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University of Tizi-Ouzou**

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Dedication

In the name of Allah, Most Gracious, Most Merciful

This research is dedicated to:

- ✓ My marvelous parents : my mother **Aldjia** and my father **Ali**,
who believed in my capacities and encourage me to achieve
progress, and taught me the value of sacrifices and patience;
- ✓ My lovely sisters **Ibtissem** and **Dyhia**; and
- ✓ My beloved brother **Hamza**.

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Abstract

The present study aims to examine the effect of lecture note-taking methods on students' academic achievement. This research is centered around three major objectives. First, it seeks to identify the main note-taking methods used by Master one Language and Communication students relying on Ratnaprabha & Shashikala' (2017) framework of Note-taking. Second, it aims to discover students' perception on the usefulness of note-taking methods on their academic achievement. Third, it attempts to determine whether note-taking has a positive or a negative impact on students' academic outcomes. To achieve the cited objectives, a quasi-experimental research was conducted in the department of English at Mouloud Mammeri University of Tizi-Ouzou in addition to the use of mixed-method approach for data collection and data analysis. A questionnaire, a pretest, a posttest, and students' lecture notes were the main data collection tools that were analyzed using quantitative and qualitative methods. The findings of the questionnaire and students' lecture notes revealed that Master one Language and Communication students use both the outline and the sentence note-taking methods which pertain to the linear note-taking style. In addition, it was disclosed that students perceive note-taking as an efficient technique that helps them to get better grades. Furthermore, the pretest and posttest findings showed that note-taking has a positive impact on students' academic achievement.

Key words: Academic achievement, Linear and non-linear notes, Master one students, Note-taking, Ratnaprabha and Shashikala (2017).

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General Introduction

1- Statement of the Problem

One of the most important skills students should master is the ability to take notes and record their lectures effectively. Indeed, according to Haghverdi *et al.* (2010), note-taking is the most significant tool in students' toolbox. Note-taking is the process of recording information presented during a lecture (Mosleh & Baba, 2013). Even if the teacher provides his /her students with handouts that summarize the material covered in class, note-taking remains an important component of the learning process because it allows students to write down valuable information not mentioned in the handouts. Students can record their lectures and revisit them later to refresh their memory, especially before taking an important test or exam.

Students' academic achievement occupy a significant place in the learning process. Several factors can influence students' educational outcomes such as intelligence, attitudes, personality, and study habits (Nair & Kulkarni, 2020). The latter denotes different learning skills such as reading skills, essay writing, note-taking, and examination techniques (Percival & Ellington, 1984; cited in Nair & Kulkarni, 2020). Among these learning or study habits, note-taking is an important learning strategy that can help students improve their academic achievements. Indeed, Kiewra (1985) notes that students who take lecture notes generally have higher test achievements.

Some research studies have investigated the impact of note-taking on students' academic achievements both nationally and internationally. At the international level, Haghverdi *et al.* (2010) examined the effect of note-taking on students' academic achievement at Islamic Azad University, in Iran. The findings revealed a significant correlation between note-taking and students' academic achievement. The authors stressed the

need to provide teachers with in-service training about note-taking and this in order to teach their students how to take notes effectively.

In another study, Ibrahim and Almaagbh (2020) looked at the impact of strategic note-taking on three hundred and eighty-four EFL students' academic performance in four public Jordanian universities using a descriptive research design. The study outcomes showed that strategic note-taking has a significant impact on students' academic performance.

At a national level, Ghedbane and Gourari (2012) studied the impact of strategic note-taking on lecture comprehension and learning performance at the University of Biskra. The findings indicated that effective note-taking improves students' exam grades. The authors stated that considering that lecture notes aid comprehension, it is important for teachers to encourage their students to take notes strategically rather than randomly.

In another study, Alloui (2019) considered teachers and students' attitudes towards the role of note-taking in enhancing students' test performance at the University of Oum El Bouaghi. The results of the questionnaires administered to teachers and students revealed that the research participants are aware of the significance of taking notes in lecture memorization and organization. In addition, they viewed note-taking as an important tool to improve test performance.

The aforementioned studies are descriptive case studies that investigated the effect of note-taking strategies on students' academic achievements. In addition, to the present state of our knowledge, no research has explored the topic in the department of English at Mouloud Mammeri University of Tizi-Ouzou. Therefore, this study aims to fill in this research void by examining the impact of note-taking on students' academic achievements by using a quasi-experimental research design with EFL Master one students at the University of Tizi-Ouzou.

2. Aims and Significance of the Study

The present research attempts to determine the kind of note-taking methods employed by students and investigate their effect on academic achievements. More specifically, the study objectives are threefold. First, it aims at identifying the main note-taking methods used by Master one student of Language and Communication in the department of English at Mouloud Mammeri University of Tizi-ouzou to record information presented by the teacher. Second, it endeavours to find out about students perception of the effectiveness of lecture note-taking in improving their academic achievement. Third, it seeks to determine whether taking notes has a positive or a negative effect on students' academic achievements.

This study is worth investigating in the sense that it sheds light on the importance of lecture notes. In addition, it offers information about the note-taking methods employed by students and their effect on academic achievements. Furthermore, the results obtained from the study are intended to contribute to the body of research on note-taking methods and their effect on students' academic performance.

3. Research Questions and Hypotheses

In order to reach the above-mentioned research objectives, the present study aims at answering the following questions:

- 1.** What are the main lecture note-taking strategies used by Master one students of Language and Communication in the department of English at the University of Tizi-Ouzou?
- 2.** What are students' perceptions of the usefulness of lecture note-taking in improving their academic achievement?

3. Does lecture note-taking improve students' academic achievement?

In an attempt to answer the above asked research questions, the following hypotheses are advanced:

1. Master one Language and Communication students in the department of English at the University of Tizi-Ouzou use linear notes to record the information presented during the lecture.
2. Students perceive note-taking as a useful tool that enhances their academic achievements.
3. Lecture note-taking methods improve students' academic achievement.

4. Research Techniques and Methodology

The present research took place in the department of English at Mouloud Mammeri University of Tizi-Ouzou and involved twenty-five Master one students studying Language and Communication. To answer the research questions and test the validity of the study hypotheses, a mixed-method approach that combines both quantitative and qualitative data collection and data analysis procedures was used. The study is quasi-experimental in nature and adopted a pretest-posttest design. In other words, the researcher worked with an already existing group of Master one students and measured their academic achievements by using a pretest and a posttest. During the first phase of the investigation, the students received a lecture but were not allowed to take any notes, and then took a pretest. During the second phase, the students received the same lecture, took notes, and then were given a posttest. The results obtained from the pretest were compared with those gained from the posttest to determine whether lecture note taking influences students' academic performance. In the end, the students were given a questionnaire to state the type of note-taking methods they use and reflect on the usefulness of note-taking in enhancing their academic achievements. In

addition, students' lecture notes were collected to support the results obtained from the questionnaire about the type of note-taking methods used by the participants.

5. Structure of the Dissertation

The structure of the dissertation follows the IMRAD (Introduction, Methods, Results and Discussion) format, also known as the traditional simple model, preceded by a general introduction and ended with a general conclusion. The General Introduction provides an overview of the study including the general aim, specific objectives, the significance of the study, research questions and hypotheses, research techniques and methodology, and the structure of the dissertation. It is followed by the first chapter titled *Review of the Literature*, which provides the theoretical background of the study and covers the main concepts related to linear and non-linear note-taking methods suggested by Ratnaprabha and Shashikala (2017). The second chapter, entitled *Research Design and Methodology*, describes the methodological procedures used for data collection and data analysis. The third chapter, called *Presentation of the Findings*, presents the main findings of the study using graphical representations like tables and diagrams. The last chapter is called *Discussion of the Findings* and it deals with the interpretation and discussion of the results and this by relating each point to certain theoretical aspects. It also confirms or disconfirms the hypotheses mentioned earlier. Finally, the whole work concludes with a *General Conclusion* that summarizes the important findings and suggests additional research on the topic. In order to cite the different works mentioned in this dissertation, we have relied on the Harvard Referencing System.

Chapter One:
Review of the Literature

Introduction

The current chapter is theoretical. Its main purpose is to present the theoretical background of the present research. It is mainly divided into two major sections. The first one deals with note-taking. It first defines note-taking and differentiates it from note making. Then, it highlights the purpose, benefits, functions, skills and stages of note-taking. Finally, it reviews previous studies on the effect of note-taking on students' academic achievement. The second section explains the theoretical framework upon which the study is based. It consists of the classification of note-taking methods provided by Ratnaprabha and Shashikala (2017).

1. Note-taking

1.1. Definition of Note -taking

The note-taking process is highly valued in foreign language teaching and learning contexts. Academic researchers and teachers consider note-taking as one of the finest strategies that can assist students in their learning process. Indeed, Karimi (2011:806) states that 'Note-taking is recognized as a critical activity which enhances learning in learning contexts'. In the classroom note-taking, can help students to capture the essence of the lecture by writing down the key points presented by the teacher.

Various definitions of note-taking have been proposed by scholars. For example, O'Malley and Chamot (1995; cited in Rahmani & Sadeghi, 2011:117) view note-taking as 'writing down the key words and concepts in abbreviated verbal, graphic or numerical form to assist performance of a language task.' That is to say, note-taking is a process that involves recording key terms using different strategies such as abbreviations and graphs. According to DeWitt (2007:46), note-taking can be defined as 'an external memory aid that refers to writing a brief record of information to be remembered'. To say it differently, DeWitt

considers note-taking as a secondary memory where important notes are stored to be recalled later on.

1.2. Note -taking versus Note Making

Taking notes and making notes are two different processes. Neville (2010:25) highlights the difference between them by stating that note-taking is ‘a process that involves writing or recording what you hear or read in a descriptive way.’ while note making is ‘an advanced process that involves reviewing, synthesizing, connecting ideas from the lecture or reading and presenting information in readable and creative ways, and in ways that will help you revise more effectively.’ In other words, note-taking refers to the process during which students write what they hear and read. Note making, on the other hand, goes beyond note-taking to refer to the practice of reviewing, summarizing, and combining the ideas students hear or read. Besides being an important activity to record information, note making has three central aims, namely, to summarize key elements, combine and link between ideas, and add one’s own notes to the already summarized or paraphrased elements (Ibid, 2010). It can be deduced from these definitions that note-taking is a passive practice whereas note making is an active process.

Both processes provide students with the necessary information to study for tests and exams and help them to remember and recall the studied materials more easily. Indeed, Babu (2016:2763) indicates that ‘Notes prepared by the method of *‘note making’* or *‘note-taking’* provide big chunks of knowledge in a clear and succinct way. Notes are an aid to memory.’

1.3. The Purpose of Note -taking

Students receive a tremendous amount of information in academic lectures that may be difficult for them to understand. Thus, taking notes during lectures may be one of the most efficient ways that students can adopt to accomplish their needs (Krioui & Bensadia, 2020).

In the same way Friedman (2014), claims that note-taking serves a variety of purposes such as to learn new thing, increase the retention of information, and record important events. In the learning process, the main goal of taking notes is to record or writing what students hear or read because forgetting key points can happen instantly and they cannot rely on their short-term memory to recall all the information from a lecture. Isaacs (1994) believes that the most crucial purposes of note-taking are to give students a foundation for further study, aid their retention of lecture material, serve as a basis for subject revision, and enable them to understand the subjects' organization. Besides, the aim behind taking notes is to make the information shorter in order to utilize it easily and record it quickly by using certain abbreviations (Boch & Piolat, 2005; cited in Özçakmak, 2019). Furthermore, Neville (2010:25) claims that note-taking has many different purposes, and among them 'acting as a summary or reinforcement of the main points of what you saw, heard or read'.

1. 4. The Importance / Benefits of Note-taking

Note-taking is an important skill for students' academic learning and accomplishment (Jiang *et al.*, 2018). Some students think that their notes are a practical tool during the revision period because they allow them to recall the content covered beyond the class. In the same vein, Tsai-Fu and Yongan (2010:121) assert that 'the effect of note-taking goes far beyond the moment when the notes are taken.' Note-taking seems to be advantageous because students' memory is short-live and forgetting things can sometimes occur right after a given lecture, thus taking notes helps students to retain the information presented in class for a

longer period of time. Therefore, note-taking can improve long-term memory. It serves as an external storage device that allows students to review the lecture and remember the elements covered in class during tests and exams. Effective notes help students to remember the ideas, examples, facts, and explanations exposed by the teacher during the lecture.

Another advantage of note-taking is that it helps students to concentrate on the lecture. Students can take notes by actively listening to what the teacher is saying. According to Touati (2014), even the most motivated students can become inattentive in class, but taking notes makes them involved with what is being said. Students pay attention to what is being said and make decisions about what to write or record; therefore, they are actively engaged during the lecture. Since students pay attention to what they read or hear while taking notes, this can improve their comprehension skills. Indeed, Özçakmak (2019:581) claims that ‘Note-taking is a technique that is highly effective on comprehension.’ In a study about the effect of note-taking while reading and listening on comprehension, (Ibid.2019) found that note-taking while listening influenced students’ comprehension achievement more than taking notes while reading. In addition, taking notes and reviewing them later have a positive impact on students’ academic performance. Kiewra (1985; cited in Babu, 2016) found that students who take notes perform better than those who do not take notes. The purpose of the present study is to determine whether note-taking improves students’ academic achievement.

