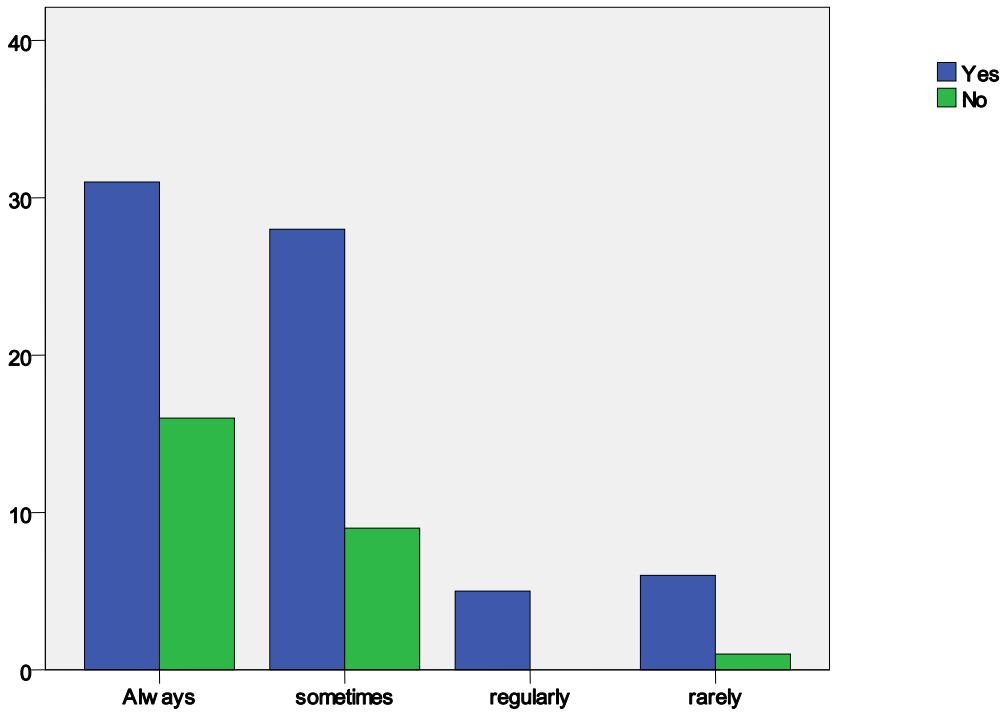
The Chi- Square test

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 3,733[a] | 3 | ,292 |
| Likelihood Ratio | 5,065 | 3 | ,167 |
| Linear-by- linear association | 2,872 | 1 | ,090 |
| Number of valid cases | 96 | | |

e. Calculated only for tables of 2×2.
f. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1,35.

This table shows the Chi- Square test's results in which the Pearson Chi- Square value equals 3.733 with a degree of freedom of (03) at a level of asymptotic significance ,292. It appears from this that the Chi- Square value is well above the mean value and it indicates no significant statistical differences between students' answers on the way they express their notes and the extent to which they read loudly in favour of the majority of respondents who put their notes on words (72.9%) and regularly read aloud (100%). Consequently, we can deduce that the whole population read aloud which is something that proves our students' handicap in reading rapidly. Actaully this reality appears clearly when they express their notes verbally in words in which they are forced to write complete words and sentences and not using abbreviations and symbols.

**Figure 36: bar diagram for the way of students' express their notes and the extent to which they read loudly.**



**Crosstabulation 34: for the non- verbal way of expressing notes and the extent to which they read loudly.**

| | | S3- Q10b: Non verbally (e.g. preparing tables, diagrams, maps, models) | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| S4- Q20b: the extent of reading loudly | Always | 1<br>14.3 | 6<br>85.7 | 7<br>100,0% |
| | sometimes | 9<br>24.3 | 28<br>75.7 | 37<br>100,0% |
| | regularly | 0<br>.0 | 5<br>100,0% | 5<br>100,0% |
| | rarely | 16<br>34.0 | 31<br>66.0 | 47<br>100,0% |
| Total | | 26<br>27,1% | 70<br>72,9% | 100,0% |

This question would be joined with the first one. Out of all the respondents, 26 students, that is 27,1 %, opted for the first choice. They answered that they are not interested or concerned in expressing their notes non verbally in tables, diagrams, maps, etc especially those (16 represent 34.0) who rarely read loudly. 9 students (i.e. 24,3 %) said that they sometimes read loudly. whereas only a unique student chose the first option. Again, this means that the second question corresponds with the former one. From the two questions, we could note that the way by which students express their notes might be affected by one's way of reading. Both Tables (1-2) illustrate well the slow behaviour of students they exhibit when reading and note- taking. And this would imply that the source of students' problems is the lack of having enough practice on how to enhance their reading speed and note taking speed.

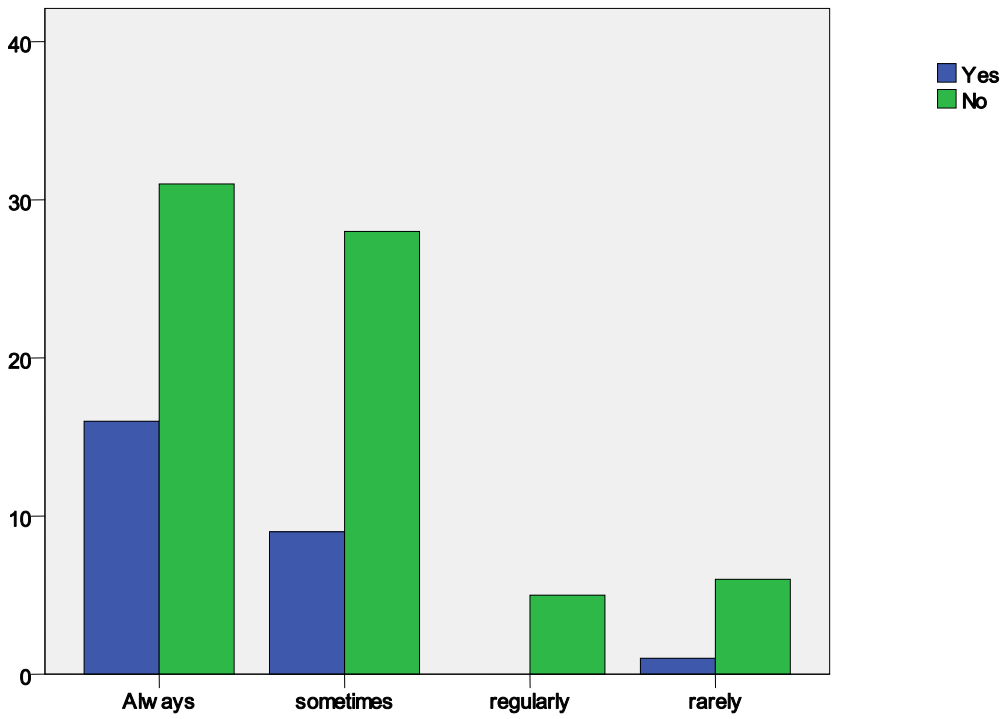
**Table 37: Sample SPSS output reporting Chi-Square statistics for the non- verbal way of expressing notes and the extent to which they read loudly.**

The Chi- Square test

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 3,733[a] | 3 | ,292 |
| Likelihood Ratio | 5,065 | 3 | ,167 |
| Linear-by- linear association | 2,872 | 1 | ,090 |
| Number of valid cases | 96 | | |

a. Calculated only for tables of 2×2.
b. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1,35

**Figure 37: bar diagram for the non- verbal way of expressing notes and the extent to which they read loudly.**



**Crosstabulation 35: varying techniques and strategies of note taking and the preferred way of reading.**

| | | Q11a -S3 varying techniques and strategies of note taking | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| Q20a -S4 the preferred way of reading: | a-silently | 91<br>54,8% | 75<br>45,2% | 166<br>100,0% |
| | b-loudly | 49<br>51,0% | 47<br>49,0% | 96<br>100,0% |
| Total | | 140<br>53,4% | 122<br>46,6% | 262<br>100,0% |

As it could be grasped from the above table, the biggest rate is noted in students who vary their techniques and strategies of note taking. They represent 140 students (that is 53.4%) especially those who read silently (91 i.e., 54.8%). Whereas informants who do not vary their techniques and strategies while note taking make up 46.6% from the whole population especially those who prefer to read aloud. The results obtained show that students are quite aware of their needs in using and varying techniques and strategies while taking notes and most of them are those who read silently. In other words, selecting the first option also demonstrates that when informants follow the silent way in reading, they may have enough left time for varying techniques and strategies of note taking the fact that may enrich their note taking procedure especially if it becomes more rapid and automatic out of much practice. Respondents may be clear about their specific purposes and so they could direct their attention and effort towards their needs like varying techniques and strategies of note taking. These findings are a bit motivating and interesting, too.

**Table 38: Sample SPSS output reporting Chi-Square statistics for varying techniques and strategies of note taking and the preferred way of reading.**

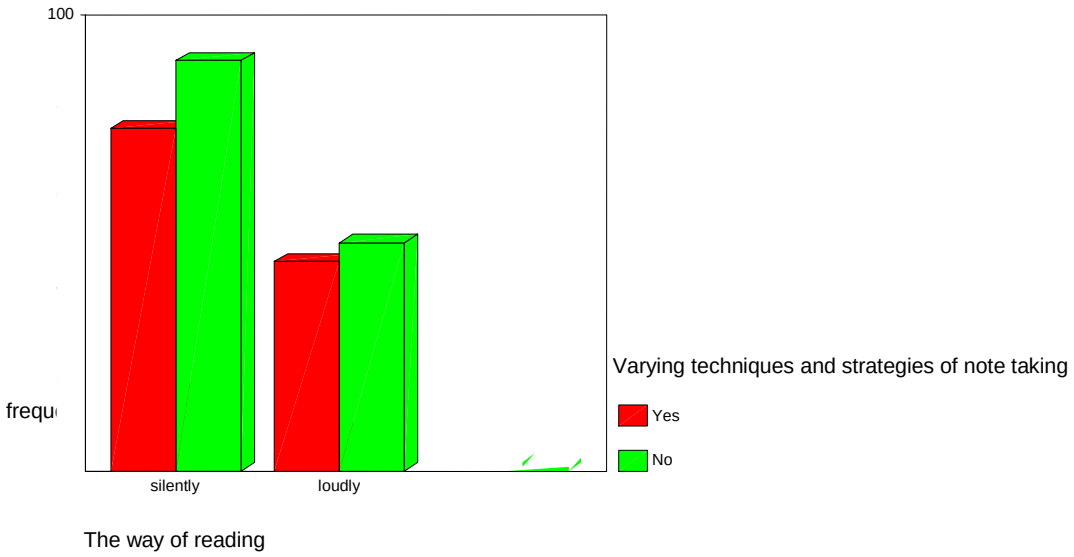
The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | ,349[a] | 1 | ,555 | | |
| Continuity Correction | ,214 | 1 | ,644 | | |
| Likelihood Ratio | ,349 | 1 | ,555 | | |
| Fisher's Exact Test | | | | ,608 | ,322 |
| Linear-by- linear association | ,348 | 1 | ,556 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 44,70

As it can be analysed from the above results, the Pearson Chi-square value is ,349 with a degree of freedom that equals (01) at a level of significance of ,555. Hence, it is clear that there are statistical significant differences between students answers concerning both questions. That is to say, most of informants said that they vary their techniques and strategies of note taking (53.4%) especially with those who read silently (54.8%). As it can be analysed from these results and by way of balance, students' percentage in varying vocabulary while taking notes is approximately similar to theirs in reading silently. Moreover, nearly half of respondents vary their techniques and strategies of note taking and the other half don't do. Therefore, we can deduce that our informants are still in need of rasing awareness on how to go through successful training on reading and note taking speeds development.

**Figure 38: bar diagram for varying techniques and strategies of note taking and the preferred way of reading.**




**Crosstabulation 36: varying techniques and strategies of note taking and the extent of reading loudly**

| | | Q2 -S4 varying techniques and strategies of note taking | | Total |
|---|---|---|---|---|
| | | Yes | No | |
| Q7 b -S1 - the extent of reading loudly | Always | 21<br>44.7% | 26<br>55.3% | 47<br>100,0% |
| | sometimes | 20<br>54.1% | 17<br>45.9% | 37<br>100,0% |
| | regularly | 2<br>40.0% | 3<br>60.0% | 5<br>100,0% |
| | rarely | 6<br>85.7% | 1<br>14.3% | 7<br>100,0% |
| Total | | 49<br>51,0% | 47<br>49,0% | 96<br>100,0% |

Crosstabulation table 36 reveals that the half number of students (49 that is 51,0 %) vary their techniques and strategies of note taking especially those (6 that is 85.7%) who rarely read aloud and we could observe that approximately the same number (i.e., 47 students who represent 49.0%) do not vary their strategies of note taking especially those who regularly read aloud (3 students who represent 60.0%). This conveys that the majority of our students could be considered as low level students and slow readers and note takers.

In all, the results obtained indicate that reading and note taking speeds actually cause a hurdle for those EFL students. Hence, motivation and more practice of reading speed and note taking speed would help in reducing some of this hardship.

**Table 39: Sample SPSS output reporting Chi-Square statistics for varying techniques and strategies of note taking and the extent of reading loudly**

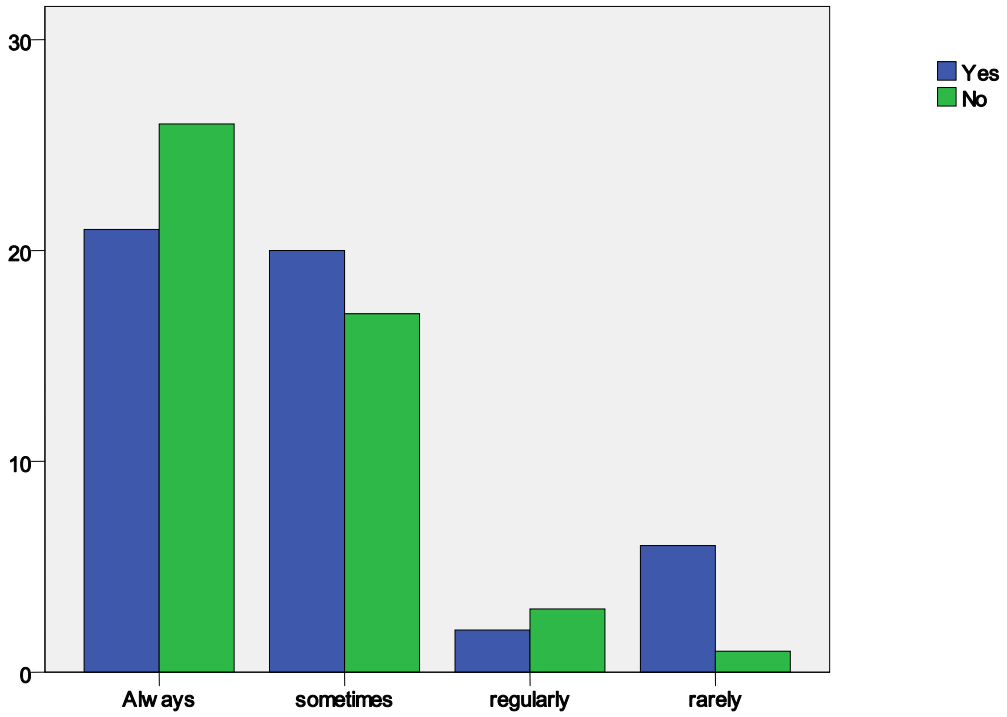
The Chi- Square test

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 4,507[a] | 3 | ,212 |
| Likelihood Ratio | 4,899 | 3 | ,179 |
| Linear-by- linear association | 2,931 | 1 | ,087 |
| Number of valid cases | 96 | | |

a. Calculated only for tables of 2×2.
b. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 2,45

As it could be grasped from the findings of this table, the Pearson Chi- Square value is 4.507 with a degree of freedom that equals (03) at a level of significance of ,212. Actually, this table tend to show the Chi- Square value to be above the mean required value the matter that indicates no significant statistical differences between students' answers on varying techniques and strategies of note taking and the extent or reading aloud in favour of the half who vary their techniques and strategies of note taking and rarely read loudly. Therefore, we may assume that when students read silently, they are more likely to have time for varying their strategies of note taking which may help them be effective, rapid, and efficient note takers.

**Figure 39: bar diagram for varying techniques and strategies of note taking and the extent of reading loudly**.




**Crosstabulation 37: the extent of thinking in the mother tongue and translating into the native language when reading in English.**

| | | Q 7 - S2 the extent of thinking in the mother tongue in trying to express ideas and words. | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Always | sometimes | regularly | rarely | never | |
| Q19e -S4 translating into the native language when reading in English or writing translations of words in the English text | Yes | 44<br>27,0% | 81<br>49,7% | 15<br>9,2% | 22<br>13,5% | 1<br>,6% | 163<br>100,0% |
| | No | 23<br>23,2% | 43<br>43,4% | 11<br>11,1% | 20<br>20,2% | 2<br>2,0% | 99<br>100,0% |
| Total | | 67<br>25,6% | 124<br>47,3% | 26<br>9,9% | 42<br>16,0% | 3<br>1,1% | 262<br>100,0% |

As it can be analysed from the above results, and by way of balance, students' frequencies in answering the question concerning the extent to which they think in their

mother tongue as they take notes in relation to translating into the native language when reading vary considerably. Most of them (124 that is 47.3%) said that they sometimes think in their mother tongue while taking notes. Nearly the same rate of students replied that they translate into their native language when reading (81 i.e., 49.7). 67 students (25,6 %) said that they always think in their mother tongue while thinking how to express their notes with approximately the same percentage with those (44 i.e., 27.0%) who translate into their native language while reading and may write down their translations in the margin of their notes. However, a relatively few number of respondents (42 that is 16.0%) answered that they rarely think in their mother tongue as they take notes especially with informants that do not translate into their native language as they read (20 that is 20.2%). 26 students (9.9%) said that they regularly think in their L1 as they note down what they want commonly with those who translate into Arabic as they read. Only 3 (1.1%) respondents replied that they never think in their L1 as they take notes and 2 students (2.0%) said that they do not translate into their L1 when reading.

Back to these findings, we could say that thinking in one's L1 when taking notes or translating into the L1 while reading are faulty reading habits that are noticed to be existed as such depending on our students' answers. This may be due to the fact that our students do not really find what and how to read, or they do not like to read. This clears again that they lack the rich environment, either inside or outside the university (no available books, magazines, newspapers articles, recordings, and communications, mainly in English). In short, having a healthy learning atmosphere would help them being more proficient readers in foreign languages, even at their smaller scope.

