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**An Investigation of Note -Taking Strategies and their Effect  
on Students' Performance in Exams:**

The Case of Third Year License LMD Students of English at Jijel University

Dissertation submitted in partial fulfillment of the requirements for the  
degree of Master in Language Sciences

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## Dedication

After praising God almighty the greatest

I dedicate this work:

to my dearest person, the person whose words of encouragement are still echoing in

my memory, **My Father**;

to the apple of my eyes, **MY Mother**;

to my young brother; my older brother and his wife, my sisters and their husbands;

to my beloved young sisters: Mounia and Ibtissem;

to my beautiful nieces: Aya, Chaïma, and Oumayma,; and wonderful nephews

Achraf, Wassim and Iyed;

to my dear friends: Radia, nadjia, Rokia, Charifa, Nadjat, Nadia, Imen, and Racha.

**Sabra**

I would dedicate this modest work: To the only person with the exception of God

nothing is important: to you **Mum**;

to **My Father** who has helped me to make my dream a reality;

to my dearest brothers: *M. El-Cherif* and *Abd El-Ouaheb*, and my beloved sisters:

*Hadjira* and *Nihel* a big thanks for their support and for putting colors in my life;

to my adorable cousins especially: *Assia, Zahra, Loubna, Imen, Chahinez, Aya* and

*Israa*, and to all the extended family;

to my best friends: *Ahlem, Nadjia, Sabra, Radia, Rokia, Nadia, Imen, and Fatiha*.

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## Abstract

The present research work is intended to investigate note-taking strategies used by third year License LMD English language students at Mohammed Seddik Ben Yahia University. It also aims to explore the effect of note-taking strategies on students' performance in exams. To reach the above stated aims, it is hypothesized that third year English language students use three types of strategies (abbreviations, symbols and highlighting) to take their notes and that these strategies do not help them to improve their performance in exams. To test the validity of these hypotheses, a research study was carried out a study with (44) third year license LMD English students out of (308) as a sample at Mohammed Seddik Ben Yahia University during the academic year 2014-2015. Two research tools were used: a questionnaire and documents analysis. All the participants have been randomly selected from the department of English. The discussion of the results has shown that the most widely used note-taking strategies are abbreviations, symbols and highlighting and that these strategies do not help students to do well in their exams because most of them did not get good marks in teaching English as a foreign language and sociolinguistics exams as it is demonstrated in the documents analysis.

## List of Abbreviations and Symbols

EFL: English as a Foreign Language

E.g.: Example

ESL: English as a Second Language

LD: Learning Disability

LMD: License Master Doctorate

L2: Second Language or Foreign Language

NR: No Response

P.: Page

SOAR: Select, Organize, Associate, and Regulate

SQ3R: Survey, Question, Read, Recite, and Review

TEFL: Teaching English as a Foreign Language

TL: Target Language

TOEFL: Test of English as a Foreign Language

/: and or

%: Percentage

&: and

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## **General Introduction**

### **1. Introduction**

Note-taking plays a crucial role in the process of learning in universities. Most students take notes while listening to classroom lectures to gather the most important information and ideas included in the lecture's content. The most important reason which makes students take notes is that maybe they can never listen again to the presentation or speech. So, students take any opportunity to record every information they can use later. Many learners claim that they follow the speaker, but have problems is that when it comes to remember the lecture that content. Likewise, the high speed at which the lecture is delivered is another problem students may face. Besides, some students take their notes from written materials provided by their teachers such as books and handouts. Students while taking their notes use different strategies and skills. These notes will be used by students during the preparation for exams. However, some students may not depend on their notes because they see them as ineffective and inadequate.

Note-taking can be defined as the process of writing down or recording what an instructor said. It is based on selecting the main points and ideas from the lecture's content.

Fajardo (1996) considered note-taking as a complex activity which combines reading and listening with selecting, summarizing, and writing.

Pauk and Owens (2013) said that "Taking notes does not simply mean scribbling down or marking up the things that strike your fancy. It means using a proven system and then effectively recording information before tying everything together" (p. 234). This means that when students take their notes, they do not need to write quickly and carelessly every information they feel it is likeable. Note-taking means selecting and recording effective

and main points. Since note-taking is a very important process, it was a subject of interest of many researchers.

## **2. Background of the study**

There are numerous studies interested in note-taking and in the strategies being used. The first systematic study of note-taking was done by Gilbert (1989). He claimed that taking notes from a lecture in a foreign language is a very difficult process. Even sometimes students when they listen to the second language lecture, they take notes in their first language (Koren, 1997).

Van Meter, Yokoi, and Pressley (1994) stated that most students take notes when listening to the lectures in universities and colleges. They found in their ethnographic interview study that students need to take notes for the following reasons: (1) it increases their attention to the lecture, (2) it helps them in understanding the lecture content and retain this content later in their memory, (3) it provides connection between ideas, and (4) it informs the repeated points in a class. They also focused on what strategies students use when they take notes. They found that students generally write down the key words paying attention to the content on the board and the information they were unfamiliar with.

Dunkel (1988) investigated the relationship between the content of notes students take from L2 lectures and test performance. Dunkel's results showed that there is no direct relationship between test achievement and the quantity of notes taken "but rather to (a) terseness of notations (embodied in the information units), and (b) inclusion of potential test information (embodied in the test answerability index)...'' (pp. 269-270).

A pilot study was undertaken by Benson (1989) to investigate the Arabic speaking students' processes while listening to academic lectures at a United State University. Benson found that students recorded the instructors' stated points in simple sentences.

Liu (2001) investigated the relationship between three qualitative features of Chinese students' notes and test performance: number of content words, number of words spelled out fully, and number of notation. The study showed significant positive correlations between number of content words and lecture specific information opposed to words in full spelling which have negative correlations with lecture specific information. Liu claimed that learners should be encouraged to take down more content words when required to recall specific information and to establish a personalized shorthand system. Since many researchers spent a great deal of time on this issue, a research study is carried out to investigate the different note-taking strategies used by third year license LMD students of English language, and the effect of these strategies on their performance in exams.

### **3. Statement of the Problem and Research Questions**

Within the context of English as a foreign language, it has been observed that students are required to take notes during lectures. Note-taking is a very important skill which is widely used in universities. It is based on recording information and ideas that students may recall later. Not all students are good note-takers; they may face problems in taking their notes in a successful way. Students may differ in their level of knowledge as well as in the strategies they use in taking their notes. For learners to be effective note-takers, they should display a readiness to use adequate strategies to achieve successful comprehension of the whole lecture. For instance, students should be selective; they do not need to write down everything that is said or read. Also, students need to use symbols and abbreviations.

We have noticed that third year license LMD English Language students at Mohammed Seddik Ben Yahia University do not seem to be aware of the adequate strategies to follow, and we think this may affect their performance in exams.

The present investigation is carried out to answer the following research questions:

- What strategies do third year license LMD students of English language use in taking their notes at Mohammed Seddik Ben Yahia University?
- Do note-taking strategies employed by third year license LMD English language students assist them in their performance in exams?

#### **4. Hypotheses**

- Third year license LMD students of English language use three types of strategies to take their notes. These strategies are: abbreviations, symbols, and highlighting.
- Third year license LMD English language students do less better in exams because their note-taking strategies do not assist them in their performance.

#### **5. Aims of the Study**

The aim of this research is to investigate the different types of strategies that third year license LMD English language students use to take their notes. Specifically, this study investigates the effect of note-taking strategies on improving EFL learners' performance in exams.

So, the main aim of the current study is the examination of the nature of the relationship that may exist between the students' performance in exams and their use of note-taking strategies.

#### **6. Research Methodology**

Polit et al. (2001) stated that research methodology is concerned with the techniques used to structure a study, to collect, and to analyze the data in a research investigation. It also contains a set of procedures used to collect information.

To investigate the above hypotheses, to obtain the information required from our subject, and to fit the objectives of our research, two main tools were used which are a questionnaire and documents analysis. The questionnaire contains a set of questions

directed to third year LMD English language students. On the other hand, the documents consist of the students' records in exams of two content modules.

The above mentioned tools will be directed to English language students at Mohammed Seddik Ben Yahia University to investigate their note-taking strategies and the impact of these strategies on the learners' performance in exams.

The subject of the present study will be a randomly selected sample of third year license LMD English language students at the department of English at Mohammed Seddik Ben Yahia University. The third year students are selected because they have a number of modules, and most of which are content modules that require note-taking.

## **7. Structure of the Study**

This research is basically divided into two main chapters, in addition to an introductory part which contains a general view about what the research will be about, and a concluding part which contains the research aims and main findings.

The first chapter is concerned with the definition, the different note-taking strategies and methods, in addition to the note-taking functions and skills. Also, it deals with students' characteristics in relation with note-taking.

The second chapter is divided into two sections. The first one presents the research methodology. The second part is devoted to the presentation and the analysis of the data gathered and the results that will be obtained from the documents analysis and the questionnaire given to third year license LMD English language students.



## **Chapter One: Review of the Literature**

### Introduction

#### 1.1 Note-Taking

##### 1.1.1 Note-Taking Definition

##### 1.1.2 Note-Taking Methods

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###### 1.1.5.1 the SOAR study system

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1.1.6.3 cognitive differences among note-takers

1.1.7 Note-Taking Functions

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1.1.6.5 the encoding function

1.1.7 Some Axioms of Good Note-Taking

1.1.8 Good Advice for Note-Takers

1.1.9 Note-Taking Importance

1.1.11 Note-taking and Test Performance

## Chapter One: Review of the Literature

### Introduction

The current chapter deals with preliminary considerations in note-taking. It deals with note-taking skills and its phases. It has also to do with reading note-taking strategies and relationship of students characteristics to note-taking. Besides, it states some axioms of good notes and good advice for note-takers. Last but not least, note-taking importance is also discussed in this chapter.

### 1.1 Note-Taking

Note-taking process is given a great importance and is taken into consideration in every foreign language teaching situation. In addition, investigators have claimed that note-taking is one of the best ways to help students in their learning situation.

**1.1.1 Note-Taking Definition.** O'Malley and Chamot (1995) defined note-taking as "Writing down the key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a language task" (p. 138). That is, note-taking is the process of recording the main ideas included in the lecture's content that may help students in their performance on later exams.

Another general definition presented by O'Hara (2005) is that note-taking involves besides active listening, relating information to previous knowledge and answering the questions that arise from the material.

**1.1.2 Note-Taking Methods.** Piolat (2001) classified note-taking methods into linear and non-linear styles/note-taking. On one hand, linear note-taking has a similar format to written texts which are the most common among students. On the other hand, non-linear styles are based on graphical representation. The most important thing here is that both styles do not differ in the required cognitive effort or in the comprehension of the text.

However, Piolat, Olive, and Kellogg (2005) argued that non-linear styles of note-taking are more effective than the linear styles since they provide connection between ideas.