1.5. The Functions of Note-taking

According to Boch and Piolat (2005:101), ‘Note-takers take notes to fulfill two major functions: to record information and /or to aid reflection’. That is to say, the first function of note-taking is to produce a written account of information students hear in class. The second function of note-taking is that it serves as an external memory aid that can be used later. Other researchers like Di Vesta and Gray (1972) highlight two functions of note-taking that are

encoding and external storage. The authors explain that the encoding function of note-taking allows students to record notes while listening and the external storage function allows them to store their notes in a written form that they can use for a later review. Boye (2012) points out that both functions are intertwined and render note-taking a vital part of effective learning.

1.6. Note-taking Skills

1.6.1. Listening

According to Al-Ashkar (2014), listening means to pay attention. Listening can also be defined as a combination of expectation, attention, and perception of communication sounds (Abadía, 2013). Abadía (2013) states that there needs to be a continuous search for auditory signals during the input phase and meaning creation during the processing phase. The author explains that the speaker's words must be the focus of the audience's attention, and personal bias should be avoided at all costs when acknowledging the speakers' message. The same thing happens in academic settings where students have to pay attention and focus on the teacher's input. Al-Ashkar (2014:24) indicates that 'if the student's attention is not focused on what is being said, there is little chance that meaningful processing and recording to follow'.

1.6.2 .Cognitive Processing

The main focus of note-takers is not only to record and understand information, but also to filter knowledge. In other words, students should be able to distinguish between important and insignificant lecture information. This ability is known as cognitive processing. According to Kiewra *et al.* (1991; cited in boyle, 2007:228):

Cognitive processing involves distinguishing between essential and nonessential lecture information, determining foreign terms or unknown vocabulary, storing bits of lecture information in short-term memory long enough to accurately record it, and paraphrasing and elaborating on the main points .

This means that besides differentiating between significant and insignificant lecture information, students should also be able to paraphrase the main points and insert additional information.

Besides students' role, the teacher plays a vital part during the process of note-taking. In order to help students during the listening and cognitive processing stages, Boyle (2007) recommends teachers to deliver the lecture in a way that gets students to concentrate on the key points, for example, by writing them on the board.

1.6.3. Note-taking/ Recording

Recording notes requires students to express their understanding (cognitive processing) in writing, and it is challenging to pay attention while reading, listening and taking notes at the same time. By using their senses, students are able to take notes by putting the information learnt on paper using figures, sentences, and abbreviations. According to Boyle (2007:229), 'During note-taking, students should be able to write the relevant lecture points at a sufficiently fast pace and in an organized manner.' By taking notes, students can recall the lecture content while reviewing their notes, which is the last stage of note-taking.

1.6.4. Reviewing

Boyle (2007:229) asserts that 'immediately after the lecture, students should review their notes for gaps or areas of misunderstanding.' The author further states that research has shown that reviewing notes directly after recording them increases students' comprehension of the lecture. Kobayshi (2005) indicates that the process of reviewing notes is more beneficial for students than the process of taking notes. This means that without lecture notes review, students cannot fully benefit from the notes they have recorded during class. In this

sense, Lichty (2022: 12) claims that ‘the combination of taking and reviewing notes has a positive effect on student achievement.’

1.7. Note-taking Stages

Taking notes is not simply something you do when you are sitting in class. The procedure begins before the lecture and ends when the students have reviewed their notes (Boyle, 2007).

1.7.1. Before the Lecture

The first stage of note-taking takes place before the lecture. Boyle (2007) calls this stage ‘preparing students to learn’. It is important for students to search about the subject before the lesson takes place in order to take efficient notes. This may aid them in gaining a broad understanding of the essential concepts and ideas or background information. Boyle (2007) also indicates that in order for students to take useful notes, they ought to select a seat at the front of the classroom, a seat that offers a clear view of the instructor and the board in order to reduce distractions. In addition, Boyle (2007) highlights the importance of having enough writing supplies and papers so that students can focus on learning and not on searching for more supplies when they run out.

1.7.2. During the Lecture

As the lecture starts, students have to rely on their listening skills to record the important points and allot meaning to them. In order to do so, students need to concentrate on what is being said and displayed on the board by the teacher. When taking notes, students should use their own words and organize their notes in an understandable way (Boyle, 2007). In order to increase the speed of note-taking, Suritsky and Hughes (1991) recommend the use of abbreviations and symbols rather than recording notes verbatim.

1.7.3. After the Lecture

The final stage of note-taking, according to Boyle (2007), is the review of the lecture notes. This stage is important because it allows students to have a complete and clear understanding of the main points of the lecture. It can take place immediately after the lecture or when revising for tests and exams. However, Boyle (2007) advises students to review their notes just after class because the information presented by the teacher is still fresh. Reviewing notes directly after the lecture can help students to fill in the gaps and complete their notes by comparing their own notes with the ones of their classmates or by looking for additional information in the textbook (Boyle, 2007).

1.8. Note-taking and Academic Achievement

1.8.1. Academic Achievement

Marzulina *et al.* (2019) assert that the phrase ‘academic achievement’ is a combination of two concepts that are ‘academic’ and ‘achievement’. Academic achievement is a performance outcome that measures how well or how bad a student has achieved particular educational objectives. Marzulina *et al.* (2019) further explain that academic achievement refers to the grades students obtain after taking formal tests and exams. Students may perform better if they take notes in the classroom and review them before taking these tests and exams. Indeed, as stated by Meacher (2012:12), ‘the process of note-taking is closely related to achievement.’

2. Theoretical Framework: Note-taking Methods

In order to take lecture notes, students can use various methods. Ratnaprabha and Shashikala (2017) identified two broad types of note-taking methods, which are linear and non-linear notes.

2.1. Linear Notes

Linear notes mean writing the needed information linearly that is structured in the simplest manner possible, which includes line-by-line recording. According to Ratnaprabha and Shashikala (2017:2), ‘Linear styles or note-taking in a format similar to conventional written texts or outlining, are some of the most common styles of notes used by students’. That is to say, the most widely used linear note-taking methods are the outline method and the sentence method.

2.1.1 .The Outline Method

As the name implies, the information is written from general to specific, and the various subjects and their sub-topics, are arranged as an outline. In order for students to outline their notes, they can use Roman numerals, letters, numbers, dashes and bullet points (Ratnaprabha & Shashikala, 2017). The outline method is a well-organized note-taking system. However, ‘It requires more thought during class for accurate organization’ (Ibid.3).

2.1.2. The Sentence Method

The sentence method is one of the most widely used note-taking methods by students. It involves writing ‘every new thought, fact or topic on a separate line as you progress, numbering each sentence.’(Ratnaprabha & Shashikala, 2017:5). In other words, when using the sentence method, students write down every important information said by the teacher; each information is recorded on a separate line and numbered. One of the advantages of this method is that it allows students to record most of the information delivered by the teacher. However, recording a lot of information can be disadvantageous in the sense that it makes it difficult for the students to sort information out and make a difference between important and unimportant lecture points (Ratnaprabha & Shashikala, 2017).

2.2. Non-linear Notes

Non-linear notes refer to a method that permits students to record their notes graphically in a systematized and a semi-structured manner. Consistent with Ratnaprabha and Shashikala (2017), non-linear note-taking style uses graphs that permit students to arrange their notes in a methodical but unusual way that may be hard for other students to understand. There are three types of non-linear note-taking methods, which are the Cornell method, the Mapping method, and the Charting method.

2.2.1. The Cornell Method

The Cornell method involves dividing a piece of paper into three uneven parts in terms of length. The note-taker draws both a vertical and a horizontal line (Evans & Shively, 2019). A vertical line is drawn by leaving 2.5 inches on the left margin and 6 inches on the right margin to form the cue column (Ratnaprabha & Shashikala, 2017; Evans & Shively, 2019). A horizontal line is drawn from the bottom of the page to create the summary section where students can summarize their notes. Once both lines are linked, this forms a section in the center of the paper for taking notes (Evans & Shively, 2019). According to Ratnaprabha and Shashikala (2017:2), the Cornell method ‘is a simple and efficient way of recording and reviewing notes - it’s easy for pulling out major concepts and ideas.’ Figure 1 illustrates the Cornell note-taking method.

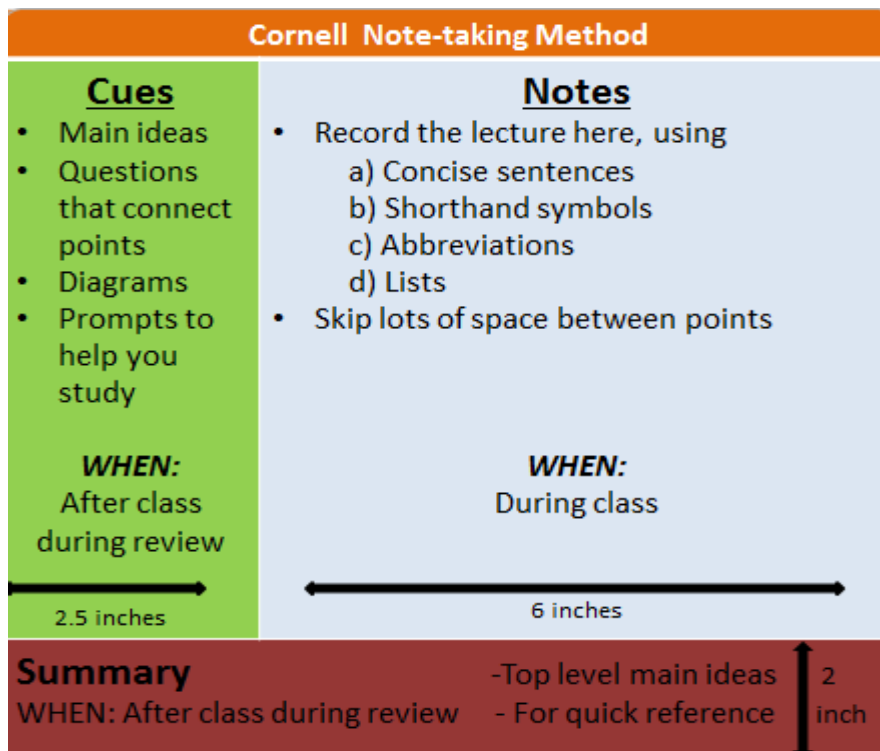


Figure 1: The Cornell Note-taking Method (Ratnaprabha & Shashikala, 2017:3)

2.2. 2. The Mapping Method

Arulselvi (2017:51) states that ‘A Mind Map is a visual diagram used to record and organize information in a way which the brain finds captivating and easy to process.’ In other words, the Mind mapping method is a visual graphical representation of information, ideas, and concepts. The mapping method is different from the linear note-taking methods because it involves the use of branches, images and colors (Arulselvi, 2017). Ratnaprabha and Shashikala (2017) indicate that the Mapping method is a useful note-taking method because the relationship between concepts is visible and the notes are easy to edit by adding branches and colors. This method is particularly useful for visual learners.

2.2.3. The Charting Method

This technique refers to the process of creating a chart simply by using a table with distinct columns to organize information into different categories. Students organize

information into categories within a table. The Charting method ‘provides easy review for memorizing facts and studying comparisons and relationships’ (Ratnaprabha & Shashikala, 2017:4).

Conclusion

This chapter has given a broad review of several theoretical elements of note-taking methods used by students, which are crucial to our research. It has first presented the definitions of the key concepts associated with note-taking. Then, it has reviewed past research on the impact of note-taking on students’ academic achievement. Lastly, it has explained the theoretical framework upon which the study is based, which is Ratnaprabha and Shashikala’s (2017) theory of Note-taking.

Chapter Two:

Research Design and Methodology

Introduction

The present chapter is methodological. It explains the research design and methodology of the study. It first describes the context of the study and the research participants, and then explains the research method and study design. Afterwards, it presents the different data collection tools used to gather the relevant data for the study. Finally, it clarifies the methods that were used to analyze the findings.

1. Context of Investigation and Research Participants

The study was conducted in the department of English at Mouloud Mammeri University of Tizi-Ouzou in June 2022. It involved a group of twenty-five Master one-level students studying Language and Communication. Among these participants, twenty-four were females and one student was a male. The study participants were not randomly selected because they were more advanced than other students. Therefore, they have more experience in note-taking and are capable to assess the effect of their lecture notes on their academic achievements.

The research took place during the first and third weeks of June 2022 in the session devoted to the “History of Communication” course, which was scheduled on Sundays and Mondays from 13:30 to 15:30 and from 12:30 to 14:30 respectively. After obtaining the teacher and students’ permission, the researcher had two hours during the first week and two hours during the third week to carry out the investigation.

