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An Investigation into the Effectiveness of the Cornell Note Taking System in Improving Learners' Writing Composition:

The Case of Master Students of English at Biskra University

Dissertation submitted in fulfillment of the requirements for a

Master Degree in Sciences of Language

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Declaration

I declare that the work embodied in the present research study has been solely

the result of my own. The efforts contained herein have not been submitted, in whole

or in part, in any other degree or professional qualification except as specified. Hence,

I hereby confirm that the work titled, "An Investigation into the Effectiveness of the

Cornell Note Taking System in Improving Learners' Writing Composition" shapes

my personal contribution to this research under the guidance of Dr. Ahmed Chaouki

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statements are true to the best of my knowledge.

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Dedication

It Is Of My Genuine Gratefulness To Dedicate This Achievement
To My Living Angels, MOM and DAD, Without Whom This Thesis
Would Have Been Successfully Completed. No "Thank YOU" Can
Express My Deepest Thanks And Gratitude!

To My Four Precious Brothers HAITHEM, SOFIANE, AYOUB, AND MOHAMMED!

To My Treasured GRAND MOTHER, May Allah Bless You!

To My Sweetest Aunts And Uncles On My Mother's Side, Leila, Zeineb, Saber, and Mohamed Who Unstoppably Supported Me, Encouraged Me, And Pushed Me Each Time To Reach My Goals, Unlimited LOVE and APPRECIATION!

Special Feelings Of Admiration And Thankfulness To My Best Friend M.B Who Stayed By My Side And Granted Me Motivation,
Love, Strength, and Support, ARIGATO!

I Also Dedicate My Work To My Dear Friends BOUTHAINA and HAYETTE.

To My Beloved Teachers Whose Words Still Ring In My Ears, Who

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Abstract

The current research set out to discover the reasons behind the lack of writing a comprehensive piece of composition, as well as attempting to provide an innovative method by which the target sample can use to develop and improve the spotted writing weaknesses. In line with the nature of our research, a Mixed-methods approach was applied to comprise an explanatory sequential design, a case study of 12 participants, and a quasi-experimental design represented in a form of treatment sessions. Consequently, the data were gathered in two separate phases wherein an interview and a focus group were conducted as a piloting stage to scope the problem; whereas, the second phase contained a test divided into pre-test and a post-test along with an online focus group. Ultimately, the research findings indicated that using the Cornell system has positive effects on learners' writing organisation and outlining skills. The students reported feelings of excitement and interest toward the implementation of the Cornell system. Their feedback, reactions, and data were analysed using inferential statistics, descriptive statistics, and Content-based analysis. Significantly, the present research work revealed that the final data support the alternative hypothesis which indicates that $(H_a = \bar{x} > 0)$ in favor of the null hypothesis $(H_0 = \bar{x} \le 0)$ at a significance level of (P < .05).

Keywords: Cornell notes system, EFL learners writing composition, essay outline, essay composition, redesigned Cornell model

List of Abbreviations and Acronyms

AW: Academic Writing

EFL: English as Foreign Language

CS: Concluding Sentence

SS: Supporting Sentence

TS: Topic Sentence

Q: Question

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General Introduction

1. The Study Background

Throughout history, researchers have carried out several research studies concerning the note-taking process and the writing skill, mainly focusing on the learners' cognitive processes when recording and jotting down notes. During the nineties, the researchers' focus had transferred from pure cognitive procedures while taking notes to discover what relate notes' quality to learning, and if the use of different note-taking methods can improve the students' learning achievements and outcomes (Castello & Monereo, 2005).

Note-taking activity is considered an effective practice in writing. Taking notes is characterised by helping students and allowing them to learn how to write fast and in an organised manner in case the appropriate method is applied (Boch & Piolat, 2005). Still, even though note-taking is widely taught throughout learners' career, especially the course under the name of study skills in the Algerian education curriculum, we believe that few only considers the benefits of the skill or encourages best practices (Friedman, 2014). Alas, learners do not seem to appreciate the effectiveness note-taking has on their learning outcomes, including the four skills, as well. Good study practices result from good note-taking practices. Therefore, both teachers and learners are supposed to be more conscious regarding the importance this aptitude plays because it is not spontaneous or obvious to have; the learner goes through different cognitive mechanisms and stages to write down what has been said or noted by the academic instructor.

There are several methods of note-taking including the outlining system, the Cornell system, the charting system, and the mapping system. The Cornell note-taking system is one of the most important methods because it allows the learner to listen

first, think, and then generate lecture notes. This method was introduced by the professor of education Walter Pauk in the 1940s and developed by Cornell University as one of the essential and efficient methods for its systematic, organised, clear, and significant impact on the learners' comprehension, listening, and writing (Writing Studio, 2008). Advancement via Individual Determination (AVID), for example, encourages the use of the Cornell formatting. It requires dividing the paper into four uneven spatial sections. Firstly, the heading page section placed at the top of the paper where the learner is supposed to place the title of the session, date, or any other relevant details. Secondly, the cue column area in the left margin of the paper where notes are reduced to form keywords and questions. Thirdly, the note-taking area placed in the middle, the one that possesses much space in which the main information is fully recorded to the extent possible. Lastly, the summary area in which the learner summarises the whole notes in no more than three lines.

Unfortunately, this method did not appear to be applied in the section of English at Biskra University; rather, students tend to use self-choice note-taking techniques in which their notes are randomly recorded following no particular method to organise the written information.

2. Statement of the Problem

Taking notes is thought to be one of the major needed skills in different data transmission situations, especially at the tertiary level in which the researcher is interested. On the one hand, the Cornell method is a system/ model created for note-taking purposes. It involves dividing the page into four unequal parts. This system consists of six major Rs that are to record, reduce, review, recap, reflect, and recite, demonstrating its planned goals (Writing studio, 2008). This method has proven its systematic procedures on writing be it among the different effective and applicable

strategies used by students who belong to different education levels. On the other hand, writing is a set of visible or concrete symbols that represent the different language units in a systematic manner (Coulmas & Florian, 1999).

In order to examine the validity of our research topic, and to confirm if our research sample does have problems in writing composition and taking notes, the researcher opted for a piloting study. An interview was conducted to teachers of the section of English at Biskra University to collect the needed information that concerns the study sample. In addition, a focus group comprising 10 master students of English was held, too. We concluded from the results of the piloting stage the difficulties our participants had concerning their writing compositions, essay writing in particular. Consequently, their written performance is highly influenced by many issues including the lack of reading and the absence of the teachers' feedback. Writing compositions appeared to be a challenging task for them since the huge number of master students per one classroom has negatively affected their written production in terms of feedback reduction that should be provided by their academic instructors.

According to our participants, the necessity to receive feedback on their written tasks, paragraphs, as well as essays is rarely given. More importantly, another major problem comes into existence. Learners' insufficiency of taking notes appropriately. Most of them write their notes in an unorganised form, chaotic formatting, and incomprehensible handwriting that some of them were obliged to delete the recorded information eventually, or to ask for their colleagues' notes. This demonstrates the learners' ignorance of the different methods possessed by note-taking. In addition, few questions were posed to both learners and teachers on whether they know about some distinctive note-taking methods such as the Cornell system. The answer was 'NO' in most of our cases.

Several research studies have demonstrated unsuccessful note-taking skills among EFL University learners including our research. This is where the researcher suggests using the Cornell note-taking system as an alternative method to improve master students of English note-taking and writing composition skills. By conducting training sessions the researcher will introduce the Cornell method, its structure, importance, how it is used to take sufficient notes, and finally rebuilding this method to be the Cornell essay outlining system instead of a note-taking system. We also aim to improve master students' of English writing composition by designing lessons that include essay writing activities and tests providing constant feedback on each activity, as well as reciting the components and tips of constructing an essay composition before and after drafting it. Moreover, the sessions would include additional lessons on how to paraphrase and summarise a piece of writing. Therefore, the latter techniques are expected to promote learners' note-taking skills and develop their writing composition as well.

3. The Research Questions

This research attempts to seek answers to the following research questions:

RQ1: Why do master students of English tend to underestimate the importance of outlining their essay composition be it a significant part of essay writing?

RQ2: How can the use of the Cornell note-taking system improve master students of English writing composition?

RQ3: Does the application of the Cornell method contribute to promoting master students' summarising, paraphrasing, and essay outlining skills?

4. The Research Hypotheses

Based on the abovementioned research questions, we propose the following research hypotheses:

RH1: EFL learners did not practise the skill of outlining before submitting the final essay draft, this might be the reason why their essays lack organisation.

RH2: Introducing the Cornell system by teaching EFL master students how to write essays following this method can improve their written composition.

RH3: It is assumed that the Cornell notes system is characterised by an organised format, as well as paraphrasing the received information and summarising the notes at the end of the page; therefore, their paraphrasing, summarising, and essay outline can be developed.

5. The Research Aims

The general aim of the study is to help master students of English at Biskra University to avoid weak note-taking practices and eliminate poor writing habits by instructing them to the Cornell note-taking system.

More specifically, this research work aims to:

- Spot the influence of adapting the Cornell note-taking method on EFL learners' written production;
- Identify problems generated from the lack of outlining their essay composition, and
- Provide them with positive attitudes and effective note-taking practices in an attempt to raise their awareness on the importance of the Cornell note-taking system.

6. The Research Methodology for This Study

According to what has been already mentioned, the aim of the study emphasises the usefulness of integrating the Cornell system to help learners develop their written composition. The theoretical assumptions that our research project will be based on begin with pragmatism paradigm and shift to the constructivism paradigm (Creswell, 2012). The nature of our study has determined the research methodology; therefore, the researcher opted for a Mixed-methods approach to address the overall content objectives. The combination of qualitative and quantitative approaches will strengthen the research problem and gives a better understanding of the research questions and hypotheses. In addition, using one data resource may not be adequate; consequently, mixing two data resources will reinforce the primary method (Creswell, 2013). Another reason why the researcher supports this approach is the need to examine, explain, explore, assess, and finally test the successfulness of adopting the Cornell system first as a note-taking strategy and second as an outline template designed for essay drafting to promote the written composition of the study's intended sample.

7. Population and Sampling Technique

A sample in research is identified to be "a group of relatively smaller number of people selected from a population for investigation purpose. The members of the sample are called as participants" (Alvi, 2016, p. 11). Correspondingly, master students of English at Biskra University are the targeted population in this research work. The study's sample constituted a case study of 12 participants of master one level chosen from three different groups. The latter was determinedly selected because the sample reflects students with developed note taking techniques and advanced writing composition style about their academic context that force them to use the two extensively. Henceforth, we are chiefly challenged to address these issues under the present research study.

8. Significance of the Study

The present study is thought to be significant for both EFL students and teachers because it is believed that this latter proposes a recent fresh method in the process of note-taking at the section of English at Biskra University. The Cornell note-taking system will be investigated as a fundamental method that is used to overcome students' writing difficulties and barriers by decreasing the negative behaviors of taking notes among master students of English, as well as taking advantage of its format to use it as an essay outline template. We hope that by the end of this study, this method will attract the teachers' and the students' attention to implement it inside the classroom setting to help them write often and read often, as well. The reason is that taking notes does not concern taking the information from lectures only; students may read books or assignments given by the teacher and record notes to prepare themselves before entering the classroom.

9. Structure of the Dissertation

The intended structure of this research work will be devised into four main chapters in which the first two chapters will handle the theoretical background of the study's intended variables and some associated research works believed to be relevant to the present dissertation. Simultaneously, the last two will be covering the study's fieldwork and the intended research methodology plus the findings of the study. Therefore, *Chapter One* is developed to review the Cornell note-taking system starting from basic definitions and origins and concluding with tips for teachers and students about how the latter is advised to be taught.

Continuously, *Chapter Two* is formulated to shed light on learners writing composition. The researcher will be reviewing the related literature on writing; however, the focus will be on composition writing and essays rather than focusing on

the general background of the writing skill. *Chapter three* is devoted to practical issues. It offers a theoretical-methodological background comprising three initial structured sections that provide specifications of the research methods, tools, and procedures shifting to describing and justifying the choice of the study's design, approach, and strategies. Finally, *Chapter Four* will concern data interpretation drawn from the results of the data collection methods and findings of the study concerning the proposed research questions and hypotheses.

Chapter one: The Cornell Note Taking System: Reviewing Fundamentals

Introduction

The aim of writing the present chapter is to address the relevant theoretical insights of note-taking skills with the study's major objectives and questions. It highlights several definitions provided by different scholars, as it attempts to address the different areas where note-taking should be learnt. Moreover, this chapter tries to emphasise the significant techniques an EFL learner has to adopt while listening or reading to produce effective and organised notes. Furthermore, it also seeks to explore some challenges and difficulties these learners may encounter in the process of jotting down their notes. Besides, it attempts to point out the different note-taking methods including few, but not all the methods existed placing extra emphasis on the targeted Cornell notes system. Finally, the chapter culminates with the importance of incorporating note-taking in EFL classes, as it includes the common symbols and abbreviations used to help such learners take speedy notes.

1.1 What is note-taking?

Note-taking has been widely defined by several scholars and researchers, be it an essential strategy for tertiary-level learners. According to Boch and Piolat (2005) note-taking "is seen as the rapid transcription of information by using a few condensing techniques, such as shortened words and substitution symbols, for the creation of an external memory whose only importance will be its later use" (Bosh & Piolat, 2005, p. 101). Friedman (2014) added that note-taking is a valuable learning technique for individuals where they can implement it during class time, or in non-academic settings. Moreover, note-takers tend to outsource the information to external material, a paper, for instance, attempting to make its content clear for further revision.