In “*Note Taking System*” 2008, there are five note-taking methods: The outline method, the sentence method, the charting method, the mapping method, and the cornell method.

**1.1.2.1 the outline method.** The outline method is a very easy method of note-taking. It divides the information of the lecture into main topic, sub-topics, and supporting details. It is good when the instructors have provided outlines of the lectures (PowerPoint). It can also be used when there is no time to think about the appropriate format for the lecture.

- **Strategy:** Write the general information on the left of the paper then write the more specific information on the right indented with spaces without using numbers or Roman numerals: dashes are better.

**a. Advantages**

-It facilitates review due to its well-organized system and relationship between elements.

**b. Disadvantages**

-It is not appropriate for first lectures.

-It requires more thought in class and may not show some relationships when needed.

**Example:** “– Extrasensory perception.

\_ Definition: means of perceiving without use of sense organs.

\_three kinds-

\_telepathy: sending messages.

\_clairvoyance: forecasting the future.

\_psychokinesis: perceiving events external to situation.

\_current status.

\_no current research to support or refute.

\_few psychologists say impossible.’’

In the example above, the main topic is mentioned on the left of the paper (extrasensory perception) followed by its sub-topics and supporting details.

**1.1.2.2 the sentence method.** In the sentence method, students write every new information on a separate line. It is very easy to use, but it requires review and editing for final organisation. It can be used in heavy, fast, and somewhat organized content lectures.

- **Strategy:** Write everything and in each new information move to a new line. Also, leave space for later missed information. After lecture, it is better to review and edit notes to organize them.

**a. Advantages**

- Most or all of the information are recorded.
- It is a very easy method.

**b. Disadvantages**

- We cannot distinguish between major and minor points.
- It is not suitable for content which comes fast.
- It is difficult to edit without rewriting.
- It is difficult to review without editing.

**e.g. 1:**

A revolution is any occurrence that affects other aspects of life, such as economic life, social life, and so forth. Therefore revolutions cause change. (See page 29-30 in your text about this.)

**Sample Notes** – Revolution – occurrence that affects other aspects of life: e.g., econ., socl. Etc. C.f. text, pp. 29-30.

**e.g. 2:**

Melville did not try to represent life as it really was. The language of Ahab, Starbuck, a and Ishmael, for instance, was not that of real life.

**Sample Notes** – Mel didn't repr. Life as was; e.g. Lang. Of Ahab, etc. no of real life.

These examples from “*Note Taking System*” (2008) show notes in the form of sentences.

**1.1.2.3 the charting method.** This method is based on drawing columns and labelling appropriate headings in a table. It is used when the lecture format is well-defined. Also, it can be used in heavy and fast lectures especially which on facts and relationships.

- **Strategy:** Draw columns and after identifying the categories of the lecture content, put them in headings. As the lecture is progressed, put the informaion in the right column.

**a. Advantages**

-It facilitates memorization of facts, comparisons, and relationships review.

-It is appropriate for heavy and fast content.

-It provides a big paper sequence for the whole lecture.

**b. Disadvantages**

-It requires a well understanding of the lecture to know how to locate the appropriate categories.

**e.g.:** A note-taking for a history class in a chart format:

Figure 1

*A Charting Format Example* (Adapted from “*Note Taking System,*” 2008)

Period	Important people	Events	Significance
1941-45	FDR	WWII	U.S.A
			Involvement

The lecture information in this example are placed in a table, and the lecture categories are placed in the headings.

**1.1.2.4 the mapping method.** This method is based on the organization of the lecture information in graphic organizers and diagrams. Students can use the mapping method to combine information from lectures and written materials. Also, they can use it when the lecture content is heavy and well-organized.

- **Strategy:** Buzan (1995) identified the mind map strategies although they are open to individual interpretations as follow:

- Write the word or the topic definition in the centre or the top of the paper; you can also use an image for the topic.

- Extend lines from the centre, and then place each key word and phrase on the extending lines.

- The closest lines to the core of the mind map can be thicker than those at the periphery.

- Each line branches off the earlier line to form a sub-concept of the previous line where it is branched from.

- Use at least three colours which you can develop them into your own code of meaning.

- Use images, symbols and codes.

**a. Advantages**

- It is useful for visual learners due to its format.

- It can be used as a study guide.

- It helps students when studying and need clarification.

- Excellent for those who want to re-organize their information after the lecture.

**b. Disadvantages**

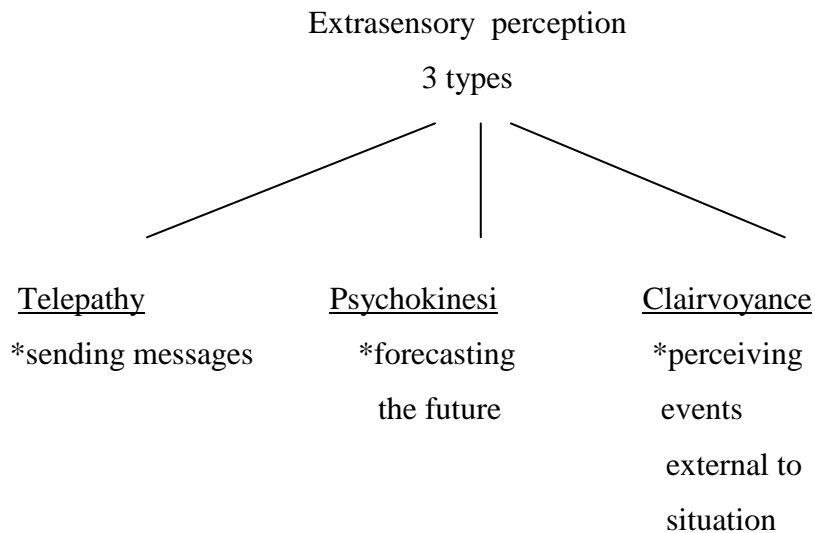
- It is difficult to use during the lecture.

- Change in content from major points to facts may not be heard (“Note-Taking System,” 2008).

**E.g.:**

Figure 2

*A Mapping Format Example* (Borrowed from “*Note Taking System*”, 2008).



In this format, the topic is placed in the middle, and the sub-topics are branched from.

**1.1.2.5 The cornell method.** The cornell method is a systematic method for recording and reviewing notes. It was developed by Pauk (1974) to help students improve the organization of their notes (Majid Hayati & Jalilifar, 2009).

- **Paper:** Divide your paper vertically, 2 ½ inches in the left, 6 inches in the right. Vertically, leave 2 inches at the bottom. The left side is for cue words or questions and the right side is for the notes (“*Note Taking System*,” 2008).
- **Strategy:** According to Pauk (2001), the cornell system is as the following:
  - 1. Record:** Write your lecture notes in the right column.
  - 2. Questions:** After class, as soon as possible write questions or key words about the lectures notes in the left column.
  - 3. Recite:** Cover the note-taking column then try to answer them in your own words.



**4. Reflect:** Ask yourself questions about the material's significance, application, and principals.

**5. Review:** Review your notes every week for a better recall for current use as well as for exams.

**6.** After class, summarize the notes at the bottom of the page.

**a. Advantages:** In "*Note Taking System*" (2008), the cornell method advantages are:

-It saves time and effort.

-It is considered as a systematic format for recording information.

-It is simple, efficient, and well-organized for reviewing.

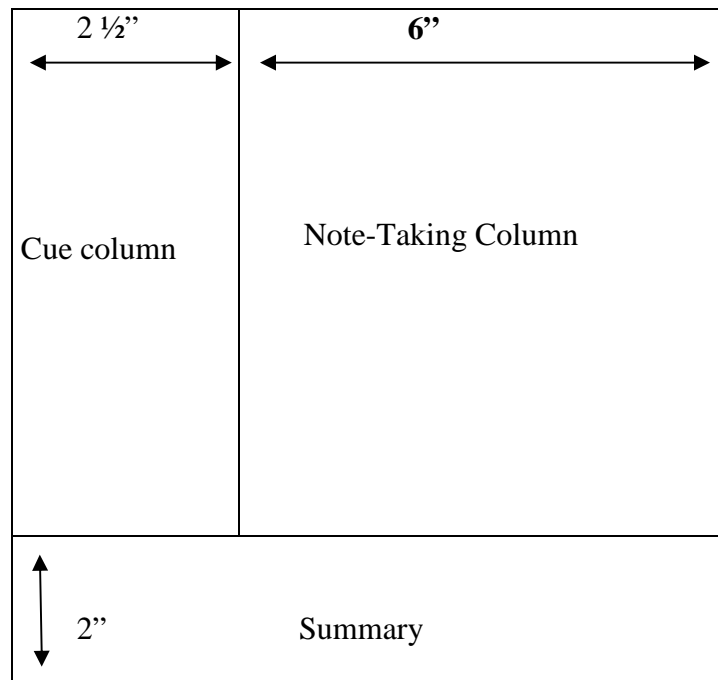
-It shows the main ideas.

**b. Disadvantages:** None.

**e.g.:**

Figure 3

*The Cornell Method* (Adapted from pauk, 2001).



**1.1.3 Note-Taking Skills.** According to Suritsky and Hughes (1991) note-taking involves four broad skills: listening, cognitive processing, recording lecture content in written form, and reviewing noted information. The first three skills usually occur contiguously (as cited in Williams & Eggert, 2002).

**1.1.3.1 listening.** Because listening and processing occur in such close succession, they are difficult to differentiate conceptually. Perhaps, the difference between these two concepts could be emphasized by equating listening with paying attention. Students' attention is focused on what the instructor is saying at the moment, there is little chance that meaningful note-taking and processing follow.

Unfortunately, little consideration has been given to moment-to-moment student attention in the college classroom (Williams & Eggert, 2002).

**1.1.3.2 cognitive processing.** Suritsky and Hughes (1991) maintained that cognitive processing of lecture content involves at least two stages: (1) understanding each lecture point, and (2) connecting that understanding with one's existing knowledge. Armbruster's (2000) synthesis of note-taking research sub-divided the second stage into two processes: (a) making internal connections between new points and previous points in the lecture; (b) making external connections between new points and one's prior knowledge of the topic.

Kiewra (1985) reported that expressing a lecture's explanation in one's own words reflects a deeper level of processing than simply repeating the comment verbatim. Suritsky and Hughes (1991) concurred that students may try to integrate incoming information with existing knowledge in different ways. This attempts to connect the current input with prior knowledge which helps the students construct a conceptual schema of the day's discussion, while integrating that discussion into a larger conceptual framework for the course (as cited in Williams & Eggert, 2002).

**1.1.3.3 note-taking.** The first challenge in note-taking is to achieve a balance between listening, processing and note-taking; efficiency is fundamental to achieve this balance. Efficiency is technically defined in terms of the ratio between the number of conceptual points recorded and the number of words in the notes.