2. Research Method

To reach the needed research outcomes, researchers were required to use research methods of data collection, analysis, and interpretation. In order to collect and analyze data, the present study relied on the mixed-method approach. According to O’Reilly et al. (2021:66), a mixed method approach ‘denotes the combination of a quantitative aspect and qualitative aspect within a study.’ This means that when using the mixed method the researcher combines quantitative and qualitative methods of data collection and data analysis in one single research

study. In the present study, both qualitative and quantitative methods were used to collect and analyze data.

3. Research Design

Considering the nature of the research problem and the purpose of the study, which is to determine the effect of note-taking methods on students' academic achievement, an experimental research design seemed suitable. According to Dimsdale and Kunter (2004:7), 'Experimental studies are highly quantitative studies that attempt to empirically test a hypothesis by using 'hard' data and statistical techniques.' The aim of this research design is to measure the effect of a given treatment and determine whether it works or not (Ibid). In the present study, a quasi-experimental research design was used because there was no random assignment of the research participants, which is the case in true experimental designs. Consistent with Ross and Morrison (2004), it is often impossible to assign the research subjects randomly to a given treatment. This is the case in schools where the classes have already been formed at the beginning of the academic year. In this situation, conducting a true experiment is not feasible but the researcher can carry out a quasi-experiment (Ibid). "Quasi" means resembling; therefore, a quasi-experiment resembles a true experiment but without the feature of random assignment. According to Cohen et al. (2007: 274), in a quasi-experimental research, 'the researcher undertakes his study with groups that are intact, that is to say, the groups have been constituted by means other than random selection.' That is to say, in quasi-experiments, the researcher works with already existing groups and does not select the participants randomly. In the present study, the group of Master one students has already been formed by the administration at the start of the academic year; therefore, the researcher did not randomly assign the students to this group.

The quasi-experimental design used in the present study is the one-group pretest-posttest design. The study participants first received a lecture but were not allowed to take any notes. At the end of the lecture, the students took a pretest that measured their academic achievements. Then, they received the same lecture and took notes. Afterwards, they received a posttest with

the purpose of assessing their academic achievements. To determine whether note-taking had any effect on the students' academic achievements, the results obtained from the pretest were compared with those took from the posttest.

4. Data Collection Instruments

In order to collect the required data, four research instruments were used, which comprised a questionnaire, students' lecture notes, a pretest and a posttest.

4.1. Questionnaire

A questionnaire is an important research tool that can be used to collect data for a given study. According to Roopa and Rani (2012: 273), 'A questionnaire is a series of questions asked to individuals to obtain statistically useful information about a given topic.' A questionnaire is a list of questions administered to a group of respondents with the aim to gather data. In the present study, a questionnaire was used in order to discover the types of note-taking methods employed by the students and determine their perception of the impact of note-taking on their academic achievements.

To this end, a questionnaire comprising twenty questions was designed and given to the participants on Monday, June, 20, 2022, right after the administration of the posttest. This questionnaire was divided into four sections (See Appendix 1). The first section gathered general information about the respondents. The second section encompassed questions about students' note-taking practices. The third section contained statements that assessed students' agreement or disagreement to determine their perception of the effectiveness of note-taking. The last section aimed to gather data about students' perception of the effect of note-taking on their academic achievements.

Before administering the questionnaire to the participants, it was first piloted with a group of eight Master one students from the field of Didactics of Foreign Languages on Sunday, June 19, 2022. According to Roopa and Rani (2012: 275), piloting or pretesting is an important step in questionnaire design because it allows the researcher

To determine whether. i. The questions are properly framed ii. Wording of the questions will achieve the desired results iii. The questions have been placed in the best order iv. The questions are understood by all classes of respondents v. Additional or specifying questions are needed or some need to be eliminated vi. Instructions to interviewers are adequate.

Since no issue was found during the piloting phase, the questionnaire was administered to the participants the next day. Before administering the questionnaire, the researcher explained the different note-taking methods to the students. This was done in order for the students to understand these methods and to specify the ones they used.

4.2. Students' Lecture Notes

Students' lecture notes were collected with the aim to determine the type of note-taking strategies used by the participants. This allowed the researcher to support the questionnaire findings and answer the first research question mainly.

4.3. Pretest

On Monday, June 6, 2022, the students received a lecture about "Berol's Model of Communication". The students listened to the explanation of the lecture by the researchers but were not allowed to take any notes. At the end of this lecture, the students took a pretest that comprised six questions (See Appendix 2) aimed to check their comprehension and recollection. The number of students who answered the pretest was thirty.

4.4. Posttest

On Monday, June 20, 2020, the students received the same lecture about "Berlo's Model of Communication". However, this time, the students listened to the researchers explaining the lesson and took different lecture notes about the information they heard and /or were written on the board. It took two weeks to tackle the second part of the investigation because the students were still studying in waves due to the COVID-19 pandemic. At the end of the lecture, the students received a posttest that included the same questions as the pretest. The number of students who answered the posttest was twenty-five. Therefore, the five

students who answered the pretest were removed from the analysis because they were absent when the posttest was administered.

5. Procedures of Data Analysis

In order to analyze the data collected from the research instruments, both quantitative and qualitative data analysis procedures were used.

5.1. Quantitative Analysis

The quantitative method was used to analyze the results obtained from the pretest and posttest. Here, students' scores in both tests were graded out of ten. The marks of each student on the pretest and posttest were displayed in a table to show the difference. Quantitative analysis was also used to treat the data obtained from the closed-ended questions of the questionnaire. Microsoft Office Excel was used to compute percentages relying on the rule of three. This rule, $X = (Z \times 100) / Y$, contains three values. X symbolizes the enumerated percentage, Z is the value of similar responses, and Y represents the total number of participants. The same analytical tool was used to generate percentage diagrams.

5.2. Qualitative Analysis

The second method used to analyze the findings was Qualitative Content Analysis (QCA). This analysis tool was used to analyze the open-ended questions of the questionnaire and students' lecture notes. Elo *et al.* (2014) indicate that qualitative content analysis is widely used to analyze qualitative research data. According to Morgan (1993: 116), 'Qualitative content analysis uses code categories that emerge from the data themselves, applies these codes through careful readings of the data.' In other words, qualitative content analysis focuses on reading the collected data and placing them into categories. In the present study, students' answers to the open-ended questions and their lecture notes were read and consulted several times before coding them into categories.

Conclusion

This chapter has depicted the methodology used to investigate the effect of note-taking on students' academic achievements. It has described the context of the investigation and the research participants. Besides, this chapter has explained the research method and design and presented the data collection instruments. Ultimately, it has clarified the methods used to analyze the collected data. The findings obtained from the different research tools are presented in the next chapter entitled "Presentation of the findings".

Chapter Three:

Presentation of the Findings

Introduction

This chapter displays the findings obtained from the data collection tools that consist of a questionnaire, lecture notes, a pretest and a posttest distributed and gathered from Master one Language and Communication students enrolled in the department of English at the University of Tizi-Ouzou 2022. The chapter is divided into three sections. The first one presents the questionnaire findings. The second part deals with the results obtained from the students' lecture notes. The third and last section is concerned with the analysis of the pretest and posttest.

1. The Questionnaire Results

Section One: General Information

Q 1- What is your gender?

Gender	Number of Students	Percentage %
Male	1	4%
Female	24	96%
Total	25	100%

Table 1: Students' Gender

In Table 1, it can be noticed that female students outnumbered male students. Indeed, the majority of the participants, that is twenty-four out of twenty-five, are females with percentage of 96%. Only one student is a male, represented by a percentage of 4%.

Q2- How would you describe your current level in English?

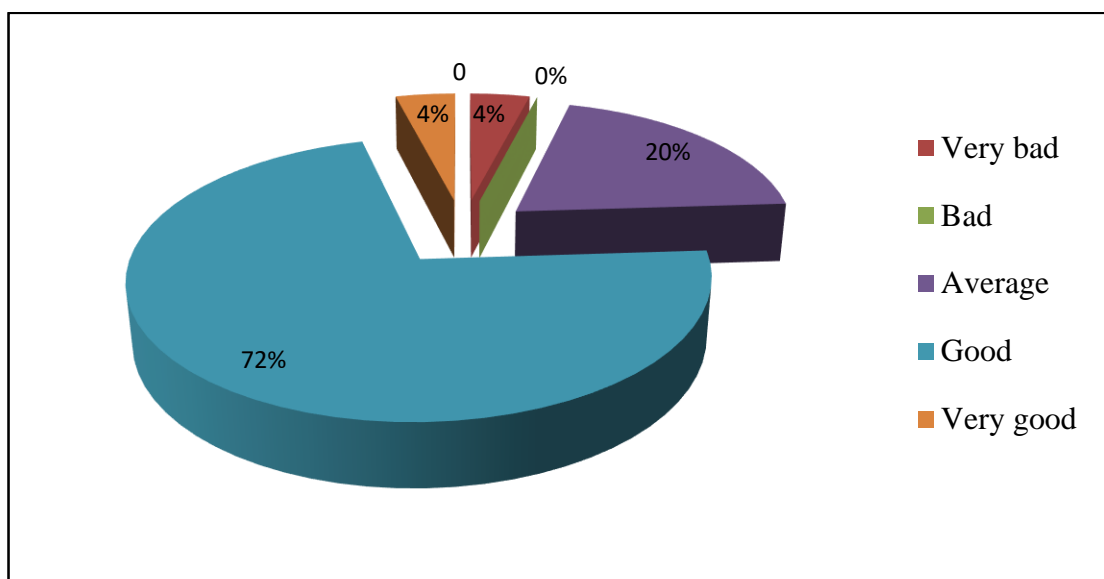


Diagram 1: Students’ Perception of their Current Level in English

Diagram (1) exhibits students’ perception of their level in English. As it can be seen, the majority of Master one Language and Communication students (72%) perceived their level in English as good. 20% of the students indicated that their level in English in average. Only 4% viewed their level in English as being very good and the same percentage (4%) considered their level as very bad.

Section Two: Students’ Note-taking Practices in the Classroom

Q3- Do your teachers give you handouts that summarize the material covered in class?

Options	Number of Students	Percentage %
Yes	23	92%
No	2	8%
Total	25	100%

Table 2: Teachers Providing Handouts to Students

Presentation of the Findings

Table 2 reveals that twenty-three out of twenty-five students, that is a percentage of 92%, reported that their teachers give them handouts that summarize the content of the lecture. Only two students (8%) indicated that their teachers do not give them handouts.

Q4- If the answer is yes, please specify when your teachers give you these handouts in class?

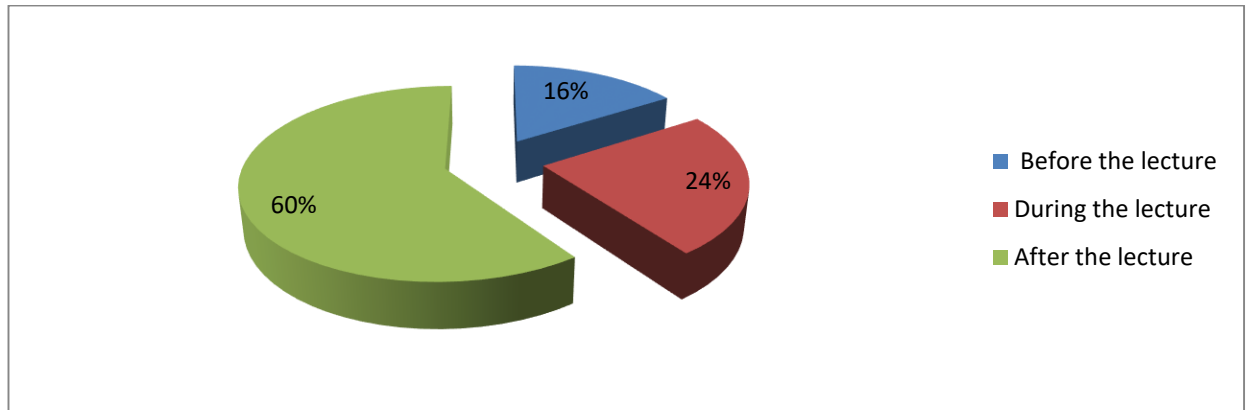


Diagram 2: Teachers' Time to Supply Students with Handouts

Diagram (2) shows that more than half of the students (60%) specified that their teachers give them handouts after the lecture. 16% receive the handout before the lecture and 24% pointed out that they receive the handouts during the lecture. Based on students' answers, it can be deduced that the majority of teachers provide the research participants with handouts after completing their lectures.

Q5- Do you take notes when the teacher says that he would provide you with handouts?

Options	Number of Students	Percentage %
Yes	21	84%
No	4	16%
Total	25	100%

Table 3: Students Taking Notes when the Teacher Provides Handouts

In Table 3, it is specified that 84% of the participants stated that they take lecture notes even when the teacher provides them with handouts. However, 16% of the students prefer not to take notes when the teacher informs them that he/she will supply them with handouts.

- If the answer is no, could you please explain why?

Students who answered the question negatively gave two main reasons for not taking notes in the classroom. The first reason mentioned by the participants was that according to them there was no need to take notes because everything the teacher said during class was mentioned in the handouts. Therefore, they did not see the utility of taking notes. The second reason cited by the students was that they preferred to listen to the teacher explain the details of the lesson rather than distract themselves by taking notes. These students are auditory learners meaning that they learn better by listening and hearing.