**Table 40: Sample SPSS output reporting Chi-Square statistics for the extent of thinking in the mother tongue and translating into the native language when reading in English.**

The Chi- Square test

| | Value | df | Asymp. Sig. (2- sided) |
|---|---|---|---|
| Pearson Chi- Square | 3,868[a] | 4 | ,424 |
| Likelihood Ratio | 3,789 | 4 | ,435 |
| Linear-by- linear association | 3,143 | 1 | ,076 |
| Number of valid cases | 262 | | |

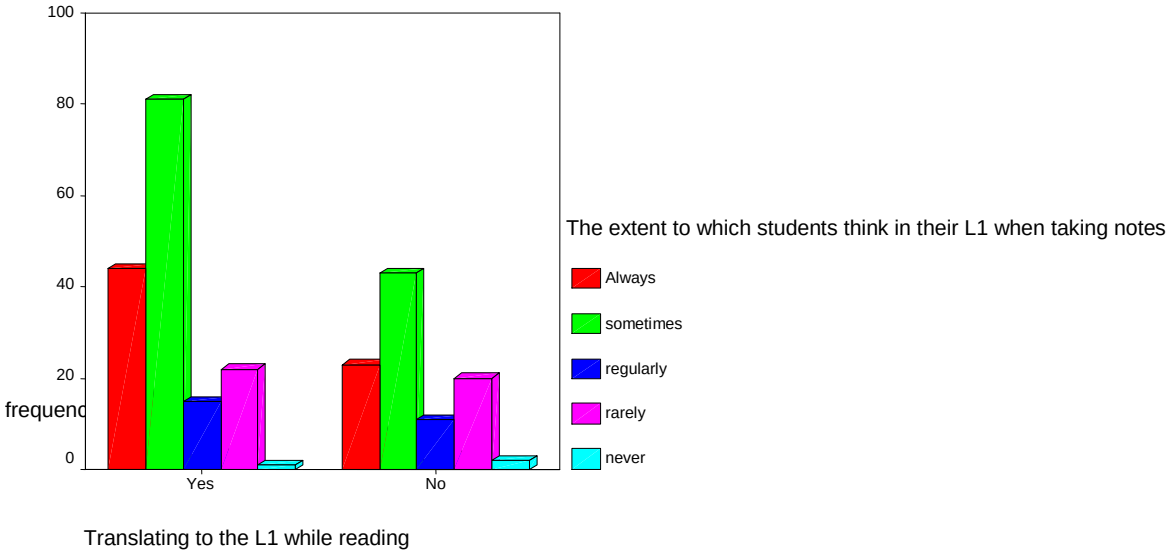
c. Calculated only for tables of 2×2.
d. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1,13.

As it could be extracted from the findings that this table tend to cast light on the Pearson Chi- Square value is 3.868 with a degree if freedom that equals 4 at a level of asymptotic significance of ,424. Therefore, we see that the Chi- Square value is highly above the required mean value (,005) the thing that demonstrates no significant statistical differences between students answers regarding thinking in the L1 while note taking and translating into the native language when reading. We could observe that most students sometimes (47.3%) or always (25.6%) think in their mother tongue when they try to put their notes into paper. In fact, this illustrates the extent to which this category of informants are poor in having enough vocabulary that would help them to put their understanding into paper without spending much time thinking in their mother tongue the fact that may lead them to be slow note takers especially if we know that half of them from the population do sometimes think in their mother tongue when taking notes. Nearly, the same number of respondents (49.7%) and (27.0%) translate into their native language when reading, on the other hands. This bad reading habit may lead them also to be slow readers as translation generally takes time from the part of the readers to know the right meanings of what he is reading. However, as we could observe also from the previous table, only few informants seem to be rapid note takers and readers since they rarely (16.0%) or never (1.1%) think in their L1 as they take notes and do not translate into their L1 as they read (20.2%) and (2.0%).

In short, one may say that language is not merely translation; it goes beyond the dictionary use. Moreover, these findings confirm again that our respondents are in need of having training on how to get rid of these bad reading habits to be efficient and rapid readers and note takers at the same time. Our findings prove that respondents view translation as a

perfect means through which they could acquire well-grounded knowledge in English. This in turn, would convey the slow levels of those students. The following bar diagram illustrates the relation between thinking in the mother tongue when taking notes and translating into the L1 when reading.

**Figure 40: bar diagram for the extent of thinking in the mother tongue and translating into the native language when reading in English.**




**Crosstabulation 38: shortening notes and ignoring or deleting difficult words when reading**.

| | | | Q1.13 shorten your notes by leaving out the unnecessary words | | |
|---|---|---|---|---|---|
| | | | Yes | No | Total |
| S3.6B Q -S Ignoring or deleting that difficult word or part of the text (skipping over and continuing reading) | yes | Frequence | 7 | 17 | 24 |
| | | percentage (%) S3.6B | 29,2% | 70,8% | 100,0% |
| | no | Frequence | 30 | 208 | 238 |
| | | percentage (%) S3.6B | 12,6% | 87,4% | 100,0% |
| Total | | Frequence | 37 | 225 | 262 |
| | | percentage (%) S3.6B | 14,1% | 85,9% | 85,9% |

225 students (85,9 %) are against the use of symbols and abbreviations by shortening words and sentences when taking notes especially those (208 i.e., 87.4%) who do not ignore,

delete, or skip over words while reading. Nevertheless, only 37 students who represent 14.1% from the population are with the use of abbreviations and leaving out unnecessary words when taking notes especially with few respondents, who ignore, delete, or skip over words when reading (7 students represent 29.2%). This result clears that inform ants who tend to short down their notes by leaving out unnecessary words tend to ignore, delete, or skip over words while reading the thing that implies that they are rapid readers and note takers but they represent the minority. However, informants who do not use abbreviations and shorten words and sentences they want to take down may not skip over the difficult words they meet while reading and they represent the majority. Hence, we would say that using abbreviations for the different words and sentences that students want to take down or learning how to skip over unnecessary words and whole lines while reading are crucial aspects of rapid reading and note taking that students must be aware about and should get to be trained on.

**Table 41: Sample SPSS output reporting Chi-Square statistics for shortening notes and ignoring or deleting difficult words when reading**.

The Chi- Square test

| | Value | df | Asymp.Sign. (2-sided) | Exact sign. (2-sided) | Exact sign. (1-sided) |
|---|---|---|---|---|---|
| Pearson Chi-square | 4,931[a] | 1 | ,026 | | |
| Continuity Correction | 3,660 | 1 | ,056 | | |
| Likelihood Ratio | 4,072 | 1 | ,044 | | |
| Fisher's Exact Test | | | | ,057 | ,035 |
| Linear-by- linear association | 4,912 | 1 | ,027 | | |
| Number of valid cases | 262 | | | | |

a. Calculated only for tables of 2×2.
b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3,39

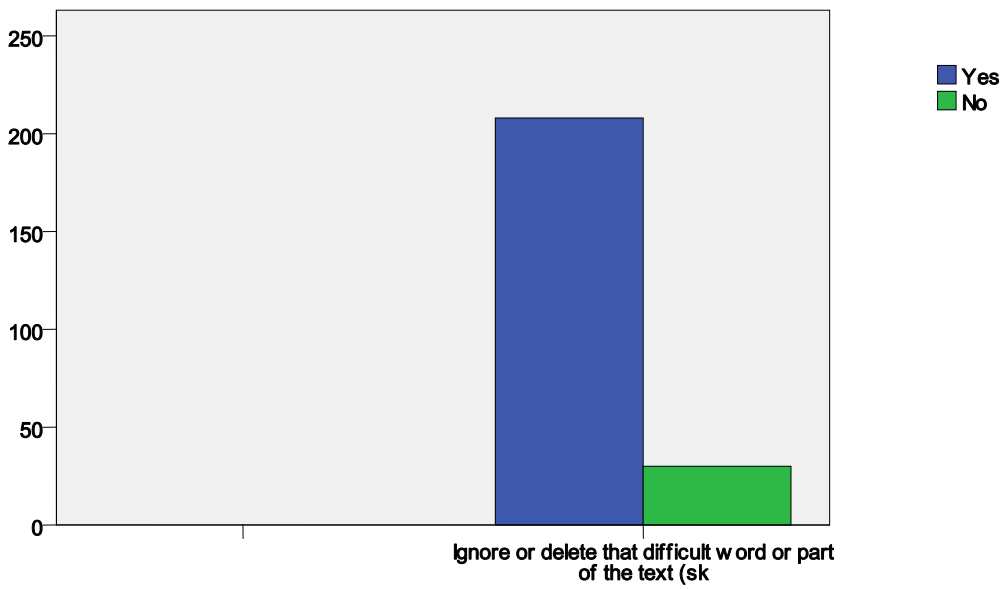
In an attempt to see whether our informant students' answers are different concerning the questions that the crosstabulation table tend to highlight, we should have a look at the Pearson Chi-square value. It equals 4.931 with (01) degree of freedom at (,026) level of significance. We can see that the Chi-square valye is highly above the required mean value the thing that identifies no statistical differences between students' answers on shortening notes and

ignoring or deleting difficult words when reading in favour of almost the whole population 225 who do not shorten their notes by leaving out unnecessary words and sentences while note taking and (208 students) do not ignore, delete, or skip over words and whole lines while reading. Again, this identifies students' handicap to read and take notes effectively with less, time, efforts, .and energy

**Figure 41: bar diagram for shortening notes and ignoring or deleting difficult words when reading**.

Bar Diagram

Shortening words and sentences when taking notes



**Tables of frequencies**:

**Table 42: selecting time in which students like to read and take notes (S1- Q2)**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valid | Yes | 201 | 76,7 | 76,7 | 76,7 |
| | No | 61 | 23,3 | 23,3 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

As a trial to see whether our informant students prefer to select time in which they like to read and take notes, this question is put to investigate their agreement or disagreement. Almost all of them (201 i.e., 76.7%) agree, and 61 students (i.e., 23.3%) disagree. In view of these results, it may be said that those who agree are the good, rapid, and motivated students who showed positive attitudes in the previous mentioned questions. As for those who disagree, we can interpret their reactions by saying that the interest to read and take notes is quite absent or the act of reading and note taking rarely been practiced. So at this stage, teachers will have to try to get the balance right, i.e. they need to assess first their students' speeds, interests, and purposes, then act accordingly.

**Figure 42: selecting time in which students like to read and take notes**

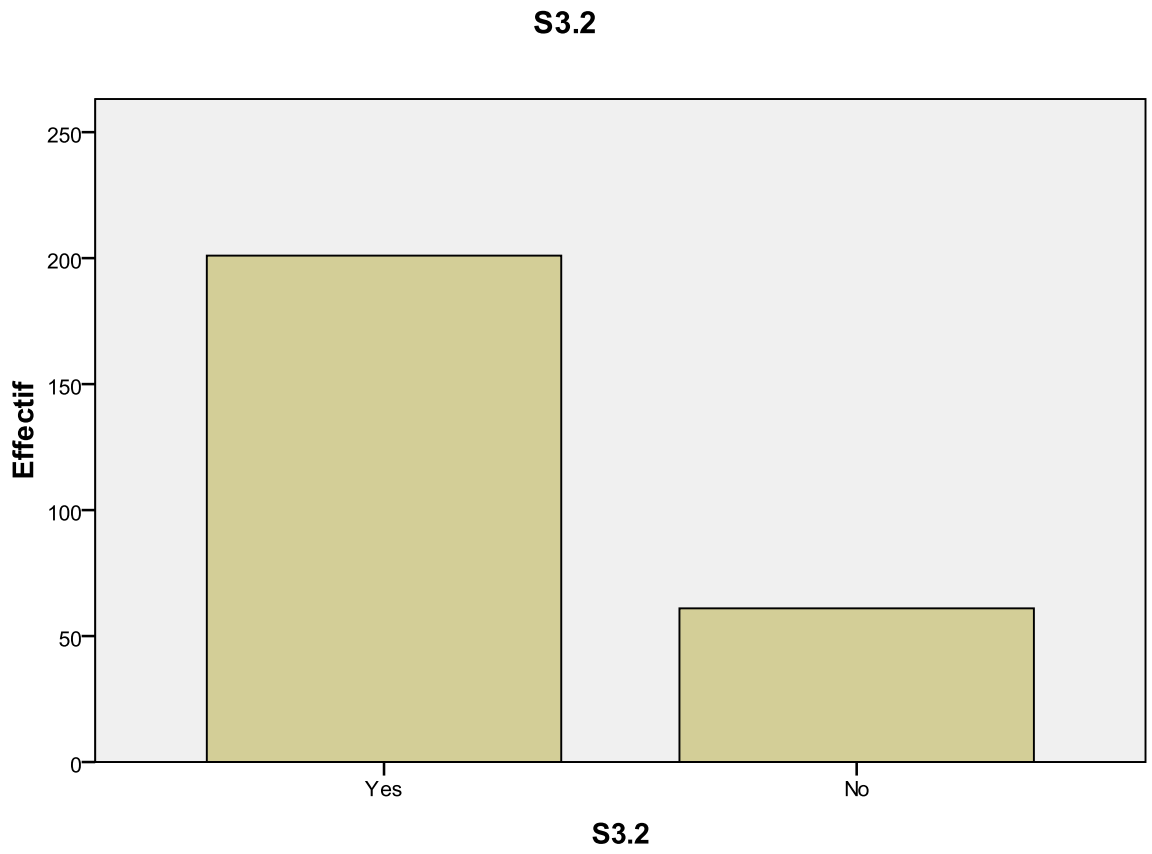



**Table 43: for having time to read recently in English (S1- Q3)**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valid | Yes | 187 | 71,4 | 71,4 | 71,4 |
| | No | 75 | 28,6 | 28,6 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

As shown in this table, the entire sample that is (187 i.e., 71.4%) has some words to say about having time recently to read in English. Doing the latter helps greatly in developing students' abilities and speeds to read because the more students read the more they learn and the more they accumulate vocabulary which affects greatly and hinders their reading speed development for having or facing difficulties in comprehension. However 75 of them didn't have time to read recently. To this point, we may admit that learners themselves could bring amazing results if they customize themselves on reading extensive texts and be trained on how to raise their reading speeds. So we think that teachers are not the only responsible part for students reading speed development though they have to give them a say in their lectures

and bearing in mind that they are old enough to decide. Sharing students' their ideas would empower their self-esteem, self-confidence, and thus self- reliance, which is important at this level. In brief, sharing is caring and co-operation would further motivation for raising reading and note taking speeds of our respondents.

**Figure 43: for having time to read recently in English**

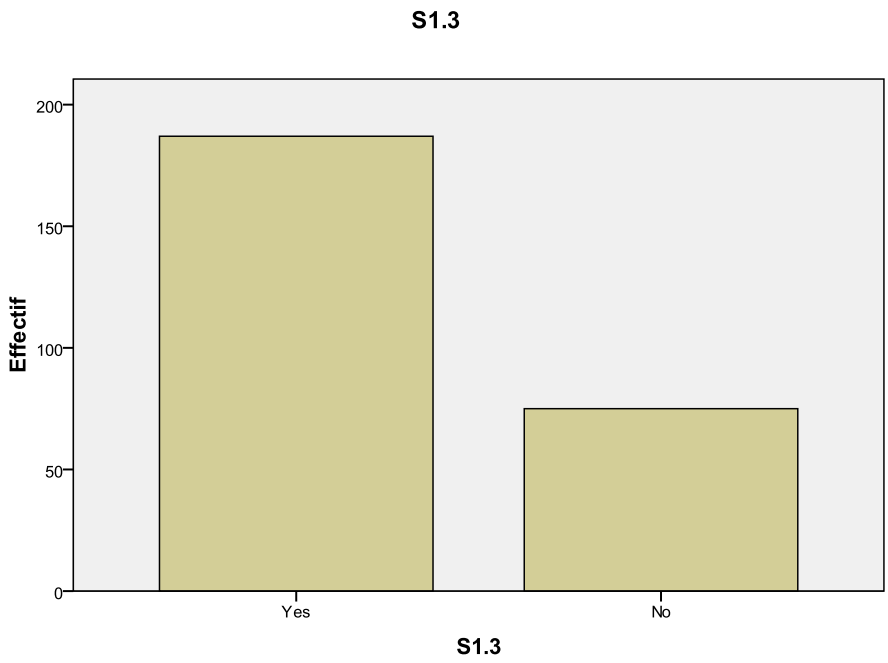



**Table 44: students' opinions on having the busy schedule (time table) sometimes prevent them from reading (S1- Q5)**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valide | Yes | 211 | 80,5 | 80,5 | 80,5 |
| | No | 51 | 19,5 | 19,5 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

This question is the follow up of the previous one that table 42 tends to highlight. The whole number of 211 students said that their time table prevents them sometimes from reading or having extensive reading. Hence, the time given to the English module is not enough. This could be an explanation for having large number of students who are slow readers and note takers as the previous findings tend to prove. However, only 51 students managed to read as their schedule don't prevent them from having extra readings. This shows that our students need more time to learn better in English.

This could parallel the last results where they answered that they do not had time to read recently in English. Here two explanations might be possible. The first is to show that their answers are not contradictory. The second is that they may not find what to read either in class or outside university. To this point, we could note that both the nature of reading lectures, if there are some inside classes, and the milieu outside where there are English data available like the Net service and the library access could motivate them to read, are among the factors that impede fluent rapid performance of our students in reading and note taking.