Kiewra (1985) found that efficient notes are related negatively to achievement. When students record their notes, they must distinguish between critical ideas and unneeded information. One of the most complex features of note-taking is achieving mix between main points and exact details. These details may help the learners to reconstruct the main ideas at a later time such as before exam (Marshall, 1974). Dansereau (1993) reported that this is one reason why the number of recorded words is positively related to performance (as cited in Williams & Eggert, 2002).

**1.1.3.4 reviewing.** The fourth major note-taking skill is reviewing notes. It was emphasized by Suritsky and Hughes in (1991). Research on note-taking indicates that students perform better when they review complete notes (Kiewra, 1985). Also, Kiewra (1987) reported that students are incomplete note-takers. Experimenters have tried to help incomplete note-takers in two different ways. First, they have directly varied the content of notes by providing some students with complete notes, representing those of the experts to review. The researchers found that reviewing the expert notes leads to higher performance than reviewing one's own notes (Annis & Davis, 1975; Thomas, 1978). Second, Kiewra et al. (1988) have directly varied the form of notes by providing a framework for note-taking. A framework provides topics, sub-topics, and space for note-taking (as cited in Williams & Eggert, 2002).

**1.1.4 Phases of Note-Taking.** Note-taking is a process which starts before the lecture and ends after the students recall their notes. Understanding this process can help parents as well as teachers to a better preparation of students for note-taking.

**1.1.4.1 before the lecture.** Students should prepare to learn before the start of the lecture. They should find a seat with a good view of the teacher and blackboard. Besides, students who have visual problems should seat close to the front of the room. Also, when they prepare to take notes, they should write the current date and the topic of discussion on the page. Writing the date and the topic will help students locate information more easily. In addition, if time permits, students may write down some information about the topic to activate prior knowledge. Another part of the preparation process involves making sure that students have adequate writing tools and available paper so that they do not have to interrupt learning by searching for more (Boyle, 2007).

**1.1.4.2 during the lecture.** As soon as the lecture starts, students must attend to the main ideas of the lecture then relating meaning to them by using listening skills (Kiewra, 1985). According to Hughes (1991) when students relate meaning they have to concentrate on and understand the most important points of the lecture. Focus on both the teacher and the topic is key aspect of the listening process. It involves using selective attention to receive the visual (the teacher and the notes on the board), and auditory cues (the teacher's voice). Attention to the teacher helps students to follow carefully the lecture points. As students hear lecture content, they start to change the information to make it personalized. Moreover, paraphrasing is the most common method of personalization in which students record lecture notes in their own words (as cited in Boyle, 2007). This technique involves using an abbreviation method that helps them record more complete notes. Furthermore, students should not try to record notes verbatim because this is the least effective method to learning (Hughes & Suritsky, 1994).

**1.1.4.3 after the lecture.** Reviewing the notes after the lecture is the last step in the note-taking process. Lazarus (1991) reported that whether the review of notes occurs immediately after class or when preparing for a test, the review process is an important

one. Reviewing notes means looking over them after class to filling gaps, clarify the ambiguous concepts, and correct spelling mistakes. This step could help the poor note-takers to compensate for their inadequacies (Surlitsky & Hughes, 1996). Reviewing notes immediately after class is a key during this step because the topic is still fresh.

In summary, there are several steps of the note-taking process. Firstly, students should locate a seat where they can see the board and teacher. During the listening stage, they should focus on the topic and the main points included in the lecture content. Finally, immediately after the lecture, students should recall their notes for gaps or areas of misunderstanding.

**1.1.5 Reading Note-Taking Strategies.** In most courses, teachers provide students with academic text to read and learn. According to Fink (2004) students' success in learning lectures is based on reading the whole course material which facilitates its understanding. Reading for comprehension is a main purpose for reading but there are some obstacles to successful understanding. As Gersten et al. (2001) stated "Many of them arise in the strategic processing of text. For example, students may not possess appropriate strategies for problem situations or they may not know when to use a strategy they, in fact, do possess" (p. 280). That is, many students may not have appropriate strategies or not know when to use them when facing problems in text processing.

**1.1.5.1 the SOAR study system.** This system was developed by Kiewra (2005, 2009). SOAR stands for: Select, Organize, Associate, and Regulate. This system is based on Mayer's (1996) SOI model of learning (Selection, Organization and Integration). According to Mayer (1996), Selection helps attention; Organization helps working memory processes, and Integration helps encoding and retrieval. However, no one found out the value of SOI model as a study system.

According to Kiewra (1985) the goal of selection is to have complete notes because students select just one-third of important ideas. In addition, the goal of organization is the construction of graphic organizers. Also, most students fail to connect ideas (Bauskh & Becker, 2001). So, the goal is the construction of internal and external associations. Finally, students commonly use rote strategies such as rewriting which have proven ineffective (Nist & Holschuh, 2000). Thus, the construction and completion of a practice test is the goal of regulation (as cited in Jairam et al., 2014).

SOAR was designed as a system that can remedy students' well-documented struggles to select, organize, and associate important information (as cited in Jairam et al., 2014).

**1.1.5.2 the SQ3R study method.** SQ3R study method is the most popular and long standing study method. SQ3R is an acronym for the system's five steps: Survey, Question, Read, Recite, and Review. According to Robinson (1962), students have first to survey the headings to have a complete idea about the text. Then, they have to develop questions from those headings. After that, students try to answer those questions through reading. After reading and using their own words, students answer their questions. Finally, students review their information. This method aims at increasing students' engagement with the text when trying to answer their generated questions (as cited in Jairam et al., 2014). According to Carlston (n.d.), the goal of this method is to raise students' involvement with the text due to the effort they make to answer their self-generated questions about the subject content.

**1.1.6 Relationship of Students' Characteristics to Note-Taking.** Whatever the note-taking / reviewing conditions, some students do better with note-taking than others. Gender, academic level, and cognitive differences are students' characteristics that have been studied in relation to note-taking.

**1.1.6.1 gender.** One of the students' characteristics that is most frequently linked to the process and product functions of note-taking is gender. According to Kiewra (1984) female students recorded more critical points than did male students. Besides, females scored more points than males on later exams about the lecture's content. From a research conducted by Eggert (2000), it showed that females noted more complete, long, and correct notes than did males. Furthermore, the note-taking perceptions survey was used to determine students' note-taking preferences (Carrier & Newell, 1984). Likewise, Carrier et al. (1988) have reported that females valued note-taking more than males, had more confidence in their note-taking skills, and viewed themselves as more active note-takers (as cited in Williams & Eggert, 2002).

**1.1.6.2 academic level.** With a few exceptions (Eggert, 2000), cross-sectional research suggested that note-taking skills be likely to increase across the college years. For instance, Cohn et al., (1995) reported that upper-level college students were better note-takers than lower-level students. Also, recent evidence suggested that experienced male students noted more notes than less experienced ones (Nye, 1978). Similarly, Carrier et al., (1988) indicated that advanced students had higher confidence in their note-taking than did less advanced. Additionally, other studies reported that college freshman noted less critical lecture points than third year students (Hartley & Marshall, 1974). Another possible contributor to academic level differences in note-taking is that only 17% of college students receiving formal instruction on how to take notes (Palmatier & Bennett, 1974). This is because most students must develop note-taking skills on their own; one would expect those skills to improve with time and experience (as cited in Williams & Eggert, 2002).

**1.1.6.3 cognitive differences among note-takers.** According to Kiewra (1988) most

researchers investigating note-taking process ignored the cognitive factors which affect note-taking and review behaviours. Others which examined such factors proposed that learners' working-memory control processes, background knowledge and cognitive style affect note-taking and review behaviours (as cited in Kiewra, 1989).

*a. working-memory control processes.* Note-takers must select appropriate information from the task environment, record and integrate them with previous ideas. All this means that the processes included in recording notes entail the control processes of holding controlling information in working-memory. Berliner (1969, 1971), DiVesta and Gray (1973) examined note-taking and working memory (but without examining the notes). They found that students with higher working-memory benefit from note-taking on the contrary of students with less memory ability who are hindered by note-taking.

In other studies, Kiewra and Benton (1988); Kiewra et al. (1987) found that students who were less able to hold and control information in working-memory noted down fewer words, total ideas (Kiewra & Benton, 1988; Kiewra et al., 1987) and particularly minor ideas (Kiewra et al., 1987) comparative to students with higher memory ability. They justified that by the fact that these note-taking behaviours are positively related to achievement (as cited in Kiewra, 1989).

Kiewra (1989) advised low memory ability students to use a technique which inserts questions all over the lecture that are to be answered in writing for a higher achievement.

*b. prior knowledge.* Note-taking and performance can also be influenced by background information about the lecture topic. Peper and Mayer (1986) found in a study of the knowledge amount about the topic that note-takers with poor prior knowledge performed better on far-transfer tasks while non note-takers with also poor knowledge performed better on near-transfer tasks. The authors hypothesized that those learners with no prior knowledge need generative activities such as note-taking to relate new information



with previous knowledge; while learners with prior knowledge easily make connections whether or not they take notes (as cited in Kiewra, 1989)

In summary, note-taking encourages students with poor background knowledge about a lecture in generative processing and far-transfer learning. However, since once again analyses of notes have not revealed a generative processing of new and old ideas, this still tentative (Kiewra, 1989).

*c. field independence-dependence.* Field independence-dependence is another important cognitive factor related to note-taking and achievement. The main difference between field-independent and field-dependent persons is in their manner of processing information. Field-dependent learners are generally bordered by the innate organization of the stimulus besides showing a passive and flexible approach to learning. In the meantime, field independence learners are active processors who are suddenly ready to reorganize a stimulus field (Kiewra, 1989)

In a study conducted by Frank (1984), there was a difference in note-taking and achievement of field-independent and field-dependent students. With note-taking, field-independent learners achieved better than field-dependent learners. Maybe this difference is due to the type of lecture notes, even if the number of lecture ideas recorded were the same for both field-dependent and field-independent learners. But field-dependent learners' notes contained fewer words than of field-dependent. According to Kiewra (1989), it seems that:

...field-independent students engaged their more active processing styles to encode the lecture immediately as reflected by their tendency to abstract and order lecture ideas in their notes. Field-dependent students, apparently processing information more rigidly, diminished the encoding value of note-taking by recording more verbatim and wordy notes that held value primarily for review purposes. (p. 165)

This means that field independent students have a leaning to select and order lecture information, while field-dependent students deal with information more strictly and recording them word for word to support their review process which weakens the significance of note-taking.

Kiewra and Frank (1986) found that field-dependent learners need more time for review to understand and combine lecture ideas to do as well as field independent learners. Another facilitator condition for field dependent-learners to record lecture ideas was proven by Frank (1984) is providing them with external structural support in the way of outlines or notes (as cited in Kiewra, 1989).