- If the answer is yes, for which purposes do you take notes?

Students who answered the question positively gave their own reasons for taking notes during class. According to these students, lecture notes allow them to understand the lesson better. They explained that when taking notes, they could use their own words and vocabulary to record the information presented by the teacher, unlike the handouts where information is presented in a complicated manner. This can help them review the class material at home, understand it better, and prepare themselves for tests and exams. The students also indicated that taking notes allows them to recall the material covered in class. By taking notes, students can record every single detail mentioned by the teacher, details like teacher' examples that are not usually mentioned in the handouts.

Q6- How often do you take notes during the lecture?

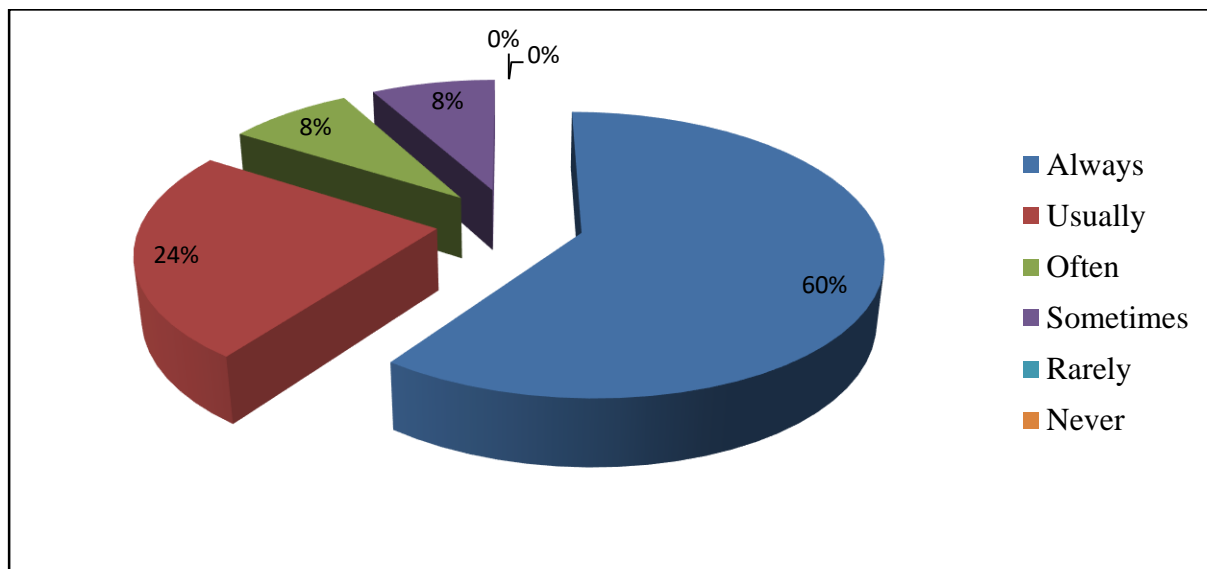


Diagram 3: Students’ Frequency of Taking Notes

Diagram 3 displays students’ frequency of taking notes. As it can be seen, more than half of the students, represented by a percentage of 60%, always take notes in the classroom. 24% of the students usually take notes, and 8% often and sometimes take notes during class. The diagram also shows that 0% of the students rarely and never take notes. It can be concluded that most of the students always and usually take notes in the classroom.

Q7- Do you write precisely what the teacher says or writes on the board?

Options	Number of Students	Percentage %
Yes	18	72%
No	7	28%
Total	25	100%

Table 4: Students’ Writing down Exactly what the Teacher Says or Writes on the Board

Presentation of the Findings

Table 4 shows that most of the students (72%) prefer to record precisely what is being said or written on the board by the teacher. Seven participants (28%); however, do not write down everything the teacher says or writes on the board.

Q8- Do you use abbreviations and symbols when taking notes?

Options	Number of Students	Percentage %
Yes	25	100%
No	0	0%
Total	25	100%

Table 5: Students' Use of Abbreviations and Symbols when Taking Notes

Table 5 depicts the use of abbreviations and symbols by the students when taking notes. It shows that all the participants (100%) employ abbreviations and symbols when taking notes.

Q9- Do you use bullet points or numbers to separate the different points of the course?

Options	Number of Student	Percentage %
Yes	24	96%
No	1	4%
Total	25	100%

Table 6: Students' Use of Bullet Points and Numbers to Separate the Different Points of the Course

Table 6 shows that nearly all the participants (96%) use bullet points and numbers to separate the different points of the lesson and only one participant (4%) does not use this note taking strategy.

Q10- Do you write your notes on the margins of the page?

Options	Number of Students	Percentage %
Yes	22	88%
No	3	12%
Total	25	100%

Table 7: Students' Writing Notes on the Margins

When the students were asked whether they write notes on the margins or not, the majority of them (88%) responded positively. However, as it is shown in Table 7, three students (12%) responded negatively meaning that they do not use the margins to write their notes.

Q11- Do you use diagrams to outline your notes?

Options	Number of Students	Percentage %
Yes	12	48%
No	13	52%
Total	25	100%

Table 8: Students' Use of Diagrams to Outline their Notes

Table 8 demonstrates that more than half of the respondents (52%) do not use diagrams to outline their notes. Nearly half of the participants (48%) ,on the other hand, use diagrams to outline their lecture notes.

Q12- Which of the following methods do you use when taking notes in the classroom?

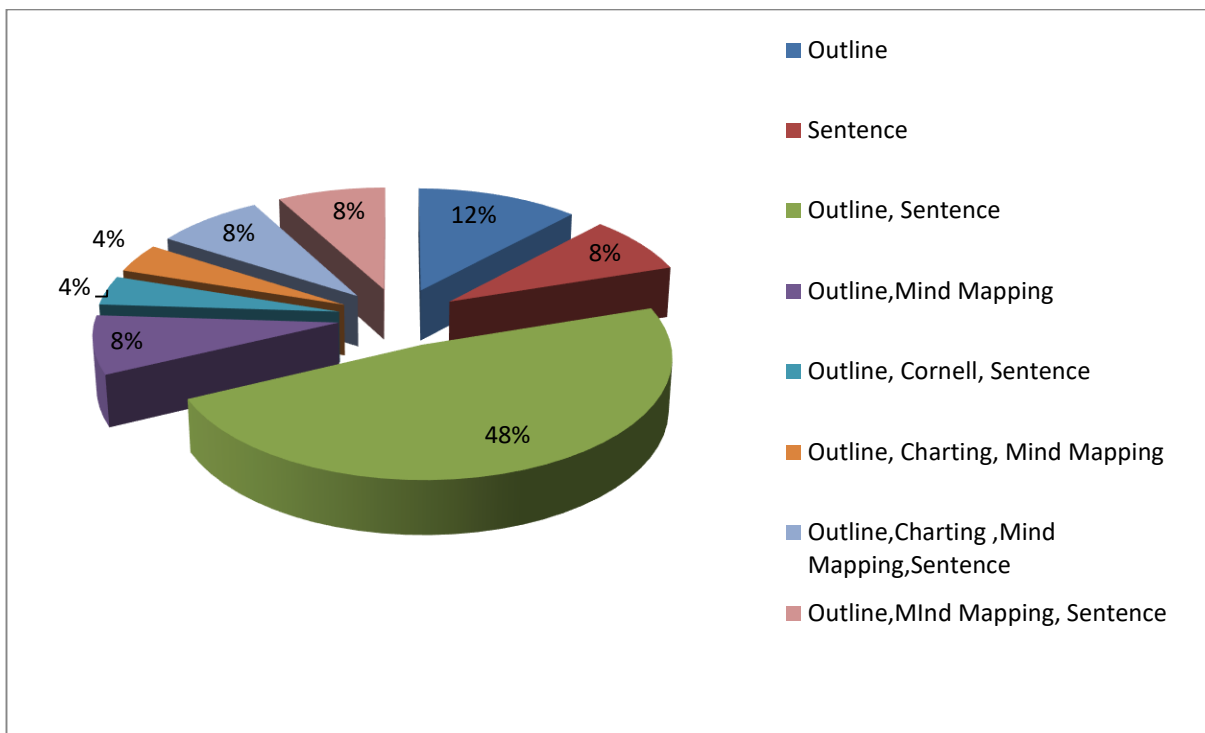


Diagram 4: Students' Choice of Note Taking Methods

In Diagram (4), it can be seen that 12% and 8% of the participants use the outline method and the sentence method respectively, whereas nearly half of the respondents (48%) use both the outline and the sentence method. It can also be seen in the diagram that some students use more than two note-taking methods. Therefore a similar percentage 8% of the students rely on the outline method in addition to the mind mapping method and the sentence method. The same percentage of students (8%) use the three aforementioned strategies plus the charting method. It seems that the most widely used note-taking methods are the outline method and the sentence method.

Q13- Do you compare your own notes with those of your classmates?

Options	Number of Students	Percentage %
Yes	11	44%
No	14	56%
Total	25	100%

Table 9: Students’ Comparing their Notes

As it is shown in Table 9, fourteen students (56%) indicated that they do not compare their notes to those of their classmates and eleven students (44%) stated the opposite.

Section Three: Students’ Perceptions of the Benefits of Note-taking

Please indicate the degree of your agreement and disagreement with the following statements.

Q14-Taking notes helps me to focus on the course and process the information provided by the teacher.

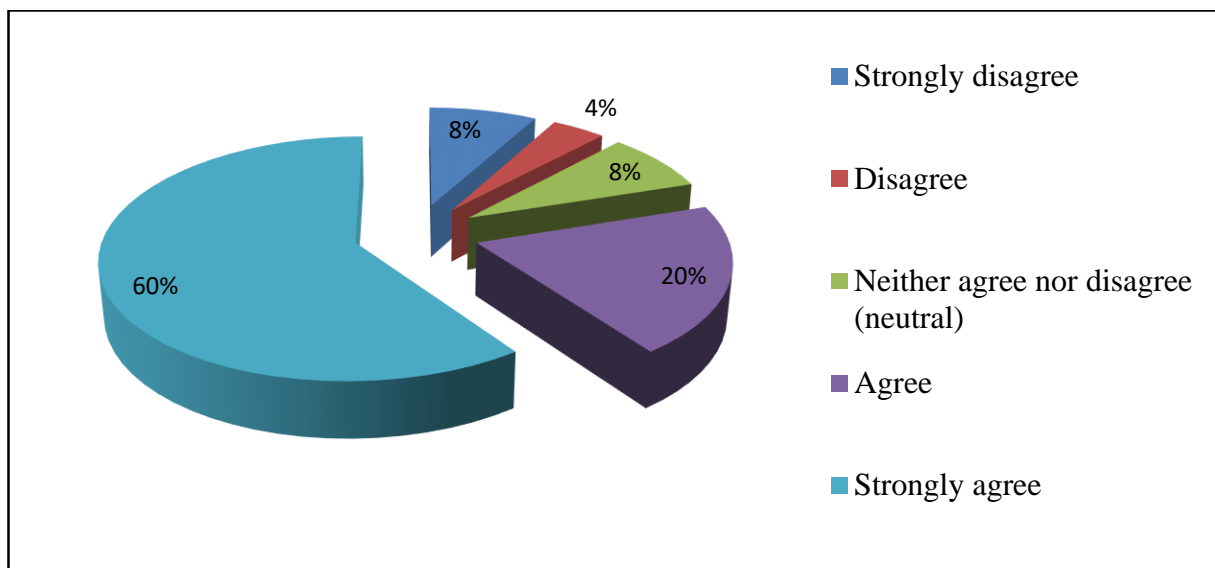


Diagram 5: Students’ Perception of the Role of Note-taking in Course Concentration and Information Processing

When the students were questioned about the role of note-taking in course concentration and information processing, more than a half of them (60%) strongly agree that taking notes helps them to pay attention to the course and process information better, and 20% agree with the statement. 8% of the students provide a neutral answer. The same percentage (8%) strongly disagrees and 4% disagree with the statement. From the results displayed in Diagram (5), we can deduce that taking notes is beneficial in increasing students' focus on the lecture and processing the information provided by the teacher.

Q15- Taking notes helps me to understand the content of the course.