**Figure 44: students' opinions on having the busy schedule (time table) sometimes prevent them from reading**

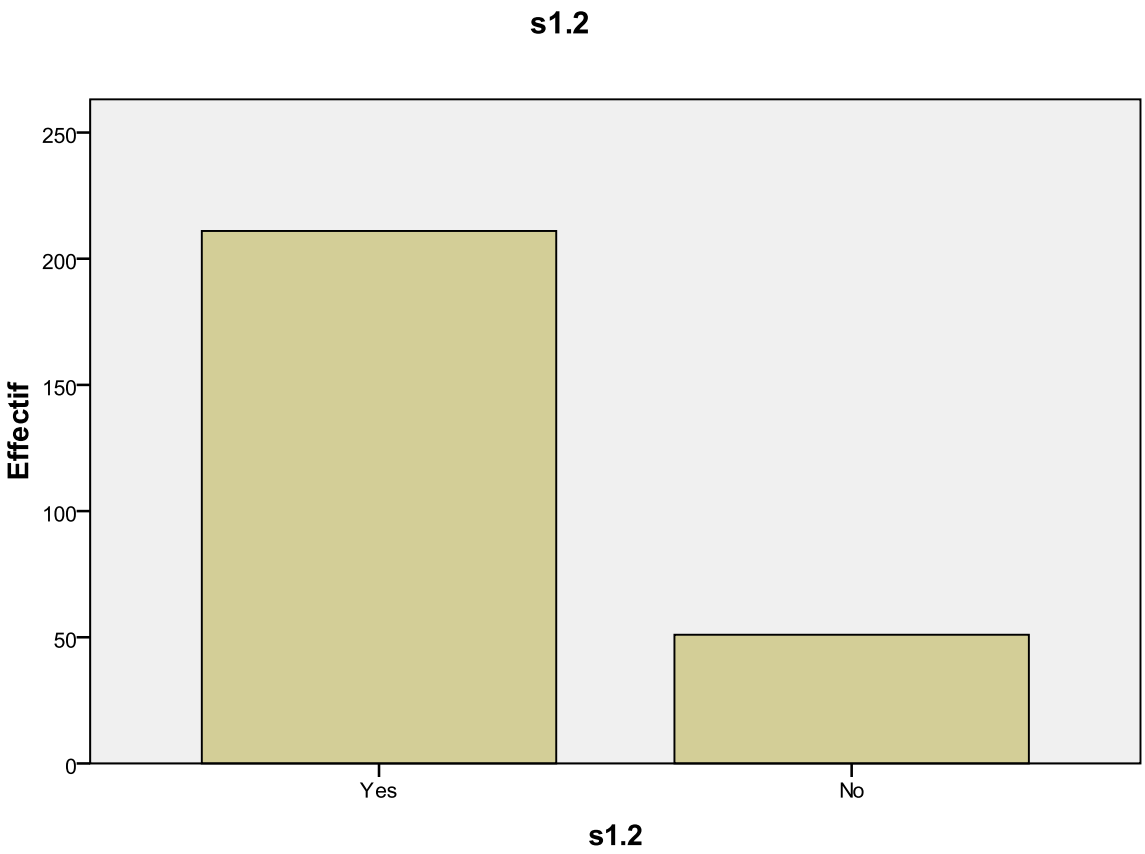


**Table 45: students' views on their reading speed in English (S3- Q16)**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valid | Very fast | 18 | 6,9 | 6,9 | 6,9 |
| | Fast | 33 | 12,6 | 12,6 | 19,5 |
| | Moderat | 191 | 72,9 | 72,9 | 92,4 |
| | Slow | 16 | 6,1 | 6,1 | 98,5 |
| | Very slow | 4 | 1,5 | 1,5 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

As shown in this table, more than half of students (191, i.e., 72, 9 %) portrayed that their reading rate in English is "moderate". Whereas, 33 students (12, 6%) described it as "fast". 18 students declared it to be every fast and 16 assume that it is slow. Consequently, we may note that reading speed is a problem encountered by our students though half of them who rated it as moderate didn't confess or declare that they are slow readers as the previous results confirm. At this stage reading speed, or reading fluency is hardly achievable since more steps and skills are rather fundamental to ameliorate reading comprehension. Reading fluency means that students meet no problems at the level of word-recognition. Though this latter is important, it seems not sufficient. Students need more practice to read with accuracy, ease and more importantly understanding. However, we might say that may be our informants are in the middle ground in the development of their reading and note taking speeds but they are in need of a small helping hand to go further in their learning progress.

**Figure 45: students' views on their reading speed in English.**

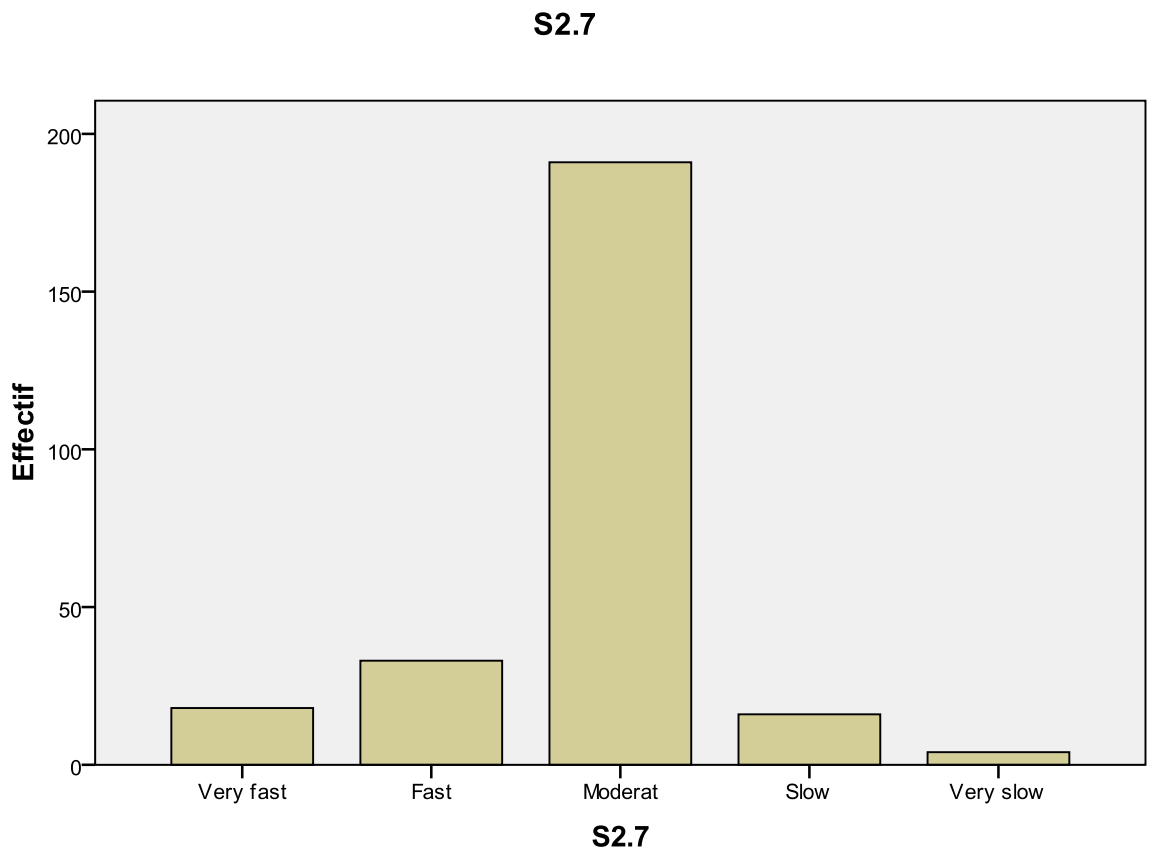



**Table 46: Students' views on trying to mark their reading time with a stop watch and the number of pages they have read (S3- Q18).**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valid | Yes | 101 | 38,5 | 38,5 | 38,5 |
| | No | 161 | 61,5 | 61,5 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

Among 262 students who have participated in filling the questionnaires more than half of them (161 that is 61.5%) said that they have never tried to use a stop watch by which they would measure their reading speed. These students may be slow readers in English as this may be one of the causes of slow reading. This would mean that students are not aware of the importance of knowing their reading speeds as a starting point for developing them or they may lack the motivation to do.

**Figure 46: Students' views on trying to mark their reading time with a stop watch and the number of pages they have read**

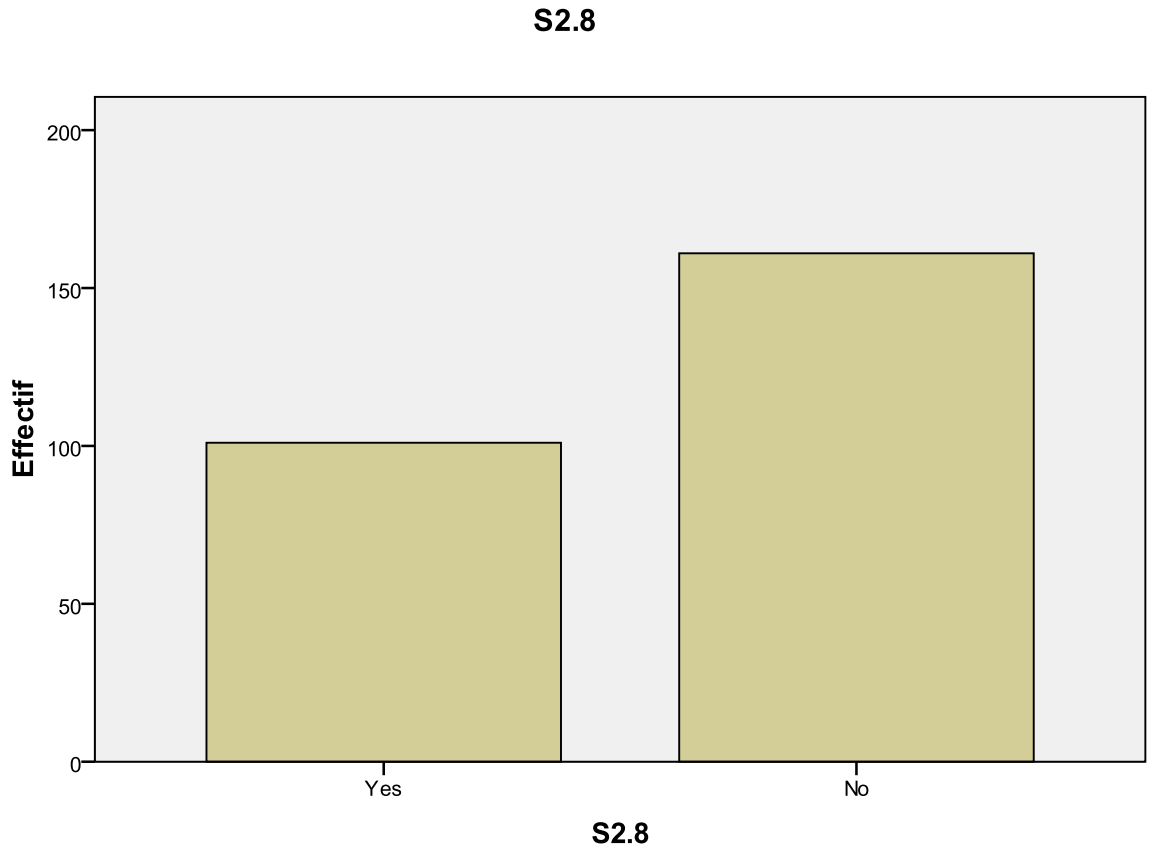



**Table 47: students' views on "who reads slowly, understands better" (S4- Q21)**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valid | yes | 189 | 72,1 | 72,1 | 72,1 |
| | no | 73 | 27,9 | 27,9 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

Table 15 reveals that the biggest number of students (189 that is 72,1%) agree that who reads slowly, understands better. However, only 73 students (that is 27.9%) disagree that who reads slowly, understands better. This consolidates their views when they asserted their own performance in reading and note taking. As mentioned and presented in the previous tables, our informants are slow and poor readers and note takers and this is further confirmed here since they base much interest on understanding rather than coping between the speed at which

they read and their understanding. This conveys that the majority of our students could be considered as slow level students. These findings describe, indeed, the efforts which would be made by those learners to understand a given text.

To sum it all up, this demonstrates clearly that our students still suffer from word for word technique. They may find it difficult to extract the general sense from the context. Sticking on the meaning of individual new words may drive them to give up reading at all.

**Figure 47: students' views on "who reads slowly, understands better".**

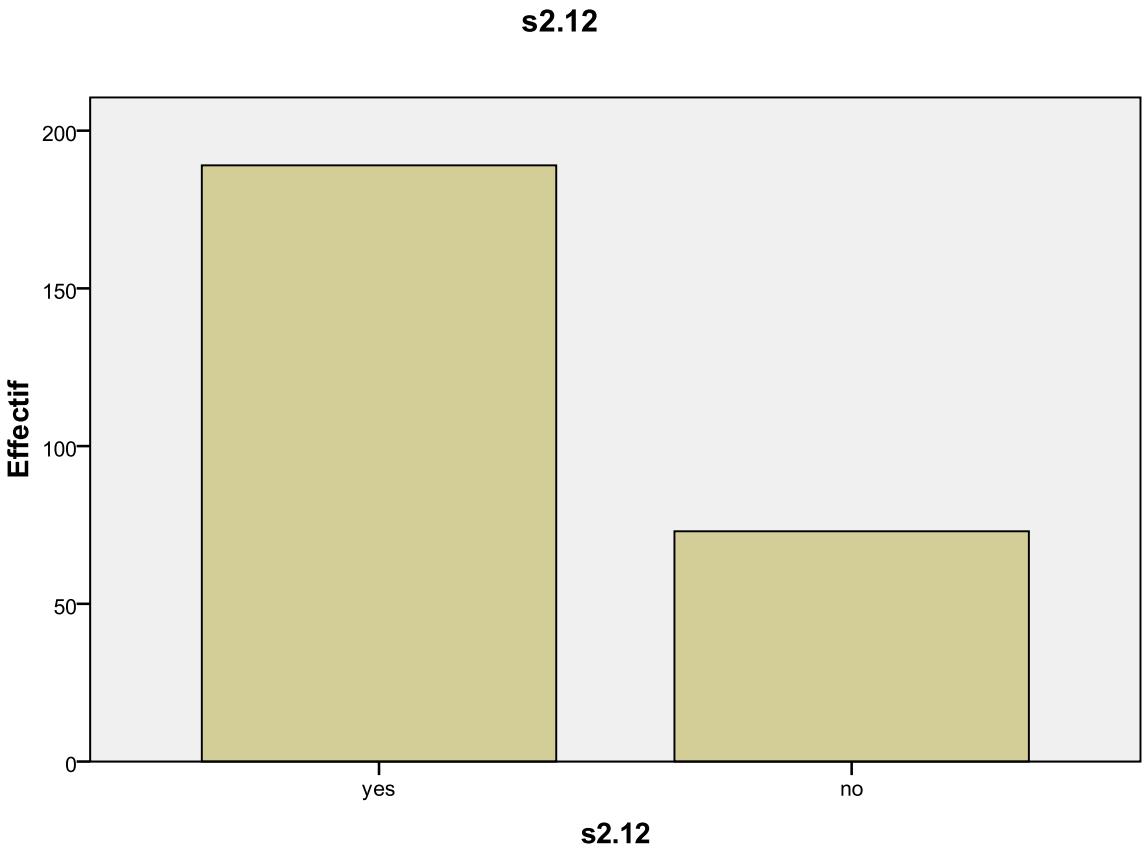


**Table 48: students' opinions on making notes as a reminder for immediate use (S2- Q9)**

| | | Frequences | Percentage | valid Percentage | cumulated Percentage |
|---|---|---|---|---|---|
| Valid | Always | 111 | 42,4 | 42,4 | 42,4 |
| | sometimes | 118 | 45,0 | 45,0 | 87,4 |
| | regularly | 21 | 8,0 | 8,0 | 95,4 |
| | rarely | 11 | 4,2 | 4,2 | 99,6 |
| | never | 1 | ,4 | ,4 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

The above table shows students' views on using notes as a reminder for immediate use like exams, for example. We could notice that half (118 i.e., 45.0%) of them sometimes do and 111 of them (i.e. 111) always do. However, 21 of them (i.e., 8.0) regularly do and 11 of them (i.e., 4.2 rarely do. Only one student never do (,4). Therefore, we can say that though students recognize the importance of taking notes especially when using them as a reminder for exams, for example, they don't know how to take proper or appropriate notes in their structure, forms, the use of abbreviations, etc.

**Figure 48: students' opinions on making notes as a reminder for immediate use**

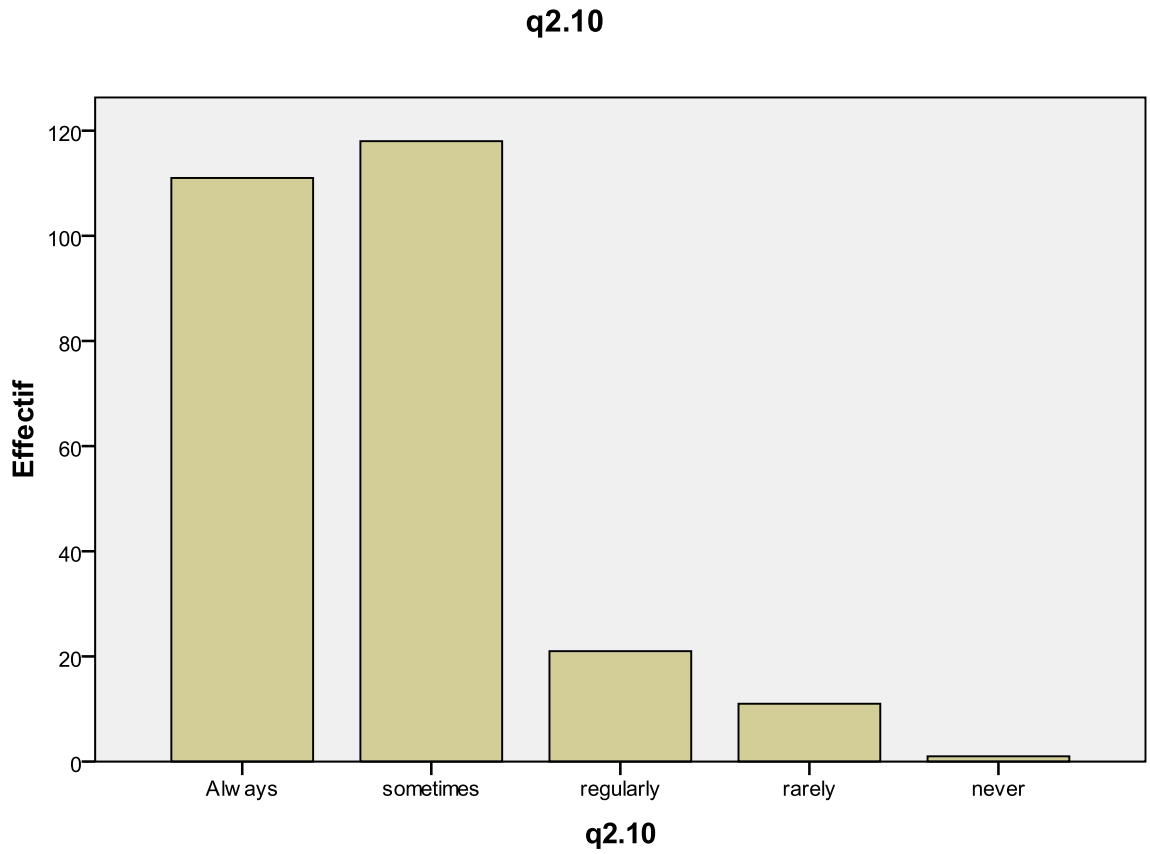



**Table 49: students' opinions on finding their notes different from their colleagues' notes in case they have borrowed them as far as the use of: symbols, abbreviations, and the reason behind taking them down (S3- Q14)**

| | | Frequences | Percentage | Percentage valid | Percentage cumulated |
|---|---|---|---|---|---|
| Valid | Yes | 206 | 78,6 | 78,6 | 78,6 |
| | No | 56 | 21,4 | 21,4 | 100,0 |
| | Total | 262 | 100,0 | 100,0 | |

This table shows clearly the results obtained when we asked our informants about whether they find their notes different from their colleagues notes as far as the use of abbreviations, symbols and the reason behind them down in case they have borrowed them. Hence, the results were as follows:

The majority of them (206 that is 78,6) said that they find a difference between their own notes and their colleagues notes especially with regard to the use of abbreviations, symbols and the reason behind taking them down. Nevertheless, only 56 students from the population

said that they don't see any difference. Therefore, we can assume that it is something motivating to know from our informants that they make use of abbreviations, symbols and put a reason for their notes which is something that didn't appear in the note taking speed test by most of them.