**1.1.7 Note-Taking Functions.** According to DiVesta and Gray (1972), note-taking has two functions: the storage function and the encoding function (as cited in Kiewra, 1989)

**1.1.7.1 the storage function.** This function proposes that retention of information is easier when reviewing written notes. Kiewra (1985) claims that reviewing notes was shown beneficial for test performance of students who reviewed their notes on the contrary of those who did not (as cited in Kiewra, 1989)

**a. Improving the storage function**

The storage function is an important function of note taking. Providing notes for review and borrowing notes for review are two main steps for improving this function.

**a. 1. Providing Notes for Review**

The storage function is affected by the students' incomplete notes. For this reason, some researchers have proposed providing students with notes either by the instructor or by other students instead of dividing their attention between listening and recording notes. Such practice will provide students with complete notes to reinforce review (Kiewra, 1989).

According to Kiewra (1989), researchers who found that there is no significant difference between listeners and note-takers performance in exams is due to short periods (10 minutes to three weeks) between lectures and exams. However, Kiewra (1985) found that listeners with provided notes achieved better than note-takers on a delayed exam. This difference was mainly because of the width and organization of provided notes on the contrary of students' notes besides the delay between learning and review (as cited in Kiewra, 1989).

There is only one study that has investigated the structure of provided notes which was done by Kiewra et al. (1988a). In this study, students listened to a lecture without writing notes; then they were provided with three types of provided notes to review. The first type was a complete seven-page text and verbatim transcript of the lecture. The second was a detailed outline in a linear form. The third was a matrix notes on a large single page where the main categories of information were on the horizontal axis, repeatable categories of the main ones on the vertical axis, and the cells of the matrix contained ideas about the intersecting categories. Students with matrix notes and outline notes recalled better than students with text notes. Perhaps, this is because these formats encouraged students to make internal connections among lecture ideas. Also, only the matrix note reviewers performed better in transfer performance than students with text notes. These results were because information would be scattered throughout the complete text or would appear on several different pages of the outline text (as cited in Kiewra, 1989).

#### **a. 2. Borrowing Notes for Review**

Concerning provided notes by instructors, these notes are not available. Kiewra (1989) stated that "my personal conversations with faculty suggest that instructors perceive themselves as too busy to provide such a service. More emphatically, they see note-taking as a student responsibility."(p.152). That is, notes cannot be provided by teachers since

they consider such an activity as students' responsibility. As a solution, Kiewra et al. (1988b) investigated another process involving provided notes which is borrowed notes. In their investigation, Kiewra and his colleagues (1988b) compared the achievement of students who take notes without reviewing them with those who take notes and reviewing them, and with absented students who review borrowed notes on a synthesis test. The results showed that notes borrowers achievement was comparable to the others and better than note-takers who did not review. These results were explained by the fact that the note borrowers had the opportunity to form relationships among lecture ideas on the contrary of note-takers who did not review because they had no time for such process during recording. These findings showed the need of the encoding process to the review process besides some merit of borrowing notes (as cited in Kiewra, 1989).

Investigations about how students should review notes and on the most effective type of review behaviors are limited regardless the importance of the review process. Kiewra et al. (1989) compared the performance of two groups in a 20 minutes lecture with two different ways of reviewing in four post-tests. The first group reviewed their notes in an unrestricted manner while the second group wrote an integrative essay using their notes with reviewing them. On recall, application, and factual recognition tests the results were similar while reviewers out-performed the writers on the synthesis test. The researchers supposed that this difference is because of that the essay writers focused on the discussion of the main categories in turn rather than compare and contrast between them.

Concerning the role of reorganization as a review activity, Shimmerlick and Nolan (1976) found that subjects who reorganized their previous information performed better than those who just listed them in both immediate and delayed free-recall exams.

In another study about the effects of elaboration as a review activity, Darnett et al. (1981) compared the performance of two groups of subjects. The first group reviewed an

outline of the lecture while the second group reviewed elaborated information in relation to non-lecture information. As a final result, the researchers found that elaboration subjects performed better than the outline group on elaboration items related to their individual elaborations, but did not perform better in a group of general elaboration items (as cited in Kiewra, 1989).

As a conclusion, Kiewra (1989) said that "...elaboration as a review activity appears to have no additional transfer value for responding to general elaboration items than does outlining."(p.158). That is to say, outlining as a review activity is better than elaboration in general elaboration items tests.

**1.1.7.2 the encoding function.** The encoding function proposes recording notes even without reviewing them because the action of recording itself is beneficial. Einstein et al. (1985) justified the importance of recording by the fact that the activity of note-taking increases attention, elaborative processing of specific ideas, and organization of ideas (a cited in Kiewra, 1989).

Kiewra (1985) said that these two functions have been the focus of about 100 studies, and most of them focused on one which was considered as the most important. However, Kiewra (1985) criticized that kind of research because the combination of both functions is important since they contribute in achievement. So, we must focus on note-taking strategies and how they should be reviewed for exams (as cited in Kiewra, 1989).

#### **a. Improving the Encoding Function of Note-Taking**

There are three suggestions for improving the encoding function: (1) making notes more complete (as an alternative to provided notes), (2) increasing internal connections among lecture ideas, and (3) relating lecture information to prior knowledge (generative note-taking).

**a. 1. Improving the Quantity and Quality of Notes**

There are many techniques which have been proven as effective in increasing the quantity and quality of notes. Cueing during lectures is one of these techniques. Another effective cue is writing information on the board. Lock (1977) in an experiment found that students recorded 88% of the information on the board and 52% of information which were not written on the board. Moreover, Kiewra et al. (1988c) proved the value of repeating a videotaped lecture presentation: students who viewed the lecture videotape three times recorded 41% of lecture ideas, and 32% of lecture ideas for students who viewed it one time. Another successful way to increase the number of important lecture points is a note-taking training program which was done by Robin et al. (1977). This program involved the instructor modeling detailed notes, encouraging students to record key points and associated details, then providing them with corrective feedback about their note-taking (as cited in Kiewra, 1989).

**a. 2. increasing internal connections among lecture ideas**

Skeletal outlines and matrix frameworks are some instructional aids which help increasing internal connections in students' notes. Skeletal notes are incomplete organized outlines for lecture ideas with spaces between ideas for learners to detail during lectures.

Kiewra et al. (1988b) conducted a study through a synthesis test to determine which note-taking format produced a qualitative effect. Subjects of this study divided into students who took notes on a skeletal outline or on a matrix framework or in their conventional manner. The results showed with respect to qualitative differences that skeletal and matrix note-takers recorded more notes than conventional note-takers while only the matrix note-takers recalled more ideas than conventional note-takers and performed better than skeletal note-takers on a synthesis test (as cited in Kiewra, 1989)

As a conclusion of these findings, skeletal outline increases note-taking but not external connections across categories of information, at least relative to a matrix framework. So, a matrix framework is very helpful within and across categories of information (Kiewra, 1989)

**a. 3. Facilitating Generative Note-Taking**

The generative function which is presented by relating new information with previous knowledge is automatically appeared during the note-taking process as some researchers hypothesized. So, Kiewra (1989) proposed that this function should be clear in the content or structure of notes besides controlling it experimentally. However, research which supported these two conditions is either not available or is weak. Also, rare and weak efforts were done to control generative processing during note-taking.

Kiewra and Fletcher (1984) tried in a study to control note-taking besides the generative variety. In their study, they measured the performance of oriented students to adopt factual, conceptual, or integrative note-taking in increasingly generative order. Consequently, by measuring factual, conceptual, or integrative knowledge there was no significant difference between the three groups on immediate or one-week delayed tests. There was a very weak relationship between integrative note-takers and performance. Also, there was a low amount of integrative note-taking (as cited in Kiewra, 1989).

As a conclusion, Kiewra (1989) saw that "...integrative or generative note-taking maybe both modifiable and effective if students were to receive programmatic training in generative note-taking" (p.162) which has been not yet researched. In other words, the programmatic training is the best solution for improving generative note-taking. Kiewra advised students to record complete notes and organize them during lectures, then integrate this information with prior knowledge during reviewing.

**1.1.8 Some Axioms of Good Note-Taking.** According to Ganske (1981) note-taking is important, either because of the students' beliefs, or because it provides an approach to studying the cognitive processing (p. 64). In addition, ESL materials writers and curriculum developers believed note-taking to be an important skill for developing L2 learners' note-taking skills.

Some teachers incorporate many of the axioms of good note-taking in their instructional designs. For instance, the guidelines set forth by Hartley and Davies (1978) suggested that teachers:

- Show that the style of the lecture is appropriate to the note-taking strategies and to the different aims and subject matter.
- Make the organization of the lecture as clear as possible. For example, does the instructor state the structure of the lecture before its start?
- Use advance organizers or skeleton notes. Klemm (1976) argues that providing skeletal notes frees the students from writing every point with more details.
- Teach students to know verbal signposts in a lecture that make the structure of the information evident. In other words, teach students to recognize rhetorical cues. For instance, repetition of certain phrases.

Gage and Berliner (1975) gave an example of lecture's use of repetition or relational words and phrases to show the structure of the lecture:

Teaching can be analyzed in many different ways for different purposes. It can be analyzed according to the components of the learning process that it influences, when it is being related to the learning process. It can be analyzed according to the time sequence of the logical steps involved, when one is planning a teacher education program. It can be analyzed according to grade level or subject matter, when one is planning to speak: to teachers of different grade levels or subject matters. (p. 506)



This means, teaching can be analyzed according to the components of the learning process, to the time sequence of steps involved when planning an educational program, and to teachers of different levels and subject matters.

-Teach students to pay attention to changes of major topics and subjects. For instance, “we are through with that topic, now let us turn to the second major theme” (Gage & Berliner, 1975, p. 503). That is, teachers should keep their students aware of the different changes of the topic to move from one topic to another smoothly.

-Show that lecturers often use humors to avoid students’ tiredness and provide attention on the part of the learner.

-Give students enough time to take their notes. That is, avoid requiring students, especially L2 students to take notes on long lectures that are full of information.

-Encourage students to take notes. Then examine those notes with providing the students with feedback involving how they might improve their notes.

**1.1.9 Good Advice for Note-Takers.** These advice show that it would be unwise for students to miss classes or to refrain from note-taking. As an alternative, they should pay attention to the following six indications:

-Go to class. Theoretically, when students do not hear the lecture, they will probably not have a prior knowledge about the lecture to assimilate the new notes (Ausubel, 1968).

-Take many notes. Not only is there a significant relationship between note completeness and achievement that matters, but research shows that students who are not allowed to review their notes will recall from 34% to 78% of any recorded information only from 5 to 34% of information they did not record (Howe, 1970).

-Take paraphrase or summary notes. Even though it is important to catch certain lecture details, notes should generally be paraphrases of the lecture rather than exactly the same words as were used originally (Bretzing & Kulhavy, 1979).

-Revise your notes. When students revise their notes, they entail first filling in the gaps in their notes and then integrating the lecture content. Integrating involves relating notes to one another and to prior knowledge (Tulving & Thomson, 1973).