Note-taking is also defined as a kind of writing that serves as a tool to foster and facilitate learners learning. It has the potential of helping college and high school students to recall, organise the information, and develop their bank of knowledge in several subject areas (Baharev, 2016). Additionally, note taking skill is an active process that can help the learner concentrate on the content of the lecture. It provides a summary of what has been said or read. Also, this process assists the learners to improve deeper understanding and record any kind of information in a quick manner (Abbreviations & symbols for note-taking, 2015).

1.1.1 Why should students take/make notes?

Making notes is an active process where active learning and listening are related to one another. When learners listen to their lecturer, the retention of the studied material, and the ability to make decisions will gradually increase, taking into account the appropriate conditions of the learner while taking notes. Students should be aware of the importance the note-taking skill plays. Taking notes aids the learners' retention of the perceived information while listening or reading, meaning stimulating the long-term memory by having double processing. Hence, not only listening or reading but listening, reading, and recording (Bosh & Piolat, 2005). Accordingly, learners will have the opportunity to revise their notes whenever they need to retrieve any type of data, so that the notes will be a pack of information for examination, quizzes, or tests. In this vein, revising notes is considered a guide for further readings and clarifications. Another reason why learners should take notes is the need to maintain their concentration inside the classroom. Different factors could distract the learners' attention and hinder their concentration; thus, the note-taking process involves students to be actively engaged to avoid any kind of distraction (Effective note-taking, n.d.).

- **1.1.1.1 Note-taking and lecturing.** Taking notes is not restricted to students only; the context in which they are taken differs according to the situation. This section, therefore, will specify the scope where learners in a lecture take notes.
- **1.1.1.2 Defining a lecture.** Lynch (2004) stated in his book A Course in Listening to Lectures and note-taking that a lecture is a component of a series presented by the same lecturer to obtain a degree course. Learners listen and take notes while lecturing, and sometimes ask questions. As a result, different lecture styles differ from one person to another and from one place to another place, as well. Mainly, Lynch (2004) specified three major styles:
 - Reading style: here the teacher may read loudly or from a paper,
 - Conversational style (interactive): the so-called interactive style involves the teacher speaking using informal language. In addition, it involves students' interaction with the lecturer by asking questions,
 - Rhetorical style: this latter appears to be similar to performing in a theatre;
 learners can present not only lessons, but stories, jokes, and presentations
 (p.11).
- **1.1.1.3 Note-taking in a lecture.** One of the difficulties learners encounter while having a lecture is listening and writing notes at the same time. Students have to decide on certain criteria such as what has been said so far, what it means, what is needed to be evaluated as important information, and finally how to write it in a form of notes (Lynch, 2004, p. 12).
- **1.1.1.4 Note-taking techniques.** Learners may use different note-taking systems; therefore, Lynch (2004), which can make the process of note-taking more effective,

proposed three main rules and quick no matter what notes system the learners use.

The rules are as follow:

- 1. Be selective: selecting important information is an essential step to avoid information filling,
- **2.** Be brief: creating a system of conventional abbreviation and symbols, or following standard abbreviation is required to shortened long and complex ideas,
- **3.** Be clear: expressing the relationship between ideas in a clear manner to fully understand the speaker's point.

1.2 Note taking and reading

Reading is a skill that emerges only by practice. It is complex because it requires understanding and interpreting the meaning of the text. The latter may reach a level of difficulty for EFL learners in forms of certain problems that contribute to comprehend the written material; this includes the sentence length, the lexis being used, and the different cultural and social background knowledge (Johaerani, 2017, p. 1). Taking notes while reading involves multiple cognitive processes that have the power to expend one's memory. It optimises the learners' focus through facilitating the process of familiarisation with the material that enhances their memory. However, taking notes is not always an easy process as it is in listening in which the learners' hands and eyes are not constrained, rather, free to write down notes. On the other hand, it is often a hard task while reading. Therefore, the question is how the learner is expected to take notes while reading without interrupting the reading flow.

Young (2019) suggested three major steps that facilitate the process of notetaking while reading and one of them is why we read. Defining the purpose of reading the material is a vital step as an initial start. Secondly, why should we take notes in the first place? It is worth to mention that this point is based on the nature of the material to be read. It might be a long textbook where the learner needs to take notes to induce the most important and relevant information from the text. Thirdly, what is the ultimate goal to be achieved at the end of the reading task? In order to answer the former question of this section, each of these sub-questions has to be answered. In doing so, young (2019) believed that they should be followed by different methods or techniques for taking notes.

Step number two concerns facilitating focus. Since the ultimate purpose of these steps is to improve the learners' concentration on what they read, the current step is meant to ease the note-taking process from written texts to maintain focus. Therefore, the notes learners take should serve certain functions. The functions are divided into three points; the first point is to make it easier for the reader to concentrate on reading. To achieve the latter, the number of notes should be decreased into small notes so that the learner will avoid wandering the mind with large pieces of notes. The second point is to focus the mind on the right level of information; that is to say, reinforcing the reader's attention during the reading activity. The last one is creating a document that the reader can reference for later review. This will prevent the learner from forgetting the source of information.

Step number three according to young (2019) is review or recall? Retrieval practices are meant to improve the memory by recalling as much information as the person can from a text. This can happen by asking questions and answer them. Eventually, the author suggested using the question book method as an attempt to encourage note-taking in the form of questions. Alternatively, it can also happen by writing information on a blank paper. The recalling practice confirmed its practicality

in comparison to reviewing, which requires looking at the notes several times. The difference between the two strategies is that reviewing, on the one hand, can merely attain recognition, while retrieval, on the other hand, can aid the ability to retrieve memories the learner need in real-life situations.

1.2.1 Reading strategies in taking notes

Jones and Mort (1994) proposed four reading strategies used in taking notes.

These are mainly concerned with:

- Be selective and systematic,
- Identify the purpose and function of a text,
- Identify how information is organised, and
- Include your thoughts.

The first division indicates selecting relevant information from a text in an ordered manner. While the second one seeks to identify useful data by reading the most essential parts of the text, for instance, reading the title of the text, or the abstract if existed. The third strategy highlights the systematic order of ideas and how the information is sequenced into a logical hierarchy. Finally, the last one concerns recording one's ideas by using different colours (Jones & Mort, 1994).

1.2.2 Note-taking and listening

Learners tend to confront serious challenges listening to academic lectures and taking notes simultaneously. Therefore, understanding spoken academic English is fundamental for them to acquire the knowledge they need. Listening and taking notes at the same time have aroused the researchers' interest to investigate the issue in an attempt to retain comprehension of the academic lecture (Qian, 2002).

1.2.3 Why taking notes is important while listening?

Qian (2002) believed that it could be beneficial for EFL learners to take notes in academic lectures for different reasons, including the need to take notes at the university level, which is one of their high priorities. Besides, note-taking would be helpful for them to release the pressure when listening to long lectures. In addition, having the notes written will aid memorising the information they heard.

1.2.3.1 What makes lecture listening tiring. In several countries such as Britain, learners are expected to take notes even if the lecturer affords a handout. Since handouts provide some but not all the necessary information the learners may need. In fact, it is difficult and tiring to listen to lectures and make notes at the same time because the learner has to decide on certain points, such as what is being said, what would be its possible meaning, its level of importance, and finally deciding how to jot down the information in a notes form. According to Lynch (2013), the most significant step among the former mentioned points is deciding on the importance of the information because it is determined by the learners' knowledge of the subject.

1.2.3.2 Macro-strategies for listening. In order to receive most of the lecture listening, the learner should take into consideration the following strategies that can help him/her while taking notes. This includes the ability to predict the content of the lecture, monitoring by identifying the areas of uncertainty and problems while listening, and responding through giving reflections and opinions on the presented ideas in the academic lecture (Lynch, 2013, p. 7).

1.3 Note taking methods

As it has been mentioned previously, note-taking is the process of jotting down the information into a well-organised form for later review. The second part of

this sentence, the part of organising information, is done with several systems namely note-taking methods. Each of which is used following the learner's learning style. Some of the latter include the charting method, the outlining method, the mapping method, the Cornell method or system, and different other methods, too.

1.3.1 The charting method

This method emphasises drawing a table and divides it into columns of different categories. The learner can take advantage of this method by writing the received information under the appropriate column. It includes dates, events, people, and places. Usually, learners who find difficulties understanding the content of the lecture tend to use it the most. Moreover, sometimes they use it when the lecturer presents the lesson quickly. Evidence has proven its efficiency on visual learners (Dasilva & Thompson, 1994). These are some of its advantages and disadvantages:

1.3.1.1 The charting method advantages. It helps the learner grasp the important information, as it diminishes the amount of writing since the headings are categorised. Furthermore, it makes the reviewing process easier for learners (Dasilva & Thompson, 1994).

1.3.1.2 The charting method disadvantages. It might not be easy to learn using this method. Furthermore, the learners must have prior knowledge of the lecture's content (Dasilva & Thompson, 1994).

		ing Method Rle)	
Monday March 12, 2012 page 1 of 1			
Apri?	Advantages	Digadvantages	When to use it?
Set up your paper in columns and lable headings	Helps pull out the relevant information	Can be a hard system to learn to use.	If you'll be tested on facts and relationships
The headings could be categories covered in the lecture.	Reduces the amount of writing required.	You will need to know what content, is being covered at the beginning of the lecture.	If content is heavy and presented quickly — such as a highery counge with dates, people, events, etc.
Ingert information (words phrages, main ideas, etc.) into the appropriate column	Provides easy review for memorizing facts and studying companisons and relationships		If you want to make an overview of the whole courge on one big paper.

Figure 1.1. Common note-taking methods. (2012). Canter for Academic support and Advisement. Copyright 2012-2020 University of Tennessee at Chattanooga.

1.3.2 The outline method

It is also called the traditional method, the outline system is used to organise the major elements, sub-elements, as well as the detailed points. It allows the learner to present and review the recorded information in an organised manner (Dasilva & Thompson, 1994).

1.3.2.1 The outline method advantages. This method provides easier ways to review the notes by turning them into questions. It is also considered a well-organised system of taking notes (Dasilva & Thompson, 1994).

1.3.2.2 The outline method disadvantages. This method is not applicable in certain conditions where the lecturer is speeding. Also, it demands plentiful thinking to develop the organisation (Dasilva & Thompson, 1994).

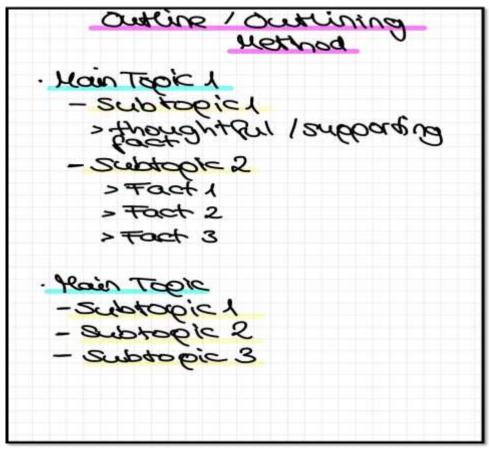


Figure 1.2. Alina. (2019). Methods of note-taking. Retrieved from https://medium.com/@alinas/methods-note-taking-4874a7a29ef2

1.3.3 The mapping method

This method is known as the pattering method. As its name indicates, it includes mind maps, diagrams, flowcharts, shapes, and colours. It has the power to make the topic clear and seen from a global picture (Five note-taking methods, 2010).

1.3.3.1 Advantages of the mapping method. It is considered a practical technique for visual learners to trace their lectures. Besides, it provides easier ways to

edit notes and add colours to them. Moreover, it does not require over-thinking (Five note-taking methods, 2010).

1.3.3.2 Disadvantages of the mapping method. Mind maps can become unstructured and big if the learner does not select the exact keywords, bigger mind maps are difficult to be understood (Five note-taking methods, 2010).

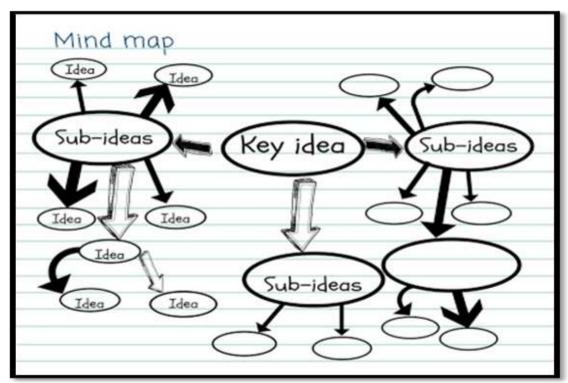


Figure 1.3. Academic skills Center. (2020). Note Taking Systems. California Polytechnic State University.

1.3.4 The Cornell method

1.3.4.1 The origin of the Cornell system

This notes system was named after the private Cornell University in Ithaca, New York, which was founded by Ezra Cornell and Andrew Dickson White in 1865. In 1940, the professor of education Walter Pauk developed a notes system, namely the Cornell note-taking system (Cornell University, 2014). Keuntjes (2018) pointed out that this unique system permits the learner to arrange notes to ease the visual review

of the recorded information, as well as quizzing the learner to test his understanding of the subject matter. The Cornell method has a specific feature, the layout, which distinguishes it from other different note-taking methods.