**Figure 49: students' opinions on finding their notes different from their colleagues' notes in case they have borrowed them as far as the use of: symbols, abbreviations, and the reason behind taking them down**

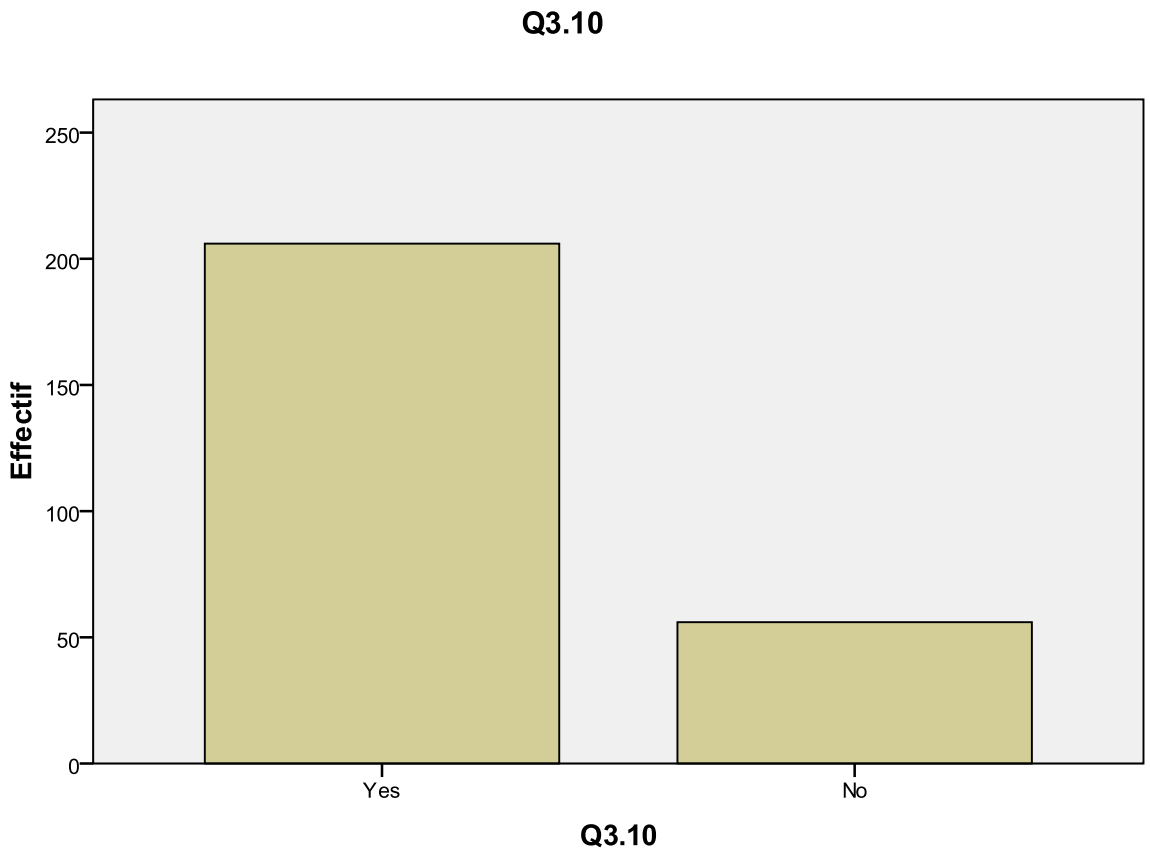


**Table 50: Sample SPSS output reporting Chi-Square statistics for the previous frequency tables.**

**Test**

| | S1- Q2 | S1- Q3 | S1- Q5 | S3- Q16 | S3- Q18 | S4- Q21 | S2- Q9 | S3- Q14 |
|---|---|---|---|---|---|---|---|---|
| Chi- square | 74,809[a] | 47,878[a] | 97,710[a] | 466,359[b] | 13,740[a] | 51,359[a] | 249,603[b] | 85,878[a] |
| df | 1 | 1 | 1 | 4 | 1 | 1 | 4 | 1 |
| asymptotique Significance | ,000 | ,000 | ,000 | ,000 | ,000 | ,000 | ,000 | ,000 |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 131,0

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 52,4.

The Chi- Square tests' table contains the different tables that are intended for the previous frequency tables. It illustrates the Chi- Square values of the different questions that are highlighted above. We could notice that the Chi- Square value concerning selecting time in which students like to read and take notes (S1- Q2) is 74.809 with a level of freedom that equals (01) at a level of asymptotic significance of ,000. Hence, we can deduce that since the level of asymptotic significance (.000) is below the required mean value which equals (.005) there are great difference between students' answers on this question in favour of the majority who (201 i.e., 76.7%) do not select time when they read. This makes a great impediment for these students to read at ease with appropriate speed the thing that lead them to be slow readers.

The Chi- Square value for the second question regarding having time to read recently in English indicates that it (47.878) with a level of freedom (01) at a level of significance (.000) in that it is below the required mean value which equals (.005), the thing that shows having great significant statistical differences between students answers in favour of the majority of students (187 i.e., 71.4%) who have time to read recently in English. This is something quite interesting since it indicates that students like to read.

As far as the third question is concerned, the Chi- Square table shows that there are great differences (97,710 with a degree of freedom (01) at a level of asymptotic significance that

equals (,000) between students' answers on having their schedule (time table) sometimes prevent them from reading in that the whole number of 211 students said that their time table prevents them sometimes from reading or having extensive reading. The bad consequences of this on their reading speed goes back on their teachers' or the administration's shoulders because the more students read, the more they come across new words which they may learn the more they develop their reading speeds.

Regarding the forth question which deals with students' views on their reading speed in English. The Chi- Square table indicate that its value is 466,359 with a degree of freedom (04) at a level of asymptotic significance which is (,000). Hence, there are highly significant statistical differences between students' answers on this question favour of the majority of respondents who rated their reading speed as moderate the thing that identifies that they had never went through a training programme in which they know their actual reading speeds, use a stop watch and develop their reading speeds.

Concerning question **S3- Q18,** the Chi- Square table illustrates having high difference between students' answers since it equals 13,740 with a degree of freedom (01) at a level of asymptotic significance (,000). It reveals that this latter is below the required mean value which equals (.005). hence, students' views on trying to mark their reading time with a stop watch and the number of pages they have read vary greatly in favour of the more than a half of them (161 that is 61.5%) who said that they have never tried to use a stop watch by which they would measure their reading speed. Actually, this confirms the previous findings in which more than half of them (161 that is 61.5%) said that they have never tried to use a stop watch by which they would measure their reading speed. Therefore, they are in crucial need to have a helping hand to develop their reading speeds.

The Chi- Square table of students' views on "who reads slowly, understands better" (S4-Q21) reveals that 51,359 it is below the required mean value with a degree of freedom that

equals (01) at a level of asymptotic significance of (.000) in favour of the biggest number of students (189 that is 72,1%) who agree that who reads slowly, understands better. This identifies students' much reliance and focus on reading comprehension rather than reading speed the thing that turn their reading experience to a boring and slow one.

Question before the last one which deals with students' opinions on making notes as a reminder for immediate use clarifies that the Chi- Square table shows its value to be as equal as 249,603 with a degree of freedom of (04) at a level of asymptotic significance of (,000). Thus, students responded differently to this question and their answers vary greatly since the Chi- Square value is well above the mean value. We could notice that half (118 i.e., 45.0%) of them sometimes make their notes as a reminder for exams and 111 of them (i.e. 42.4%) always do. These results show that our informants take notes but it is still something interesting to know if they use and take their notes appropriately.

The Last column of the Chi- Square test table shows its value as 85,878 with (01) degree of freedom at a level of asymptotic significance of (,000). Thus, we could feel of the great differences between students' answers on finding their notes different from their colleagues' notes in case they have borrowed them as far as the use of: symbols, abbreviations, and the reason behind taking them down (S3- Q14) in favour of almost of them (206 that is 78,6) who said that they find a difference between their own notes and their colleagues notes especially with regard to the use of abbreviations, symbols and the reason behind taking them down. Consequently, we can deduce that it is something interesting to find that informants' notes are different from each other in that this identifies that each student devise his/ her personal abbreviations and symbols which would help him in economizing time while taking notes.

**Conclusion:**

Our study has been concerned with investigating the reading and note taking abilities of third year English students at Farhat Abbas University as far as speed is concerned. It has allowed us to examine the nature of the relationship between reading speed and note taking speed in relation to the research questions: Are rapid readers of English as a Foreign Language able to take notes down with the same speed with which they read? Do the strategies and the habits they import on using while reading that lead to rapid/slow reading match with that are used when taking notes that lead to being rapid/slow note takers?. Therefore, we can say that we found a correlation between reading and note taking speeds of third year students and it is proved in both the reading and note taking speeds tests and the partial correlations between questions of the reading speed questionnaire and the note taking speed questionnaire. Moreover, we found that students who are slow in reading are slow in note taking and those who have faulty reading habits have also faulty note taking habits like it is discussed and confirmed by means of the reading and note taking speeds questionnaires. Hence, we can say that our research hypothesis has been statistically confirmed.

# CHAPTER SIX:

# PEDAGOGICAL IMPLICATIONS AND RECOMMENDATIONS

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# PEDAGOGICAL IMPLICATIONS AND RECOMMENDATIONS

## Introduction:

Undoubtedly, the speed to read academic, technical, business, or other specific texts is seen one of the crucial skills that those university students need to acquire. The reading demands placed upon them is vital; however, the majority of them are unaware about this as it is observed among our respondents on the reading and note taking speeds questionnaires.

This chapter sets the different conclusions drawn from the current study and compares the obtained results with those attained by previous researchers. It also highlights some pedagogical implications to the teaching of reading by stressing the significance of reading speed as being a tool for assessing students' overall reading performance and a significant aspect of fluent reading. Moreover, this chapter puts forward the limitations of the study and provides some suggestions for future research. The pedagogical and practical implications that this chapter aims to propose are covered in terms of future reading instructions to help partly teachers and mostly students, especially those who are said to be poor / slow readers and note takers in order to enjoy teaching / learning of these skills. These implications are the result of the conclusions we have made from this work of research. We will be suggesting the use of reading speed as an effective strategy to activate readers' fluency about the narrative text as a means to increase students' reading and note taking speeds.

The chapter includes also the study limitations and some suggestions for further research. Some points in the study need to be looked at. These points need to be explained to avoid considering them as gaps in our study. Moreover, and thanks to the study conclusions, we suggested what can be a new idea of future works of research. Therefore, the present chapter seeks to suggest some operational guidelines in the form of recommendations which will

contribute to enhance the learners' reading performance and assist them in developing their reading abilities and speeds. .

**6.1. Consistency with Past Research:**

The present study is set to serve two intended purposes. First, to investigate the nature of association between reading speed and note taking speed, second, to explore students' reading and note taking strategies and habits. It is noteworthy, that studies related to this issue are very few (Anderson, 1983; Coady and Anderson, 1993; Cushing Weigle and Jensen, 1996; Mahon, 1986; in Anderson, 1999:1; Carrell and Grabe, 2002: 242; Fraser, 2004:136). In this vain, Wainwright (2007, p.1) contends:

> *Reading performance is traditionally measured purely in terms of comprehension, but most people want to be able to deal with their daily reading faster and yet recall it effectively when required. Neither of these is assessed in school comprehension tests, yet good recall is essential for better comprehension. A prerequisite for achieving this is to find out what your reading speeds and recall levels are before you begin trying some new techniques.*

To this respect, reading and note taking were treated separately as two independent study skills. However, M. Vallet (1967, 1977: 211) state that speed is one of the features that clearly distinguish the reading skill from the other skills. He said that rapidity of writing or speaking is limited by the muscular functioning of the hand or the speech organs; rapidity of listening comprehension is determined by the speed at which others speak. Only in reading can the mind assimilate information in much less time than that required for writing it down. Hence, we can deduce that the speed at which students read is greater than the speed at which they take things down or take notes. For this, we have suggested some points concerning handwriting and how to speed up the hand while taking notes. Vallet goes further and says that in order to measure reading speed, the test must allow the students to read without

interruption for at least five minutes and we have followed the same procedure in our reading speed test. She suggests two ways of format are possible:

a. The students are given a text that no one can finish in the allotted time. After five minutes, the teacher calls time and the students mark the point where they stopped reading.

b. The students are given a text that everyone can finish in five to ten minutes. When a student finishes, he or she signals the teacher's attention and the reading time is marked. It is noteworthy that this second way is adopted and followed during the reading speed test in that we asked students to mark their starting and finishing reading times to be calculated later on and compared to their note taking time.

M. vallet (1967, 1977, ibid) advices to check whether the students have understood what they have read, in both instances. In our case, we didn't test it because our only aim was to focus on students' reading and note taking speeds.

The fact that speed is found to be a significant element of fluent reading in English as a Foreign Language in this paper is consistent with previous findings. In fact, many studies have pointed out to the fact that differences between rapid and slow readers and note takers are explained on the basis of measures of their speeds and an investigation of their reading and note taking habits that may speed up or slow down their paces.

The objectives of this research are to identify and to compare the techniques, strategies and habits of reading and note-taking used by third year English students when they read and take notes in English. These students read a text in English and English for them is the foreign language. We aim at knowing whether these students use distinct techniques and hence have different habits when they take notes in comparison to their reading habits. Our goal is to

understand the ways and the conditions that make students to succeed in adjusting the note-taking procedures and note down at a certain speed that enables them to be rapid note takers.

In this vain, Chaudron, Loschky, & Cook, 1994; Clerehan, 1995; Dunkel, 1988; Famhy & Bilton, 1991, in Barbier et al. (Current psychology letters, 20, Vol. 3, 2006) contend that note-taking has received little attention from the communities of researchers and teachers that investigate issues related to second language. In first language, note takers are simultaneously engaged in language comprehension and production activities (Piolat, 2004, 2007), which are likely to exceed working memory capacities (Baddeley, 2000). Indeed, taking notes involve a deliberate and strategic management of the processes involved in language production and comprehension. Moreover, during a lecture or a conference, note takers must control variations of rate between the speed of emission of what they hear and the speed of their writing (Peverly, Ramaswamy, Garner, Brown, Sumowski, & Alidoost, in Barbier et al. (Current psychology letters, 20, Vol. 3, 2006)). For that reason, they develop adjustment strategies that rely on transcription of a reduced quantity of information compared to that contained in the source discourse (Piolat, 2006). This reduction operates at a conceptual level by selecting only ideas considered as important, and at a formal level, with abbreviating procedures that are specific to note-taking.

Barbiers et al., (20, Vol. 3, 2006) state that when taking notes in second language, language mastering is of major importance. Students are indeed faced with many difficulties for at least two reasons. First, when linguistic skills are poorly automated, in other words when psycholinguistics processes require a large amount of attention and are not fluent, they prevent a fast transcription of information (Barbier, 1998, 2003, 2004; Ransdell & Barbier, 2002; Roca de Larios, Murphy & Marin, 2002). Second, when the metacognitive control of note-taking is restricted, note takers do not succeed in evaluating the reliability of the content of their notes with respect to former knowledge and competence already acquired in first

language (Barbier, 2003, 2004; Barbier, Faraco, Piolat, Roussey, & Kida, 2003). These two sources of difficulties have been identified from the very low performance (quantitatively and qualitatively) observed among note takers in second language.

In the literature on note-taking, formal analyses of notes are based on the identification of at least two types of variables (Chaudron, Loschky, & Cook, 1994; Barbier *et al*., 2003). The first variables are quantitative and concern the total number of words and/or abbreviations and it is exactly the same thing we did in our research work. The second variables are qualitative and relate to the content of the notes (new words, words in first language), to the organization of ideas and to the structuring of the spatial layout (in particular use of marks related to lists effects: classification, separation in sections, underlining, columns, etc.; Barbier, Faraco, Piolat, & Branca, 2004, in Barbier et al., 20, Vol. 3, 2006).

Quantitative analyses of notes show that abbreviating procedures, which are considered by some scholars as performance indicators of note-taking (Fahmy & Bilton, 1991; Janda, 1985, in Barbier et al., 2006. Vol. 20) or even as quality indicators (Chaudron *et al*., 1994), are little used in second language. For example, when students take notes in second language they do not use the surface abbreviating procedures that are commonly shared by native speakers. They also do not use the note taking tools, such as icons, they used in their first language note-taking and that allow them to quickly write down what they hear. Actually, note takers in second language do not possess a large variety of techniques and so they sometimes switch in a first language transcription of information or even sometimes produce neologisms (Badger, White, Sutherland, & Haggis, 2001; Faraco, Barbier, & Piolat, 2002; Dunkel & Davis, 1994, in Barbier et al., 20, Vol. 3, 2006).

As the rare on-line data on note-taking indicates, Barbier et al., (vol. 3, 2006) identify that the lack of linguistic automatisms in second language is also visible in the focus of attention which is directed on the microstructure of the source text (they observe the same phenomenon

in text composition). Indeed, Faraco *et al.* (2002 in Barbier et al., vol. 3, 2006) have shown that students who take notes in a second language (L2) make twice more pauses at intra- and inter-words boundaries than do native-speaking students. The former note takers particularly hesitate when they transcribe what they hear. In addition, qualitative analyses of notes in L2 indicate the use of a limited syntax, a "disorganized" note-taking (Fahmy & Bilton, 1990), or confusion in the procedures that highlight information provided between titles, definitions and examples (Clerehan, 1995). Finally, notes are generally shorter in L2 than in L1 (Clerehan, 1995; Faraco *et al.*, 2002).