-Review your notes. Theoretically, learners must process information at deeper levels of abstraction to encode the information into long term memory ( Craik & Lokhart, 1972), and to answer higher order questions effectively (Morris, Bransford, & Jeffrey, 1977). Kiewra (1976) stated that when students reorganize their notes, they recall relatively more information for exams (as cited in Kiewra, 1984).

-Include the externally provided notes in your review. According to Kiewra (1983) reviewing externally provided notes with personal notes can be the best study method if notes are complete, if time is sufficient for review, and if students try to process the information at deeper levels of abstraction by integrating and reorganizing noted information (as cited in Kiewra, 1984).

**1.1.10 Note-Taking Importance.** According to Rowntree (1976), note-taking helps students to extend their attention (p. 112). Kesselman-Turkel and Peterson (1982) said that while reading or listening, you might think about anything in your life, so note-taking helps you to focus on the lecture (p.2).

-Note-taking helps you to retain the lecture information (Kesselman-Turkel & Peterson, 1982, p. 3). According to Cottrell (2003), the act of writing itself helps memory.

-Note-taking is useful for organizing lecture ideas (Kesselman-Turkel & Peterson, 1982, pp. 3-6). Good notes should be organized, arranged, and well-referenced so they can be helpful in reviewing for exams (Rowntree, 1976, p. 112).

-Cottrell (2003) said that note-taking helps understanding through the focus on selecting information to note.

-Note-taking plays an important role in professional settings; it is useful in making better decisions, solve problems, and improve group work (Sturb & McKimmie, 2012).

-Nwokoreze (1990) believed that “It is during the note-taking stage that students reach the highest level of comprehension” (p. 42). That is, students think a lot about the lecture important ideas and how to organize them regarding their relationships.

**1.1.11 Note-Taking and Test Performance.** Researches on note-taking stated that note-taking is an almost universal activity among university students. According to some researchers note-taking is related in a way or in another to testing. Testing is considered as a method of measuring a person’s specific abilities or knowledge in a given domain (Brown, 2004). Yet, few naturalistic studies have examined relationships between note-taking practices and subsequent test performance.

According to Henk and Stahl (1985) note-taking not only allows students to become actively involved in lectures; it also functions as a written document that helps students when they review or prepare for tests. Notes also serve as the prime means of capturing lecture’s points (Suritsky & Hughes, 1991) and that lecture’s information directly related to teacher-made tests, which regularly compose half of the students’ grades (Putnam, Deshler, & Schumaker, 1993).

As well, Chaudron, Cook, & Loschky (1988) found that retaining or not retaining notes taken while listening to short lectures did not affect performance on multiple-choice or cloze listening comprehension measures. Chaudron et al. (1988) concluded that “certain note-taking measures are more related to successful comprehension performance than others on a lecture specific basis” (p. 15). For example, symbols, abbreviations, and total words are three measures which were significantly correlated with multiple-choice test scores on one lecture, but not with multiple-choice test scores on two other lectures.

In another early examination, Dunkel (1988) investigated the relationship between the content of L2 students' lecture notes and test performance. Dunkel scored the notes recorded by L1 and L2 listeners during a 23-minute mini lecture. His results showed that L1 and L2 note-takers who scored high on the post-listening test, when considered as one group, had included a considerable quantity of information in their notes and had detected and noted information that consequently appeared on the post lecture quiz.

However, in some studies, it was seen that there is no positive correlation between note-taking and students' performance in exams. Specifically, note-taking did not facilitate examinees performance. Hale and Courtney (1994) found that allowing participants to take notes in TOEFL on lectures or mini talks had little effect on test performance.

### **Conclusion**

This chapter has tried to elucidate several note-taking strategies in foreign language classes that students need to apply as a means to follow the teacher's presentation and record the lecture's main points. These strategies may in a way or in another effect the students' performance in exams.

## **Chapter Two: Research Methodology, Data Analysis, and Discussion**

### 2.1 Research Methodology

#### 2.1.1 Methodological Approach

#### 2.1.2 Research Tools

##### 2.1.2.1 Questionnaire

##### 2.1.2.2 description of the questionnaire

##### 2.1.2.3 administration of the questionnaire

#### 2.1.3 Documents Analysis

##### 2.1.3.1 description of the research documents

#### 2.1.4 Population and Sampling

#### 2.1.5 Limitations of the Study

### 2.2 Data Analysis and Discussions

#### 2.2.1 Presentation and Discussion of the Results from the Research Tools

##### 2.2.1.1 results from the questionnaire

##### 2.2.1.2 results from the documents analysis

#### 2.2.2 Discussion of the Results from the Questionnaire and the two documents

#### 2.2.3 Comparing the Results of the Questionnaire and the Documents Analysis

## Conclusion

### General Conclusion

## Chapter Two: Research Methodology and Data Analysis

### Introduction

This chapter is designed to investigate note-taking strategies used by third year students and their effect on their performance in exams. First, the methodological approach will be introduced and the research instruments and population of the study will be identified. Besides, the process of data analysis will be described and discussed. Finally, the data analysis will be presented and the obtained results from both tools will be interpreted .

### 2.1 Research Methodology

In this part we would introduce the methodological approach and the research design of this study. Besides, we are going to define and describe the research tools. In addition, the sample and limitations of the study are also concerned.

**2.1.1 Methodological Approach.** This research is a descriptive study. It aims at investigating note-taking strategies used by third year license LMD students at Mohammed Saddik Ben Yahia University. To accomplish this aim, a quantitative method based on positivism was used. This method was used to test and validate the research hypotheses. It is also used because it is beneficial for collecting fast and direct data. Besides, it provides precise and numeric data which guarantee the validity and reliability of data. This method is about explaining phenomena by collecting quantitative data.

**2.1.2 Research Tools.** This study attempted to investigate the note-taking strategies used by students when recording their notes and their effect on their performance in exams. It made use of two main instruments: a questionnaire and documents analysis.

**2.1.2.1 questionnaire.** Questionnaires are considered as a list of research questions asked to subjects, and designed to get specific information. It may serve as a means to

collect the appropriate data, to make data comparable and agreeable to analysis, and to reduce bias in formulating and asking questions.

*2.1.2.2 description of the questionnaire.* As far as the research instruments are concerned, a questionnaire was used to investigate the note-taking strategies used by third year LMD English students and their effect on their performance in exams. Questionnaires are valuable for this research because of their capacity to gather data and for their practicality.

Questionnaires also allow the researchers to get the desired data easily and within the time limits specified for this study.

The questionnaire is composed of 25 questions. It is divided into three main parts; they are entitled as follows:

- 1- General information: this part is about students' gender and level (Questions 1 and 2).
- 2- Note-taking strategies (Question 3→22).
- 3- Note-taking and testing (Question 23→25).

Nearly all the questions are open-ended where students are required to answer some questions by 'yes' or 'no' with providing justifications or clarifications whenever necessary except questions 1, 2 and 24 which are closed questions.

Questions (1) and (2) are devoted to get some background information about the chosen sample of students. The students are asked to mention their gender and indicate their level in English.

Questions (3) to (22) are all designed to explore students' note-taking strategies. Questions (3) and (4) are devoted to know whether students take notes or not and whether they are satisfied with their recorded notes or not. Questions (5) and (6) are to explore students' knowledge about note-taking methods. Question (7) investigates students'

concentration during note-taking. Question (8) is to know whether students include the date and the course title in their notes when recording notes. Question (9) is designed to explore students' attitudes toward the use of native language while listening to information in English. Questions (10) and (11) seek to know if note-taking distract them from paying close attention to the lectures' content and if they have enough time to take as many notes as they want. Questions (12) and (13) are to know whether students ask for clarification and borrow their classmates' notes when they miss or do not understand some points. Questions (15) to (21) are designed to investigate some specific note-taking strategies and techniques that are used by students when taking their notes. Question (22) is designed to know why some students do not understand their notes.

Question (23) aims to know if the notes taken by students are enough or not to revise for exams or they need to use those of their classmates. Questions (24) and (25) are intended to know if note-taking helps students to recall information and to perform well in exams

**2.1.2.3 administration of the questionnaire.** The learners' questionnaire was handed in at nearly the end of the second semester of the academic year 2014-2015. This questionnaire is given to forty four (44) third year English students at Mohammed Seddik Ben Yahia University to gather information about note-taking strategies and how note-taking helps students improve their performance in exams. All the questionnaires were given back.

The questionnaire was distributed in class on 28<sup>th</sup> of April 2015. It was delivered in Oral Expression session from 9:30 to 11:00, and in Sociolinguistics session from 14:00 to 15:30 and collected immediately. This resulted in a high percentage of responsiveness.



**2.1.3 Documents Analysis.** The second tool of this research is documents analysis. This kind of research instruments is rarely used and students are not familiar with. Document analysis is used to support a particular view point or argument of a research. Documents analysis is mainly a qualitative method as the following definition states:

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic. Analyzing documents incorporates coding content into themes similar to how focus group or interview transcripts are analyzed. A rubric can also be used to grade or score a document. (*“Assessments Methods,”* 2010, p. 1)

That is to say, documents analysis is a qualitative research method which helps the researcher interpret documents and give meaning to any assessment issue.

However, document analysis can be also quantitative or both qualitative and quantitative. In this research we are concerned with quantitative analysis which is called *content analysis*. The latter is considered as a formal and systematic process. In content analysis we do not analyze the structure of a particular document but we make an organized analysis of the content. Also, such type of analysis ignores context and multiple meanings.

The documents analysis is to check whether the students did benefit from their notes or not. This tool allowed the researchers to analyze the students' records in two content modules ( TEFL and sociolinguistics) to gather the data required to determine if the students did benefit from their notes and whether they use effective note-taking strategies or not. These two modules were selected because of the large amount of notes taken in these important modules and because of students' reliance on these notes during exams.

**2.1.3.1 description of the research documents.** In our research we used two different documents. The first document is a document of third year students' scores in the first

semester of the academic year 2014-2015. The group concerned is group 9, and the module is Teaching English as a Foreign Language (TEFL). There were 33 students present in that exam, and the teacher is Miss Arzim. The second document is about the third year students' marks in the first semester of the academic year 2014-2015. This document is about the sociolinguistics exam by Mr. Boukhentache. The group considered is group 7, and 32 out of 33 students were present.

The documents used in this research have authenticity (complete and reliable), credibility (free from errors) and representative (present scores of more than 60 students).