1.3.4.2 Structure of the Cornell method format.

The format itself consists of four spatial sections that construct the whole page. Starting with drawing a horizontal line up to the top of the page, it is called the page heading section that determines the main topic of the lesson, the date, and the course's name. It may also include the name of the professor, the period of the lecture, or other relevant information (Brown, 2015; Writing studio, 2008). On the left side of the page, a vertical line of 2.5 inches is to be drawn, this is the cue/keywords column created for future review. It comprises the main questions deduced from lectures that should not be delayed for further recording. In addition, it covers the keywords that do not exist in the textbook or the lecture handouts.

After that comes the right column of six or more inches, which encompasses a larger space among the other divisions. The notes column covers relevant information the lecturer inscribe on the board, diagrams, or questions. It is advised for learners to jot down key concepts and ideas, rather than focusing on words spelled to convey those key ideas. Finally, the last column is the summary section placed at the bottom of the page. The learner is supposed to recapitulate most of the notes in a few lines. The importance of this step lays in its efficiency in absorbing the information, as it forces the learner to relate different ideas and increase critical thinking. Furthermore, it displays the role of a guide to finding information in the notes (Brown, 2015; Writing studio, 2008).

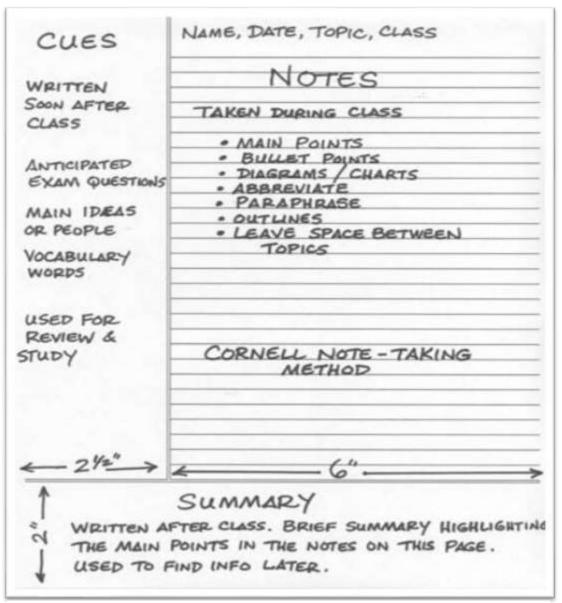


Figure 1.4. Piowlski. (n.d.). Cornell notes. Comprehension strategies. Minnesota state university, Mankato.

1.3.4.3 Major criteria for making the Cornell notes. The Cornell method does not provide an organised system of taking effective notes only, which is reducing, recording, and recapitulating the information, but also demonstrates how to use those notes. Mainly, the "how" notes should be managed follows three major criteria, to review, to reflect, and to recite (Brown, 2015; Writing studio, 2008). Recording notes without reviewing them makes no difference in grasping and

understanding the lecture notes; therefore, learners should review and revise their notes. Pauk, Owens, and Ross (2010) emphasised that notes review should be done within 24/48 hours after taking the notes, or in more than a few times within a week in an attempt to stimulate the learners' long term information retrieval. Reviewing notes helps the learner to eliminate the stress that comes before a test or a quiz, as it provides future clarifications from peers or teachers. The next step after reviewing the notes is reflecting on them, the learner's opinions should appear in this stage so that he can reflect on the course and its relationship with other courses. The last stage is reciting those notes to test the learner's comprehension. This could be done by covering the original right column with a blank paper and recite the key terms and ideas. Besides, the learner can compare what he has written so far against the original notes' copy (Writing studio, 2008).

1.4 Note-taking and note-making

Jones's notion of note-taking and note-making indicates, "Academic reading and writing demands a change in you from being an active seeker of understanding and a maker of sense and meaning. You are not just telling a story you are exploring a question" (p. 7). This means that whenever we write or read something, we have to be engaged in different processes so that we make sense of the information and analyse it to reach the ultimate goal of understanding. What makes note taking and note making different is that note making is a developed process. The latter involves reviewing and synthesising the information to connect ideas from a lecture and then present the same ideas into a manageable and readable form. By this, the learner will always remember what s/he has jotted down in the lecture. On the contrary, note-taking is mainly concerned with writing what the learners hear or read to produce effective notes.

It is worth to mention that making notes should not involve plagiarism. In this case, referencing the source of any note is significant. The learner should make sure to quote when copying and cite the authors' names (Neville, 2006). However, the notes cannot be accurately completed unless these two techniques function together. After having the first steps of taking notes done, the initial steps of taking notes, organising them, and using short-hand abbreviations to foster the process, the learner should automatically review and revise the notes as a second step, which is notes making. Moreover, Witwatersrand University (2000) differentiates between note taking and note making in terms of active and passive processes. On the one hand, note-taking is considered a passive activity done by the learner in both academic and non-academic settings. On the other hand, note making is an active process where the learner tries his best to make sense of the recorded information.

1.4.1 Challenges learners face in taking notes

According to Ferris and Tagg (1996, as cited in Hayati & Jalilifar, 2009), EFL learners' lack of note-taking skills in lectures is a worrying issue. They believe that one significant reason for taking notes is that the person can never re-listen to a speech or a presentation. Their claim is debatable, especially in this century where technology has conquered every single part of our lives. A speech, for example, is instantly recorded and shared on social media platforms. Thus, we can re-listen to it hundreds of times; it is no longer a problem if someone misses taking notes on certain occasions. Students record even university lectures most of the time. However, the skill remains vital and a time saver if it is taken in appropriate conditions.

Moreover, a significant number of EFL teachers complain about the low level of students' writing composition skills. Therefore, when it comes to writing their notes they either write everything or jot down a few ideas only that does not cover

half of the whole content. Some of the possible reasons could be the time afforded for a lesson. The learner will find it difficult to realise the crucial information that has to be written and organised after the lecture time (Alzubi, 2019). Moreover, the lecturer's pace of speaking affects the ability of learners to take notes. For instance, if the teacher speaks too fast without making pauses and stresses the significantly related concepts, the learner will be lost and unable to determine what to note down as core information. Consequently, the teacher's intonation and rate of speaking are some of the major factors that facilitate the process of taking effective notes.

In the same vein, Boch and Piolat (2005) claimed that no teacher would speak slowly to meet the students' expectations of writing everything said. As a result, learners will develop their methods to record the lecture's content to the extent possible. Apart from the cognitive processes they intentionally or unintentionally encounter when taking notes, a set of linguistic processes are followed, such as abbreviations, symbols, shortened sentences, and several other processes that help them make the procedure of taking notes manageable and less challenging.

1.4.2 How Note-Taking should be taught?

College students are expected to master the skill of taking notes be it one of the most needed skills at the university level. Learners usually take notes for the sake of recording the information, either from their academic instructor or through reading relevant texts, whereas the supreme objective is not jotting notes only, but also adopting the skill to develop their learning achievement. Learners' lack of experience goes hand in hand with insufficient habits they manage to use when writing their notes. This can include jotting down what the entire teacher says, notes taken in a chaotic structure, and the inability to identify keywords from unimportant words (Heaney & Willford, n.d.). Boch and Piolat (2005) stated in their book A Summary of

Research the complications the teaching of the note-taking skill could reach, saying that it comprises three fundamental skills that are necessary for teachers to instruct. Comprehension through note-taking, producing notes, and the cognizant management of the whole activity.

Furthermore, Maryland University conducted a study in 2002, which illustrated the effectiveness of teaching note-taking among college students. The results of the study proven its success through the implemented procedure. Two categories of students have emerged; the ones who were exposed to teaching the skill were able to grasp 55% to 60% of the significant information in a lecture. However, the second category includes those who were not taught how to take notes appropriately, their understanding average was 37% only (Heaney & Willford, n.d.). In order to urge the student to take effective notes, teachers need to consider many selected areas. Firstly, they have to outline the lecture by displaying the content of the course either visually or orally before the lecture starts. This step permits the learners to organise their notes and avoid losing track of important key concepts as it allows the teacher to refer back to the written outline and shift in topics. Secondly, the need to adopt a framework. This step concerns the schema learners use to systematize information. Generally, there are two chief frameworks, sequencing, classification. The former type is interested in explaining changes or phases, such as information represented to illustrate a specific process. While the latter type is mainly used to classify data that includes types, characteristics, or components.

Other critical areas could be specifying what to record as notes, challenge students to think by making pauses within the course time, providing feedback on students' notes by comparing them to the teacher's note model, and finally giving space for note-taking activities to encourage the learners' deep thinking (Teaching

students to take better notes, n.d.). In conclusion, habituating university students to apply effective methods and techniques in an attempt to help them write better notes, as well as to assist the teacher to deliver his instructions smoothly should be regarded as a serious issue.

1.4.3 Common Symbols and Abbreviations for Speedy Notes

Table 1.1

Symbols and their Related Meaning

Symbols	Symbols Meaning	Symbols	Symbols Meaning
:=	is defined as	\rightarrow	Leads to, (showing result)
<<	much less than	←	caused by, because of (showing reason)
=>	Logical implication/implies	↑	increase, more, incline, up
<i>:</i> .	therefore, so	\downarrow	decrease, less, decline
·:	because, since, for	" "	ditto (from 'dictums'): the same thing again
+	more	&	and
=	equal to	#	number
≠	not equal to, the opposite of	@	at
≈	approximately	>>	much greater than
>	greater than	<	less than
\$	woman, female	8	man, male

Note. Adapted from Note-taking abbreviations: Writing centre learning guide (pp.2-3), by Writing Centre. 2014. The University of Adelaide. Retrieved from https://www.adelaide.edu.au/

Table 1.2

Abbreviations and their Related Meaning

Abbreviation	Abbreviation meaning	Abbreviation	Abbreviation meaning
2b, 2B	to be	2day, 2DAY	today
2d4, 2D4	to die for	2moro	tomorrow
4	for, four	aam, aamof	as a matter of fact
E.g.	For example	i.e.	That is
approx	Approximate (ly)	Diff	Different, difference
Q	question	A	answer
poss	Possible (ly)	Prob	problem
w/	with	Max	maximum
w/o	Without	Min	minimum

Note. Sheldon, C, H Smith (2013) using symbols & abbreviations. Retrieved fr<u>https://www.eapfoundation.com/listening/notetaking/symbol</u>

Conclusion

Note-taking requires the mastery of writing skills, paraphrasing, and summarising skills. With less experience to the latter, the learner will feel tired and unable to take notes correctly. Most of the studies in the literature were conducted in relation to listening or reading, where a small number of studies tackled the effectiveness of teaching note-taking to improve students writing composition. The next chapter attempts to cover the concepts of the writing composition, its types, and process, as well as the common factors affecting this skill. Besides, it discusses some tips used to improve learners' writing composition.

Chapter Two: Writing Composition: Reviewing the Literature

Introduction

In this chapter, we shed light on learners' writing composition in EFL teaching and learning context. The latter will be devoted to explaining and describing the writing skill, its history, definitions, as well as the difference between academic writing and other forms of writing. Likewise, we will present the principles of academic writing and gradually shift to writing composition, its mode, rules, and types. More importantly, the chapter aims at providing a closer overview of the writing processes and its related steps. Essentially, linking chapter one with this chapter by providing connections between the Cornell note-taking system and students' writing composition.

2.1 Historical account of writing

Evidence showed that the origins of writing were historically traced in three different places, Mesoamerica about 630 BCE, China around 1250 BCE, and in Mesopotamia around 3200 BCE. Human being devised two major systems to communicate with each other, visual symbols and art. It is remarkable throughout history how these two systems have been spread over wide geographical areas all around the world. Archaeologists, however, proved that art existed and preceded writing for about 25.000 years ago (Besserat & Edard, n.d.). Consequently, art is the second component of the human communicative systems in which cultures and civilisations are sculpted. Archaeological evidence revealed that the first indications of art existed in France around 30.000 BCE. It was not until the dawn of the twenty's century where researchers start sharing the roots of writing and hoping, someday, to be able to explore the mysterious communal influence between China, Mesopotamia, and Mesoamerica (Besserat & Edard, n.d.).

2.1.1 What is writing?

Writing is a method used by people to represent human language. Its systems, namely scripts and orthography, comprise several symbols symbolising different sounds of speech, numerals, as well as punctuation (Bright & Daniels, 1996). Furthermore, Creme and Lea (2008), in their book Writing at University, claimed that the process of writing is about combining words following specific formations to form sentences. In addition, Koay (2017) defined writing as an excellent platform that is typically based on having a clear mind and clear writing, rather than composing grammatical sentences together. He added that the core stone of any writing is the need to communicate a coherent form of ideas; therefore, learners have to organise what they have in mind before writing it down. Writing does not concern linking sentences collectively, but making these sentences meaningful and organised in a clear form. Consequently, it will serve as evidence that proves the writer's ability to have a clear flow of ideas and thinking.