Out of these results reached by Faraco *et al.* (2002 in Barbier et al., vol. 3, 2006), we can say that we have observed the same thing in our research work case. Students place much interest on word by word reading and note taking as it is proved each in both questionnaires. They make more pauses as they read and stop from time to time while taking notes thinking of what might be written down. It should be noted that the interpretation of these indicators as reflecting readers and note takers difficulties in EFL, even if shared by researchers, has to be modulated if one wants to obtain a deeper knowledge of the nature of these difficulties. However, we should note that if noting a low volume of words may indicate that the note taker has problems to understand and to store information, it can also indicate the use of an elaborated strategy of the note taker who may try to retain only the most important concepts in the form of key words (a strategy which is often used by expert note takers in L1, as barbier et al., 2006, Vol.3 state). Therefore, a conjunct analysis of multiple indicators is required to analyse strategies of note-taking. Syntactical, lexical and conceptual fidelity has also to be taken into account for analysing note-taking strategies. In particular, we have observed out of analyzing the reading and note taking speeds questionnaires that note takers very often transcribe the words they are reading without introducing new words, staying very close to the source text. Barbier *et al.*, (2003) stress that indicators of L2 note-taking must be interpreted

in networks, and in parallel with other indicators more directly related to the subjective difficulties of note takers.

Some experimental studies on student achievement have been inconclusive regarding the benefits of note-taking training. However, these studies have had serious methodological weaknesses and have not consistently involved meaningful training sessions that incorporate practice and evaluation of the note-taking skills (Boon, 1989). For example, a study by Bretzing et al (1987) involved 15 minute training sessions before the testing and provided only general note-taking tips. Another study by Peck and Hannafin (1983) showed students a videotape how to take notes more efficiently. A study by Meyer (2001) allocated one class unit for note-taking training. Research on the effects of pre-training on note-taking and information recall found that training in note-taking must involve long-term, systematic instruction and continuous practice (Dunkel,1985).

Bretzing, Kulhavy and Caterino (1987) and Peck and Hannafin (1983) conducted similar research to gain insight into this issue. In all of these studies, one or more experimental groups received special note-taking training, while one or more groups received no formal training. The results of Peck and Hannafin's study found that the uninstructed note takers actually performed better on all three tests. Peck and Hannafin suggested that the results were a product of an "interference effect" in which the process of note-taking itself interfered with the retention of information.

In our view the "interference effect" was a result of insufficient training as opposed to what Peck and Hannafin believed a negative impact of note-taking on learning. Students were inadequately trained in the ***product*** which caused an adverse effect on the note-taking ***process.***

Boyle and Weishaar (2001) in their study of high school students with disabilities concluded that improved note-taking skills contribute to increasing students' comprehension,

short-term and long-term recall. They extended the academic note-taking training in their study from 15 minutes to two 50 minute sessions. Instructed students scored significantly higher on measures of immediate recall, long-term recall and comprehension, and number of words recorded. It's reasonable to assume that if a speed note-taking is incorporated into academic note-taking and a sufficient practicing and reinforcement is provided, it will increase the number of words recorded which will have a significant impact on comprehension, immediate and long-term recall.

As evidenced by various research studies, effective note takers possess a sufficient writing speed to take down spoken or written information and, even when they do take notes, are frequently able to read them after the reading session (Suritsky, 1992), mostly because their notes are legible. Inefficient note takers either avoid taking notes, relying on their colleagues or teachers to assist them with guided reading notes after class (Beckley, 1996).

Although these accommodations are helpful, and even necessary, it is important for students to learn how to effectively take notes from their reading materials. Suritsky and Hughes (1996) have found that students with disabilities are passive learners, and note-taking is one way to *actively engage* them in the learning process.

**6.2. Pedagogical implications:**

**6.2.1. The significance of reading speed and note taking speed improvement:**

As reading speed is considered as an indicator to fluent and diffluent reading and a tool for assessing students' reading performance, it is according to it that authentic instructional activities can be included into a reading programme as a remedy for slow reading which is a widely recognized problem faced by learners throughout EFL/ ESL world.

One possible implication points out to the need to improve ESL/ EFL students' reading speed. In fact, adopting rapid reading programmes may yield in interesting results in developing students' reading speed beyond a minimal threshold because it assists them to read

beyond the word level and allows them to read in meaningful chunks of thought. Indeed, class paced readings; for instance, have proved, by many researchers like Champeau de Lopez (1993) to be quite effective in serving this aim. They are easy to apply and do not require much time for their implementation. 20 minutes per session are quite enough, especially that EFL students are in need of extensive classroom should be consolidated with self- paced reading at home either by practicing over the same material dealt with in class or choosing another one.

**6.2.2. The necessity of balancing reading speed and comprehension:**

The current study seeks to locate the twin issue of reading speed and note taking speed. However, it is important to consider reading comprehension because this latter plays a significant role in enhancing and speeding up the process of reading and note taking. That is to say, if students do not understand what they read, they will spend much time decoding words and analyzing their meanings seeking to reach comprehension and thus, the act of putting down ideas that have been understood will be delay and postponed if not disregarded at all. Therefore, it should be noted that although the development of adequate reading speed should receive a high priority in our learning programmes, we should recall, as Nuttall (1982:37) states that reading speed without comprehension is worthless. Hence, if we want to serve ESL/EFL learners' interests in reading improvement, priority should not be given to the former objective at the expense of the latter; that is to say, students should be continuously encouraged to read at a high speed and maintaining a suitable level of comprehension simultaneously. Students, in fact, struggle to do this at the beginning of the training, but as they get used to paced reading, for example, they manage to achieve the two goals progressively.

To sum it all, reading is one of the core activities of study. Hence, students need to be able to understand what they read and to be able to recall the main ideas when they need

them. Hence**,** reading comprehension is significant for them since it is not merely a set of words linked together; rather it is an integration of the learner's background knowledge, his language, and his strategies as well. This latter demonstrates apparently that the learner is not a passive reader, but an active one who has the ability to think, to link, to perceive, to memorise, and to call his information whenever needed. He is the one who can plan, monitor, regulate, and evaluate his reading to solve his problems. Besides, he is the one who cares and shares other's views .Simply put, good readers are said to be good users of strategies that speed them up while reading and note taking processes without hindering their comprehension of the material at hand,

**6.2.3. The need of pairing skimming and scanning off with reading and note taking:**

Fraser (2004: 136- 137) states that reading courses rarely focus on reading fluency development, apart from previewing, skimming, and scanning exercises. Actually, these strategies would be fruitful if they are intertwined with paced- reading activities. Although students in the reading speed test were introduced to the same strategies (skimming and scanning), it is not enough. Students should be supported by paced reading activities in order to enhance their reading fluency. These strategies are rewarding in making students read effectively by matching their reading to their purpose and to be flexible readers. Hence, reading strategies and paced reading activities may be very complementary to promote a successful paced- reading programme for enhancing reading speed; but skimming and scanning alone do not help the students to increase their reading speed.

Nevertheless, students' initiation to different reading strategies depending on the purpose of reading should be emphasized. To this end, teachers should clarify the purpose of reading all the time so that students can use appropriate strategies for reading and note taking together. Examples of these are skimming (for gist), scanning (for specific information), encouraging students to make predictions when they read, using pre- reading activities to activate students'

background knowledge by having them preview the material they are to read about by reading the title, headings, reading the introduction, conclusion and transition words, skipping inessential words, guessing from context, using symbols and abbreviations while taking notes, reading in chunks, ..etc.

Study reading is the reading style used by flexible readers when their purpose is to read difficult material at a high level of comprehension. When using the Study Reading style, students should read at a rate that is slower than their normal reading rate. Further, as they read they must challenge themselves to understand the material. Study Reading will often require them to read material more than once to achieve a high level of comprehension. Sometimes, reading the material aloud will also help them improve their comprehension.

Skimming is the reading style that is used when the purpose is to quickly obtain a general idea about the reading material. The Skimming style is most useful when they have to read a large amount of material in a short amount of time. When using the Skimming style, they should identify the main ideas in each paragraph and ignore the details in supportive sentences. Because they are only looking for the main idea in each paragraph they read, a lower level of comprehension is to be expected than when using the Study Reading style.

Scanning, on the other hand is the reading style used by flexible readers when their purpose is to quickly locate a specific piece of information within reading material. The piece of information to be located may be contained in a list of names, words, numbers, short statements, and sometimes even in a paragraph. Since they know exactly what they are looking for, they can move their eyes quickly over the reading material until they locate the specific piece of information they need to find.

Normally before beginning their next reading assignment, readers should identify their purpose for reading. They have to decide if they are reading for a *high level of*

*comprehension, trying to get a general idea about what they are reading*, or *looking for specific information*. Then use the reading style that is appropriate for their reading purpose.

**6.3. Limitations of the study:**

Due to many reasons and like any other research work, this study contains potential limitations that moderate the implications of the research findings. Thus, the results of this investigation must be considered within the limits of its design, sample, and methods. Hence, a number of important limitations to our findings need to be highlighted.

The first limitation is related to the number of subjects on which the reading and note taking speeds tests' are obtained. A total of 48 students who participated in the reading and note taking speeds tests is small if it is compared to the total number of the sample who participated in the reading and note taking speeds questionnaires (approximately 262 students). Indeed, the nature of the current study requires considerable efforts from the researcher to consider an individualized attention to the participants. In addition, the researcher needs time and efforts to calculate reading speed and note taking speeds for each participant. With a larger group, it would be possible to generalize findings to the whole population of the study.

A further limitation would be the adaptation or matching the reading passage's level of difficulty to the students' level. Actually, EFL settings lack textbooks which are graded according to students' level even the selected reading books or novels attributed to our study sample are not adopted according to the students' level as in L1 setting where standards are put to match textbooks levels of difficulty to the students' grades. To minimize the criterion of text difficulty to a certain extent, we have chosen a narrative text that is known to be easy to be read than expository texts, for example. Second, it was self motivating to analyse the extent to which the selected text is difficult for our students by counting the number of

difficult words found in the reading passage. We found that it doesn't exceed 20 words out of 550 words.

Another limitation refers to reading comprehension which is not directly assessed though the students' notes and their way of reading may demonstrate their understanding of the reading material. Our aim is not to test readers' comprehension but to measure reading and note- taking speeds as a broader aim.

An extra limitation of this study belongs to the reading and note taking speeds questionnaires. It relates to the demand on readers to report on their thoughts and opinions about their own way of reading speed and note taking. Thus, when we ask readers to report on their reflections about reading or note- taking, we need to remember that they may respond to the questionnaires according to what they think the teacher or researcher wants to find i.e. they may write that they are rapid readers and rapid note- takers.

An additional limitation would be the effect of psychological factors as stress and anxiety that the test-taker may feel during his taking of the test. A person may not have had breakfast, could possibly be ill that day or is having a panic attack regarding taking the test. Consequently, these will affect his/her performance and the results would not reflect clearly his potential abilities or real speeds.

### 6.4. Recommendation for future research:

#### 6.4.1. Becoming a Flexible Reader:

Since reading and note taking are active processes, students need to be flexible readers and note takers at the same time. They need to know how to select and use a reading style that is consistent with their purpose for reading. Actually, there are three important reading styles they should learn to use. Each has its own purpose. Knowing when and how to use these three reading styles will make them flexible enough in performing both tasks simultaneously and

this will contribute directly to their reading and note taking speeds. These are the three reading styles used by flexible readers.

**6.4.2. Selecting Appropriate Reading Materials:**

Like subject selection, the selection of reading passages should also reflect the aim of the study. Criteria for text selection involve text structure, length, difficulty and content. As for structure, "passages should be analysed for differences which may predispose subjects to use particular strategies and not others" (Rankin, 1988: 123). Passage length should also be considered in the selection. Passages should be long enough to allow for subjects to get involved in reading, but it should not be so long that the subjects get tired by the demands of thinking aloud for a long period of time. Generally, the characteristics of the research population are the deciding factors concerning the length of the passage. Younger and less proficient readers are likely to be asked to use shorter passages than older and more proficient readers. Rankin (1988) proposes that passages between 300 and 1000 words are appropriate under most conditions.

The third criterion to consider in text selection concerns the level of difficulty. In this respect, when the cognitive load of the passage is too high it would make it difficult for subjects to think aloud. On the other hand, a passage that is below the subjects' ability will be dealt with only superficially, thus requiring little strategy use. Pressley and Afflerbach (1995: 14); however, state that "active and strategic efforts at meaning construction only occur in reaction to more challenging texts", and that when texts are difficult, reading is slower and consciously controlled, resulting in "substantial verbalization of information not explicitly given in the text" (Ericsson and Simon, 1988: xxxvi, cited in Pressley and Afflerbach 1995). Finally, the subjects' familiarity with the topic of the passage is an important factor to take into account. The subjects' responses to the passage may be biased if its subject matter requires prior cultural knowledge. Furthermore, if the researcher uses excerpts from larger

works, s/he should take care that the understanding of the excerpt would not necessitate knowledge of the previous and/or subsequent parts of the larger work.

On the other hand, Ericsson and Simon (1993) claim that easy and well-written texts are not suitable for verbalization because most reading proceeds rapidly and automatically, so whatever the reader can say out loud is a mere reproduction itself. However, as soon as the text gets more difficult due to its topic, organization, poor writing or unfamiliar writing style, reading starts to resemble a problem-solving task and verbalization can produce information other than the actual style. For this reason, Ericsson and Simon think that think-aloud is particularly suitable for examining the strategies of poor readers who encounter difficulties when trying to read an unfamiliar text.

**6.4.3. Types of texts:**

Text type is of a great value because it helps in determining both the reader's purpose and strategy and is likely to influence the reader's comprehension. Each type has its own characteristics concerning the general theme and the way it is structured. Moreover, the text type dictates sentence structure and vocabulary choice. In reading, one may get in contact with various materials like a letter, a newspaper, a novel, an electronic message, a play, a conversation, a picture, or a table. Hence, a text can be written, spoken, or even visual. Davies (1995: 83-88) argues that a text is described according to its rhetorical function. He sees that a text is persuasive, descriptive, expository, etc... These functions reflect neither the text's level of difficulty nor its content, but simply, they are indicators of the author's social goals. He referred also to more specific lower-level rhetorical functions such as cause- effect, comparison- contrast, argument- exemplification, problem-solution patterns and general particular patterns of the text. Therefore, each type of writing shows a particular way of development, and a special sequence of the writer's thought. The reader needs to be aware of

these types of development to make sure that he will be successful in following the author's flow of ideas.

In general, the text type falls under two big categories namely the narrative and expository text. The reader should be aware of the different features of the narrative text. He needs to keep in mind that a narrative passage usually tells a tale, a short story, folk tale, myth, fable, legend, fantasy and science fiction as it reports biographies. It has an opening section, the heart of the events and a closing section. The narrative text centers on some elements which are the characters, settings, themes, the conflict, sequence of events which settle the plot and a resolution of the conflict (Comprehension Instruction: 13). These features are termed by Rumelhart (1980: 313) "story grammars". He argues that these story grammars are helpful and very useful in understanding considerable portions of the story to be read. Thus, the reader's comprehension is affected by how much he recognizes these above mentioned features. Hyland (1990: 14) states that "effective understanding is therefore seen as being dependent on the reader's ability to relate the structure of a text to a familiar conventional pattern". A reader tackling a narrative text should not start from vacuum. He will get inside the text with the previous knowledge of meeting characters, following a sequence of events with conflicts and solutions. This is likely to direct his attention and focus and helps in maximizing his comprehension.

The reader also should be aware of the different features of the expository text. The author's goal is most of the time to inform or expose the information. It is usually associated with science and history texts. It is claimed that the informational text contains difficult vocabulary, in some cases domain specific or technical items. For this reason, it is seen as the most difficult text genre to tackle and to understand. Readers need to be prepared for the expository text features, information statistics, numbers, graphs, technical vocabulary with the different types of development namely description, classification, contrast, cause and effect…

This previous expectation of the text structure pattern reduces some of the reader's load and eases his comprehension.

To sum up, the reader recognition of the different rhetorical goals and the different organizational patterns of the text influences reading comprehension. Whenever the reader possesses this type of knowledge, his chances of success with a given piece of writing are increased. Therefore, a reader, a text, and an activity are fundamental ingredients in the reading process .The variety of text types convey that there is no one standard text that should be handled in a sole way. Different texts require different ways of reading. Students are consequently expected to have a kind of flexibility to move from one type to another using numerous techniques and strategies.

**6.4.4. Increasing the Will to Read the narrative Text:**

Through the study we conducted, we notice that the narrative text we used in the reading and note taking speeds tests is more motivating to read for almost learners. This to illustrate that text selection demands a high degree of skill on the part of the teacher. The most important selection criteria suggested in the literature on text selection involve the learners' interest and background knowledge. Teachers should also consider texts in terms of vocabulary, grammatical complexity and organization. Moreover, the selected text should be at an appropriate level of difficulty to match the learners' proficiency level in L2.

**6.4.4.1. Strategies for Reading a Narrative:**

1. Depending on the narrative type: for a written text, students should take careful notes as they read; jotting down whatever students might think is important. Students may mark in the text (if it's not a library book) or make notes on a separate sheet of paper. After they finishing each reading passage, they can take a few moments to think about what they've just read, and brainstorm for any possible ideas, significance, etc.

2. Immediately after finishing the narrative, students should write for about 15 minutes on everything that comes to their minds. These can be personal reactions, observations, and interpretations of what they've just read. They can write down questions they have about the narrative, ones that they may want to bring up in a class discussion.

3. Some things to consider while writing post-reading/viewing notes:

**Narrative structure** - what happens in the narrative and how the story is told?

**Themes, ideas, and values** - anything major concerning human and cultural issues expressed in the narrative; or in other words, what readers think the narrative is about.

**Characterization** - what the characters are like, how they are depicted (positively, negatively, mixture?), what their importance is in the narrative.

**Setting** - the characters' environments and the symbolic importance they may have.

**Writing** - important lines, dialogue significant to the narrative's theme(s).

**Technique** - the significance of writing style (the way the author uses words and the particular words used) in written texts or the camera movement and editing in film.