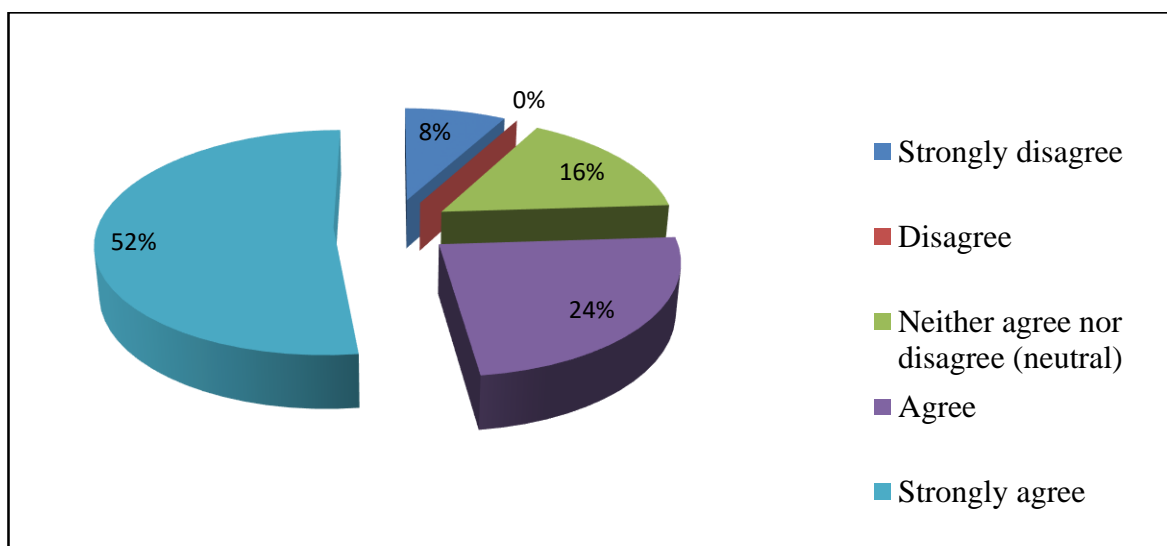


Diagram 6: Students' Perception of the Role of Note-taking in Course Comprehension

Diagram (6) shows that 52% of the students strongly agreed that taking notes contributes to the comprehension of the course, and 24% of them concurred with the statement. The diagram also demonstrates that 16% of the answers were neutral, while 8% of the students selected the option "strongly disagree". It can be assumed that taking notes can assist students in understanding the content of the course.

Q16- Taking notes makes it easier to remember and recall the content of the course.

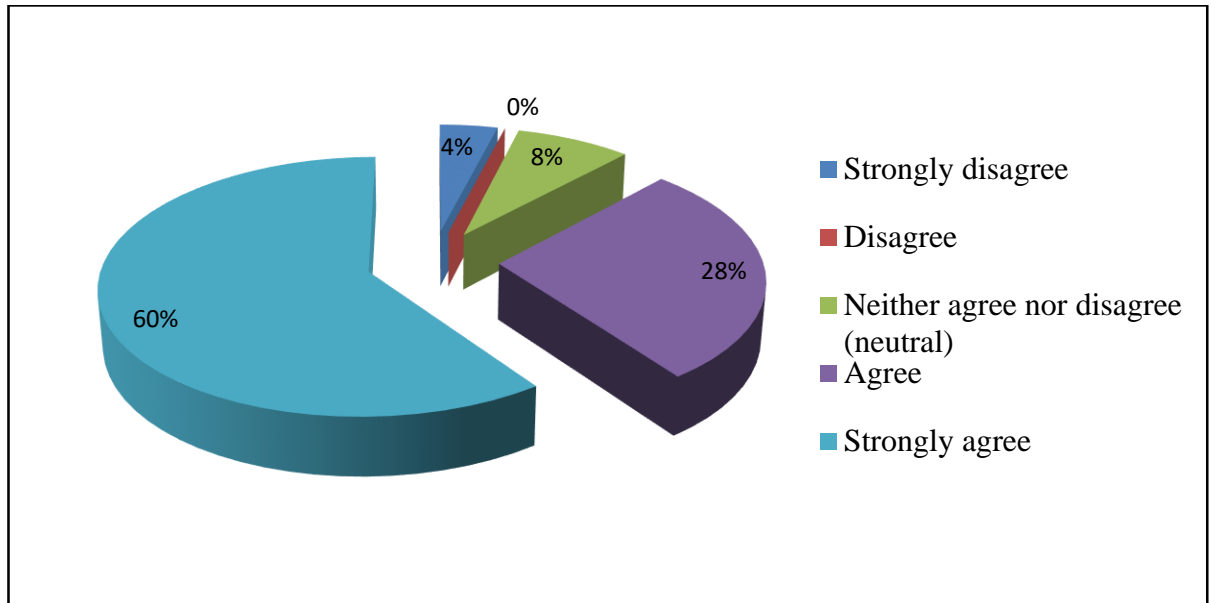


Diagram 7: Students' Perception on the Role of Note-taking in Course Recollection

When the students were asked to state the degree of their agreement or disagreement about whether taking notes in the classroom facilitates the recollection of the information given by the teacher, 60% of them strongly agreed and 28% agreed with the fact that the process of note-taking helps them to remember the content of the course. 8% of the students neither agreed nor disagreed with the statement. Only 4% of the research participants opted for “strongly disagree”. It can be inferred that note taking helps students to recall the course content.

Q17- Note taking helps me to revise for tests and exams.

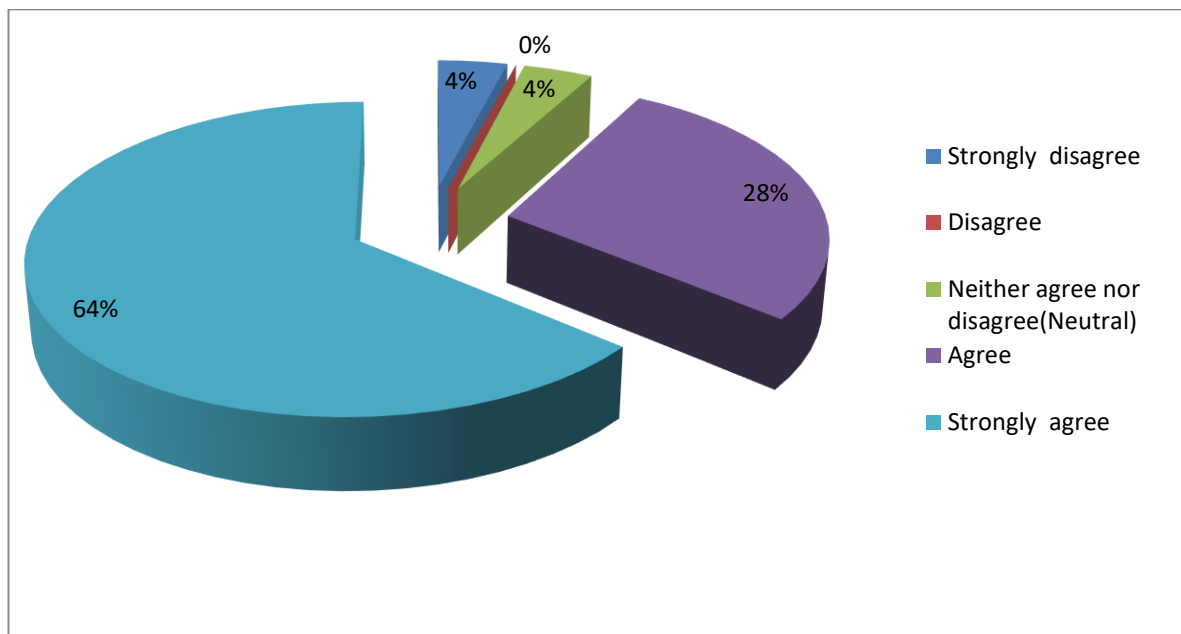


Diagram 8: Students' Perception of the Role of Note-taking during Test and Exam Revisions

From the results in Diagram (8), we can see that 64% of the students strongly agree that note-taking helps them during their revisions for tests and exams, and 28% of them agreed with the statement. The diagram also shows that only 4% of the students rejected the statement and the same percentage (4%) provided a neutral answer. The obtained results indicate that note taking in the classroom helps students later on during their preparation for tests and exams.

Q18- Taking notes help me to get better grades.

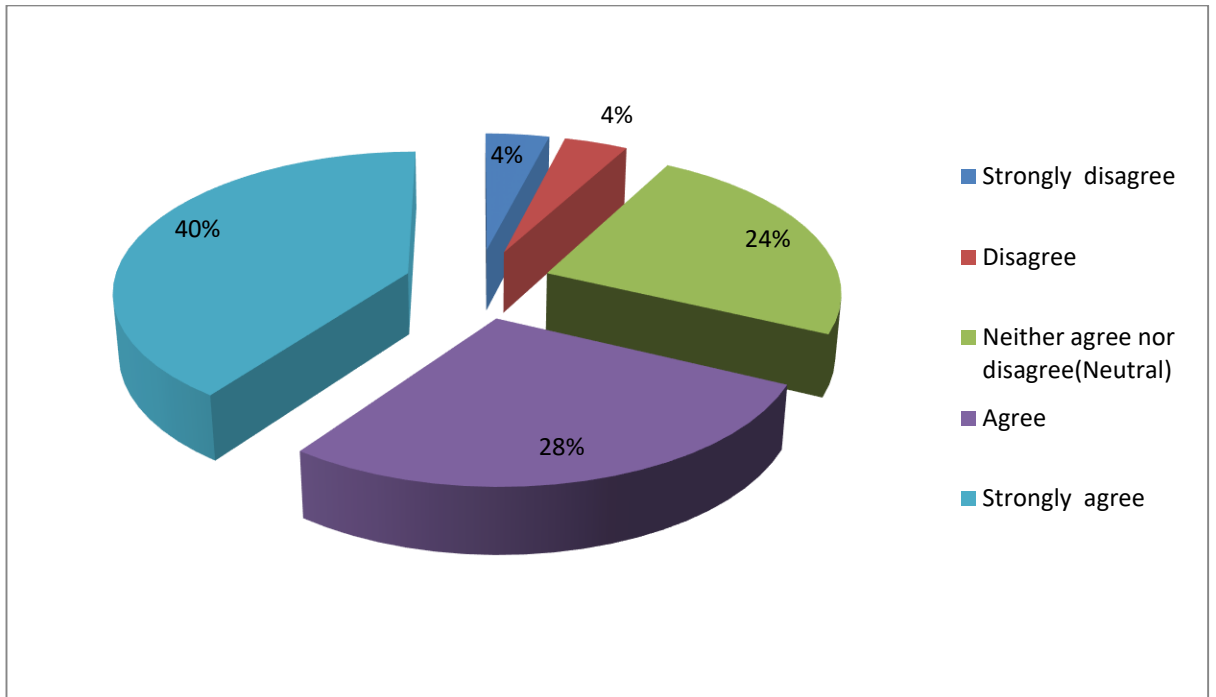


Diagram 9: Students' Perception of the Role of Note-taking in Getting better Grades

From Diagram (9), it can be seen that 40% of the students strongly agreed that taking notes in class helps them improve their grades, and 28% concurred with the statement. For 8% of the students, however, taking notes does not help them obtain better grades. 24% of the students selected the neutral option. The diagram shows that more than half of the students perceive note taking as a useful method to ameliorate their grades.

Section Four: Students' Perception of the Effect of Note-taking on their Academic Achievement

Q19- Do you think that taking notes during class and reviewing them later improve your academic achievement?

Options	Number of Students	Percentage %
Yes	23	92%
No	2	8%
Total	25	100%

Table 10: Students' Opinions on the Effect of Taking and Revising Notes in Improving their Academic Achievement

Table 10 reveals that nearly all the students, that is twenty- three out of twenty-five (92%), think that taking notes in class and revising them later help them to improve their academic achievement. Only two students (8%) do not believe that taking notes leads to an amelioration in their academic achievement. The findings support the result obtained from the previous question where the majority of the students agreed and strongly agreed with the fact that note-taking helps them to get better grades.

- **If the answer is yes, please explain how.**

According to some of the students who answered the question positively, note-taking improves their academic achievement because revising the notes they took in class just before taking tests and exams helps them to refresh their memory and recall the content of the course more easily and this has a direct effect on their academic performance. Other students stated that recording notes using their own words and style and reviewing them before taking a test or an exam help them to understand the content of the course better, which in turn ameliorates

their grades. Another explanation mentioned by the students is that taking condensed notes is more helpful in revising the studied material than reading and summarizing long and complicated handouts.

- **If the answer is no, please explain why taking notes has no effect on your academic achievement.**

For the students who responded negatively, taking notes does not improve their academic achievement because they have difficulties deciding what information to record in class. As a result, they do not take notes in class and prefer to use the handouts provided by the teacher as the sole study tool.

Q 20- Is there any additional information that you would like to share about note-taking methods and their effect on your academic?

The last question asked the students to provide additional information or suggestions regarding the topic. Students stressed the importance of note-taking in their academic careers. They indicated that note-taking is an essential tool that assists them in recording and reviewing the most important information the teacher has presented in class. They stated that without the lecture notes they take in class, they cannot have external information storage for later revisions. That is to say, the majority of students believe that note-taking facilitates their learning process and helps them obtain better grades. Students' confessions support the results obtained in the previous questions.

2. Analysis of students' Lecture Notes

At the end of the experiment, students' lecture notes were collected for analysis. We observed that the majority of the students recorded all that was written on the board and everything they heard, including examples, explanation and details given during the lecture.