2.1.2 What is academic writing?

Academic writing can have several labels according to what the academic instructor means to call it. For instance, essay writing, research paper, analysis paper, and dissertations. Whitaker (2009) shed light on the importance of setting one's goals and purposes of why we write academically emphasizing those students should not start writing their assignments at the last minute then start complaining about the difficulty of writing in such academic matter. In her book A Step-by-step Guide to Writing Academic Papers, she stated:

An academic writing assignment is supposed to be your opportunity to explore something that interests you from your course. You have the freedom to choose a topic, empty pages

on which to express your ideas, an audience that is interested in reading what you think. (Whitaker, 2009, p. 2)

Furthermore, academic writing is any type of communicated, discussed, and analysed knowledge generated through research. Hence, it is different from other kinds of writing regarding its unique form. Still, it shares some common features with other writing types including the purpose of communicating arguments and ideas with a wider audience (Nilsen, 2019).

2.1.2.1 Principles of academic writing. Whitaker (2009) managed to create ten academic writing principles that writers should follow in writing any academic composition at university. The table below gives a brief description of the writing principles:

Table 2.1

Principles of Academic Writing and its Meaning

Principles	Further Explanation		
	Referring back to the instruction of the assignment is		
Clear Purpose	important to determine its purpose. It can take the form of		
	persuading, analysing, or informing.		
	Thinking about an audience is significant for the writer to		
Audience Engagement	know who is s/he writes for. Therefore, the style of		
	writing, evidence provided, and ideas should be carefully		
	chosen and well written in a catchy way.		
	Presenting what a writer thinks or believes in his/her		
Clear Point of View	original words aiming at answering the academic question		
	that s/he is willing to write about.		
	The presented information in any piece of the academic		
Single Focus	composition should be relevant, important, and do not		
	contradict with the main topic's ideas.		
	Introduction: here the writer provides background		
	information about a topic plus constructing a thesis		
I aminal Oumanisation	statement.		
Logical Organisation	Body Paragraphs: paragraphs meant to explain the thesis		
	statement.		
	Conclusion: a summary of the thesis statement.		
	Ideas that are purposefully written to support the topic		
Strong Support	sentence and further explain the thesis statement.		
	The writer's writing processes and thoughts should be		
Clean and Complete	clearly stated and understood for the reader.		
Clear and Complete	Providing complete ideas and logical explanation of		
Explanation	sequences so that the reader will not face comprehension		
	difficulties.		
Effective Use of	Academic and professional sources should be taken		
	seriously and correctly by integrating them within the		
Research	writer's writing to support his/her claims.		
	Being consistent in following the APA style of		
Correct APA Style	referencing until the end of the writing process is		
	recommended.		
	The writer is advised to use his/her own words in writing		
Writing Style	academically paying more attention to errors, spelling		
Willing Style	71.7 8		

Note. Whitaker, A. (2009). A step-by-step guide to writing academic papers. Bratislava, Slovakia. A table demonstrating the key principles of academic writing.

2.2 Composition writing

The word composition is derived from the Latin 'To Put Together', which identifies the writer's ability to assemble correct and organised sentences to generate coherent and expressive written work (Nordquist, 2019). Composition writing is a sequential flow of ideas that leads students to have better English writing composition skills moving from a simple paragraph writing to compose essays and advanced articles (Oyedele & Chikwature, 2016). Hence, the meaning of the term composition differs regarding the circumstances in which it is used. For instance, it may reflect works of prose and fiction, personal narration, essay, or poem writing. Each of the latter has its characterisations and rules (How to write a composition, n.d.).

2.2.1 Modes of composition

English professors and writers have been contending to find solutions to categories different modes of writing since the beginning of the 19th century. Consequently, rhetoricians finally concluded with four major writing categories that remain typical components for college studies: Description, narration, exposition, and argumentation. These four writing styles are not usually written singularly in one composition, but regularly combined to create a combination of the entire mixture. The aim of creating the four modes of writing composition lays in directing beginner writers to set down a starting point to form their ideas systematically, rather than considering composition modes as rigid prerequisites (Nordquist, 2019). Composition writing includes several types, such as formal and informal letters, reports, magazines, newspaper articles, essays, and several related types. The present chapter will be emphasising essay composition writing among the formerly mentioned types because the study's original focus and aims emphasise EFL learners' essay writing composition.

2.2.2 Rules of composition writing

When students are asked to compose an academic writing work, they should be aware of some critical rules that can help them avoid subjectivity, text's tone, and irrelevancy of ideas. Composition writing aids (2016) indicated in their study guide that learners are not advised to use first-person pronouns, such as I, we, us, or me because it will change the tone of the writing to be more subjective and less academic. Also, they should avoid writing contracted form of words, for instance, can't instead of cannot, or acronyms since the latter must be spelled out when first time used. Moreover, starting a sentence with words like "That/There" is considered inappropriate in the academic community (Composition writing aids, 2016). Apart from the formerly mentioned rules, several other aids to writing composition are common and, perhaps, unconsciously used by learners like capitalisation of proper nouns, or prevention to end sentences with prepositions. If EFL learners, at least, obey most of these rules, it would have been easier for them not to encounter writing difficulties in their classes; rather, it would make the process more flexible with the least amount of committing written errors and making mistakes.

2.2.3 Writing composition types

There are various types of composition writing presented in the literature, such as poetry, novels, letters, and short stories. In this theoretical section, the writer will be placing more focus on essay writing composition type, its structure and the processes it follows.

2.2.3.1 Essay writing. The origin of the word essay comes from the Latin verb *exigere*, a verb that means to examine and test. An essay is a purely individual piece of writing required in higher education classes. Its length varies from 1.500 words to 5.000 words (Connelly & Forsyth, 2011, p. 7). University students should

master the craft of composition writing starting from drafting down basic sentences, structuring paragraphs, and finally writing essays. Generally, academic essays are not simple to write because this process is not about attaching words, conjunctions, sentences, or writing all that the learner knows about a specific subject or topic; rather, it concerns setting an organised building of ideas and concepts. Academic essays, also, should answer a question, or some sub-questions aiming to persuade, narrate, describe, or inform a reader of an idea grounding the latter with reliable and valid shreds of evidence (Essay writing, n.d.).

2.2.3.2 Essay structure. Any academic essay building should comprise some sentences that collectively construct a paragraph in a logical and meaningful order. The essay body paragraphs, therefore, vary according to its length, whether the latter is short or long. According to Macdonald (2015), essay structure is different among several academic cultures and languages; as a result, being aware of its common and used structure, as well as other different organisation is suggestively important. Academically speaking, essay composition is divided into three initial parts namely introduction, body paragraphs, and a related conclusion. First, the introductory paragraph that has the purpose of introducing the reader to a topic. Usually, it is the part where writers place three crucial elements that are important to its logical organisation, the hook, the building sentences, and the thesis statement.

Relatively, the hook refers to the interest the writer creates to the topic to attract the reader's attention and urge him/her to complete reading. The second element is writing building sentences. As the name indicates, this step highlights the transition of ideas starting from the topic's general perspectives until the writer reaches narrowed and specific points (Chin et al., 2012). Lastly, constructing a workable thesis statement. Usually, it comprises the major points of a given topic

because it provides narrowed and more focused ideas. In addition, it demonstrates the writer's position and sometimes it includes clues about the organisation of the essay. More importantly, a thesis statement is not developed once the topic is selected; rather it develops through explaining and drafting a given subject continuously in the prewriting stage (Mcwhorter, 2010).

The second part of the essay organisation is writing the body paragraphs. Its ultimate objective is supporting and explaining the thesis statement (Checkett & Checkett, 2010). The latter should contain a relevant topic sentence, supporting sentences, as well as a concluding sentence with a related lead-in. The topic sentence handles the essential idea that needs to be covered in the paragraph, in other words, an argument that should be introduced. The next step would be providing pieces of evidence, illustrating with examples, facts, statistics, or quotations to support and strengthen the topic sentence providing references to preclude plagiarism. Lastly, writing a concluding sentence at the end of the body paragraph. It should be characterised by leaving the reader with a final thought and providing a clear lead-in link to the next expected paragraph (How to write a good paragraph, n.d.).

The final essay structure is composing a relevant conclusion. A conclusion emphasises summarising the main key ideas of the essay and should afford what is called a link back to the introduction, mainly the thesis statement. Well written conclusions leave the reader with positive impressions because students, most of the time, write for a targeted audience. Hence, the writer should ask himself/herself a question before finishing this part, what would the writer wants the reader to comprehend by reading this piece of composition? (Sowton, n.d.).

2.3 The writing process

The writing process does not concern matching and gathering words to form sentences and paragraphs, but to produce a piece of writing that follows a systematic set of steps. This concerns starting with choosing a topic, brainstorming ideas, develop the thesis statement, outlining, drafting, revising, editing, and proofreading to complete the writing procedures, as well as developing one's way of writing. The steps should be applied along the whole process and this comes after the learner receives his/her academic assignment.

2.3.1 Steps of process writing

Choosing a topic to write about is not an easy task for learners to accomplish. Sometimes the purpose of the teacher's assignment leaves learners with no choice to write about a certain subject; whereas, in other times it is the opposite where they have the freedom to select a topic of interest. If learners find it challenging to select a topic, they may refer to their study courses that seem to be attractive to them. The next move would be narrowing down a subject to form precise topics by selecting a problem or questions to be answered from that subject. In doing so, learners need to do some research if they lack knowledge about the selected topic. Furthermore, determining interest is vital to focus the scope of the topic being under research. Generally, this step is accomplished by asking relevant questions, for example, who? What? Where? When? And why? (Whitaker, 2009).

Gradually, once the task is clarified learners should start brainstorming their ideas immediately. They are expected to jot down any possible answers to previously raised questions related to their topic. Moreover, any information, ideas, or opinions that come to their minds should be written to prevent them from being forgotten later in the proceeding stages (Whitaker, 2009). Moreover, the brainstorming step

comprises some methods that help to generate ideas including idea trees, free writing, and mapping. The idea trees method refers to the tree shape where learners start writing the central idea forwarded by a line to add other related information and details. The connections, therefore, are recorded with lines demonstrating the link between shared ideas. Commonly, this method appeals to visual learners (The writing process, n.d.).

The second brainstorming strategy is free writing. Free writing allows writers to draft whatever comes to their mind. Hence, recalling unstoppable information about their topic to the extent of their knowledge. This method helps them to discover what a person knows, thinks, or what s/he needs to know more about a selected topic. Lastly, implementing the mapping method by mapping ideas in a chart form or some kind of a draw is required, it starts with an initial thought and then the writer adds additional arguments to reinforce it (The writing process, n.d.). The third step in process writing is generating a thesis statement. Every academic essay composition must have a related thesis sentence stated at the end of the introductory paragraph; however, if the writer is skillful enough s/he can hint the thesis instead of announcing it, or place it anywhere in the text (What is an academic paper, n.d.). In the same vein, developing a workable thesis statement occurs in the pre-writing stage most of the time. It is considered as a guide to approaching a topic. In order to generate a working thesis, the learner should explore details and determine its sub-groups to be stated in the thesis and further explained, analysed, and supported with evidence in body paragraphs.

Consequently, when learners are fully engaged in writing the thesis statement they can take advantage of some beneficial guidelines suggested by scholars. Simultaneously, among the tips provided by the literature, Mcwhorter (2010)

suggested six major guidelines: making an assertion, set specific details, central point limitation, propose an original topic perspective, avoid announcing in the thesis and finally using the thesis sentence to preview the essay organisation (Mcwhorter, 2010, pp. 102-103). Progressively, developing an outline is the fourth step. Vos (2019) defines an outline as an academic plan for a piece of writing where the writer is expected to organise the key points into complete paragraphs. Referring back to essay composition, essays should be outlined and organised before writing the final draft. The latter has different essay outline templates, such as expository essay outline, argumentative essay outline...All depend on the instruction's defined key terms, to explain, analyse, describe, or to persuade (Vos, 2019).

Continuously, the writer moves to rough draft paragraph writing. The drafting stage is mainly concerned with presenting arguments as they were outlined reasonably with comprehensive evidence. More importantly, drafting saves time in terms of avoiding editing, as well as proofreading until the writer draft full ideas without interrupting his/her thinking (The writing process, n.d.). It is interesting how the structure of writing the first draft paper differs from one person to another. For instance, writers can start with writing body paragraphs and transitionally finish with the introduction and conclusion (Whitaker, 2009). Subsequently, as said by the Writing resource book (2013) revision stage is a sub-element of the refining step. It indicates the completion of receiving feedback from a variety of sources. Accordingly, students in the revision stage can decide what could be possibly added or removed in the draft. Revising; therefore, is the step where students likely attempt to rearrange both the structure of sentences and paragraphs to develop the text sequences (Writing resource book, 2013).

Besides, the process writing is characterised by being an interrupted process, meaning not linear. For example, the revision phase can be repeated several times during drafting or the possibility of returning to the preliminary pre-writing stage in order to develop ideas. By the same circumstances, learners become readers of their work. They identify places where any possible change could occur and replace words with better vocabulary choices. They can also draw arrows, asterisks, or erase needless words (The writing process revision, 2020). After revising the intended draft, editing should be taking place right after. Editors can edit their writing by scanning the paper looking for mistakes and attempting to correct or change the content information. This stage covers two-step elements, the first step checks the meaning of the draft in terms of clarity while the second one primarily focuses on having correct structure, grammar, spelling mistakes, and the use of appropriate punctuation (Hogue, 2008).

Finally, the last phase in process writing integrates proofreading skills. It is significantly related to improving revision consciousness where learners proofread their writing from the reader's global angles (Writing resource book, 2013). Once proofreaders are satisfied with their final drafts they must assure that, their composition writing is error-free, well arranged, and written in the required format. Hence, a careful proofreader leaves positive impacts on readers (Mcwhorter, 2010).