**Overall impression** - what students thought of the narrative and why. They may try to go beyond the labels "good" or "bad." Express why they did or didn't like it and define what you mean by "good" or "bad." All of this should help them to sharpen their memory and their ability to be a critical reader.

**6.4.4.2. Outlining and summarizing:** *Identifying the main ideas and restating them in one's own words*. Outlining and summarizing are especially helpful strategies for understanding the content and structure of a reading selection. Whereas outlining reveals the basic structure of the text, summarizing synopsizes a selection's main argument in brief. Outlining may be part of the annotating process, or it may be done separately (as it is in this class). The key to both outlining and summarizing is being able to distinguish between the main ideas and the supporting ideas and examples. The main ideas form the backbone, the strand that holds the

various parts and pieces of the text together. Outlining the main ideas helps to discover this structure. When making an outline, students shouldn't use the text's exact words. Summarizing begins with outlining, but instead of merely listing the main ideas, a summary recomposes them to form a new text. Whereas outlining depends on a close analysis of each paragraph, summarizing also requires creative synthesis. Putting ideas together again – in one's own words and in a condensed form -- shows how reading critically can lead to deeper understanding of any text.

**6.4.5. Striking the Right Notes:**

Although published over two decades ago, Edge's (1983) practical methods of classroom-oriented note taking for successful reading comprehension are still relevant today. It is always delightful to find a classic like this, which can be applied to real classroom situations irrespective of the times.

Edge (1983) stated that note taking is difficult in one's native language and in a foreign language, especially for students who are expected to understand everything in a text. He presented an 11-step process of note taking in detail using a real piece of material, which makes it easy for readers to understand and follow the steps. While introducing the steps, Edge reminded the reader that "the steps are only suggestions," implying that teachers could modify the steps considering factors such as students' academic levels, needs, goals, and time limitations.

Effective note-taking begins with the preparation which is done *before* the presentation. For this, we can assume that there is more to taking notes than recording ideas in a notebook. Actually, the pre- reading and note taking phase helps and improves focus, provides a framework on which students can hang the reading information, and helps "elaborate on information by filling in missing details or clarifying ambiguities met in the lecture, for instance.

Reviewing notes from the previous readings should not take more than 5 or 10 minutes, because the time is very worthwhile. And, while this simple step may seem obvious, students should make sure to bring all necessary materials (e.g., notebook, pen, handouts, syllabus, and textbook) before starting reading and noting down ideas of interest. Also, they should date and number each day's notes so they can check the notes with the assigned textbook reading and obtain notes for things they missed or forget to take. During reading, students should take notes that focus on main ideas and supporting details staying alert for signals that indicate the importance of information. Also, they have to condense the main ideas and supporting details into short phrases or sentences using abbreviations whenever possible.

After finishing reading, students should include such steps as filling in the gaps by adding important information they remember the writer puts but they did not write. However, despite all these crucial duties from the part of students, they should be exposed to great guidelines on how to take better rapid and effective notes and they should learn how to deal with particular note taking problems or issues.

To conclude with, we can say that as with reading, effective note taking is an active process. It is not an active process to copy words from a book onto paper. After all, a bright student could probably do that with any text but the result would not be a set of good notes. Active note taking means asking oneself, what or who are the notes for? What is the text about? What are the main ideas?

**6.4.5.1. Identifying Main Ideas:**

Good notes should pick out the ‘bones’ of an argument or key ideas in a text, especially those which are relevant to students’ studies or needs. Often the main idea in a single paragraph will be contained in the first or second sentence. The supporting sentences may clarify the idea for readers but they probably don’t need to record those once they have understood the main idea.

If they find it difficult to find the 'main idea' in a paragraph or series of paragraphs, they could use a procedure based on the following text analysis:

- What is the topic of the paragraph or paragraphs?
- What is special about the topic?

If students managed to answer these 2 questions, they have identified the main idea. Another crucial point about reading and note taking is that students should keep their eyes open for words and phrases in the text which signal key ideas such as, 'The most important...', 'Essentially...', In conclusion...', 'The main point is...' and so on. They may even find it helpful to read an author's conclusion first so they know in advance where an author is leading.

Reciprocal Notes help students to identify important details and events, and also determine why they are important or what they mean. Students' notes should fall into three categories: What it is; what it means; and why they think that.

**6.4.6. Style of notes:**

Broadly speaking there are two styles of notes, linear and diagrammatic. It is perfectly acceptable to adopt one style exclusively, alternate styles, or use different styles at different times. Unless the student is making them for someone else, notes are his/her personal record and as long they are meaningful and useful to him/her, it doesn't matter what they look like. There may be times when you need lots of detail and others when students just need an outline.

Linear notes are most effective when used with wide margins so comments, questions and ideas can be added subsequently with sub-headings which will give the notes structure. Other annotations such as circles, arrows, underlines and use of colour can help to highlight themes and show the relationship between two ideas. Using abbreviations for common words or words that occur frequently help to speed up the process.

Reviewing notes is important each time students read materials of their interest. If students spend time making notes, then it is important that they serve their purpose. However, they should keep checking that their notes make sense and are useful.

We can deduce from this that reading and note-taking influences the academic success of all university students as it is recognised by most researchers. As Spires and Stone (1989) point out, students will "increasingly have to depend on their ability to take notes in order to be successful in the classroom." Ornstein (1994) believes that all students would benefit if teachers deliberately trained their students in note-taking techniques, especially the lower-achieving students. Bakunas and Holley (2001) suggest that note-taking skills should be taught to students in the same manner that they are taught writing or computer skills.

Studies about the effect of note-taking on achievement recognize that there are two distinct categories of note-taking (Meyer, 2001). The first category suggests that the notes themselves are valuable because 1) help the learner rehearse the lecture's or the reading material's content and (2) can serve as a memory device that can help the student to remember parts of the content that were not included in the notes themselves.

The second category suggests that the act of taking notes is important because it 1) increases attention and concentration, 2) encourages students to process the material at a deeper level, and 3) provides a means of connecting new learning with prior knowledge (Carrier & Titus, 1981). These two categories imply that note-taking can boost achievement by acting as a ***product*** (the first category) or as a ***process*** (the second category).

To take quality notes that will be enough and save time, " The popular phrase "Just do it!" proposed by Edge (1983) might sound attractive. In this case, students should be encouraged to take notes, as a first step. In fact, providing a demonstration about the assigned reading book, for example, saves students time in the long term. However, teachers should also keep in mind that personal notes contain information meaningful for individuals (Van Meter,

Yokoi, & Pressley, 1994); it is important to give students ample opportunity to take their own useful notes so that they can become autonomous learners.

We must also remind ourselves that the steps given by Edge (1983) are only suggestions. Hence, students or teachers can skip some steps, emphasize others, or modify some on the basis of their own teaching experiences and often by the process of trial and error. For example, Edge emphasized pair and group work and provided an instructor's notes. By interacting with their peers, students can develop different perspectives on the same reading material and discover more efficient strategies by comparing notes among themselves. Slower readers and introverted students that have a hard time speaking up would be frustrated by having to share the text.

In her article Edge also suggested a one-paragraph summary as a final step. Unfortunately he did not fully explain this idea, which could be a shortcoming of her article. It is obvious that combining all notes for each paragraph does not necessarily make a good summary, as Edge admitted. A summary goes one step beyond note taking. Students must be able to reorganize, analyze, and synthesize what the writer says to create a summary. Thus, it might be helpful to provide information on how to write a summary for students in addition to guiding them through the note taking process.

Edge concluded that "the real test of good notes is their usefulness." Students take notes to use them afterward. Therefore, students must discover and develop their own note taking methods. They might use their first languages or techniques such as outlining, highlighting, or mapping. It is misleading to conclude that any one type of note taking is superior to others or even the best match for all students.

The taking of high-quality notes is an ongoing process that requires practice on a regular basis. This feat cannot be accomplished within a day. As teachers we have the responsibility to help our students develop effective note taking strategies and become better readers. In

serving these goals Edge's (1983) article is a commendable guide although published over two decades ago.

### 6.4.7. Vocabulary Instruction

Lexical knowledge appears to be a prerequisite for comprehending text. Laufer (1989) found that the lexical "threshold level" is 95%; that is if the student understands less than 95% of the text lexis, his/her comprehension of the text will be unsatisfactory. One of the points that the research tends to cover was statistically confirmed was related to the students' −especially slow readers− limited vocabulary knowledge and lack of strategic approach to handle unfamiliar words consisting mainly of using a dictionary or translating words to Arabic and French rather than using context clues and decoding word components for meaning or making educated guesses.

In order for reading to be successful, then, the learners must have a solid lexical knowledge that would ensure rapid reading and note taking rather than hindering it. In place, students must process words rapidly and automatically and approach new words strategically to learn content matter. The results of the study enable us to suggest the need for multiple ways both for acquiring new vocabulary and strategically handling unfamiliar words in the text to achieve the above goals. The former can be achieved through extensive reading; whereas, the latter requires a thorough and systematic vocabulary instruction.

### 6.4.8. Extensive Reading

The advantages of extensive reading are numerous. They involve promoting a positive attitude to reading, increasing the amount of reading, encouraging the use of reading strategies, and above all acquiring not only a new amount of vocabulary but also an understanding of the properties of words in use. For Zimmerman, 1997, cited in Bramford and Day, 1998), learners should be encouraged to 'adopt the habit of self-selected materials, based

on the evidence that incremental knowledge of words may be gained from reading' (p136-137).

**6.4.9. Developing reading speed:**

The results obtained from both reading and note taking speeds questionnaires and basically tests prove that there is a correlation between the two variables. Consequently, in the light of this we would come up with the following suggestions which could help remedy and improve teaching / learning situations. However, we may say that the recommendations listed below are not to solve absolutely the difficulty or the slowness in reading and note taking that students exhibit while doing both activities, but to relieve some of its negative effects.

Thus, for ensuring better rapid notes, students need to:

1. Preview the material they're going to read by looking at main headings, chapter divisions, and other relevant material--to develop clues about the structure of the work.

2. Adjust their reading speed as you read the material. Slow down when they need to be sure that they comprehend a section of material.

3. Speed up if you are already familiar with (or don't need to know) other sections.

4. Readers can dramatically improve their reading speeds by taking in several words in the line of text at one time (instead of sounding out each word, or focusing on each letter of the word (i.e., reading in chunks).

5. Computer programs like Speed Reader or Rapid Reader are designed to help readers improve reading speeds with flashing letters and words.

6. Another way to improve reading speed is to focus on the key words in the sentences. A significant amount of reading time is wasted on conjunctions, prepositions, or articles (i.e. a, an, the, but, and, or, nor, but, etc.).

7. Using a pacer like a pen or a finger--as a focal point to draw the eye across the line or down the page. A pacer can help in increasing the speed at which students read and reduce re-reading. A pacer can also help to keep track of what is being read.

8. Talking about what have been read. Some readers find that by talking about their reading with friends or fellow students, they are able to effectively synthesize the material.

9. Determining a reading schedule that best works. Readers may find that they can't concentrate on the material for more than an hour (or a half hour). Also, they should select time of the day when they are alert and ready to read.

10. Finding a reading spot, where interruptions or distractions will not disturb the reading of the text.

11. The best way to improve reading speed is to practice reading.

12. Students should not read everything, and should not miss out on vital information in the pursuit of their speed.

13. They shouldn't re-read right away; it will slow them down. If they absolutely don't understand part of the reading selection, they can go back and review the material later.

14. Developing a wider eye-span will help in reading more than one word at a glance. Since written material is less meaningful if read word by word, this will help to learn to read by phrases or thought units.

15. Instead of reading single words one at a time, students should read them in groups of 2, 3 or 4. As they fixate on each group minimize the time they spend on each eye fixation. To overcome the problems of skipping back and regression students can use a guide such as their finger, a pen or pencil or perhaps their mouse cursor.

These ideas are very simple concepts that can have a powerful effect on students' reading speed if they practice them and make them a habit. The most important concept behind speed-reading is the eye span. They know that fleeting moment when their eyes blink as they read a

line in a book? Their eyes are not blinking without purpose. They are taking in the information, which the brain will later process. This is where speed-reading or slow reading is decided. If students read word-by-word y they are definitely slow readers. If they read by vocalizing every syllable, you are also slower than they could be.

So the big rule is avoiding subvocalization which is the clinical term for reading word-for-word. Subvocalization, or silent speech is a natural process when reading it helps the mind to reduce its cognitive load, grasp meaning, and enable it to comprehend and remember what is read. The wisdom behind avoiding the subvocalization trap lies in the fact that the eye span works in conjunction with the eye blink to record the information in the brain. The shorter the reader's eye span, the less information his/her brain assimilates.

There is no evidence that normal non-observable subvocalizing will negatively affect any reading process (Carver, 1990; McWhorter, 2002). At the more powerful rates (Memorizing, learning, and reading for comprehension) subvocalizing is very detectable by the reader. At the less powerful faster rates (skimming and scanning), subvocalization is less detectable. For normal competent readers, subvocalizing to some extent even at scanning rates is normal. However, speed reading advocates generally teach lengthy prescriptive practices to eliminate subvocalising when reading as they claim it "places extra burden on the cognitive resources, thus, slowing the reading down." Normal reading instructors may simply apply remedial teaching to a reader who subvocalizes to the degree that they make visible movements on the lips, jaw, or throat (McWhorter 2002).

It may be impossible to totally eliminate subvocalizing because people learn to read by associating the sight of words with their spoken sounds. Sound associations for words are indelibly imprinted on the nervous systems, even of deaf people, as they will have associated the word with the mechanism for causing the sound. Subvocalizing is an inherent part of reading and understanding a word, and micro-muscle tests suggest that subvocalizing is

impossible to eliminate. Attempting to stop subvocalizing is potentially harmful to comprehension, learning and memory. At the more powerful reading rates (100-300wpm), subvocalizing can be used to improve comprehension.

That's why the chief trick behind becoming a speed-reading freak is widening your eye span. That means that in one reading sweep 'at the blink of an eye'; you should not only capture one word but words, phrases and eventually a whole sentence.

Another point is that students should avoid re-reading, which is technically known in speed reading circles as digressing. This takes up too much of the reading time thinking that the mind will remember it better by going back.

One of the biggest problems is that people try to read everything. Most textbooks are not designed to be read cover to cover. It's not cheating to read selective sections from a textbook. Students should be selective about what they read. Speed reading is not just about reading faster. It's about learning to use much more of the extraordinary powers of the mind.

**6.4.10. Handwriting speed:**

Higher handwriting speed contributes to greater fluency in writing without loss of legibility and can influence competence in composing. Improved handwriting speed plays an important role in learning to compose and enhances composing ability to express knowledge about different subjects.

In addition, writing researchers have indicated that slow handwriting can restrict the ease with which competence in composing is obtained and difficulties in acquiring handwriting speed may lead to avoiding writing and developing a mind-set leading to slow writing development. Handwriting fluency can affect completing written assignments, ability to take notes during lectures and frequency of writing (Berninger et al, 1998).

Handwriting difficulties cause difficulty when extensive writing is required and can undermine student's real potential. Since large amounts of time is still taken up with recording

in writing the lack of handwriting speed can lead to loss of motivation and evading of students' assigned work (Hedderly, 1992).

Existing research suggests (Alston, 1995) that handwriting speed can be a factor in scholastic achievement and a speed under 12 words per minute severely disables results and a significant extension time is needed to perform tasks requiring handwriting skills. As evidenced by various research studies:

a.Handwriting speed is a factor in student achievement, regardless of ability.

b.Students achieving higher-than-expected English language grades tended to write at a higher speed than those who underachieved.

c.At all ability levels students who achieved higher-than-expected English grades had a better handwriting style than those who underachieved. The evidence from various studies suggested that handwriting quality and quantity are strongly associated with examination achievement.

d.Slow hand writers had problems with poor motor co-ordination, spelling, letter formation, word shapes and discrimination between upper and lower case.

e.There was a correlation between speed and Reading/Spelling age. It was found that an increase in speed of 3 to 4 wpm corresponded on average to an increase in Reading/Spelling age of 3 - 4 months.

To say it in another way, a student's inability to record information in a coherent and legible form can impede their progress and note taking speed, which can then lead to frustration and possibly disaffection with a system where in the majority of cases assessment is linked to the written word. Handwriting difficulties can therefore be handicapping and as such can undermine academic progress across the ability range and interfere with learning.

Having the option to present or record responses in a range of written 'codes' reveals a true potential and provides much stronger motivation. Using abbreviations can improve

handwriting legibility, style, speed and motivation to write. Writing fewer characters for each word leaves more time to concentrate on legibility and handwriting style. In turn, more legible writing leads to less frustration in reading of written material, more willingness to write and additional time to study. Also, writing words in abbreviated form saves time when copious is performed.

**6.5. Suggestions for further research:**

Reading can be fun, but it can also be time-consuming if one's speed is not as fast as you'd like it to be. An average reading speed can range from 200 to 350 words per minute, but that rate can vary depending on the material and students' reading experience. It's also important to understand what is being read--even when trying to improve the reading speed.

The issue of optimal or sufficient reading rate necessary for comprehension of a print to take place has yielded very conflicting views (Anderson, 1999:2). Higgins and Wallace (1989; in Anderson, ibid) claim that a reading rate that is below 180 w/m is too slow for efficient comprehension. Dubin and Bycina (1991; in Anderson, ibid) state that 200 w/m is a minimum reading speed for a full understanding of a written print. Jensen being supported by Nuttall recommends 300 w/m as the optimal reading speed for SL readers who seek to approach native speakers reading rates (Jensen, 1986, Nuttall, 1996: 56; in Anderson, ibid).

Possible questions related to this issue suggested for future studies may include the following:

1. is there an optimal reading and note taking speeds for EFL learners for the processing of a particular text and the extraction of meaning?

2. What is the impact of comprehension on reading and note taking speeds?

3. What is the impact of increased writing speed and written output on both the ***product and the process*** of note-taking to enhance scholastic achievement?

Another issue suggested for future research is about the role of extensive reading in developing reading speed and note taking speed. Further research will certainly be needed to eventually understand:

How simplified, high- interest materials contribute to reading speed and note taking speed enhancement of EFL learners?

Other future investigations may include longitudinal studies on the comparative effects of different methodologies on reading speed and note taking speed in a variety of EFL settings such as:

a. Comparisons of courses using speed reading methodologies with programmes emphasising reading in quantity (based on extensive reading).

b. Examining extensive reading and intensive reading comparing their relative effectiveness in developing basic reading speed.