We have also noticed that they have written complete notes organized using dashes and bullet points to mark the topics and sub-topics (See Appendix 3). In addition, some students used abbreviations and symbols instead of writing down complete words. For example, in appendix 3, Sample 1, the students used abbreviated forms for the words communication (comm), message (msg) , and language (lgge) in addition to the use of the ampersand (&) instead of writing down the conjunction “and”. In Sample 2, the same abbreviated forms were used (Comm and msg) in addition to the abbreviations for the words advantage (Adv) and disadvantage (Disad) .Furthermore, it was noticed that most of the students used the abbreviation “eg.” to refer to the word example.

3. The Pretest/Posttest Results

Students’ scores on the pretest and posttest were calculated and presented in Table 11. The aim of displaying both pretest and posttest results in the same table is to demonstrate whether students’ academic achievements improved as a result of note-taking. In order to do this, we examined a change in each student’s scores by calculating the score difference between the pretest and posttest. The findings are displayed below.

Students	Pretest Scores Results	Posttest Scores Results	Score Difference
Student 1	3.25	6.5	3.25
Student 2	4	9	5
Student 3	2.5	6	3.5
Student 4	4.5	8.5	4
Student 5	3	4	1
Student 6	2	5	3
Student 7	3	8	5

Presentation of the Findings

Student 8	4.25	9.5	5.25
Student 9	2.5	9	6.5
Student 10	1.5	4.5	3
Student 11	4.75	8.5	3.75
Student 12	5	9	4
Student 13	6	7	1
Student 14	5.5	6.5	1
Student 15	3.5	8.5	5
Student 16	1.5	7	5.5
Student 17	4.25	7.5	3.25
Student 18	9.25	10	0.75
Student 19	4.5	9.5	5
Student 20	3.5	7.5	4
Student 21	4.5	6	1.5
Student 22	2.5	3	0.5
Student 23	2.75	9	6.25
Student 24	3	7	4
Student 25	6.5	8	1.5

Table 11: Students' Scores on the Pretest and Posttest

As it is shown in Table 11, individual students' gains in the posttest improved compared to the scores obtained in the pretest. Indeed, the table reveals that the majority of the students (eighteen out of twenty-five) gained three to six and a half points. The several gained points constitutes good evidence of the positive effect of note-taking on students' academic achievements. Only seven out of twenty-five students gained between half a point and one point and a half.

Conclusion

This chapter displayed the results obtained from the questionnaire, pretest, posttest, and the previous mentioned data collection tools were administered to twenty-five Master 1 Language and Communication students enrolled in the department of English at Mouloud Mammeri University of Tizi-Ouzou. It has also presented the results obtained from the analysis of students' lecture notes. The following chapter is dedicated to the discussion of the findings presented in this chapter.

Chapter Four:

Discussion of the Findings

Introduction

This chapter discusses the results of the present study which is about lecture note-taking methods and their effect on students' academic achievement. It is divided into three parts. The first section interprets the results related to the first research question that aims at identifying the different methods that Master One Language and Communication students use to take notes in the classroom. The second section discusses the results related to students' perceptions of the usefulness of lecture note-taking in improving their academic achievement. The last section discusses the results obtained from the pretest and posttest with the aim to determine whether students' achievement improved as a result of note-taking. More specifically, the present chapter aims to provide answers to the following study questions:

- 1- What are the main lecture note-taking methods used by Master one Language and Communication students in the department of English at the University of Tizi-Ouzou?
- 2- What are students' perceptions of the usefulness of note-taking in improving their academic achievement?
- 3- Does lecture note-taking improve students' academic achievement?

1. Discussion of the Results Addressing the First Research Question

The first objective of the research was to identify the main note-taking methods used by Master One Language and Communication students in the department of English at Mouloud Mammeri University. To attain this objective, some of the questionnaire data and all the lecture notes taken by the students were collected and analyzed quantitatively and qualitatively.

The findings obtained from question 5 in the questionnaire revealed that 84% of the students (See Table 3) tend to take notes even when the teacher gives handouts. It means that when attending their classes, the study participants focus on taking extra notes for later use. In addition, the results of question 6 revealed that more than half of the students (60%) always take notes in the classroom (See Diagram 3). The students specified that they take notes because the handouts provided by the teacher are complicated and not detailed enough, meaning that they are just outlines of the lecture materials. For example, one of the students stated that *'when I take my own notes, this help me memorize the information provided and understand better the lecture, reading only the handouts is not enough for me'*. Another student said that *'because the handouts are more complicated and sometimes not all the points are covered so professors' explanation is better than the handouts'*. From the student answer, we can deduce that students provide the teachers' illustrations and examples much worth importance rather than reading the handouts to comprehend properly the lecture content. Such as Boch (2005:103) assert that: *'Yet, we can assume that it's during these moments that comprehension hangs in the balance: examples and explanations are given that could be useful to note'*.

It can be deduced from the answers provided by the students that the practice of note-taking in the classroom is important because it helps students to write down important information not mentioned in the handouts and recall such information easily later on. For the meantime, Boye (2012:6) emphasizes that:

Taking good notes during class is an important part of learning – even when your instructor provides lecture notes, outlines, PowerPoint slides. The process of note-taking actually helps you learn and cognitively store the material in addition to providing you with something to review later

Also, the activity of note-taking can also help students to be independent learners and active participants in the classroom. This assumption reinforces Brazeau's (2006; cited in Al-Ashkar, 2014:3) statement that 'the active part of learning is to directly involve the students in the process of identifying, collecting, and organizing the information through the process of note-taking'.

However, as shown in Table 3, 16% of the students do not take notes and rely exclusively on the handouts provided by the teacher. Brazeau (2006; cited in *ibid.*) asserts that:

Due to the increased reliance on readily available presentation software and handouts, students are not provided with the opportunity to develop and enhance a critical skill that is necessary for being successful, and self-dependent learners, instead they are encouraged to become passive listeners.

In order to have more details, the students were asked about their note-taking practices. In question 7 of the questionnaire, they were asked whether they record everything that the teacher says or writes on the board. The findings showed that the majority of the students (72%) (See Table 4) tend to use their visual and auditory senses to record what they see and hear. This has been observed during the analysis of their lecture notes that revealed that they indeed write down everything they see and hear. This means that the majority of the students tend to use verbatim note-taking. When students take notes verbatim, this means that they use the sentence method which is a linear note-taking method. However, this type of note-taking can lead to a superficial level of information processing. Indeed Litchy, (2022:12) states that 'Writing verbatim notes does not allow the brain to deeply encode the information. Consequently, students will forget learned material rather quickly'. Therefore, Ratnaprabha and Shashikala (2017) advise students to take notes using their own words or paraphrase the information they see and hear rather than writing verbatim. In order to facilitate information recall and understanding, students should also review their verbatim notes immediately after

class and paraphrase them. Owing on the fact that (Nguyen, 2006; cited in Karimi, 2011:806) state that ‘Notes are essential for recalling what has been heard or seen and can promote reflection after wards’. It means students writing down their own specific notes and reviewing them after a while of recording it, they are considered as an effective tool, that impacts learning in positive way. For example (Boye, 2012:2) assert that: ‘In other words, simply reviewing any notes is less effective than reviewing notes you took yourself, but just taking notes without engaging in review is not an effective strategy alone’.

In order to have extra processing time, Suritsky and Hughes (1991) recommend the use of abbreviations and symbols. As seen in Table 5, all the participants (100%) use abbreviations and symbols to write down what the teacher writes and says. Using abbreviations and symbols can help students to write faster and take more notes. According to Boyle (2007:228), ‘Using shorthand and abbreviations is a plus to recording notes efficiently.’ the analysis of the students’ lecture notes revealed they indeed use abbreviations and symbols.

When asked whether they use bullet points or numbers to separate the different points of the lesson, nearly all the students (96%) (See Table 6) answered the question positively. This means that these students use the outline method to record their notes. This finding is supported by the analysis of students’ lecture notes where bullet points were used by the students.

In question 11, the students were asked whether they use diagrams and tables to outline their notes. Based on the findings displayed in Table 8, more than half of the students (52%) do not use this note-taking method. In addition, even though 88% of the students (See Table 7) indicated that they write notes on the margins of the page, the analysis of their lecture notes revealed that they do not use the Cornell method because they do not separate

the piece of paper into three parts. Similarly, (Ratnaprabha and Shashikala,2017:2) explained the main features of the Cornell method in which he argued that:

- You physically draw a line vertically down your paper, leaving 2.5 inches on the left and 6 inches.
- This allows you to take notes on the right -hand side of the page leaving space on the left to summarize the main points with a cue word or phrase.

This means that these students do not use the Cornell, Mapping, and the Charting methods, which are all non-linear note-taking methods.

It can be deduced from the results discussed above that most of the students use linear note-taking methods. This conclusion is supported by the results obtained in question 12 in which the students were asked to specify the note-taking methods they use. As shown in Diagram 4, 8% of the students use the sentence method, 12% use the outline method, and nearly half of them (48%) indicated that they use both the sentence and outline methods. It is also reinforced by the analysis of the lecture notes collected from the students at the end of the experiment. We noticed that the majority of the students used bullet points, dashes to outline their notes. Ratnaprabha and Shashikala (2017:3) state that ‘II. You don’t have to use Roman Numerals, letters and Numbers- try only indents, dashes, and bullets’. In addition, it was observed that the students recorded everything written on the board. This means that the students rely on the linear note-taking method to record their lecture notes. As a matter of fact, students adopt the linear style of taking notes in the purpose of a future use, specifically during passing their exams. (Boch,1999, cited in Boch and Piolat, 2005:104) affirm that:

Nevertheless, it has been shown that most students, wishing to remain faithful to the teacher’s words and in order to reproduce them during examinations, adopt a linear method of note-taking that gives the notes a relatively classic “textual” appearance. This objective is particularly clear-cut in notes taken by students at higher levels in the university

This confirms our first research hypothesis that ‘Master One Language and Communication students in the department of English at the University of Tizi-Ouzou use linear notes to record the information presented during the lecture.’

2. Discussion of the Results Addressing the Second Research Question

The second objective of the present research is to find out about students’ perceptions of the effectiveness of note-taking in improving their academic achievement. In order to do so, the questions in sections three and four of the questionnaire were analyzed.

The results of question 15 showed that more than half of the students (See Diagram 6) agreed and strongly agreed that note-taking helps them to understand the content of the course. Students perceive note-taking as a good technique that aids them in their understanding of the content of the course. As (Kiewra, 1991; cited in Özçakmak, 2019:581) assert that ‘Note-taking is a technique that is highly effective on comprehension. Taking notes during lesson helps students reach aim of the course more comfortably and makes them to understand what is taught easily’.

In addition, the results of question 16 revealed that more than 60% of the students (See Diagram 7) confirmed that taking notes in the classroom helps them to recollect the content of the course. That is to say, note-taking fosters students’ recall of the subject taught in class. Students see note-taking as a practical tool that permits them to remember what has been discussed in class. In particular, (Boyle,2007:230) illustrates that: ‘Incorporating a review of notes allows students to fill in gaps and helps them understand information. Reviewing notes immediately after recording them has also been shown to be effective at increasing comprehension’. This benefit of note-taking was highlighted by Jensen and Lowell (2011) in their pilot study about the effect of note-taking on immediate and delayed recall. Some students were allowed to take notes while watching a five-minute video clip about

Egyptian History while other students were not allowed to take notes. The study findings revealed that note-takers performed better than non-note takers on both immediate and delayed recall tests. Similarly, Al-Ashkar (2014:22) states that ‘the act of note-taking alone may improve recall and understanding over conditions when no notes are taken’.

Furthermore, when asked whether note-taking helps them to revise for tests and exams, the majority of the participants (See Diagram 8) indicated that they rely on their lecture notes and review them before taking important tests and exams. Even Karimi (2011:815) insist on the previous point of view, he advocates that ‘There is a strong bound between note-taking and memory. As it were note-taking affects learning and academic achievement in two ways at least while being taken (encoding) and while being reviewed’. It can be deduced from the results that taking notes helps students to understand and remember lecture content and study for tests and exams, which in turn can help them improve their academic achievement.

In order to find out whether students perceive note-taking as a useful method that can help them improve their academic achievement, questions 18 and 19 in the questionnaire were analyzed. The results of question 18 demonstrated that the majority of the students (See Diagram 9) see that taking lecture notes helps them to get better grades in tests and exams. Salame and Thompson (2020:12) assert that ‘students who want to get higher grades, know that note-taking is very important to their overall performance in classes’. This finding is further supported by the results obtained in question 19 that 92% of the students (See Table 10) think that taking notes in the classroom and reviewing them later improve their academic achievement. Based on students’ answers, it can be deduced that reviewing lecture notes before taking an important test or exam is viewed as an important and accommodating technique that can impact students’ academic achievement in a positive way.

When we asked to justify their answer, students' responses support the findings obtained in the previous questions that taking notes and reviewing them help them to understand the content of the course better, revive their memory, and spare them reading long and complicated handouts. The results are further reinforced by students' additional information provided in question 20. For example, one of the students said that *'Note taking is so important for me during exams in a way that it helps me recall all the important points that the teacher had explained during class and having extra information'*. Meanwhile, Salame and Thompson declare the same opinion upon which he says that: *'Having good notes can help in retaining more information, for when students would really need it like in exams or for presentations'*. Another student said that *'it is a helpful tip to follow by the students because it enhances the memorization of the lecture and help improve exam grades'*. The findings support the results obtained by Al-Askhar (2014:65) in which 'students confirmed that note-taking helps them to remember and understand lectures, to prepare for tests, to get better grades, and to answer test questions'. Similarly, the same as the ones of salame and Thompson (2020:12) whereon he states that: 'Either way, based on our study, the end result is clear, that taking strategic notes leads to higher academic performance'.