**2.1.4 Population and Sampling.** The current study took place in the department of English at the University of Mohammed Seddik Ben Yahia, Jijel during the academic year 2014-2015. Four groups of third year students of English were involved in order to have a clear investigation of note-taking strategies in EFL classes. We choose third year students because they have a number of modules, and most of which are content modules that require a large amount of notes. Dornyei (2007) defines sample as “the group of participants whom the researcher actually examines in an empirical investigation”. This means, that sample is the group of people investigated by a researcher. He also considers population as “the group of people whom the study is about” (p. 31). That is, the group of people on which the investigation is carried out is called population (as cited in Mebitil, 2001). The target population includes all the students of third year LMD ( $\approx 310$ ) since it is impossible to deal with all students because of time pressure, so a representative sample of 44 students has been selected.

The sample has been chosen randomly. This gave the opportunity to each student to be involved and this somehow ensured reliability and objectivity of this research. This sample is considered as representative since it covers more than 10% (about 14 %) of the

whole population. The size of the sample population could have been enlarged in order to be more representative; however, the time constraints did not allow.

**2.1.5 Limitations of the Study.** The results and discussions that would be obtained from this research would provide a general view of note-taking strategies used by students. Also, it would show if these strategies help students to improve their performance in exams. Nonetheless, this study has a limitation which is time constraints. It has been almost impossible to deal with a large sample of students; the number has been reduced to cover only 44 students. Longer time would be helpful to use different tools and longer sample of students who study at the department of English at Mohammed Seddik Ben Yahia University.

To sum up, the information was gathered through two research tools. The first tool was the questionnaire which is submitted to forty four students chosen randomly from the whole population in order to check how much the answers would serve our study. The second tool was a document analysis which contains students' records of two content modules. These modules are TEFL and Sociolinguistics.

After introducing research methodology and instruments we are going in the coming section to present and discuss the data obtained from the research tools.

## 2.2 Data Analysis and Discussion

In this section we are going to present and discuss the findings which are obtained from different sources by using two different tools. These tools are a questionnaire and documents analysis.

### 2.2.1 Presentation and Discussion of the Results from the Research Tools

This section provides the data obtained from the students' questionnaire and documents analysis. The findings are presented in tables.

**2.2.1.1 results from the questionnaire.** The data obtained from the questionnaire are presented in the 28 tables below.

#### Students' answers to question 1: (gender)

Table 1

*Students' Gender*

Options	Number
Male	6
Female	38
<b>Total</b>	44

It is clear from the table that the majority of students are females. However, males represent just 6 from the whole population. This can be explained by the fact that girls are more interested in learning English than boys. Also the percentage of girls in the field of foreign languages is higher than that of boys.

**Students' answers to question 2:** (How do you consider your level in English?)

Table 2

*Students' Level*

<b>Options</b>	<b>Number</b>
<b>Very good</b>	4
<b>Good</b>	16
<b>Average</b>	24
<b>Less than average</b>	0
<b>Total</b>	44

In this question, students are expected to rank their levels from very good to less average. We noticed 24 respondents who have admitted that their level in English is average. Also, there are 16 students who consider their level as good. These results may reflect self-confidence among students, especially when we have recorded none of the respondents who have ranked themselves as less than average.

**Students' answers to question 3:** (Do you take notes?)

Table 3

*Frequency of Students' Note-Taking*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	43
<b>No</b>	1
<b>Total</b>	44

This question is designed to know the value of note-taking among students. Here, we notice that nearly everyone (43 students) affirm that they take notes and only one student

said no. This can indicate that note-taking process is considered to be important among University students.

Students in the second part of this item are asked to justify why they take notes or why not. The only person who said 'No' justified his answer by saying that lectures are enough.

**Students' justifications to question 3:** these justifications were summed up.

Table 4

*Students' Attitudes toward their Note-Taking Process*

<b>Justifications</b>	<b>Number</b>
To understand the lecture.	4
The handouts are not enough.	4
They are helpful in revising the lessons.	12
To write down the lessons.	11
To save time.	5
To improve the English language.	2
To remember the lecture's explanation.	1
Some teachers do not dictate.	1
No justification.	3
<b>Total</b>	<b>44</b>

From the results above, most students who take notes (12) said that they take notes to help them revise for exams. This maybe because they have no other sources for revision like handouts. So, they are obliged to take notes to use them later in revision.

**Students' answers to question 4:** (Are you happy with your notes?)

Table 5

*Students' Satisfaction with their Notes*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	38
<b>No</b>	6
<b>Total</b>	44

Question 4 seeks to know whether students are satisfied with their notes or not. In this question, we found that the majority of students (38 out of 44) are happy with their notes. Probably, this satisfaction is that because they benefit from their notes so they are happy with them.

In the second part of this question, students are asked to say why or why not they are happy with their notes. The justifications provided by students who are happy with their notes are different and they are summed up in the table below:

**Students' justifications to question 4:**

Table 6

*Students' Views about their Satisfaction with their Notes*

<b>Justifications</b>	<b>Number</b>
They help in understanding the lesson.	11
They help in revising for exams.	15
They save time.	3
They help in remembering the lecture content.	2
They improve the English language.	3
I feel comfortable when I take notes.	1
I record the lessons' information.	1
I study hard to get them.	1
Not satisfied.	6
No justification.	1
<b>Total</b>	<b>44</b>

As it is shown in students' justifications above, most of students (15) are satisfied with their notes because they help them in revising for exams. This may be because these students use these notes a lot to revise for exams. Another important reason provided by a good number of students (11) is that notes help them in understanding the lessons. This maybe due to the concentration on the lectures' information, then the selection of



important ideas to record during the note-taking process which helps in a better understanding of the lecture content.

**Students' answers to question 5:** (Do you know note-taking methods?)

Table 7

*Students' Knowledge about Note-Taking Methods*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	25
<b>No</b>	19
<b>Total</b>	44

Learners in this question are asked if they know note-taking methods or not. 25 of students said that they know them. The first interpretation is that they may have courses about note-taking and those who said yes they remembered them.

**Students' answers to question 6:** (if your answer is yes, please name them.)

Unfortunately, when we asked students to name note-taking methods in this question they mixed between note-taking strategies and methods. All of the students who answered by 'yes', named note-taking methods as abbreviations, symbols, summarizing which are note-taking strategies. We can also explain that by the fact that students were confused, did not remember them (if they studied them) or they did not have courses about such topic.

**Students' answers to question 7:** (Are you able to take notes in class, keep up with the instructor, and understand the concepts at the same time?)

Table 8

*Students' Concentration during Note-Taking*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	31
<b>No</b>	13
<b>Total</b>	44

From the results above, 31 students are able to take notes in class, keep up with the instructor, and understand the concepts at the same time. This result seems to indicate a high capacity in concentration and balancing between the three actions during taking notes among students.

**Students' answers to question 8:** (Do you include the date and course title at the beginning of your notes?)

Table 9

*Students' Inclusion of Date and Course Title in Notes*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	33
<b>No</b>	11
<b>Total</b>	44

A look at the table (10) shows that 33 students include the date and course title at the beginning of their notes. This may indicate a sense of organization among students. Also it is possibly because they help them to easily review the lectures when needed.

**Students' answers to question 9:** (Do you take notes in your native language when you are listening to information in English?)

Table 10

*Students' Use of Native Language when Taking Notes in English*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	14
<b>No</b>	30
<b>Total</b>	44

As it is shown in this table, 30 students said that they do not use their native language to record information in English. This can be justified by their ability to record and express ideas in the target language (TL).

We asked students who use their native language in the second part of this item to justify the purpose of using it.

**Students' justifications to question 9:** Students' justifications were summed up.

Table 11

*Students' Attitudes toward Native Language Use*

<b>Justifications</b>	<b>Number</b>
We do not find appropriate words in English.	6
To catch the exact meaning (to make things clearer).	2
To understand easily.	1
To get information quickly.	1
No justification.	4
<b>Total</b>	14

We can notice from the above table that the major reason for using the native language is when students did not find the appropriate words in English to explain ideas better. This seems due to the fact that they do not have enough time to think in appropriate words to use during the note-taking process, and if they do so they will miss some important points.

**Students' answers to question 10:** (Does note-taking distract you from paying close attention to all the information included in the lecture?)

Table 12

*Students' Attention during Note-Taking*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	24
<b>No</b>	19
<b>NR</b>	1
<b>Total</b>	44

Out of 44 students, only 24 students reported that note-taking distract them from paying close attention to all the information included in the lecture. This may be because students during the lesson divide their attention to take notes and listen to the teacher's explanation. So, when they focus on some points, they may lose some others. Relating these results to the results obtained in question 7, students' opinions in this question are in contradiction with those of question 7. This is because in question 7 they said that they can take notes, keep up with the instructor, and understand the concepts at the same time. However, in this question they said that note-taking distract them from paying close attention to all the information included in the lecture. This may imply that students in question 7 mean that they can just focus on main ideas. But, in this question students are perhaps distracted from paying close attention to all the points (details and main ideas).

**Students' answers to question 11:** (Do you have enough time to take as many notes as possible?)

Table 13

*Students' Time to Record Enough Information*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	8
<b>No</b>	36
<b>Total</b>	44

Most students (36 out of 44) see that they do not have enough time to record as many notes as possible. Maybe the problem here is due to the speed of presentation or the complexity of ideas presented during the lecture.

**Students' answers to question 12:** (Do you ask your instructor for clarification if you do not understand specific points?)

Table 14

*Students' Search for Clarification during Note-Taking*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	31
<b>No</b>	13
<b>Total</b>	44

The majority of students said 'yes' and affirmed that they ask the instructor for clarification if they do not understand specific points. This seems to indicate interest and awareness among students about the importance of understanding notes besides recording them.

**Students' answers to question 13:** (Do you borrow your classmates' notes if you miss something during class?)

Table 15

*Borrowing of Notes among Students during Class*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	38
<b>No</b>	6
<b>Total</b>	44

As far as the results obtained from question 13, we found that 38 students borrow notes from their classmates during class to complete their notes. This possibly because they sometimes missed some words or some points which lead them to the misunderstanding of the whole lecture. Then, when they could not understand some points of lecture, they did not record them at all.

**Students' answers to question 14:** (Do you paraphrase key points of the discussions or reading materials rather than writing words verbatim (as they are written or said) ?)

Table 16

*Students' Use of Paraphrasing*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	33
<b>No</b>	9
<b>NR</b>	2
<b>Total</b>	44

Statistics related to this question show that the majority of students (33 out of 44) paraphrase key points of the discussions or reading materials rather than writing words

verbatim. A possible interpretation is that they use this strategy to gain time and record as much notes as possible.

**Students' answers to question 15:** (When I am taking notes, I usually use :)

Table 17

*Students' Techniques of Note-Taking*

<b>Options</b>	<b>Number</b>
<b>Abbreviations</b>	25
<b>Diagrams</b>	0
<b>Symbols</b>	0
<b>A+b</b>	3
<b>A+c</b>	15
<b>A+b+c</b>	1
<b>Others</b>	
<b>No specification</b>	40
<b>Drawings</b>	2
<b>Outlining</b>	1
<b>Summarizing</b>	1
<b>Total</b>	44

An examination of the table above will reveal that abbreviations are the most preferred techniques among students (25 students). Students use abbreviations possibly because they help them in recording the lecture's content in a short period of time. Abbreviation help students gain time and record as many points as possible. That is, students instead of waiting time writing the whole words, they use them in abbreviated forms.