2.3.2 Writing using correct grammar and appropriate vocabulary

Duigu (2002) cleared out that "No matter how good your ideas or your outlining skills are, if you do not have sufficient control of correct English you cannot communicate your brilliance" (Duigu, 2002, p. 37). This quotation reveals the significance of using correct grammar rules to better communicate one's ideas. The learner may be capable in some of the pre-writing skills like outlining, but with the

wrong use of grammar, the whole composition will simply collapse. As a result, learners should take into account grammar essentials, such as correct use of tenses, the right use of parts of speech, passive voice, correct clause structure, and many other essentials (Duigu, 2002).

Vocabulary is the second base pillar along with grammar for students' writing. The use of sophisticated terminology is not advised for learners to do; rather they can use simple and clear English. However, they can practice unfamiliar words under some circumstances, for instance having a helpful teacher. Duigu (2002) added, "The correct use of a word involves knowing: the exact meaning, the words that go with it, and the grammatical features" (Duigu, 2002, p. 39). Vocabulary and grammar have an interchangeable effect on one another while writing. Learning the meaning of words alone is not adequate; therefore, learners must understand and learn its exact usage.

2.4 Cornell method and composition writing skill

One study only appeared to undertake the influence of the Suggested Cornell Note Taking on Improving Writing Composition Skills of Jordanian EFL Learners by Alzubi (2019). The objective of the study intended to discover the effect of the Cornell note-taking method on EFL learners' writing composition skills. Thus, a quantitative approach was employed where the sample involved 58 English students who were randomly selected. The results of the analysed data indicated that students who studied writing composition following the suggested Cornell system accomplished better grades in comparison to those who were taught through conventional teaching methods. Moreover, through reading the literature none of the studies, to our scope of knowledge, implemented a Mixed- methods approach; rather, they have investigated the problem using a purely quantitative research approach or a quasi-experimental design. To conclude, very little work has been done on improving

university students' writing composition through instructing the Connell notes system, especially among students of English at Biskra University. This is where the current study comes into existence in an attempt to fill in the gaps of the previous research studies.

2.4.1 Paraphrasing and summarising

Including other people's ideas in ones writing without acknowledging them is called plagiarism. Learners can avoid this unethical behavior by following effective writing practices such as paraphrasing and summarising. Generally, paraphrasing refers to rewording a written work using the writer's own words but keeping the author's original ideas or meaning. The reworded version; therefore, should be clear and simple for readers to understand. It is often in the same size as the original text. Alternatively, in order to paraphrase a piece of writing some steps are to be taken into consideration. For example, reading and rereading the text to understand its meaning, underlining difficult terminology, and provide related synonyms, rewriting sentences by changing its original structures and order, and using in-text citation at the beginning or end of the paraphrase (Paraphrasing and summarising, n.d.).

In addition to paraphrasing, summarising is also an important practice in academic writing (Paraphrasing, 2016). Buckley (2004) defined summarising as a skill learners pose to reduce the length of the original text about one-third its size and leaving main ideas only. In other words, a summary is about providing an overview of an author's writing. It is usually shorter in size comparing to the original text. Consequently, in order to write an effective summary, a set of steps are followed for better summary writing, such as skimming long texts when reading, using the dictionary, note down key ideas and initial words, and using in-text citation to acknowledge the work of one or more authors (Paraphrasing and summarising, n.d.).

The skills of paraphrasing and summarising are crucial for university students to master. The present chapter mentioned them briefly for two reasons, when learners attempt to take notes in their lectures they should avoid being verbatim writers, meaning writing what teachers say word by word. The skill of paraphrasing is required in this case; the same goes for when they are searching for information to support their writing. Hence, ideas that do not belong to them should be paraphrased or summarised and correctly referenced. The second reason is that the Cornell notes format includes a part where summarising the recorded information is necessary to have a final thought of the lesson. As a result, learning how to write better summaries is a skill that should be seriously learnt in higher education.

2.4.2 How writing should be taught?

Graham (2008) suggested in his book Effective Writing Instruction for All Students seven major tips for teachers to teach writing and eliminate students writing difficulties. Some of the latter include:

- Dedicate time to writing, with writing occurring across the curriculum, and involve students in various forms of writing over time.
- Increase students' knowledge about writing.
- Foster students' interest, enjoyment, and motivation to write.
- Help students become strategic writers.

The first recommendation indicates the opportunities of writing that the learner should be given and the time dedicated to this craft. Thus, frequent writing means a development in the writing ability since students cannot simply make progress in writing if they are not often exposed to it. Secondly, students should acquire enough background knowledge of what characterises good writing, its purposes, and its different forms as well. Along with this process, reading is the

suggested effective alternative recommended for teachers, reading the existing literature gives learners a vivid experience to recognise writing from its broader perspectives (Graham, 2008).

Accordingly, the classroom environment plays an important role in fostering students' motivation and enjoyment to write in case it is supportive. Teachers need to accept the students' efforts and encourage them to behave in the same way with their peers. Besides, they need to urge students to collaborate in group work to make the activity more fun. Additionally, they can be motivated by giving them positive feedback and praising them for their work. Finally, helping students become strategic writers is based on the general writing processes of planning, drafting, revising, and editing. Directing students throughout the process of writing, as well as providing assistance where needed help them be effectively engaged. As a consequence, teaching writing strategies according to Graham include giving clear description to the purposes of learning a writing strategy, when do they need to use the strategy, how it is used, and setting activities and practices to apply the strategy and evaluate the student's understanding (Graham, 2008).

Conclusion

The majority of university students tend to face challenges and difficulties when it comes to master the craft of composition writing. Raising their awareness regarding the importance of the skill in their learning career is recommended in order to improve it. However, most of the conducted studies that were undertaken to eliminate the poor writing practices helped neither the teachers nor the students; the evidence lays in the way master students write, for instance, and their weak writing practices regarding the rich knowledge they have concerning the importance of the skill.

Chapter Three: The Research Methodology of the Study, Data Display, and Analysis.

Introduction

This chapter displays the selected research methodology for this study, the methods of data collection and analysis, as well as some theoretical concepts jotted to justify our choices. This chapter is thought to be the essence of this study since it provides an analysis of the data combined with the researcher's contribution to design an outlining system that is inspired from the Cornell note-taking format. This fieldwork chapter is separated into three sections. Mainly, the first section handles the theoretical background that is determined by several methodological components, such as the research paradigms, research approaches and designs, data gathering methods, and data analysis. Continuously, the second section involves the selected research methodology of the present work, the implemented research approaches and designs, as well as the methods of data collection along with their aims and structure. Finally, the last section concludes with the results drawn from the test and the focus group, in addition to the drawn out inferences from both data.

3.1 Research Methodology: Theoretical Background

3.1.1 Research Paradigms

The American philosopher Thomas Samuel Kuhn first coined the term paradigm in 1962. In social research, this terminology refers to the philosophical and theoretical beliefs or assumptions that are used to clear the path for researchers and determine their worldview. Paradigms also can be defined as practical tools created to solve certain research problems. In this regard, there are several research paradigms used to provide organisation to social work, such as constructivism, post-positivism, pragmatism, and participatory paradigms (Kaushik & Walsh, 2019, p. 1).

The present research study emphasises two philosophical assumptions that are built upon a mixed methods research namely pragmatism and constructivism research paradigms. According to Brierley (2017), the purpose of creating these research paradigms lays in the importance of using them as approaches to generate knowledge and to summaries the researchers' beliefs. Henceforth, based on Kuhn's concept scholars like Morgan (2007) worked on extending the term paradigm and consequently identify four major versions of it. These versions are, paradigms as worldviews, epistemological stances, shared beliefs, and paradigm as research model examples. Concurrently, the constructivist paradigm falls under the second category that is epistemological stances, whereas pragmatism is categorised under what Morgan called shared beliefs (Brierley, 2017, p. 7-16).

3.1.2 Pragmatism Paradigm

Pragmatism is a philosophical movement traced back in 1870. It is used in a mixed-methods approach. The founding fathers of this assumption included a group of philosophers, psychologists, and lawyers as well. The latter are Charles Peirce, William James, Chauncey Wright, Jurist Oliver Holmes, Nicholas St, and many others (Walsh & Kaushik, 2019, p. 2). The term pragmatism is originated from the Greek word *Pragma* that indicates action. It has been defined as a strong bond linking human's experiences and beliefs with their actions. It is believed that people under this concept can control their experiences without the intervention of any external forces. According to pragmatists, the reality always changes similarly to the world that is not static (Walsh & Kaushik, 2019).

One of the advantages of applying a mixed methods research is that the data is not gathered through a mono-method. It integrates both qualitative and quantitative methods in an attempt to provide sufficient knowledge and overcome some of the problems that are caused by the lack of one of the above-mentioned approaches (Brierley, 2017, p. 5; Baker, 2015, p. 321). Simultaneously, in mixed methods studies, the use of paradigms is essential for the reason that it helps the researchers to approach the research problem and provides solutions on how it should be addressed. Therefore, research paradigms are considered a guide for them to carry out their work (Baker, 2015).

Morgan (2007) emphasised that the latter concerns the determination of what something means in communication situations that are practically used as an alternative to social problems (Baker, 2015). Tashakkori (2009) insisted that the literature presented by a mixed-methods approach has introduced pragmatism as the most qualified paradigm for mixed methods research (Brierley, 2017, p. 15). However, adopting a research paradigm in mixed methods research created a few inconveniences because of the paradigm war that took place between the 1970s and 1980s. Still, the central problem in mixed methods research has always been discovering a rationale for the data that emerged through the combination of qualitative and quantitative methods (Hall, 2014, p. 2).

3.1.3 Constructivism (Interpretive Paradigm)

Unlike the pragmatism paradigm, constructivism approached educational research in the late 1970s. The reason why it is called constructivism is that it permits researchers to construct knowledge upon real-life experiences of peoples, cultures, and schools. Essentially, it allows teachers to engage in the process of enhancing their students' understanding by asking them questions that require interpretation (Taylor & Medina, 2013, p. 4-5). The core of the constructivist paradigm is its parallel relation with research, meaning it follows the research process and does not precede it. Most importantly, the data gathered are analysed using grounded theory.

Methodologically speaking, the essence of this paradigm is based on the researchers' interpretation of the data they collect through their thinking while interacting with the target participants. Moreover, constructivism is different from other paradigms by means of some critical points that characterise it including, the permanent interaction between the researcher and participants, the belief that findings create knowledge, and the importance of considering the contextual factors to fulfill understanding (Kivunja & Kuyini, 2017, pp. 33-34).

3.1.4 Research Approaches and Designs

A research approach, by definition, denotes the procedures and the steps of collecting, analysing, and interpreting data (Creswell, 2009). The nature of the research problem determines the appropriate approach selected for any research work. Initially, it is divided into three components namely a philosophical point of view, research design, and research methods as well. It is worthy to mention that when the appropriate research approach is selected, researchers should integrate the research methods and designs together (Grover, 2015). Accordingly, Grover (2015) listed criteria to the appropriate selection of a research approach, some of which include the need to have a fair knowledge of the research problem and the selected research questions, deciding the most applicable type of research to the problem, and finally the consequences of determining the rationale behind undertaking a particular research project. This will bring various alternatives in presenting related results to select an approach (Grover, 2015).

Consequently, there are three critical approaches that any researcher should be familiar with, quantitative approach, qualitative approach, and mixed methods approach. According to Marczyk, DeMatteo, and Festinger (2005), the former one displays "studies that make use of statistical analyses to obtain their findings. Key

features include formal and systematic measurement and the use of statistics" (p. 17). In this sense, quantitative research seeks to test and confirm the stated theories to explain the relationships between variables, as well as to generate reliable data that is generalised to different contexts (Peroni & Tucker, 2003). Put differently, a research that is quantitative in nature aims to test human behaviors by affording specific characteristics that allow the quantification of those human behaviours (Marczyk, DeMatteo, & Festinger, 2005). Usually, quantitative research is regularly dissimilar to that of a qualitative type where we can find the use of numbers, close-ended questions, and the philosophical assumptions built upon each approach, too. Furthermore, how data is collected and treated in quantitative studies make it different in terms of analyses and interpretation as well (Creswell, 2009, p. 31). Besides, the use of statistics as a branch of mathematics is widely used starting with hypothesis testing and moving to the application of either inferential or descriptive methods (Rajasekar, Philominathan, & Chinnathambi, 2013, p. 9).

Transitionally, Chelly (2016) addressed the qualitative social approach as "a process of inquiry with the goal of understanding a social human problem from multiple perspectives; conducted in a natural setting to build a complex and holistic picture of the phenomenon of interest" (p. 25). In order to understand individuals or to address a social issue, qualitative research has been broadly applied in social sciences for about a century. Fundamentally, the process concerns the assessment of human behaviours, attitudes, and opinions (Kothari, 2004, p. 5). Unlike Quantitative research approach, the assessment of the latter does not require results' quantification done through the use of statistical means of analysis; rather, it requires the selection of interviews, open-ended questions, observation and different other modes of data qualification (Marczyk, DeMatteo, & Festinger, 2005, p. 17). Henceforth, the vital

aims by which qualitative research is conducted lay in its importance of making sense of reality, as well as the description and explanation of social problems (Field & Morse, 2019).