The results obtained from sections three and four in the questionnaire confirm the second research hypothesis that 'Students perceive note-taking as a useful tool that enhances their academic achievement'.

3. Discussion of the Findings Addressing the Third Research Question

The results addressing the third research question indicated that students recognized that note-taking is a valuable means that helps them improve their academic achievement. As just (Thompson and Salame, 2020:1) contend that 'Strategic and extensive note -taking improves students learning as well as achievement in class'. Moreover, (Meacher,2012:12)

state that: 'The process of note-taking is related to achievement. Given the proper training in note-taking, students will perform at a higher level'. In order to confirm whether note-taking actually improves students' academic achievement, quasi-experimental research was conducted and students' outcomes were measured before and after taking notes using a pretest and a posttest. Before taking the pretest, students did not take any notes. In order to determine whether note-taking has any effect on academic achievement, students recorded lecture notes and reviewed them before taking the posttest.

The results displayed in Table 11 showed that students' scores in the posttest improved compared to those obtained in the pretest. Indeed, after taking notes and reviewing them, eighteen out of twenty-five students improved their scores by three to six and a half points in the posttest. In addition, seven students out of twenty-five increased their scores as well by gaining half a point to one point and a half.

It can be deduced from the study findings that note-taking plays an important role in improving students' academic achievement. Students' outcomes improved as a result of taking and reviewing lecture notes. In the same manner that (Karimi, 2011:815) declared that:

Note-taking can generally affect learning and academic achievement in various ways. For instance, encoding and the storage processes of information result in retrieval and learning. This is due to the fact that teaching note-taking strategies strengthens the process of comprehending, noticing the materials (especially the key points) and summarizing information. When amplified such processes facilitate and speed up understanding the materials. Moreover reviewing and / or thinking about notes may cause learning materials to be encoded, fixed in mind and retrieved.

Ratnaprabha and Shashikala (2017:5) assert that 'reviewing notes after some time leads to superior performance in the following tests over those that do not take notes initially'. The results of the present study confirm the third research hypothesis that 'Lecture note-taking methods improve students' academic achievement'. But if students do not consider note-taking as an indispensable technique during or after the lecture, thus it might not reflect on students' academic achievement in an efficient manner or it can hinder students in having

a good performance. As (Meacher, 2012:12) state that: ‘The absence of importance placed on note-taking can stunt a students’ ability to progress and succeed in future academic achievements’.

The findings also support previous research on the effect of note-taking on academic achievement that were previously mentioned in the general introduction review of the literature chapter. For example, the study that Karimi et al have done at Islamic Azad University on the effect of note-taking on students’ academic achievement, whereon they used the same instruments as the ones of this study which are a pretest and posttest test, consequently, the outcomes of their study revealed that note-taking effect on the students’ academic achievement on a positive way. To assure the earlier statement, karimi *et all* (2011:142) declare that: ‘The present study showed that teaching note-taking strategies improves students’ academic achievement’.

In addition, Ratnaprabha and Shashikala (2017:1) state that:

Students’ notes, created in class or while reviewing course material, are an important tool for learning...Good note-taking practices can lead to efficient study practices, better course outcomes, and improved retention of content beyond a course’s conclusion.

We conclude that note-taking is an important learning method that should be integrated into the classroom with the aim to improve students’ memorization and recall of the course content and enhance their academic achievement.

Conclusion

This chapter has discussed the collected data from the questionnaire, students’ lecture notes, and the pretest and posttest. This discussion has provided clear answers to the research questions and tested the hypotheses that have been stated in the general introduction of this dissertation. The discussed findings have shown that students mainly rely on linear note-taking methods to record the teacher’s input. In addition, the students are aware of the

importance of note-taking in improving their academic achievement. Students' beliefs have been confirmed by the results of the pretest and posttest that have indicated that taking notes indeed improves academic achievement.

General Conclusion

General Conclusion

The main objective of this dissertation was to determine the kind of note-taking methods used by Master one Language and Communication students enrolled in the department of English at the University of Tizi-Ouzou and examine their impact on students' academic achievement. More specifically, the study aimed to attain three objectives. The first objective was to find out what kind of note-taking methods students use. The second objective was to uncover students' perceptions on the effectiveness of note-taking in improving their academic achievement. The third objective was to determine whether note-taking affects students' academic outcomes positively or negatively.

In order to reach these objectives, answer the research questions and test the validity of the study hypotheses listed in the General Introduction of this dissertation, a quasi-experimental research design and the mixed-method approach of data collection and data analysis were used. In order to collect the necessary data, a questionnaire, a pretest, a posttest, and students' lecture notes were collected from twenty-five Master One Language and Communication students.

In order to reach the first research objective, the second section of the questionnaire and students' lecture notes were analyzed relying on Ratnaprabha and Shashikala's (2017) framework of Note-taking in which they distinguished between linear and non-linear note-taking styles. To determine whether students perceive note-taking as a useful tool that helps them improve their academic achievement, sections three and four in the questionnaire were analyzed. In order to attain the last objective, a quasi-experimental research was conducted which during a pretest and a posttest were administered to the students. The aim was to determine whether students' academic achievement improved thanks to note-taking. The study findings were analyzed using the mixed-method approach that combines quantitative and

qualitative analysis. The findings obtained from the second section of the questionnaire and students' lecture notes revealed that the study participants tend to use the outline method and the sentence method to record lecture notes. Both of these methods were classified by Ratnaprabha and Shashikala (2017) as linear note-taking methods. This means that the students involved in the present study use linear note-taking methods. Therefore, the first research hypothesis was confirmed.

The results obtained from the third and fourth sections of the questionnaire indicated that students perceive note-taking as a beneficial tool because it helps them understand the content of the course better, recall important information, revise for tests and exams, and get better grades. This indicates that students view note-taking positively as it aids them in improving their academic achievement. The results confirmed the second research hypothesis.

In order to check whether note-taking has a positive impact on students' academic achievement, the results of the pretest and posttest were analyzed and compared. The results obtained in the posttest showed that students' scores improved compared to those of the pretest. This indicates that taking lecture notes and reviewing them before taking a test or an exam have a positive impact on students' academic achievement. This finding confirmed the third research hypothesis.

It is worth mentioning that the present study has some limitations. The first limitation concerned the way the research was conducted. At the time of the investigation, in June 2022, studies were still conducted in waves. That is to say, Master one students studied for one week and stayed at home for the following week. This had an impact on the research design and the process of data collection. In other words, we had to wait until the students came back to class in order to carry on the investigation and collect data. The second limitation of the study was related to the students-researchers. At the beginning of the investigation, two students were

engaged in the research process. However, in August 2022, the second student got her visa and went to study abroad. As a result, research was carried on individually and that was challenging.

The present study revealed that note-taking has a positive impact on students' academic achievement. However, the study focused only on the impact of traditional pen and paper note-taking method. Therefore, upcoming research should look at the effect of computerized or digital notes on students' academic achievement as many students nowadays rely on technological devices such as laptops, smart phones, and audio recordings to take notes.

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Appendix 1 : Questionnaire

Dear students,

This questionnaire is a research tool designed to collect data about “Lecture Note-taking methods and their Effect on Students’ Academic Achievement”. We would appreciate it if you could answer all the questions provided below. Your answers will be kept confidential and used only for research purposes. Your assistance in obtaining the required information will be greatly estimated.

Please use a cross (x) to indicate your chosen answer, and use your own statements where required.

Section One: General Information

1. What is your gender: Male Female
2. How would you describe your current level in English?
Very bad Bad Average Good Very good

Section Two: Students’ Note-taking practices in the classroom:

3. Do your teachers give you handouts that summarize the material covered in class?
Yes No
4. If the answer is yes, please specify when your teachers give you these handouts.
Before the lecture During the lecture After the lecture
5. Do you take notes when the teacher says that he would provide handouts?
Yes No

If the answer is no, could you please explain why?

.....

.....

.....

If the answer is yes, for which purpose (s) do you take notes?

.....

.....

.....

6. How often do you take notes during the lecture?

Always Usually Often Sometimes Rarely Never

7. Do you write precisely what the teacher says or writes on the board?

Yes No

8. Do you use abbreviations and symbols when taking notes?

Yes No

9. Do you use bullet points or numbers to separate the different points of the course?

Yes No

10. Do you write your notes on the margins of the page?

Yes No

11. Do you use diagrams to outline your notes?

Yes No

12. Which of the following methods do you use when taking notes in the classroom?

You can select more than one option.

- a. The Outline method
- b. Cornell notes
- c. The Charting method
- d. The Mind mapping method
- e. The Sentence strategy
- f. If there are others, please specify.....
.....

13. Do you compare own notes with those of your classmates?

Yes

No

Section Three: Students' Perception of the benefits of Note-taking

Please indicate the degree of your agreement or disagreement with the following statements.

14. Taking notes helps me to focus on the course and process the information provided by the teacher

Strongly disagree Disagree Neither agree nor disagree (Neutral)
 Agree Strongly agree

15. Taking notes helps me to understand the content of the course.

Strongly disagree Disagree Neither agree nor disagree (Neutral)
 Agree Strongly agree

16. Taking notes makes easier to remember and recall the content of the course.

Strongly disagree Disagree Neither agree nor disagree (Neutral)
 Agree Strongly agree

17. Note-taking helps me to revise for tests and exams.

Strongly disagree Disagree Neither agree nor disagree (Neutral)
 Agree Strongly agree

18. Taking notes helps me to get better grades.

Strongly disagree Disagree Neither agree nor disagree (Neutral)
 Agree Strongly agree

Section Four: Students' Perception of the Effect of Note-taking on their Academic Achievement

19. Do you think that taking notes during class and reviewing them later improve your academic achievement?

Yes No

If the answer is yes, please explain how.

.....

If the answer is no, please explain why taking notes has no effect on your academic achievement.

.....

20. Is there any additional information that you would like to share about note-taking methods and their effect on your academic achievement?

.....

.....

.....

Thank you very much for your cooperation.

Ms. Lahmari Fetta

Master II students (Language and communication)

Mouloud Mammeri University of Tizi-Ouzou

Appendix 2: Pretest-Posttest

Mouloud Mammeri University, Tizi-Ouzou

Faculty of Letters and Languages

Department of English

Master One Students (Language and Communication)

Course name: History of Communication

TEST

Student's full name:.....

Please answer the following questions:

1. What does SMCR stands for? (1 pt.)

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2. How is the message transmitted in Berlo's model? (1 pt.)

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3. What are the factors in Berlo's model of communication that affect the message?

(2.5pts.)

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4. The sender and the receiver of the message should share similar factors, what are these factors?

(2.5pt.)

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5. What is the main strength of Berlo's communication model? (1pt.)

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6. List four (4) limitations of Berlo's communication model.(2 pts.)

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Appendix 3 : Students' Lecture Notes

Sample 1

Berlo's SMCAR Model of Communication.

David Kenneth Berlo: 1929-1996.

His model came around 1960.

Based on the Shannon-Weaver model.

It is one-way communication-system. ie linear model.



eg: watching television news.

News reporter - news - television - audience.

(S)

(M)

(C)

(R)

* The factors that help the sender to send his msg.

- Knowledge → Discuss topics that you are familiar with.
- Cultural differences, may make the msg difficult to understand & different.
- Content → The whole msg.
- Elements → Eye contact, body language.
- Structure → The way the msg is structured.
- Code → The form that people choose to deliver their msg.

- Channel: Medium used to deliver the message from the sender to the receiver. It can be a sense.

→ The use of the 5 senses

↳ As a method, use of the mass media.

* Audio factors: hearing and seeing.

- In face to face comm, we use the 5 senses.

- Touching → Haptics channel (in non-verbal comm).
- Tasting → Taste food (recognize deliciousness of food).
- Smelling → olfactics (in non-verbal comm).

The Receiver should have a good understanding skills.

Synchronisation → Clear msg sent by the sender to the receiver.