In the second part of this question, we asked students to specify other techniques. Unluckily, nearly all students (40) did not answer this part of question (they did not specify other techniques). Only two students stated that they use drawings. Probably because they see them as an effective technique that helps them record the lecture's content in an easy and fast way.

**Students' answers to question 16:** (Do you use content words (verbs, nouns,...etc) and omit function words (articles, prepositions,...etc)?)

Table 18

*Students' Use of Content Words and Omission of Function Words*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	28
<b>No</b>	16
<b>Total</b>	44

The results obtained show that 28 students use content words and omit function words. This high use of content words is may be due to the fact that this technique shows main ideas. Also, students may use these techniques to save time for other notes.



**Students' answers to question 17:** (Do you use ways to highlight particularly important points (e.g. circles, underlying)?)

Table 19

*Students' Use of Highlighting*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	38
<b>No</b>	6
<b>Total</b>	44

The results shown in the table above indicate that most students (38 out of 44) use other ways to highlight important points. For instance, students use circles and underlining to stress main points. They may use these two ways because they see them easier or appropriate to show main ideas. Also they may rely on them to save time and effort.

**Students' answers to question 18:** (Do you take notes as you read class materials?)

Table 20

*Students' Use of Notes for Class Reading Materials*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	27
<b>No</b>	16
<b>NR</b>	1
<b>Total</b>	44

The majority of students (27 out of 44) take notes from class materials (reading). This is probably because of the length of these reading materials or they see that not all the information included in these materials are important. However, one student did not answer the question.

**Students' answers to question 19:** (Do you ever rewrite your notes?)

Table 21

*Students' Rewriting of their Notes*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	16
<b>No</b>	28
<b>Total</b>	44

The results in the above table (21) show that most students (28 out of 44) do not rewrite their notes. This maybe because they see that their notes are organized well enough to learn from them. So, they do not need to rewrite their notes.

**Students' answers to question 20:** (Do you use good hand writing?)

Table 22

*Students' Use of Good Handwriting*

<b>Options</b>	<b>N</b>
<b>Yes</b>	14
<b>No</b>	28
<b>NR</b>	2
<b>Total</b>	44

The results above show that the majority of students (28students) do not use good handwriting maybe because the teacher's explanation is fast. Thus, students need to catch as many points as possible. So, there is no time to write slowly.

**Students' answers to question 21:** (Do you review your notes after each class, preferably right after class?)

Table 23

*Students' Reviewing of Notes after Class*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	14
<b>No</b>	30
<b>Total</b>	44

The results above show that most students (30) do not review their notes after each class. This maybe because students consider reviewing as a process which takes place before the exams.

**Students' answers to question 22:** (Do you always understand your notes?)

Table 24

*Students' Understanding of their Notes*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	31
<b>No</b>	13
<b>Total</b>	44

The above table investigates the students' understanding of their notes. The results show that most students (31 out of 44) understand their notes. This may indicate that the students concentrate with the teacher's explanation to record clear and meaningful notes

that they can understand later, and organize their notes in a way they will be understandable.

**If no, is it because:**

Table 25

*Students' Problems with Understanding Notes*

<b>Options</b>	<b>Number</b>
<b>a-Your writing is not legible</b>	2
<b>b-You had forgotten the context in which you had written something</b>	2
<b>c-You could not remember what an abbreviation stands for</b>	1
<b>d-You had simply not written enough notes, so you missed some important points</b>	1
<b>a+b</b>	1
<b>a+c</b>	2
<b>a+b+d</b>	1
<b>b+d</b>	3
<b>Total</b>	13

Concerning students' problems with understanding their notes, table above indicates that the major problems for students to not understand their notes are: (1) sometimes students when they take some points, they forget the context in which they write those points, (2) also students may miss some important points. Thus, students if they found some missing points when they come to revise their notes, this can be resulted in the misunderstanding of those points.

**Students' answers to question 23:** (Do you borrow your classmates' notes before exams?)

Table 26

*Students' Borrowing of Notes before Exams*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	28
<b>No</b>	16
<b>Total</b>	44

The results show that the majority of students (28 out of 44) borrow notes from their classmates. This maybe because students could not catch all the information explained by the teacher or they see that their notes are not enough for them to revise for an exam.

**Students' answers to question 24:** (Note-taking makes it easier for me to remember the lecture information in exams?)

Table 27

*Students' Remembering of Notes in Exams*

<b>Options</b>	<b>Number</b>
<b>Strongly agree</b>	24
<b>Agree</b>	19
<b>Disagree</b>	1
<b>Total</b>	44

The results shown in table (27) indicate that the majority of students (24 out of 44) strongly agree that note-taking is a process which makes them remember the lecture's information in exams. This is probably because they can remember the context in which they had written their notes.

**Students' answers to question 25:** (Is it enough for you to use just notes to do well in exams?)

Table 28

*Students' Use of Notes*

<b>Options</b>	<b>Number</b>
<b>Yes</b>	3
<b>No</b>	41
<b>Total</b>	44

From the results demonstrated above, we notice that nearly all students (41 out of 44) said that notes are not enough to do well in exams, because by taking notes students could not catch all the points that can help them to do well in exams. In addition, sometimes students do not remember all the points that they have written down.

**2.2.1.2 results from the documents analysis.** The data obtained from the documents analysis are presented in the 2 tables below.

*2.2.1.2.1 the analysis of the TEFL document*

Table 29

*Group Nine Marks of TEFL Exam*

<b>Module</b>	<b>10 &lt;</b>	<b>10 ≥</b>	<b>Total</b>
<b>TEFL</b>	22	11	33

Through the analysis of the students' marks in the TEFL exam, we can notice 22 students with marks less than average. These marks are between 2 and 9 (see appendix 2). Besides, 11 students out of 33 students had marks above the average. These marks are between 10 and 16 (see appendix 2).

2.2.1.2.2 *the analysis of the sociolinguistics document*

Table 30

*Group Seven Marks of Sociolinguistics Exam*

<b>Module</b>	$\geq 10$	$< 10$	<b>Total</b>
<b>Sociolinguistics</b>	9	23	32

Concerning the analysis of the students' marks in Sociolinguistics, the table shows 19 students with marks less than average. These marks are between 3.5 and 8.5 (see appendix 3). In addition, 11 students had mark above the average. These marks are between 10 and 15 (see appendix 3).

These feeble marks are possibly because students did not take enough notes to help them perform well in these two exams, or probably because the notes that they have written down were not effective.

## 2.2.2 Discussion of the Results from the Questionnaire and the two Documents

In this part, the findings of the questionnaire and the two (2) documents are interpreted below under the following themes:

- **Gender and level:** the results shown in table (1) indicate that the majority of students are females (38 out of 44) because females are more interested in education than males. 40 EFL students rank their levels of proficiency in English between good and average as it is demonstrated in table (2). So, students are self-confident and very interested in studying English since no one ranks his level as less than average.
- **Satisfaction with note-taking:** Table (3) shows the frequency of students' note-taking. Nearly all students (43) said that they take notes. This may reflect the students' belief in the benefits of this process. Most students justified their answers by saying that notes are

very helpful in revising for the exams. Others said that note-taking helps them in understanding the lecture's content, save time, and remember the teachers' explanation. Note-taking also helps students improve their proficiency in English. This is why most of students (38 students) are happy with their notes as it is indicated in table (5). When students are asked to justify why they are happy with their notes, most of them responded that notes help them in revising for exams which is significantly correlated with their aim of taking notes.

- **Note-taking methods:** When we ask students if they know note-taking methods, most of them (25 students) replied by 'yes'. Unfortunately, when we ask them to name these methods (e.g. the cornell method, the sentence method, etc), we discovered that no one of our subjects knows note-taking methods. Students mixed between note-taking methods and strategies by naming methods as abbreviations, symbols, etc which are note-taking strategies.
- **Concentration during note-taking:** EFL students (31 out of 44) are aware of concentration during the not-taking process as it is demonstrated in table (8); concentration provides them with opportunities to record the main points in the lecture. This may confirm the conclusion shown in table (2) about the ranking of their levels. However, 24 students stated that note-taking distract them from paying close attention to the entire lecture's content justifying their answers by maintaining that when they keep their minds on specific points they miss other points. It can be said that this conclusion refutes the conclusion shown in table (8) where 31 students confirmed that they can take notes, concentrate with the teacher, and understand the concepts in the same time.
- **Date and Course Title:** Concerning the results obtained from table (9) most students



(33 students) said that they include the date and course title at the beginning of their notes; this is a sign of their interest in organizing their notes to facilitate their reviewing, and use them as a means to revise for later quizzes.

- **Language:** From the results denoted in table (10), 30 students reported that they do not use their native language when recording information in English. This points out students' mastering of the target language. However, 14 students said that they use their native language as it is illustrated in table (11), most of them (6) justified their answers by the fact that they do not find the appropriate words in English. This result is another evidence for students' level in the target language.
- **Search for clarification:** Findings revealed in table (14) indicate that most students ask their teachers for clarification when they did not understand specific points during lecture's presentation. This reflects the students' interest in learning English. Besides, students borrow their classmates' notes when they miss some points before exams or during class presentation. This may reflect the students' intention to understand the whole lecture by recording the main points with some details.
- **Abbreviations and symbols:** abbreviations and symbols are the most used strategies (table 17). Students use these strategies because they save their times and help them record as many points as they want. They are efficient note-taking strategies but this efficiency depends on students' remembering of what these abbreviations and symbols stands for.
- **Reading note-taking strategies:** most students (27) take notes from reading class materials and highlight (38) important points to take as much advantage as possible from these materials.
- **Paraphrasing:** paraphrasing is another widely used strategy by 33 third year students.

Although this strategy saves time, it seems to be ineffective since students may deviate from the real meaning intended by the instructor during paraphrasing. So, students should be aware of the use of this strategy.

- **Borrowing notes:** the results obtained from both tables (15) and (26) show that most students borrow their classmates' notes either during class (38 students) or before exams (28 students). These results are probably a sign of students' incomplete notes. Also, they support students' answers in question (11) when they said that they do not have enough time to record information as much as they want.
- **Review process:** Although the importance of reviewing, especially after class, most students (30) said that they do not review their notes after each class. This bad behaviour may affect their performance in exams.
- **Rewriting:** According to the results obtained in table (21), most students (28) do not rewrite their notes. This result can be interpreted in relation with the findings of table (24) where most students (31) said that they understand their notes. However, most of them do not use a good handwriting. These results show that their notes are somehow organized. The results about the note-taking strategies that are used by third year English language students answered our first research question about students' note-taking strategies.
- **Students' performance:** From the analysis of the two documents, the documents of students' marks of Sociolinguistics and Teaching English as a Foreign Language (TEFL) exams in the first semester of the academic year 2014-2015, we can notice that the majority of students had marks less than average in both exams. These results maybe due to many factors such as the difficulty of questions and the psychological state of students the day of exams. Furthermore, the main reason behind these results maybe the quality of students' notes (poor and ineffective notes), or the quantity of those notes (few and incomplete notes). These results can be an answer to our second research question.