I recommend, then, to include Reading as an independent module in the case of third year English students at Ferhat Abbas university of Setif. By including this module within the body of the modules taught at the English Department, we are offering the opportunity for both students and teachers. Students will be given the chance to improve the skill of reading by practicing more and more reading either in class or at home. On the other hand, teachers could directly observe their students' reading progress.

If reading is included as an independent module; then, time becomes appropriate for embedding fluency instructions as one of the main objectives in the reading program as it has been suggested by Badrawi (1992, p17). According to this EFL educator, any reading program should have as fundamental objectives the following: to develop the reader's ability in identifying many words at sight; understanding rapidly unknown words; and in reading orally with an appropriate speed, proper expression and with correct punctuation. She points

out the fundamental objectives that should be met by a successful reading program where fluency instructions are one of them.

In the current study we have confirmed that reading speed and note taking speed are highly correlated variables but their effects on reading comprehension remains to be demonstrated in future researches. It is, then, so important to conduct a similar study in the same setting (FL setting) in which reading comprehension is, simultaneously, measured with speed and accuracy and its effect on note taking. Because reading quickly with a poor comprehension, as viewed earlier in the literature review, is not a good indicator of fluency. Adding to that, there are many EFL students who can decode texts quickly but have a poor comprehension.

In this study, we have attempted to give some hints for teachers who want to embed fluency instruction in their reading program. We highlight the areas that any teacher of reading should consider while developing reading and note taking speeds. EFL teachers should encourage their students to practice more and more reading in class under their guidance which insures the rapid growth of EFL students' reading performances and abilities would be more beneficial for any EFL teacher who wants to experience the rapid fluency growth of his students.

This may be the subject of a future investigation in which text comprehension is observed too during the experimental study beside the other fluency pieces (rate, accuracy and prosody. It is important to note that fluent reading depends not only on the reader's skill, but on the texts characteristics as well. Yet many of us may be fluent on some texts and reads in a very slow and laboured manner when confronted with some other texts. The type of texts that are most beneficial for developing speed needs to receive much interest in future research, knowing that most researchers concerns in this field have been on the text length and the level of difficulty of the passage (Invernizzi, 2002, p.462). Future researches need to focus on whether a particular type of texts best facilitates aspects of reading performance such us: rate,

accuracy, prosody and comprehension. It is then essential to know how far the type of text and its level of readability influence fluency growth.

*To what extent the length of the treatment period produce a consistency in fluency development?*

**Conclusion:**

This chapter tends to provide us with some pedagogical implications which are felt quite important for reading and note taking speeds. It also sheds light on the limitations of the current study and offers some recommendations and suggestions for future research.

# GENERAL CONCLUSION

The ability to read academic texts is considered one of the most important skills that university students need to practice and acquire. This study is aimed at casting light on and exploring the actual reading speed and note- taking speed of Third year English students when reading in their academic learning area, and depicting the repertoire of reading habits used when performing both tasks. For this aim, the study departs from two principle research questions:

1. What are the nature of the relationship between reading speed and note- taking speed? Are they independent or correlated variables?
2. What are the students' reading note- taking habits and reactions they import on using while dealing with both tasks.

The act of reading is described here as the outcomes of decoding and comprehension; in the absence of any one of them reading is not achieved and therefore the resultant notes that would reflect their understanding may be meaningless. For this reason, prior to the analysis and testing of the hypothesis, the flow of the written information is tracked in the literary survey from the moment the eyes get the visual stimuli until the process of putting ideas down starts by means of note- taking. In this vein, the different models of reading are highlighted, namely the bottom- up, the top- down and the interactive models. Our aim was to lay some background information relevant to the practical details of the present thesis. Our next step consisted in discussing the correlational study of the present research work by describing the two data collection procedures used in the study: a reading speed test, a note- taking speed test, a students' reading speed questionnaire and a students' note- taking speed questionnaire.

In order to test the hypothesis, the study entails a qualitative and quantitative investigation. The aim of the questionnaires was to have an idea about the learner's'

behaviours, attitudes, and habits in general once they come across a print and start taking notes.

The students who have participated in the current study are third- year English students at Setif University, Algeria. Hence, three measures have been administered to analyze the results gained in the reading speed and note- taking speed questionnaires by means of the SPSS. First, frequencies and percentages are used because the data is qualitative. It generally aims at knowing students answers and preferences on each question from both questionnaires. Second, the use of scatter diagrams which are graphical representation of the relationship between the two variables to make the founded results (percentages) clear. Finally, the Chi-square test is adapted to compare the founded results with the expected results that have been stated in the hypothesis. It is out of this test that we can have an idea about the extent to which the results are significant.

However, another set of measures have been undertaken to test the results of the reading speed and note- taking speed tests. First is the Mean. It aims at knowing the average of students' scores in both reading speed and note taking speed. Second is the use of the standard of deviation which is an indicator of the average distance of the scores from the mean. Third, Pearson's product-moment correlation coefficient (r) which seeks to investigate the proportion of the variation in values of note- taking speed which can be predicted from the variation in the reading speed. The calculation of the correlation coefficient (r ) has helped to discern the nature of the relationship between reading speed and note- taking speed; the comparison of means, and calculation t- tests results, all have served to show that there is a strong positive relationship between reading speed and note- taking speed.

Analysis of the results obtained from the calculation of the correlation coefficient (r) is achieved by means of the SPSS. Students' tests together with the questionnaires have allowed us to provide some conclusive interpretations in relation to the hypothesis and research

questions set at the introductory part of the study. The correlation coefficient (r) has proved that reading speed and note taking speed are highly and positively correlated; that is to say, subjects with lower reading speeds are slow inefficient readers and note- takers at the same time. Furthermore, they spend much time and focus much attention on decoding words in print which disrupted their comprehension and delayed their note taking process. However, subjects with higher reading speed (rapid) are rapid efficient readers and note- takers at the same time i.e. they do not spend much time reading and taking notes. The readers' less developed word recognition skills and strategies as well as vocabulary knowledge caused them to read word- by- word (slowly) and less effectively than rapid readers who manage not to read the text in isolated units but in chunks or sentences. Henceforth, the construction of the texts' meaning was not executed effectively.

Two- questionnaires have been calculated to support and validate the results obtained in comparing the means of reading speed and note- taking speed. The results of the questionnaires and the test have been in the direction of our hypothesis. They have denoted the possibility of having rapid readers who are rapid in their note- taking technique. In other words, when the degree or intensity of one variable goes high, the other also goes high.

On the light of the results obtained some proposed pedagogical implications and operational guidelines in the form of recommendations to enhance the learners' reading and note- taking speeds were proposed. Finally, the research limitations some suggestions for further research are offered.

To sum it all up, the present study has focused on reading speed and note- taking speed as being a major factors in skilled reading performance employed by University students reading academic texts in English and which have formerly neglected by both teachers and educators. It is now important to grant it more consideration and attention. For improving reading and note- taking speeds equals doubling students reading volumes and widening their reading

horizons. A larger- scale study with more participants, more test and questionnaire items would provide more data, and therefore a more reliable picture and determine whether the findings of the study could be extended to readers at different genre and carry out different reading tasks. Nevertheless, these findings indicate that reading speed and note- taking speed is a topic that deserves attention in L2 reading research, and perhaps most importantly identifies some specific directions for further research.

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www.lc.unsw.edu.au/onlib/notemake.html
'Note taking – an introduction' (University of New South Wales)
www.lc.unsw.edu.au/onlib/note1.html
www.College Board.com
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www.selfgrowth.com
www.usq.edu.au/library/help/refering/apa.htm
www.englishcompanion.com

Academic Skills Center. Kennedy Library, Rm 112. San Luis Obispo, Ca 93407-0204
805.756.1256
wsydnor@calpoly.edu
Tuesday, February 17, 1998 Critical Reading Strategies Page: 2 http://mind.phil.vt.edu/www/

**Appendix 1: The Reading Passage.**

**The Missing Painting**

Sam Marwick enjoyed his job as night security officer in the Department of Fine Arts at the University of Lochbrae. Of the people that he met, which were not too many since most had gone home by the time he arrived for his shift, he got on well with most of them. That did not include Professor Simkins, a rather severe and aloof personality.

It had all started when Sam tidied up some files in an office and put them into one of the filing cabinets for safety. That was his first week. What he did not realise, of course, was that some academics were not as security conscious as the people at the nuclear power station where he had worked previously. What he had also not realised was that the files belonged to Professor Simkins.

When the Professor came in the following morning, after Sam had left to get some well-earned sleep, there had been ructions. Everybody who ventured into the offices was accused of removing the files. No one could find them and it was only when Sam happened to come in early out of enthusiasm for his new job that the truth came to light. Sam remembered that interview he had had with the professor and had kept out of his way ever since.

This worked well until the painting of the Madonna and Child went missing. It was not a particularly famous or valuable treatment of the theme, but it had belonged to Professor Simkins before he donated it to the university. When Sam came in on the evening of the day on which its absence was discovered, he was met by Professor Simkins, Sarah Hill, his deputy, and Alan Jenkinson, the departmental secretary. What then ensued would have been described in politer circles as a full and frank discussion. What actually took place was a fierce and noisy row. The professor let his feelings about Sam's so-called incompetence come out in full clarity. Sam vented all the pent-up resentment he felt against the professor that had built up since the incident of the files. Sarah Hill tried to reason with them both, but simply

achieved the result that they both turned on her and told her to shut up. Alan Jenkinson hovered indecisively in the background.

The upshot was that Sam stormed out threatening to go straight to his union, with the professor shouting for his immediate resignation. The following day the painting mysteriously reappeared.

Sam confronted the professor and demanded an apology, which he did not get.
He also demanded an enquiry to find out what had really happened to the painting. He did not get this either. Frustrated and bitter, he approached Sarah Hill for her support in making a complaint about the professor's attitude and behaviour, but she did not want to get involved and, clearly embarrassed, said that she had to support her superior. He got even less help from Alan Jenkinson because, search as he might, he could find no trace of him. He had, apparently, as it emerged later, turned tail and gone on a few days' leave (which he had suddenly remembered he was entitled to) to do some fishing in the highlands of Scotland.

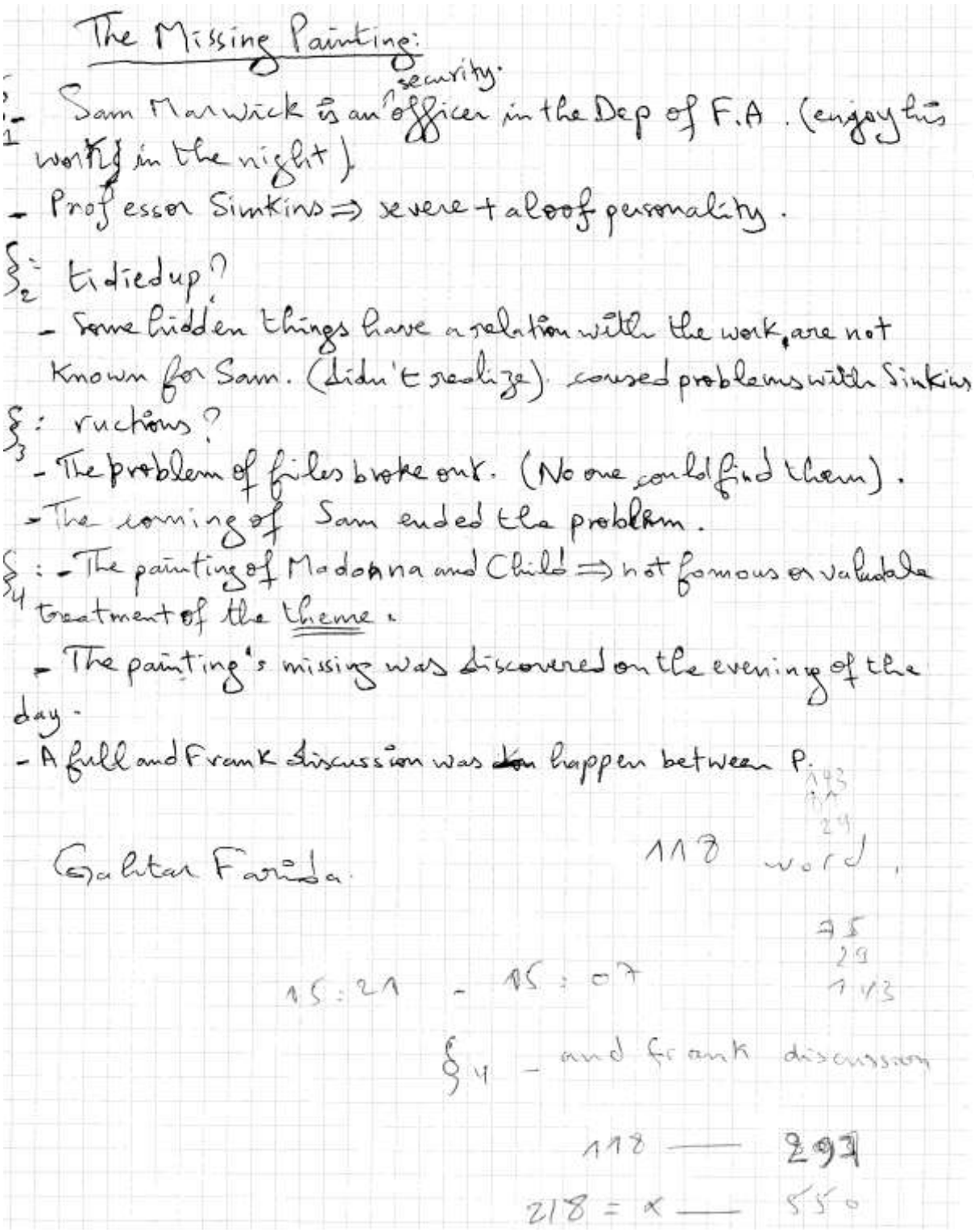
Sam had no option but to withdraw to consider what his best course of action might be.
(550 words)

**Questions**

1. Who had a rather severe and aloof personality?
2. Why had Sam tidied up some files and put them in a filing cabinet?
3. Where had Sam Marwick worked prior to his job at the university?
4. What was the subject of the painting that went missing?
5. What took place on the evening of the day on which the painting went missing?
6. What happened on the following day?
7. What was Alan Jenkinson's position in the department?
8. Who did Sam approach for support in his dispute with the professor?
9. What was Alan Jenkinson intending to do when he was on leave?

10. What did Sam do when he withdrew from the situation?

**Appendix 2: Sample of Students' Notes.**



The Missing Painting:

§1 - Sam Marwick is an security officer in the Dep of F.A. (enjoy his work in the night)
- Professor Simkins ⇒ severe + aloof personality.

§2: tidiedup?
- Some hidden things have a relation with the work, are not known for Sam. (didn't realize) caused problems with Sinkins

§3: ructions?
- The problem of files broke out. (No one could find them).
- The coming of Sam ended the problem.

§4: - The painting of Madonna and Child ⇒ not famous or valuable treatment of the theme.
- The painting's missing was discovered on the evening of the day.
- A full and Frank discussion was happen between P.

Galitar Farida 118 word

15:21 - 15:07

§4 - and frank discussion

118 — 297

218 = x — 550

Boudinar Soumia

Answers:

1) The professor Simkins had a rather severe and aloof personality.
2) Sam tidied up some files and put them in a filing cabinet in order to keep them safe.

3) Sam Macwick had worked prior to his job at the university in the nuclear power station.

4) The Madonna and Child was the subject of the missing painting.

5) On the evening of the day on which the painting went missing, Sam met many people among them the professor Simkins, Sarah Hill and Alan Jenkinson and they started discussing.
6)

7) Departmental Secretary was Alan Jenkinson's position in the Department.

8) Sam approached the support of Sarah Hill

9) Alan Jenkinson intending to do when he was on leave was to go fishing in the highland of Scotland.

10) Sam asked the apology of the professor and looking for the real reason behind the missing painting.

149

149 — 452
181 = x — 550

1- proffssor Simkins.
2- Sam tidied up some files and put them in a filing cabinet for safety.
3- Sam Marwick worked prior to his jobs at the University on the nuclear power station.
4- The subject of the painting that went missing was = the painting of the Madonna and child went missing
5- which took place on the evening of the day on which the painting went missing was, a fierce and noisy row.
6- The following day the painting mysteriously reappeared.
7- Alan Jenkinson's position was the departmental secretary.
8- Sarah Hill, Sam approached her for her support in making a complaint about the professor's attitude and behaviour.
9- Alan Jenkinson turned tail and gone on a few day's leave, to do some fishing in the highlands of Scotland.
10- Sam had no option but to withdraw to consider what his best course of action might be.

* Sam Marwick worked as night security officer in the department. He met proffssor Simkins a rather severe and aloof personality.

One day Sam tidied ups some files and put them in a filing cabinet for safety, when proffessor came in the following morning he did not find the files and accused Sam to steal them, the following day the painting mysteriously reappeared, So Sarah Hill tried to reconcile with Sam and the professor, Alan Jenkinson leave to do some fishing in the highlands of Scotland.

At the end Sam withdraws from a situation.

AMINA - ZIGHMI

word 252

$252 \times 3 = 756$

personatitues

Chahdi Rohadia

Sam Marwick: night security officer.
Professor Simkins: severe & Loof.
Sara hill: deputy of Simkins.
~~Madonna and his~~ child.
Alan jinkson: departmental secratery


- 1st S Introduction of Sam Marwick and Professor Simkins.
2nd S: 1st week in work for Sam and introduction to the problem which was that academix were not really security conscious and that files belong to Professor Simkins.
3rd: parograph: files were absent & not ~~was know~~ could find. only Sam.
4th. climax: The painting ~~was~~ missing => belonged to professor Simkins.

word 86

96 — 248
550
190 = x 5
10 : 40 - 10 : 35

- The Missing Painting: files = boxes.

- Sam was working in the nuclear power station. ~~he enjoyed recently~~ now he enjoyed a new job in the Department of Film Arts at the University of Lochbrae as a night security officer.

- climax:
- The files are missed. These files include a paint

- characters:
- Professor Simkins = severe and aloof personality
- Sarah Hill = deputy of Professor Simkins
- Sam Marwick = the new worker in the department
- Alan Jenkinson = the departmental secretary

79 word

Hernoune Yasmina

12:08 — 11:53

Hadji Zeineb

• 1st §: Sam Harwick enjoyed his job as night security officer and his bad relation with Professor Simkins

• 2nd §: The mistake that Sam done was that files that he losed and he didn't know that files were the Professor's Simkins files. 45

• 3rd §: the result of losing those files was very bad; Some-one could took those files and stolen it

• 4th §: investigation of Professor Simkins in order to find the thief and the other problem that was emerged later between the professor and Sam.