• Advantages:

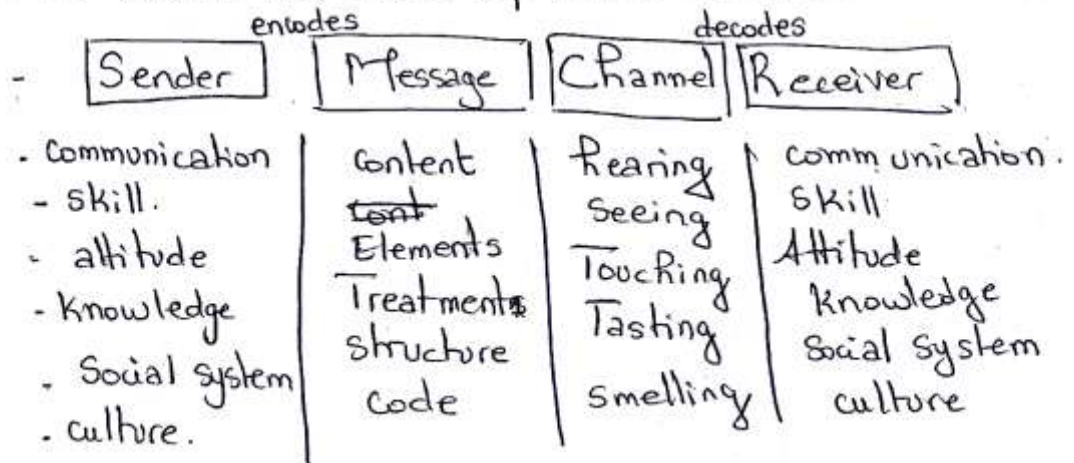
- Straight forward → not ambiguous.
- It coordinates the msg aligns the medium between the msg & the receiver of the message.
- Still used in face to face comm / in some newer forms of comm.

• Disadvantages:

- The element of noise and feedback are not included.
- It is a comprehensible model.
- The sender & the receiver should share the same factors.
- It is a linear model.
- It gives importance to the 6th sense (reasoning & analyzing).

Sample 2

- Berlo's model of comm / Berlo's SMCR model.
- Berlo is an American communication theorist, his full name is David Kenneth Berlo. (1929-1996).
- He created his model of comm in 1960.



- each of these components is affected by factors. eg: watching television news.
 - sender: news reporter.
 - channel: TV channel.
 - msg: news.
 - receiver: audience.
- channel can be a sense.
- Touching is called the Haptics in non verbal comm.
- in Berlo's model the use of channel depends on the purpose.

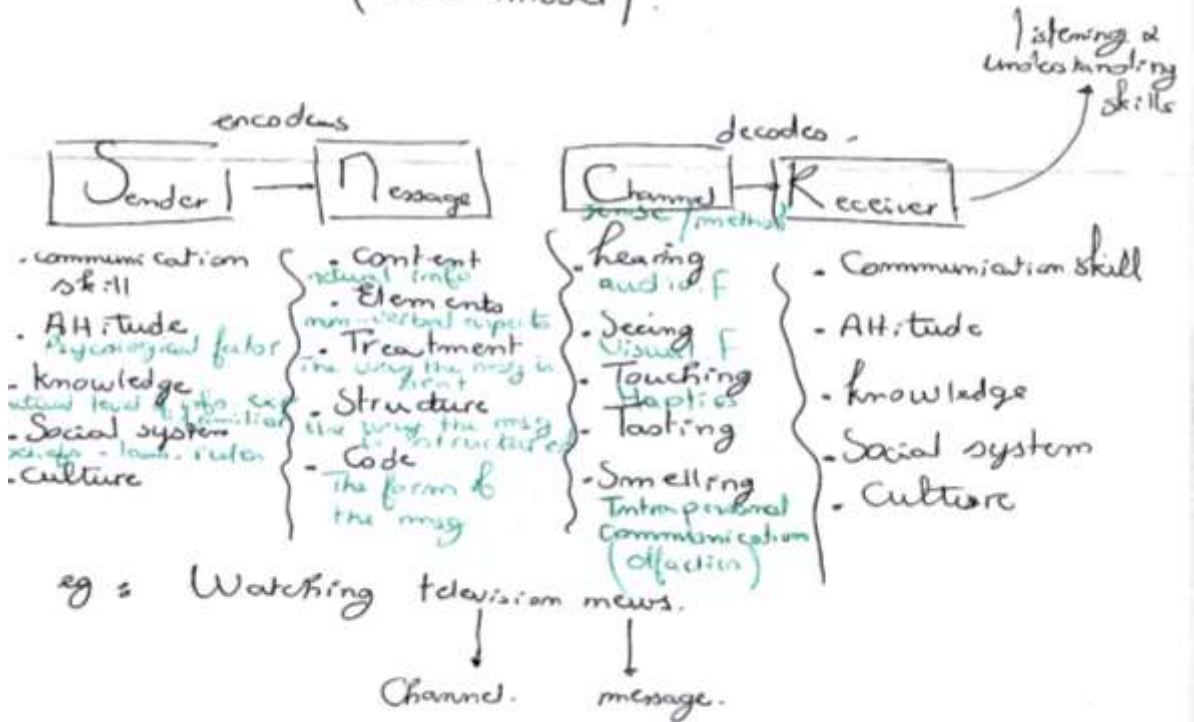
- encoding: it is to send a msg. (sender).
 - decoding: it is when the receiver receives the msg sent by the sender.
 - characteristics of the receiver:
 - should have a good understanding skill and listening skill.
 - Both sender and receiver should share the same skills.
 - They should be at the same level.
 - Disad: - noise is neglected.
 - no feedback.
 - it is linear.
 - Adv:
 - comprehensible
 - straight forward (free of ambiguity).
 - it coordinate the msg between the medium and receiver.
 - still used in some purer forms of communication (face to face).
- This model gives importance to the five senses.

Sample 3

Berlo's SNOCK Model of Communication.

David Kenneth Berlo
(1929 - 1996)

- His model is simple to understand which based on Schramm's view of communication. (1960).
- It is a one way comm - system. (linear model).



Sender = news reporter
Receiver = audience.

Advantages

- It is straightforward (free of ambiguity).
- It aligns the medium btw message & receiver
- Still used in some purer forms of communication (face to face).

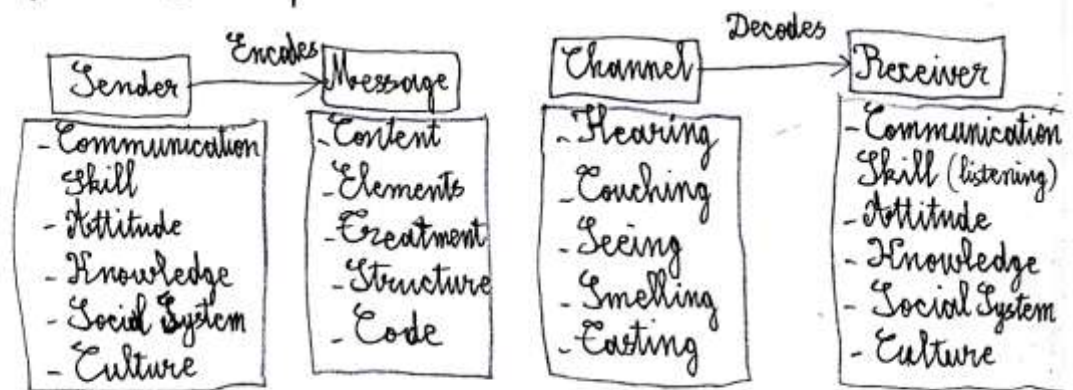
Disadvantages (limitations).

- no feedback.
- no noise.
- sender & receiver should have same factors.
- It gives importance to the senses.

Sample 4

D. H. Berlo's SMCR Model of Comm

- One-way comm system based on the Shannon-Weaver Model.
- One of the most simple to understand.



Disadvantages:

- No noise
- No feedback
- Sender & receiver have the same factors.

Advantages:

- Straightforward
- It aligns the medium between the message & receiver.
- Still used in some purer forms of communication.

Sample 5

Berlo's SMCR Model of communication -

Complete name: David Kenneth Berlo (1929-1996), an American scientist. His model was presented in 1960, and was a one-way communication system (linear)

The visual presentation of the Model.



Example: Watching television news:

Sender: reporter.

Receiver: audience watching.

Sender

- Communication skills (4)
- Mastery of language skill to improve comm.
- The meaning of the message depends on both the sender and receiver.
- familiarity - Knowledge - (shared some background in a field)
- Social systems (beliefs, rules...)
- Cultural differences make the message sounds different. (acceptance)

Message

- Content: what things are about.
- Elements: to maintain contact.
- Structure.
- Code: text, audio...

Channel

- It has two types; through senses or as a method.

Receiver

- Communication ends when the receiver gets the message.
- Must have good listening and understanding skills.

Advantages:-

- It is straightforward (i.e. not ambiguous)
- It aligns the medium between the message and receiver.
- Still used in some purer forms of communication (face-to-face)

Disadvantages:-

- It neglected the element of noise.
- There is no feedback. (Linear)
- Some skills may not be used in real-life.

Appendix 4 : Students' Pretest- Posttest Grades

Sample 1 : Pretest

Mouloud Mammeri University , Tizi-Ouzou
 Faculty of Letters and Languages
 Department of English
 Master One Students (Language and Communication)

5.6

 10

T E S T

Student's full name : .. Student Fourteen

Please answer the following questions :

1. What does SMCR stands for ? (1 pt.)

.. Those words are used to refer to the Berlo's model
 .. of communication including: the Sender, Message,
 .. Channel and Receiver

**2. How is the message transmitted in Berlo's model ?
 (1 pt.)**

.. The message is transmitted by using the five
 .. senses: seeing, hearing, tasting, speaking and
 .. listening

**3. What are the factors in Berlo's model of
 communication that affect the message ? (2 pts.)**

.. The right encoding and decoding of the message

4. What language skills are given importance in Berlo's model? (1pt.)

The factors include all of a knowledge, culture, attitudes and code. (0.5) (0.5) X

5. What is the strength of Berlo's communication model? (1pt.)

(1) Its strength is that it goes directly to the point and it makes the communication process easy regarding both senders and receivers who share the same characteristics.

6. List four (4) limitations of Berlo's communication model. (4 pts.)

1. It is much like Aristotle's model of communication which makes the communication a one way communication.
2. This linear model neglected both noise and feedback and this makes communication kind of not understood. (0.5) (0.5)
3. Using the five levels in communication makes the situation ambiguous, since it is basically with no feedback.
4. Sometimes both senders and receivers may not share the same characteristics which makes the communication impossible. (0.5)

Sample 2 : Posttest

Mouloud Mammeri University, Tizi-Ouzou
 Faculty of Letters and Languages
 Department of English
 Master One Students (Language and Communication)
 Module: History of Communication

615

TEST

Student's full name: ... Student Fourteen

Please answer the following questions:

1. What does SMCR stand for? (1 pt.)

1) It stands for: Sender Message Channel Receiver

2. How is the message transmitted in Berlo's model? (1pt.)

The message is transmitted through the medium of one of the five senses, in a process of a one-way communication system.

3. What are the factors in Berlo's model of communication that affect the message? (2.5pts.)

0.5) the factors should be shared by both sender and receiver including: communication skills, culture, knowledge, attitudes, etc. to have a mutual understanding; the five senses; clarity of message and others.

4. The sender and the receiver should share similar factors, what are these factors? (2.5pts.)

2) attitudes, language communication skills, knowledge, culture.

5. What is the strength of Berlo's communication model? (1pt.)

① It is not ambiguous
 Easy and simple to understand

6. List four (4) limitations of Berlo's communication model. (2pts.)

② The absence of both noise and feedback
 It neglects the sixth skill involving reasoning
 It is almost impossible to show the same
 skills for both senders and receivers
 It does not encourage further communication

Sample 3 : Pretest

Mouloud Mammeri University , Tizi-Ouzou
Faculty of Letters and Languages
Department of English
Master One Students (Language and Communication)

2
10

TEST

Student's full name : ... Student Six

Please answer the following questions :

1. What does SMCR stands for ? (1 pt.)

Sender Message Channel Receiver
.....
.....

2. How is the message transmitted in Berlo's model ?
(1 pt.)

The five senses : Touching, smelling, hearing, seeing
and tasting

3. What are the factors in Berlo's model of
communication that affect the message ? (2 pts.)

Noise

.....
.....
4. What language skills are given importance in Berlo's model ? (1pt.)

code - language - channel - context
.....
.....
.....

5. What is the strength of Berlo's communication model ? (1pt.)

Easy to understand / Simple model
.....
.....
.....



6. List four (4) limitations of Berlo's communication model . (4 pts.)
.....
.....
.....
.....
.....
.....
.....
.....
.....

Sample 4 : Posttest

Mouloud Mammeri University, Tizi-Ouzou
 Faculty of Letters and Languages
 Department of English
 Master One Students (Language and Communication)
 Module: History of Communication

TEST

Student's full name: Student Six

5

Please answer the following questions:

1. What does SMCR stand for? (1 pt.)

1 It stands for: Sender Message Channel Receiver

2. How is the message transmitted in Berlo's model? (1pt.)

1 The message is transmitted via the four senses which are hearing, seeing, touching, smelling and tasting.

3. What are the factors in Berlo's model of communication that affect the message? (2.5pts.)

1 The factors that may affect the message is the element of noise which is a neglected part.

4. The sender and the receiver should share similar factors, what are these factors? (2.5pts.)

The sender and receiver must share the same code, talk the same language, have the same background of a field. Also have the same channel.

5. What is the strength of Berlo's communication model? (1pt.)

1

It is straight forward.
Easy and simple to understand.

6. List four (4) limitations of Berlo's communication model. (2pts.)

2

It neglected the element of noise.
There is no feedback. (linear).
Some factors can not be real in real life.