Another research approach that arises through the combination of quantitative and qualitative researches is the mixed-methods approach. Subedi (2016) resolved that this approach was discovered in the late 20 years as a distinct orientation that is less known compared to that of qualitative and quantitative approaches. In fact, a significant number of researchers tend to adopt mixed-methods designs frequently regarding it as a better alternative to decrease mono-method bias. Significantly, the basic premise of the mixed-methods approach disposed to provide superior results in understanding a given research problem. This can be done by mixing qualitative and quantitative methods, strategies, and data that could be inadequate if either approach is used separately (Creswell & Plano, 2011).

According to Creswell and Plano (2011, as cited in Guest and Fleming, 2015), the reasons why a mixed-methods approach is advised to be selected refer to several advantages, such as "The strengths of one approach offset the weaknesses of the other; a combination of methods can provide more comprehensive and convincing evidence; mixed methods encourage the use of multiple worldviews/paradigms" (p. 582). In this sense, the combination of both quantitative and qualitative approaches proves to have positive influence on the depth of analysis, as well as the precision of a study's given findings. Therefore, the incorporation of two data sets involves the use of different research designs, too (Creswell, 2009, p. 4).

Once an approach is successfully determined, the selection of a related research design is the next vital step to approach a research problem. Research

designs appeared in the 1960s as a remarkable study field (Akhtar, 2016, p. 69). As reported by Akhtar (2016) a research design is a plan that holds an organised outline of data collection, measurement, and analysis (p. 68). Initially, the design is not necessarily bounded to specific types of data, on the contrary, it aims at recognising adequate kinds of pieces of evidence that are essential to offer answers to a study's related questions. In addition, Creswell (2014) pointed out a brief, however, direct definition to research designs claiming that they "are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research design (p. 41).

There exist numerous categories of designs in the literature. The choice by which a particular type of design is selected refers to the problem's nature and the outlined objectives. Thereby, it is quite vital to mention that each research design encompasses a sequence of research methods that are assigned to gather and analyse the generated data (Walliman, 2011, p. 9). Walliman (2011) classified research designs into variant groups, historical research design, descriptive, correlation, experimental, simulation, evaluation, action, ethnological, feminist, and cultural research designs. In addition to the previous categorisation, Creswell (2014) suggested other arrangements by which the alternative research designs are ordered under the three common approaches, qualitative, quantitative, and mixed-methods approaches.

The first type comprises experimental and non-experimental designs. Whereas the one follows contains a classification of narrative research, grounded theory, phenomenology, case studies, and ethnographies. Mixed methods designs, on the other hand, composed four major designs, namely convergent, explanatory sequential design, exploratory sequential design, and multiphase design (Creswell, 2014). On

this subject, other scholars like Teddlie and Tashakkori (2009) recommended five similar scholarly mixed-methods designs, parallel, sequential, conversion, multilevel, and fully integrated designs (Guest & Fleming, 2015, pp. 586-587).

3.1.5 Sampling Techniques

Taherdoost (2016) defined sampling as a process of reducing a certain number of cases from a chosen population. This organised procedure contains a set of stages that guide the researcher to select a relative sample. It involves defining a target population as an initial step, determining a sampling frame, choosing the appropriate sampling technique, deciding the sample size, collecting relevant data, and assessing response rate meaning knowing the number of participants who agreed to involve themselves in a given research study (Taherdoost, 2016, p. 19).

Generally, sampling techniques are divided into two categories, probability sampling and non-probability sampling (Taherdoost, 2016). Each of the latter comprises some methods that characterise, as well as differentiate between the two techniques. On the one hand, probability sampling uses simple random sampling, systematic sampling, stratified sampling, cluster sampling, and multistage sampling (Datta, 2018, p. 3). Under this concept, the cases are chosen randomly where each sample has an equal chance to be selected and, therefore, creating a sample that is representative of the whole population (Fleetwood, 2020). On the other hand, non-probability sampling types include quota, convenience, purposive, snowball, and self-selection sampling, which are chosen depending on the researcher's subjective judgment (Laerd dissertation, 2013, para. 1-7).

3.1.6 Data Collection Methods

Data collection is one of the core phases in conducting a scholarly research study, which comes after determining the research problem. It allows us to gather relevant information that is of use and interest to the study by implementing a set of appropriate data collection instruments. Besides, it enables the researcher to solve problematic issues and evaluate the research study outcomes aiming to reach credible answers to the research posed questions (Kabir, 2016, p. 202). According to Walliman (2011), two forms of data should be taken into account in the process of gathering information that is primary and secondary data. The former one is essentially related to closely recorded data that was not interpreted by other people, in other words, "the nearest one can get to the truth" (Walliman, 2011, p. 69). Controversy, the second form portrays sources that involve the interpretation of primary sources.

Essentially, data gathering methods are of two categories, the ones that fall under qualitative research methods and others under the umbrella of quantitative methods. Each category functions differently following the nature of data. To simplify, information related to human beings, for instance, ideas, emotions, and beliefs cannot be reduced to numbers; however, they can be observed and described into words. This quality is the central vein of qualitative data collection methods. In reverse, quantitative methods tend to analyse numerical data utilising statistical and mathematical procedures (Walliman, 2011, p. 72).

Among the various data-gathering instruments like tests, questionnaires, interviews, focus groups, and observations the researcher is primarily interested in tests, and focus groups due to the study's selected data collection tools. Therefore, tests are considered as effective instrument of collecting numerical data that is quantitative in nature (Cohen, Manion, & Morrison, 2007). Cohen (2007) asserts that tests are divided into two categories, parametric and nonparametric tests. The essence

of designing parametric tests is to assimilate a wider population; whereas nonparametric tests aim to represent small samples. Regarding the quantification of our sample's scores, a t-test was implemented as a statistical tool of data gathering to compare the means of a given group. More accurately, a dependent sample t-test type (repeated measures t-test) is selected by the study's related design. In this vein, dependent samples t-test indicates that "the scores between pre- and post-test are dependent on each other [...] When researchers compare two means that are dependent on each other, a dependent samples t-test is often used" (Schlomer, 2009, p. 2). A Focus group, on the other hand, is a method of data collection that intends to gather a group of participants and discuss a topic of interest. It should be held in a receptive environment where the respondents share their ideas, intercut, and influence each other (Devault, 2019). Usually, this method is widely implemented in qualitative approaches where the researcher attempts to collect an in-depth understanding of a certain area of interest. Therefore, it "is perceived to be a cost-effective and promising alternative in participatory research" (Nyumba, Wilson, Derrick, & Mukherjee, 2018, para. 2).

Precisely, a focus group contains four essential steps by which a discussion is held, guided, and organised. These are research design, data collection, data analysis, results, and reporting. In the first step, the questions and the aims of the study, as well as the number of the participants are to be prepared before the actual focus group meeting. Henceforth, the second step concerns the data gathering. The latter can be effectively achieved with the presence of a skilled facilitator whose role is to manage a relaxing environment that allows for a smooth data documentary. Speaking of data that is collected through the focus group session, it can be of two types either verbal or non-verbal. Relatively, the reduced verbal and non-verbal information should be

scheduled for analysis. Nyumba et al. (2018) argued, "According to Leech and Onwuegbuzie (2007, 2008), qualitative analysis techniques that can be used to analyse focus group data include grounded theory analysis, content analysis, and discourse analysis" (para. 14). After the analysis of data, the researcher will report the obtained results. Thus, the focus group results should be shared with the respondents to maintain the credibility of the reported data. It can be accomplished by a process named member checking, which grants the respondents the opportunity to check their accuracy with their experiences (Nyumba et al., 2018).

3.1.7 Data Analysis Procedures

Data analysis is seen as a fundamental step that any researcher should carry throughout the process of inquiry. Marshall and Rossman (1990) cleared that data analysis, by definition, "is the process of bringing order, structure, and meaning to the mass of collected data" (p. 111). Consequently, it is done by collecting relevant data from the field and reduce it through summarising as well as categorising to make sense of it (Loeb et al., 2017; Kawulich, 2004, p. 97). Hence, this process makes use of both logical and analytical reasoning aiming to eradicate meaning that will help the researcher obtain final decisions (Import, 2019).

In correspondence to the nature of our research study, mixed methods approaches require mixed analysis. This term involves the incorporation of quantitative and qualitative analytical procedures under a single framework. Henceforward, the analysis of the latter can occur either sequentially or concurrently (Combs & Onwuegbuzie, 2011). Here, we are centrally attached to a sequential mixed methods analysis in which the quantitative phase of data gathering and analysis precedes the qualitative phase. Arguably, this phase of research has always been considered challengeable for researchers to carry on behalf of various fields of study.

The difference between qualitative and quantitative researches does not cover data collection, research paradigms, and types of inquiry only; the statistical analysis of the data emerged from each approach separately or a mixing research presents different analytical procedures as well. Accordingly, quantitative data are to be statistically analysed by either descriptive statistics or inferential statistics. The first type of analysis is determined by the use of numerical data that is presented through graphs, or table forms (Mathur & Kaushik, 2014). Therefore, it is consistent with some subdivisions that are critical in the process of measuring data. These are measures of central tendency, the median, the mode, the average of the mean, and other measurement methods, too (Lani, 2010, p. 1). Inferential statistics, on the other hand, refer to the prediction gained from a sample and, later on, generalised to a wider population. Furthermore, it is also applied to compare samples attempting to discover the differences that might exist between them (Amin, 2019, p. 7).

Concurrently, qualitative data analysis embraces different factors and techniques that are incorporated together to make sense of the collected information. Therefore, it seeks to make the researchers familiar with the data they gathered, prompting them to search for any existing relationships that could link the data to each other, coding and themes identification, and finally displaying the gathered information and prepare it to be written down (Kawulich, 2004, p. 96; Chelli, 2016). In fact, this process is not restricted to the previously mentioned analytical procedures. Due to the revolution of computers in this century, advanced software assistant is available for researchers to analyse, manage, and categorise large amounts of data in a shorter time (Kawulich, 2004).

3.2 Research Methodology for this Study and Rationale

A mixed-methods research design is a process where both qualitative and quantitative data and methods are mixed, collected, and analysed under a single framework in an attempt to understand the research problem. The aim of the study emphasises the usefulness of integrating the Cornell system to help learners develop their written composition. The theoretical assumptions by which our research project is based on are built upon pragmatism assumption and shift to constructivism paradigm (Creswell, 2012). The nature of our study has determined the research methodology; therefore, the researcher opted for a Mixed-methods approach to address the overall content objectives of the present work.

The combination of qualitative and quantitative approaches will strengthen the research problem and provide a better understanding of the research questions and hypotheses. Besides, using one data resource may not be adequate; consequently, mixing two data resources will reinforce the primary method (Creswell, 2013). Another reason why the researcher supports this approach is the need to examine, explain, explore, assess, and finally test the successfulness of adopting the Cornell system first as a note-taking strategy and second as an outline template that is designed to draft essays to promote the written composition of the study's intended sample.

3.2.1 Population and Sampling Technique for this study

3.2.1.1 Population

Cohen et al (2007) noted that the targeted population is the overall collection of each element used by the researcher to reach conclusions. The current study targeted EFL students, master one, Section of English at Biskra University to be the population under study for three major reasons. Master one students are aware enough

of the importance the writing skill plays in their learning context since they are proposed to write research papers, research presentations, essays, as well as preparing themselves with the necessary awareness from the part of their academic instructors on how to write a dissertation. Relatively, according to our observation master students are experienced enough in taking notes more than other students of different levels. Besides, they seem to appreciate the significance of this research study, as well as how it might benefit their outcomes in their study courses.

3.2.1.2 Sampling Technique

A case study of 12 master students of English, branch of Applied Linguistics at Biskra University was chosen from three different groups based on the voluntary response sampling. Thus, the students are interested in the study and have chosen to include themselves in the sample. The selection of our participants was not easy for the researcher to handle because they do not seem to be committed enough to include themselves in the present study. As a result, we based our selection on the students' diversity from different groups since we could not collect the needed number from one group only out of three groups.

3.2.2 Research Approach and Designs for This Study

A Mixed-methods approach contains six different designs: Convergent parallel design, explanatory sequential design, exploratory sequential design, embedded design, transformative design, and multiphase design. They are divided into two categories, basic designs, and advanced designs. We will be selecting the type of design taking into account certain criteria. For instance, selecting the design that is significantly related to our research study, determining the researcher's skills, i.e., qualitatively strong or quantitatively strong, and finally considering the complexity of the design itself. Among the different types of a Mixed-methods approach, the

researcher is going to select the sequential explanatory design. The purpose of choosing this type in particular is to explain the quantitative research results that need exploration using a qualitative approach. This latter demands the collection of the numerical data first then shifting to qualitative data to strengthen it (Creswell, 2013).