• 5th §:

86 word 101.

15:14 — 14 : 89

§ 6 Sam confronted

96 — 242

249 = x — 550

Fellak Karima.

* Major Personality: Sam Marwick: a night security officer.

- Simkins = Professor..

* Other Personality: Sarah Hill; and Alan Jenkinson.

General Ideas:

- The New Job of Sam Marwick as a night Security officer in The Department of Fine Arts.
- The special Character of Simkins.
- The misunderstanding of the lost files between Sam and Simkins.
- The Missing Painting of Madonna and the Child which leads Simkins to accuse Sam since the first incident.
- The reappearence of the Painting mistouriously

The Reaction of Sam after this whole 2nd incident and what he thought of Sarah and Alan.

word 77 ~~word 101~~

~~77~~
~~71~~
~~129~~
143

14.38 – 14:23

Finished the whole text

77 — 326
129 = x — 550

The movement of Sam Nomick to Lochblue university to work there but Unfortunately he found a severe and an aloof personality who was Professor Simkins. (because he was in his first week in his new job)

Sam removed the files of the professor Simkins and now could find them.

Sam's work included the painting of the Madona and Child → so it was missing

After this accident some hits enter to both of them. Sarah hill tries make them relax but she couldn't.

word 84

Hammach Fouad

4 = 378

15:56 15:36

in the background

the upshot

55

84 — 378

130 x — 5500

84 ← 273

168 x ← 550

x = 550 × 84

84 — 273

169 x — 550

Grindoum Assia

The Professor Simkins had a rather severe and aloof personality. Sam tidied up the files and put them in a filing cabinet for the sake of safety. He had worked previously at the nuclear power station. The missing painting was called Madonna and Child. After the painting went missing, a conflict starts between the Professor and Sam. But, the following day, the missing painting reappeared.
Alan Jenkinson was the departmental secretary. No one supported Sam in his dispute with the professor. Alan was doing some fishing in the highlands of Scotland when he was on leave. Finally, Sam decide to consider what his best course of action might be.

Word 121

121 — 469
550
141 = x

1 The Missing Painting

- The text is about Mr Sam who work as night security officer. He had a good relations with the people when he work except Professor Sulems with serve persecuting.

- Mr Sam had a problem in his first week in work, it was about save files.

- The files were missing and no one said just the but Sam remembered that they had with the professor.

- Sam was absent in the morning of the day and the painting of the Madonna and child was missing and it will pass to professor Sulems first and then a fierce and nasty row took place and Sarah Hill the daughter of Sam had to rescue both of them.

- The following day the painting mysteriously reappeared.

- Sam demanded from Sarah Hill to make complaint about the professor attitude and behaviour but she didn't and he also get a less help from Alan Jackson the departmental secretary.

So, the text is about Sam and his troubles with Professure Sulems. word 165

Taibi Samira.

165 — 488
185 = x — 550

paragraphe 1 : [illegible] A mina
the work of Sam in the university of hoe Pabrae.
the people that he met not since most of them arrived f
his shift.

paragraphe 2 :
he didn't realised that some Academics were not as security
conscious as the people at the nuclear power station where
he had worked.
the files belonged to proffessor Simkins

paragraphe 3 :
the man who ventured into the offices was accused of
removing the files.

paragraphe 4 :
Sam met by proffessor Simkins, Sarah Hill, his deputy,
Lauren Jenkinson
fierce and noisy row was take place.

paragraphe 5
the students cut treatening to go to straight to his unicom
the professor.

paragraphe 6 :
He didn't get his either, he approached Sara for the
support in making a complaint about the professor's attitud
and behaviour.

word 136

15:35 _ 15:20

46'

136 / 550

162 = 4

56 → He had appare

**Appendix 3: The Reading Speed Questionnaire**

**Questionnaire on Reading Speed:**

Full name: ……
Boy: □ Girl: □

I would be very grateful if you would participate in filling in the following questionnaire and contribute in the fulfilment of this work.

We would like to ask you to help us by answering the following questions concerning **Foreign Language Learning**. This survey is conducted to better understand **the way you read and take notes**. This is not a test so there is no right or wrong answers. We are interested in your personal opinion. Please give your answers sincerely as only this will guarantee the success of the investigation.

Your answers to any or all questions will be treated with **the strictest confidence.** Although we ask for your name on the cover page, we do so only because we must be able to associate your answers to this questionnaire with those of the other questionnaire which you will be asked to answer. It is important for you to know, however, that before the questionnaires are examined, your questionnaire will be numbered, the same number will be put on the section containing your name, and then that section will be removed. By following similar procedures with the other questionnaires through matching numbers and avoid having to associate your name directly with the questionnaire.

**Thank you very much for your help!**
**Mrs K. Faid**

**Section One: Background of Learners towards Reading and general information.**
**Please tick (√ ) the appropriate box (es):**

1) Are you interested in taking notes every time you read any sort of informative data?
   Yes □
   No □
2) Do you select time in which you like to read and take notes?
   Yes □
   No □
3) Have you had time to read recently in English?
   Yes □
   No □
4) Do you try to answer the exercises or questions which follow- up the text?
   Yes □
   No □
5) Does your busy schedule (time table) sometimes prevent you from reading?
   Yes □
   No □

**Section Two: Reading Strategies:**

6) Do you set purposes for yourself when you read?
   Yes □
   No □
7) a- Did you happen to have:
   a- extra □
   b- Extensive reading □
   c- None of them □

b- If yes. How often you do this?
   c. Always □
   d. b- sometimes

e. □ c- regularly □
f. d- rarely □
g. e- never □

8) Do you focus on..... while reading?
a- detailed (scan) □
b- General information (skim) □
9) Do you pay attention and seek to understand the structure and the organisation of the text?
Yes □
No □

**Please tick next to the reading habit you get used to follow when meeting an unfamiliar word or a new form:**

10) What do you do when you meet an unknown word or a new structure?
a- Reread the word many times (repetition) and try to guess the meaning of the word from the context.
b- Ignore or delete that difficult word or part of the text (skip over and continue reading)
c- Cut it into letters and syllables (prefix, root, and suffix) to read it correctly.
d- Ask another student about the meaning
e- Look up the definition in the dictionary.
f- Look at its grammatical class which the words belongs to.
g- Look at the words which are used with it to analyse the word for clues to its meaning.

11) a-Do you face difficulties in recognizing words and knowing their meanings?
Yes □
No □

**Section Three: Reading Speed.**

**12) Complete the chart with what you think true for you. Put (√) in the chosen column.**

| How fast do you usually read these | Very fast | Fast | Moderate | Slow | Very slow |
|---|---|---|---|---|---|
| - novel, short story, or detective story<br>- newspaper article<br>- telephone directory<br>- new work book recipe<br>- directions to a friend's house<br>- textbook chapter<br>- poem<br>- letter from a friend | | | | | |

13) When you read, do you pause (make a pause or stop) briefly after each:
a- phrase: longer meaningful stretch i.e. two words or more at a time □
b- word: reading a lot of separate words i.e. word by word? □
14) Do you think that doubling your reading speed will lead to better academic performance and success?
Yes □
No □
15) **Which way do you take in reading these sentences? The first or the second, please tick (√) next to the chosen sentence.**
a- The good/ old man/ raised his hand/ in blessing. □

b- The good/ old man/ raised his/ hand in/ blessing. □

16) How would you rate your reading speed in English?

a- **Very fast** □

b- **Fast** □

**c-Moderate** □

d- **Slow**□

e- **Very slow** □

17) Have you ever trained your eyes to move very quickly through a reading material by skipping over words or whole lines?

Yes □

No □

18) Have you ever tried to mark your reading time with a stop watch and the number of pages you have read?

Yes □

No □

**Section Four: Students' Reading Habits.**

19) a-Have you thought of the habits that may slow you down while reading?

Yes □

No □

b- Do you usually move your lips while you read silently?

Yes □

No □

c- Do you have the habit to pronounce the words for yourself first (silently) before saying them aloud?

Yes □

No □

d- Do you follow the words you read with your finger or a pencil and your eyes move line by line through a text?

Yes □

No □

e-Do you translate into your native language as you read in English or you often write translations of words in the English text?

Yes □

No □

f-Did you happen to move your eyes backward to check again the previous words instead of sweeping steadily forwards?

Yes □

No □

Don't know □

20) a- How do you like to read:

a- silently □

b- Loudly □

b- If you read loudly how often you do this?

a- Always □

b- Sometimes □

c- Regularly □

d- Rarely □

21) Do you think who reads slowly, understands better.

a- Strongly agree □

b- Agree□

c- Partly agree □
d- Disagree□
e- Strongly disagree□
f- Neuter □

**Appendix 4: The Note- Taking Speed Questionnaire.**

**Note- taking speed:** Full name: ……

Boy: □ Girl: □

I would be very grateful if you would participate in filling in the following questionnaire and contribute in the fulfilment of this work.

We would like to ask you to help us by answering the following questions concerning **Foreign Language Learning**. This survey is conducted to better understand **the way you read and take notes**. This is not a test so there is no right or wrong answers. We are interested in your personal opinion. Please give your answers sincerely as only this will guarantee the success of the investigation.

Your answers to any or all questions will be treated with **the strictest confidence.** Although we ask for your name on the cover page, we do so only because we must be able to associate your answers to this questionnaire with those of the other questionnaire which you will be asked to answer. It is important for you to know, however, that before the questionnaires are examined, your questionnaire will be numbered, the same number will be put on the section containing your name, and then that section will be removed. By following similar procedures with the other questionnaires through matching numbers and avoid having to associate your name directly with the questionnaire.

**Thank you very much for your help!**

**Mrs K. Faid**

**Section One: Students' backgrounds and strategies Towards Note- Taking.**

1) Do you construct notes out of the teacher's demand?

Yes □
No□

2) To what extent do you set goals and objectives for yourself before you note down

Always □
Sometimes □
Regularly □
Rarely □
Never □

3) Do you reach the level of comprehension (i.e., understanding) through producing what you have read in a form of notes?

Yes □
No□

4) a- Do you give interest to the mastery of the structure?

Yes □
No □.

b- If yes, does this mean that you hesitate to put the words on paper and you find difficulty in selecting the appropriate words that convey what you want to say?

Yes □
No □.

5) Do you generally: a- Take the structure of the notes which is proposed by the writer of the text?

Yes □
No □

Or (b) you use your own plan which may help you achieve what you want?

Yes □
No □.

6) Note taking is the stage of production. What ideas do you include in your notes?

a- Secondary □ or
b- Main□

**Section Two: Note- Taking Habits**

7) Do you think in your mother tongue in trying to express your ideas and words?

Yes □
No□

8) Did you happen to: a- Note down ideas on the spot i.e. immediately after reading them? Y

Yes □
No□

b- Or Leave what you want to write down until you finish reading the whole text then you rely on your memory to take them down?

Yes □
No□

9) How often do you make notes as a reminder for immediate use e.g. exams.

Always □
Sometimes □
Regularly □
Rarely □
Never □

**Section Three: Note- Taking Forms.**

10) Do you express your notes?

a- Verbally i.e., in words? □
b- Non verbally (e.g. preparing tables, diagrams, maps, models) □

11) A- Do you vary your techniques and strategies of note taking?

Yes □
No □.

B- Or you prefer to follow one form?

Yes □
No □.

12) What forms does your plan take:

Graphs□,
Headings and sub heading□,
Drawings□,
Signs □
Abbreviations□
Tables□,
Charts□,
Diagrams□,
Maps□,
Models□,
Drawings□,

**Cross next to the form you follow most in your notes.**

13) Do you **underline**, **Circle**, or **highlight** your notes?

Yes □

No□

14) Do you find your notes different from your colleagues' notes in case you have borrowed them as far as the use of symbols, Abbreviations, and the reason behind taking them down.

Yes □

No □

**Section Four: Note- Taking Speed:**

15) To what extent do you make use of abbreviations and the different symbols (signs)?

Always □

Sometimes □

Regularly □

Rarely □

Never □

16) Do you use arrows to show interrelations with the topic and subtopics when you put them as an outline, for example?

Yes □

No □.

17) Do you shorten your notes by leaving out the unnecessary words?

Yes □

No□

18) Do you stop from time to time while taking notes thinking of what you might write and how to express your understanding?

Yes □

No□

19) a- When you take notes, do you use every word you read (the writer's words) from a reading material?

Yes □

No□

b- If no do you try to sum up and select the main ideas relying on your own words?

Yes □

No□

20) Did you happen to note down every new information or definition or term?

Yes □

No □

21) Do you try to vary your vocabulary when taking notes?

Yes □

No□

الملخص:

يهدف هذا البحث إلى دراسة العلاقة بين سرعة القراءة و السرعة في أخذ رؤوس أقلام من غير الولوج في بحث أيها تؤدي إلى الأخرى وهذه الدراسة نعتمد في جوهرها على الإجابة على سؤال واحد رئيسي وهو: هل هناك علاقة بين سرعة القراءة والسرعة في أخذ رؤوس أقلام أم لا؟ وقد انبثق اهتمامنا بهذا البحث من الدور الفعال الذي تلعبه كل من السرعة في القراءة والسرعة في أخذ باعتبارهما أداتان مهمتان يؤديان إلى دعم الاستيعاب والفهم لدى القراء.

ومن أجل هذا خصصت هذه الدراسة لإثبات صحة مايلي:

وجود علاقة بين السرعة في القراءة والسرعة في أخذ رؤوس الأقلام من خلال إجراء دراسة ميدانية بجامعة سطيف على عينة بحث من صف سنة ثالثة ليسانس انجليزية تكونت من 48 طالبا و**262** طالبا في الاستفسار

لقد اعتمدنا في دراستنا الوصفية هذه على أدوات البحث المتكونة من:القراءة الصامتة كتقنية أولى تهدف إلى معرفة عدد الكلمات المقروءة في الدقيقة الواحدة ثم يتم مقارنتها بعدد الكلمات المكتوبة في الدقيقة الواحدة من خلال توجيه الطلبة بعد قراءة النص للمرة الأولى إلى إعادة قراءته مرة أخرى وأخذ رؤوس أقلام في نفس الوقت مع تحديد الوقت الذي يستغرقه كل واحد منهم وبعدها يتم حساب معامل الارتباط بينهما حيث تحصلنا على تصنيف القراء إلى ثلاث مجموعات:

ـ الطلبة الذين أثبتوا كفاءة وقدرة كبيرتين على القراءة (قارئ سريع)ـ و القارئ المتوسط والقارئ البطئ الذي تظهر قراءته بشكل متقطع بدل أن تكون عبارة عن جمل واضحة ومتجانسة مع بعضها البعض ونتيجة لهذا لا يتم فهم النص المكتوب كما ينبغي.

التقنية الثانية تعتمد على الاستفسار الذي يهدف إلى معرفة الاستراتيجيات والطرق التي ينتهجها المتعلم أثناء القراءة وأّخذ رؤوس أقلام معا وهل هناك تشابه بين الاثنين وأدت الاستنتاجات المستقاة من هذه الدراسة إلى تقديم بعض الاقتراحات لمعلمي اللغة الانجليزية كلغة أجنبية بغية الاهتمام أكثر بهذه الأداة المهمة من أجل قراءة فعالة.

**باعتبار أن القراءة وأخذ** رؤوس أقلام في نفس الوقت مرتبطتان كما هو معترف به ومثبت عند جمهور الباحثين إذ أن القارئ ما ينفك يقرأ ويأخذ رؤوس أقلام في نفس الوقت.هذه الأخيرة يحتاجها للمراجعة أو للتحضير للامتحانات أو غير ذلك من الأمثلة.ولهذا فان بحثنا يرمي ليس الى دراسة كل منهما على حدا بل لعنصران مرتبطان متلازمان.فهل هناك علاقة.وفي ضوء هذا فان بحثنا الحالي يلقي الضوء على ما إذا كان هذا صحيح فيما يخص سرعة هذه الشريحة من الطلبة في **القراءة وأخذ** رؤوس أقلام هل هي سريعة أم بطيئة. هذا بالإضافة الى ملاحظة العادات والطرق التي يتبعها القارئ أثناء القراءة **وأخذ** رؤوس أقلام وذلك من خلال الاستفسار.

هذه الدراسة تنطوي على فرضية واحدة وهي أننا نفترض أن طلبة السنة الثالثة ليسانس انجليزية بطئ في **القراءة** و في **أخذ** رؤوس أقلام

النتائج عليها المحصل في هذه الدراسة تشير إلى وجود ارتباط قوي بين المتغيرتين

.

## Résumé

Le présent travail de rechercher vise à étudier la relation qui existe entre la vitesse de lecture et la prise de note. Notre intérêt pour cette recherche est fondé sur le rôle important que joue les deux variables pour les étudiants. L'habitilité en lecture est une association avec la prise de note parce que les apprenants fréquemment sont besoin de noté les éléments qui sont nécessaire et qui relier avec sont butes de lecture. Ce travail essaye de montrer les vitesses d'éducateurs dans la lecture et la prise de note quand lisent un texte écrit en Anglais comme une langue étrangère.

Cette recherche descriptive a été réalisée avec l'implication d'étudiants de troisième année Anglais à l'université de Ferhat Abbas, Sétif. Il a été accompli en deux parties : la première partie ce travail qu' étaient inclus 48 étudiants (qui ont peut être participé dans la remplient des les deux questionnaires) a visé l'évaluation de les vitesses générale des étudiants avec les deux tests en la lecture et la prise de note. La deuxième partie qui a été portée sur un échantillon de 262 étudiants a été consacrée à l'investigation de leurs stratèges et habitudes accompagnées la lecture et la prise de note.

Pour déterminer la nature de la relation existent entre les deux variable de l'étude- la vitesse de lecture et la vitesse de prise de note, le coefficient de corrélation (r) a été calcule. Il a révélé un forte positive corrélation entre ces deux variables. En outre, les résultats obtenus dans les deux tests (la vitesse de lecture et la vitesse de prise de note aves les) et les résultats obtenus dans les deux questionnaires (le questionnaire de la vitesse de lecture et le questionnaire de vitesse de prise de note) ont été analysée a partir d'utilisation de la SPSS. Les résultats significatifs de cette recherche ont fait ressortir et ont indiqué un forte positive corrélation entre les deux variantes.

Les conclusions tirées de ce travail on mené a émettre des proposition pour les enseignants d'Anglais langue étrangère, notamment diverse activités et stratégies de lecture et de prise de note pour favoriser une lecture et prise de note plus rapide.

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