In addition to the hypothesized note-taking strategies, paraphrasing (33 students), including date and course title (33 students), and using content words (28 students) are other important strategies which we discovered that they are also used by a significant number of third year LMD students.

### **2.2.3 Comparing the Results of the Questionnaire and the Documents Analysis**

In the questionnaire, when we asked students if they take notes and if they are happy with them, most students affirmed that they take notes and happy with them stating that they help them in revising for exams. However, when we asked them if notes are enough to do well in exams nearly all students replied by 'No'. This can be explained by the fact that students do not benefit from their notes. Consequently, most of them had bad marks in Sociolinguistics and TEFL exams.

In summary, all the data gathered from the questionnaire and the documents analysis were presented in tables then discussed in order to arrive to the desired results. The data obtained from the questionnaire revealed that students use different note-taking strategies (abbreviations and symbols). Besides, the results obtained from the documents analysis showed that these strategies do not ameliorate their performance in exams.

### **Conclusion**

Our aim in this part was to investigate third year students' note-taking strategies and their effect on their performance in exams. The research methodology was based on two research tools: a questionnaire and documents analysis.

All in all, the results of the questionnaire have confirmed the first hypothesis which supposes that students use abbreviations, symbols and highlighting, while the results of the documents analysis have confirmed the second hypothesis which supposes that students do not benefit from their notes.

**Recommendations**

This study investigated note-taking strategies used by third year English students and their effect on their performance in exams. Based on the findings of this study, it is recommended that:

- Teachers need to enlighten the students' note-taking strategies to improve their performance in exams.
- Using other tools of collecting data (such as test) to better understand the issue of note-taking on improving students performance in exams is also recommended for conducting further researches.
- Emphasis maybe needs to be directed towards investigating other strategies or combining several strategies together.
- Teachers need to encourage students to attend the lectures.

### **General Conclusion**

The main aim behind conducting this research work is to investigate different note-taking strategies that are used by third year LMD English language students, and to discover whether they help them in their performance in exams or not.

To achieve this aim, we relied on two different research tools. First, a questionnaire was distributed to forty four (44) students at the department of English at Mohammed Seddik Ben Yahia University to investigate the note-taking strategies. Second, two documents contain students' marks of two content modules were analyzed to discover whether these strategies improve students' performance in exams.

This research study has been carried out to answer the statement of the problem about the note-taking strategies that are used by third year students in taking their notes, and whether the use of these strategies assist them in their performance in exams. Within this scope, the collected data of the questionnaire, as well as, of the documents analysis reveal that the most widely used note-taking strategies are: abbreviations (25 students), abbreviations and symbols (15 students). Also, these strategies do not help students in their performance in exams because they had bad marks (22 out of 33 and 19 out of 33 students) in both sociolinguistics and TEFL exams as it is demonstrated in the documents analysis. So, the results of this research have confirmed our hypotheses.

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# **Appendices**

Appendix A

Appendix B

Appendix

## Appendix A

### Students' Questionnaire

Dear students,

The questions below investigate various note-taking strategies you may have used while taking notes. Please, fill out the questionnaire as thoughtfully and carefully as possible.

Will you please tick (✓) the corresponding answers or fill in with information where necessary. Thank you in advance for your contribution.

#### Part One: General Information

1) Gender:        male                       female

2) How do you consider your level in English?

Very good

Good

Average

Less than average

#### Part Two: Note-Taking Strategies

3) Do you take notes?        Yes                       No

Why or why not? .....

.....

4) Are you happy with your notes?        Yes                       No

Why or why not? Please justify.....

.....

5) Do you know note-taking methods?        Yes                       No

6) If your answer is yes, please name them.....

.....

7) Are you able to take notes in class, keep up with the instructor, and understand the concepts at the same time? Yes  No

8) Do you include the date and course title at the beginning of your notes?

Yes  No

9) Do you take notes in your native language when you are listening to information in English?

Yes  No

Why or why not.....

10) Does note-taking distract you from paying close attention to all the information included in the lecture? Yes  No

11) Do you have enough time to take as many notes as you want?

Yes  No

12) Do you ask your instructor for clarification if you do not understand specific points?

Yes  No

13) Do you borrow your classmates' notes if you miss something during class?

Yes  No

14) Do you paraphrase key points of the discussions or reading materials rather than writing words verbatim (as they are written or said)? Yes  No

15) When I am taking notes, I usually use:

Abbreviations

Diagrams

Symbols

Other (s), please specify.....

16) Do you use content words (verbs, nouns...etc) and omit function words (articles, pronouns...etc)?

Yes  No

17) Do you use ways to highlight particularly important points (e.g. Circles, underlying...etc)? Yes  No

18) Do you take notes as you read class materials?

Yes  No

19) Do you ever rewrite your notes? Yes  No

20) Do you use good hand writing? Yes  No

21) Do you review your notes after each class, preferably right after class?

Yes  No

22) Do you always understand your notes? Yes  No

-If no, is it because:

Your writing is not legible?

You had forgotten the context in which you had written something?

You could not remember what an abbreviation stood for?

You had simply not written enough notes, so you missed some important points?

### Part Three: Note-Taking and Testing

23) Do you borrow your classmates' notes before exams?

Yes  No

24) Note-taking makes it easier for me to remember the lecture information in exams.

Strongly agree  Agree  Disagree

25) Is it enough for you to use just notes to do well in exams?

Yes  No

Thank you for your cooperation.

## Appendix B

## Students' Marks in TEFL Exam

Université de Jijel

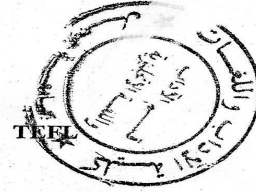
Faculté: Lettres et langues

Département : Anglais

Année Universitaire: 2014/2015

3eme année -Domaine: Anglais - Semestre N°1

Résultats de l'examen de



N°	Nom et prénoms	Exam	TD	Ratt
1	AICHA	07.00	08.00	13.00
2	RADIA	03.00	07.00	11.00
3	SOUHILA	03.00	03.00	14.00
4	SOUHILA	02.00	07.00	08.00
5	WAFI	02.00	08.00	13.00
6	KAWTHER	14.00	12.50	
7	AMIRA	14.00	16.00	
8	HALIMA	06.50	08.00	
9	RANIA	10.00	08.00	
10	AFAF	13.00	12.00	
11	HESNA	04.00	08.00	13.00
12	FERIAL	06.00	11.00	12.50
13	BILAL	04.00	07.00	10.00
14	ZAKIA	03.00	03.00	08.50
15	SARRA	06.00	08.00	11.50
16	KHADIDJA	03.00	07.00	08.00
17	ABIDA	13.00	08.00	
18	ZEYNEB	08.00	04.00	12.50
19	SOMIA	07.00	09.00	
20	SAMIRA	02.00	06.00	12.50
21	SAMIRA	13.00	13.00	
22	ROQIYA	07.00	07.00	12.50
23	MAISSA	16.00	15.00	
24	AHLEM	08.00	09.00	
25	HANANE	08.00	10.00	12.00
26	IMANE	10.00	08.00	12.00
27	NASSIBA	09.00	09.00	
28	IKHLAS	10.00	08.00	
29	WADJIBA	04.00	05.00	08.00
30	SARA	12.00	07.00	
31	CHEIMA	05.00	06.00	11.50
32	IMANE	02.00	05.00	10.00
33	SALIMA	12.00	11.00	

Enseignant ( e ) : Miss.Arzim

## Appendix C

## Students' Marks in Sociolinguistics Exam

Université de Jijel

Faculté: Lettres et langues

Département : Anglais

Année Universitaire: 2014/2015

3eme année -Domaine: Anglais - Semestre N°1

Résultats de l'examen de la matière : Sociolinguistics

Groupe

07

N°	Nom et prénoms	Exam	TD	Ratt
1	YASMINA	2		7,5
2	AHMED	10		
3	FATIMA	7		11
4	IMENE	7		9
5	DALAL			
6	SOUMIA	7		8
7	IBTISSAM	10		
8	WISSAM	2,5		6
9	MOUNIR	5		7,5
10	NOURHANE	7,5		8
11	WIDAD	6,5		8,5
12	RIMA	14		
13	ASMA	6,5		10
14	YASMINA	9		10
15	SIHEM	9		10
16	AMIRA	3		10,5
17	ABIR	10		
18	FATIHA	6,5		10
19	HOUDA	4		8,5
20	AMIRA	6		7
21	SOMIA	6		8
22	MESSAOUDA	12		
23	SABRINA	12		
24	AMEL	3		6
25	NORA	5		9
26	HESNA	11		
27	KHALED	6,5		10
28	FAWZIA	0		8,5
29	LEMYA	3		9
30	SELOUA	12		
31	HANANE	10,5		
32	KALHOUM	4,5		10
33	ZINEDDINE	9		8

Enseignant ( e ) :: Boukhentache Slimane



## ملخص

تهدف هذه الدراسة إلى البحث في استراتيجيات رؤوس الأقسام المستعملة من طرف طلبة السنة الثالثة نظام ل. م. د. في جامعة محمد الصديق بن يحيى. تهدف هذه الدراسة أيضا إلى الدراسة هو البحث عن تأثير استراتيجيات رؤوس الأقسام على أداء التلاميذ في الامتحانات. لتحقيق هذا الهدف افترضنا أن تلاميذ السنة الثالثة انجليزية نظام ل.م.د. يستعملون ثلاثة أنواع من الاستراتيجيات ( الاختصارات ، الرموز و إبراز النقاط الأساسية) وأن هذه الاستراتيجيات لا تساعدهم على تحسين أدائهم في الامتحانات. لإثبات صحة هذه الفرضيات قمنا بإجراء دراسة مع 44 طالبا كعينة من السنة الثالثة انجليزية في جامعة محمد الصديق بن يحيى خلال السنة الأكاديمية 2014-2015. استعملت في هذه الدراسة أداتين: استمارة و تحليل وثيقتين. عينة الدراسة اختيرت بصفة عشوائية من طلبة قسم اللغة الانجليزية. مناقشة النتائج بينت أن استراتيجيات رؤوس الأقسام الأكثر استعمالا هي الاختصارات، الرموز و إبراز النقاط الأساسية. كما أن هذه الاستراتيجيات لا تساعد الطلبة في أدائهم في الامتحانات لأن معظمهم لم يحصلوا على علامات جيدة كما بين تحليل الوثائق.