3.2.2.1 Explanatory Sequential Design

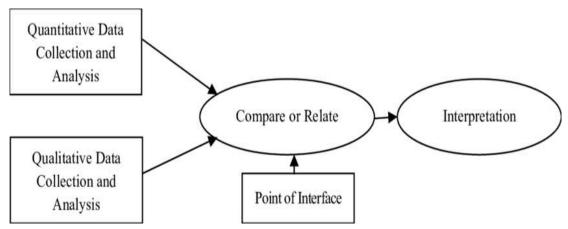


Figure 3.1. Creswell, J. W., & Plano, V. L. (2011). Designing and conducting mixed methods research (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

For the qualitative design strategy, a case study of 12 participants will be understudy. The researcher will collect the data using an online focus group prepared for the target respondents. The data obtained will be analysed employing a content-based approach. On the other hand, a quasi-experimental design will be conducted following the data collection procedures by setting a pre-test and a post-test on writing composition activities in two different sessions to one group of participants, which contains the total number of the sample attempting to collect their scores. The treatment they receive will be in sequence of five sessions in which the Cornell system will be presented, explained, and taught using the data show slides. Hence, the data obtained from both tests will be analysed using both inferential and descriptive statistics.

3.2.3 Data Collection Methods

As has been clarified in the above theoretical section, two data-gathering instruments are applied under this study namely a test, and a focus group.

3.2.3.1 The Test (Treatment Sessions)

3.2.3.1.1 Aim

The pre-test aimed to expose master students of English to composition writing activities and spot their weaknesses to collect information about their writing level. We tried to determine what they would need to improve in their composition through the correction of the pre-test and design the appropriate treatment lessons to overcome their weak writing composition skills. In addition, the training sessions seek to fulfill the following principal objectives:

- Improve learners' note-taking skill through introducing the Cornell system,
- Develop master students essay writing, paraphrasing, and summarising skills,
- Outline essay composition using the updated Cornell format.

3.2.3.1.2 Structure

The students' treatment was categorised into three crucial divisions in which a single group of participants had the same test form in the pre-post test phases. Consequently, the three divisions comprised a pre-test session, five training sessions where the researcher implemented the suggested Cornell note-taking system as a strategy to improve learners' writing composition, and lastly a post-test designed to identify any progress that could be detected from the part of the chosen sample. The structure of the test; therefore, involved three initial parts in which certain skills were targeted, paraphrasing skill activity, essay composition activity, and summarising

activity (see Appendix 1). Every single part of this test aimed to spot the shortages we identified in learners' writing; hence, we designed the mini-syllabus of the sessions based on the results obtained from the focus group that was made as a piloting stage and the pre-test. Furthermore, we devoted one hour and a half for each session and managed to use the data show slides presentation to deliver the lessons easily.

It is of great importance to note that the Head of the English Department and the Head of the English Section at Biskra University were both given an administrative consent form to sign so that we can obtain the green light to start the treatment sessions teaching (see Appendix 2). Besides, the participants were also handed an informed consent letter to read and sign to document their approval to be a part of the study (see Appendix 3). Thus, the participants' consent letter included a brief presentation of the study's title, the targeted sample, the aim behind conducting the treatment sessions, the time devoted for each session, the researcher's contact details for further clarification, and their emails to keep on touch with them. We assured that their personal information and privacy will be kept anonymous, adding that their consent could be withdrawn at any time. After receiving their consent, we tried to fix a schedule for them to start the training sessions. The debate ended up with their approval to have three sessions per week. This process, therefore, took two weeks; however, the post-test session was held after one week from the training lessons due to the learners' loaded schedule. The following table and paragraphs will cover a description of the treatment's full content and procedures.

Table 3.1

The Treatment Assigned Dates and Content

	Treatment Table Schedule					
The Number of Sessions The Sessions' Content			The Sessions' Date			
01 Pre-test session		An evaluative writing test	Tuesday, December 17, 2019			
		Lesson 01: an introduction to				
02	Tuaining Cassian 01	the Cornell method, structure,	Sunday, February 9,			
UZ	Training Session 01	and importance +	2020			
		A related pre-test feedback				
		Lesson 02: how to write an	Mandan Film 40			
03	Training Session 02	effective essay +	Monday, February 10,			
		Homework practice	2020			
		Lesson 03: paraphrasing and				
04	Training Session 03	summarising +	Wednesday, February			
U4		paraphrasing and	12, 2020			
		Summarising tasks				
	Training Session 04	Lesson 04: essay outline				
05		How to outline an essay using	Monday, February 17,			
05		the Cornell updated template+	2020			
		An exercise				
06	Training Cassian 05	Lesson 05: a writing task	Wednesday, February			
	Training Session05	composition	19, 2020			
07	Dogt togt Coggier	Draggag achievement test	Wednesday, February			
07	Post-test Session	Progress achievement test	26, 2020			

As table 3.1 reveals, in an attempt to reach the ultimate goals, we suggested introducing five treatment sessions. After instructing some relevant details that concerned the correct usage of the Cornell system in session number one, we asked the participants in session two to start taking notes using the Cornell method in the coming training sessions (see Appendix 4). In addition, the researcher checked out the

students' notes each time during the lessons to provide them with the necessary guidance and feedback. In addition, after giving directions on how to write an essay composition, we provided them with vivid examples on the data show slides to determine the different steps and components of writing an effective essay composition. An exercise took place at the end of lesson two presentation containing two parts. The first part was concerned with outlining an essay topic from their own choice in the classroom; while the second part involved writing the outlined ideas in a short essay format at home noting that they must provide the researcher with the essay in session three to be further scored (see Appendix 5). The exercise aimed to test their understanding of sessions one and two contents, as well as urging them to write an essay based on the newly acquired knowledge.

Essentially, the Cornell note-taking system emphasises the skills of paraphrasing and summarising to have, at the end of the class lecture, a final organised product of the whole lesson. Based on the latter the researcher designed session three. It included some theoretical background of both paraphrasing and summarising as it contained a few common abbreviations and symbols written in the Cornell format to show the participants and, most importantly, to remind them of how the template was used to prepare a part of their lesson (see Appendix 6). After giving them instructions on how and when to paraphrase and to summarise, an exercise took place right after (see Appendix 7). A time of 10 minutes was given to each activity, and chiefly, immediate feedback and correction were directly provided to each student. We noticed that the participants did not encounter difficulties in summarising paragraphs; however, paraphrasing remained a challenging task to do because they kept on repeating the author's original wording.

After correcting the self-choice essay given in session two, we remarked major differences in their way of writing. The composition structure had significantly changed to be organised and understood the way an essay should be written. Consequently, providing them with instructions, steps, tips, guidance, feedback, and motivation to write often seemed to be successful. The scores of exercises denote their understanding of the training sessions, critically, presenting the lessons via data show slides showing vivid examples on how to write an essay, how it is structured, its components, and where they are exactly placed helped them to have a complete image of how an essay is supposed to be drafted.

In the same vein, session four was designed based on the results of the essay. We asked the students if they had outlined their essays before writing them. The answer was 'yes we did not', two out of 12 participants tend to outline their essay composition; however, the outline was done randomly. The core content of session four was how to outline an essay by using the Cornell template. The researcher rebuilt the template to be Cornell's essay outlining format instead of the note-taking template. Immediately after teaching the procedures of composition outline using the Cornell updated system, the researcher proposed an activity to be done in the classroom, so that we would be able to test their understanding of the newly developed format. As preliminary feedback, the students enjoyed the method and said, "It is organised and clear, now we will not lose our ideas". Moreover, after finishing the exercise, we checked out their first outline draft one by one to ensure the correctness of following the right instructions, as well as to correct any inconveniences or mistakes. Simultaneously, in an attempt to guarantee the participants' understanding of the correct way of outlining an essay using the Cornell format, we explained briefly in session five the same procedures of session four briefly. Based on the essay outline

they designed, session five mainly covered writing an essay composition. Our initial goal was to create a stimulating examination atmosphere to examine the success of the rebuilt Cornell essay-planning template. Unfortunately, the time afforded came against our will since it was not sufficient to complete the essay writing activity.

3.2.3.1.3 The Redesigned Cornell Essay Outline Template

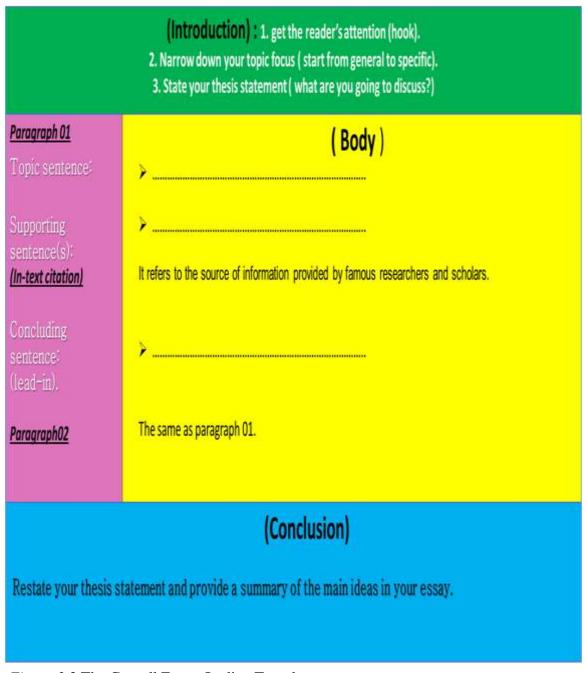


Figure 3.2. The Cornell Essay Outline Template.

Figure 3.2 implies that the essential foundation of the Cornell notes system remains the same. However, the content of the four sections has changed to construct the newly developed Cornell essay outline format. The writer, therefore, is required to outline the essay's introduction on top of the template's heading where the hook, the building sentences, and the thesis take place. Secondly, in the left margin words like in-text citation, paragraphs one and two with their related sub-components should be drafted to remind the writer of the organisation of each body paragraph, as well as to acknowledge the source of information for future reference. The aim of writing those phrases is to prevent learners from forgetting their essay structure and to write in a clear sequence of ideas. Furthermore, the body section requires writing the main topic sentence, supporting sentence (s), and a concluding sentence. Finally, the bottom part is the conclusion paragraph where learners restate their topic's thesis statement in different words and mention the critical points of the essay briefly.

Table 3.2

Composition Writing Rubric

Criteria of Evaluation	Scoring 20/20	For Maximum Points Essay Must		
Text	1.5	Introduction: Must have a clear thesis statement aligned to the body of the essay		
Organisation and Essay	3	Body of the essay: Must be well structured i.e., topic sentence, supporting sentence, and concluding sentence.		
Structure	1.5	Conclusion: Must include a clear summary of key points from the body of the essay and linked to the thesis statement.		
Content	0.5	Answers the question: Ideas must be well presented and consistently related to the essay question.		
	0.5	Critical thinking: Shows a high level of critical analysis, and includes different points of view where relevant.		
	1	Language: Must be formal and academic.		
Quality of Evidence 1 Ideas suppor		Ideas supported by examples.		
Formatting 1		Formatting as requested is required. Indentation.		
For	Maximum	Points Paraphrasing and Summarising Must		
G	3	Restates the author's ideas in the writer's own words.		
Structure of the	1	The order and structure do not remain the same.		
Paraphrased Version	1	Ideas are not transferred sentence by sentence. Size: more or the same		
Structure of	3	Should provide an overview of the main ideas in the extract as a whole.		
the Summarised Version	1	It should not be in the same size as the original text.		
v CI SIUII	1	Written with the learners' own words.		

3.2.3.1.5 Piloting and Validation

After drafting the pre-test document, we sought revision and correction from some of the teachers at the department of English. The test sheet, therefore, has been composed to considerable changes that included question structure, order, and phraseology. Two teachers suggested making a few modifications and reword some instructions to make it easier for the participants to grasp the questions. Furthermore, the pre-test would not be academically submitted to the study's sample without the valuable feedback and the recommendations provided by the researcher's academic supervisor. Hence, the latter suggested reducing the number of paragraphs in the paraphrasing activity and modifying the rubric designed to correct the test's answers.

3.2.3.2 Focus Group

3.2.3.2.1 Aim

The most compelling aim for designing an online focus group is to collect indepth qualitative data generated through a debate about a subject that demands different collective views. Thus, the focus group session aimed to explore the learners' opinions, reactions, and experiences concerning some critical areas of the study's related topic, as well as strengthening the findings of the remaining data collection methods to have valid conclusions. In this vein, the participants were given a focus group consent form to assure their approval and understanding of the required procedures (see Appendix 8). Nyumba et al. (2018) noted that "focus groups discussion can be used alongside other techniques within the context of mixed methods approach. Triangulating the results with two or more different methods, in a complimentary way can offer an opportunity to draw conclusions from such a focus group" (para. 8). Consequently, we proposed five central questions aiming to determine the learner's awareness about the significance of the essay outline stage.

We attempted to discover why learners relinquish essay outline be it a fundamental step in the pre-writing stage, decide the different techniques used by learners to draft their essay, and detect the effects of exposing the rebuilt Cornell outline system on students' way of writing.

3.2.3.2.2 Structure

Among the numerous types of focus groups, the researcher organised an online focus group session where we expected to host a discussion between the participants through the medium of an online platform. An online focus group is not different from the traditional one; it is introduced throughout the internet as an adaptation of the regular methods. The rationale behind selecting this type is the unexpected governmental circumstances that were resulted by the obligatory quarantine due to Covid19 (Corona virus). Yet, we can recapture few merits of the online focus group, such as long time virtual discussion instead of attending a real session of a limited time frame, the geographical distribution of the participants and the researcher, the flexibility of accessing the online session, and the advantages of using media. The latter allow us to record and upload the participants' responses and reactions (B2B International, 2019).

Concurrently, seven participants took part in two hours online session using the 'Google Meet' application. Unfortunately, non-verbal reactions were not considered because the session was auditory based shared data where the interaction through a video call was turned off with respect to the learners' desire. The researcher played the role of both a note taker and a moderator to guide and direct the students to answer the questions, as well as to avoid deviating from the main topic; thus, the information given by these students was recorded in the form of notes and quotations.

Essentially, five major questions were orally presented to the students to be discussed and answered; these questions are stated as follow:

- Why an essay outline is important in the prewriting stage?
- What are the factors that lead you to underestimate the stage of outlining?
- How did you use to outline your essay composition?
- Is the essay outline limited to your academic writing course only?
- Do you think that drafting essays using the redesigned Cornell system can contribute to the organisation and the flow of your ideas? If yes, justify your answer.

3.2.3.2.3 Piloting and Validation

Before administering the prepared focus group questions to the intended sample, the researcher ensured to send a copy of the focus group script to the academic supervisor to avoid any future inconveniences. As a moderator of this focus group, the clarity of the questions was one of our major priorities which were determined to the respondents before starting the meeting to assure their engagement, as well as to grant learners' the comfort they need through creating a supportive environment. Besides, we tried to avoid the biases that may influence the group discussion by eliminating the factors of dominance effects, meaning allowing the individuals to speak and share their ideas instead of a dominant participant who controls the whole discussion.

Conclusion

Describing, examining, and analysing the data obtained from quantitative and qualitative collection instruments under an explanatory sequential design was represented in this fieldwork chapter. The results revealed the successfulness of using the Cornell system as an outline technique to improve EFL learners' writing

composition, since the recreated template has proven its efficiency and contribution in enhancing several aspects of the student writing comprehension and organisation. In order to analyse the research data, inferential statistics, descriptive statistics, and content analysis were adopted. Content analysis was used to analyse the focus group transcription, and both inferential and descriptive statistics were implemented to analyse the pre-test and post-test scores.

Chapter Four: Results of the Study and Data Interpretation

Introduction

The aim of this study seeks to explore the role of the Cornell note taking system in developing learners' writing composition. Hence, this chapter describes, interprets, and summarises the findings that are based on a test and an online focus group data collected from 12 participants reduced from both quantitative and qualitative types. Following an explanatory sequential design, quantitative data will be reported first followed by qualitative results. Furthermore, along the process both quantitative and qualitative findings will be discussed to draw a final mixed methods conclusion.

4.1 Results of the study

4.1.1 The pre-post tests results

Table 4.1

Scores Obtained From the Pre-test and the Post-test

Number of students	Pre-test scores	Post-test scores
1	14	17.5
2	7.5	17.5
3	5.5	9
4	13	17.5
5	14	18.5
6	12	14.5
7	7.5	14
8	13.5	14
9	19	18.5
10	15.5	18
11	16	14
12	14	10
Sum ∑=	151.5	183

Table 4.1 displays the scores of the pre-test and post-test of 12 participants before and after the treatment and their sum. The minimum mark within the pretest column is 5.5, which resembles the same student in the post-test column. This student mark has significantly increased by 3.5 degrees after the treatment sessions. The maximum mark, on the other hand, is 19 in the pretest and 18.5 in the posttest from two different students. Another sign that indicates the improvement of the students writing composition after receiving the treatment is the overall sum of the two data sets where 183 scores were achieved after the training sessions in comparison to 152.5 before the training lessons. As required by descriptive statistics, the data needs to be described in forms of histograms, pie apple, polygons, and other related shapes. The following histograms visually present images of the pre-post tests scores and their difference to indicate the change occurred to the students' scores after receiving the treatment sessions.

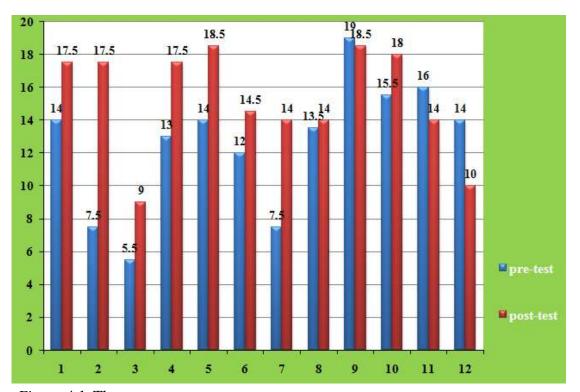


Figure 4.1. The pre-post test scores

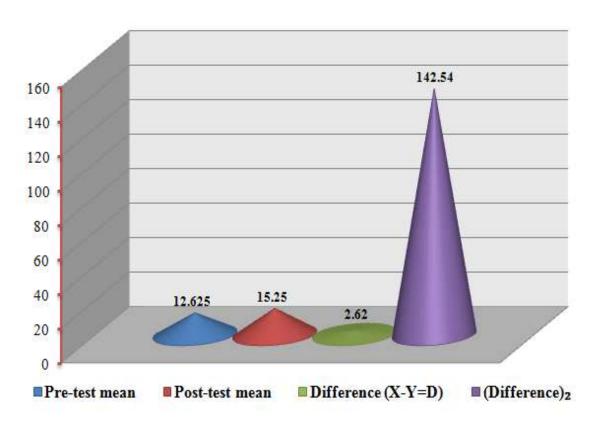


Figure 4.2. The pre-post tests means, the difference between the means, and the difference squared.

Table 4.2

The Pre-test and the Post-test Means, Modes, Medians, Standard

Deviation (SD), and the Means Difference.

The Sample Size	Test	Mean	Mode	Median	SD	Difference (X-Y)
	The pretest	x =12.625	14	13.75		
n= 12	The post- test	x̄= 15.25	17.5	16	3.78	2.62

4.1.2 The Dependent Samples t-test

In order to test the research hypotheses, the researcher chose a dependent samples t-test and, more specifically, a repeated measures test where the same

participants are tested over two different times of measure (before and after treatment). Therefore, by applying this test and compare its results we will be able to decide whether to reject or accept one of the following hypotheses:

- The null hypothesis claims that there will be no difference between the means of the scores before and after the treatment ($\mathbf{H_0} = \bar{\mathbf{x}} \leq 0$). (The treatment will have no effect on learners' writing composition).
- The alternative hypothesis highlights that there will be a difference between the means of the scores before and after the treatment ($\mathbf{H_a} = \bar{\mathbf{x}} > 0$). (Introducing the Cornell system can improve students' writing composition).

4.1.3 Hypothesis testing

In hypothesis testing, the choice between applying a one-tailed or a two-tailed hypothesis should be determined to perform the needed statistical analysis. On the one hand, a two-tailed hypothesis allows the researcher to test the effects in two directions where the significance level is split over two distribution tails. On the other hand, a one-tailed hypothesis seeks to test the effects specifying one direction only. Consequently, the significance level goes directly to the end of one distribution tail (Frost, 2020). It is of great importance to note down the difference between the null and the alternative hypotheses in both types. The table below portrays the major difference between the null and the alternative hypotheses in a given one-tailed or two-tailed hypotheses testing.

Table 4.3

The Difference between the Null and the Alternative Hypotheses

Two-tailed hypothesis	Null hypothesis (H ₀)	Alternative hypothesis (H _a)		
i wo-taneu nypotnesis	The effect equals zero	The effect does not equal		
	The effect equals zero	zero		
	Null hypothesis (H _o)	Alternative hypothesis (H _a)		
One-tailed hypothesis	Option 1: The effect is less than or equal to zero Option 2: The effect is greater/equal to zero	Option1: The effect is greater than zero Option2: The effect is less than zero		

4.1.4 Selecting a Hypothesis Test Type

Since the choice of the type of hypotheses significantly depends on the kind of the test researchers perform, we selected the dependent samples t-test to compare the means of two data sets after treatment under the same group of participants. Besides, the type of test also depends on the sample's size. Thus, if the sample exceeds 30 a (Z test) is required; however, if it is less than 30 a (t-test) is implemented. Furthermore, another indication to use a t-test is when the standard deviation of the population is unknown, which is the case in our study (The Organic Chemistry Tutor, 2015). The rationale behind using a one-tailed test hypothesis is that this type is statistically powerful in detecting the effect under a single direction rather than the two-tailed test (Frost, 2020). Therefore, the decision to accept or reject the null hypothesis is vitally related to the comparison between the t-test value and the critical value, or the probability of having a P-value that is less than the significance level $(P < \alpha)$. A onetailed hypothesis testing is divided into two categories, the right tail and the left tail hypotheses. We selected a right tail hypothesis following the statement made by the study's alternative hypothesis which states that the mean of the sample is greater than zero ($H_a = \bar{x} > 0$). The latter indicates that implementing the Cornell system can improve learners' writing composition skills. In an attempt to test the alternative hypothesis (H_a) , the researcher selected a t-test statistics to compare the t value (t) with the critical value (C) to see if the results of the test are significant or not. The equation used to calculate the t-test is:

$$t = \frac{(\sum D)/N}{\sqrt{\frac{\sum D^2 - (\frac{(\sum D)^2}{N})}{(N-1)(N)}}}$$

Table 4.4

Steps of Hypothesis Testing and Its Application

Step 1	Step 2	Step 3	Step 4	Step 5
State the null and alternative hypotheses	Choose a level of significance	Find the critical value	Find the test statistic (t value)	Draw your conclusions
$H_{o}=\bar{x}\leq 0$ $H_{a}=\bar{x}>0$	α=.05	1.796	2.40	

4.1.5 The Hypotheses Test Conclusion

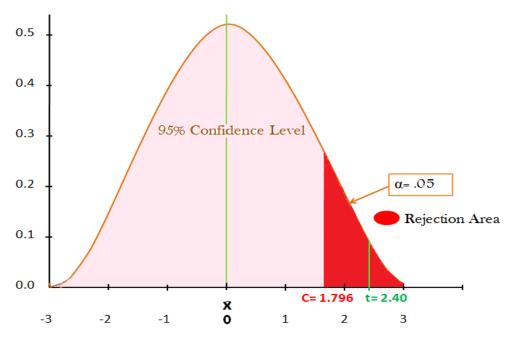


Figure 4.3. A Curve Bell Illustrates the Difference between the t Value (t) and the Critical Value (C).

Figure 4.3 shows that with a 95% confidence level, we cannot accept the null hypothesis that the mean of the sample is less than or equal to zero because there is enough evidence to discard the H_0 . It is drawn from the results that the t value falls in the rejection area with a statistical value that is greater than the critical value, as such we reject the null hypothesis in favour of the alternative one (t > C = 2.40>1.796). A shred of second evidence to accept the alternative hypothesis is the probability value (P-value) that is used to test the null hypothesis. In order to determine if the test result is statistically significant or not, we calculated the assigned P-value. The actual P-value in our test is (P= .01) and the results of our test indicate that (P< α) which means that the results are statistically significant at (P<.05). Correspondingly, the alternative hypothesis H_a is supported by the suggested pieces of evidence provided by the analysis of the t-test. Therefore, the observed positive effects on the participants' scores of the pre-post tests are due to the implemented treatment that took place after the submission of the pre-test.

Table 4.5

A Summary of the Results

Mean of the pre- test	Mean of the post-test	The Difference mean	Degrees of Freedom (n-1)	P- value	t value	Critical value	Significance level (α)
x =12.625	x= 15.25	2.62	11	.01	2.40	1.796	.05

4.2 The Focus Group Results

4.2.1 Deciding the Unite of Analysis

In an attempt to extract themes or topics from the learners' answers, we decided to use a word document and select the topics in the comment section where the coded themes are bracketed in meaningful segments. This step is known as the unite of analysis; it is the initial step of the coding stage after the familiarisation step that is done by re-reading the data. Moreover, the researcher analysed the participants' transcription in partial lines and noted down the topics that had been discussed in the margin. This process is described in the figure below:

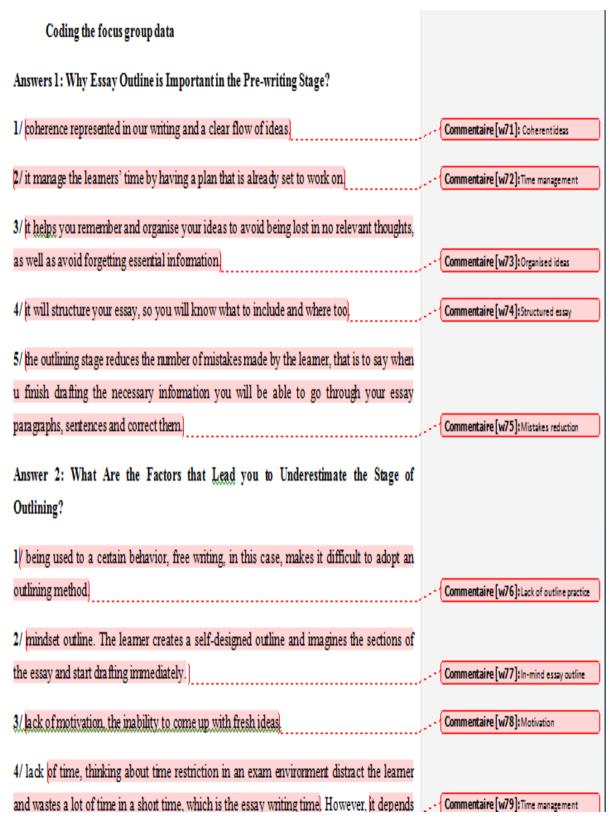


Figure 4.4. Coding the participants' transcription into themes.

Table 4.6

Colour Coding

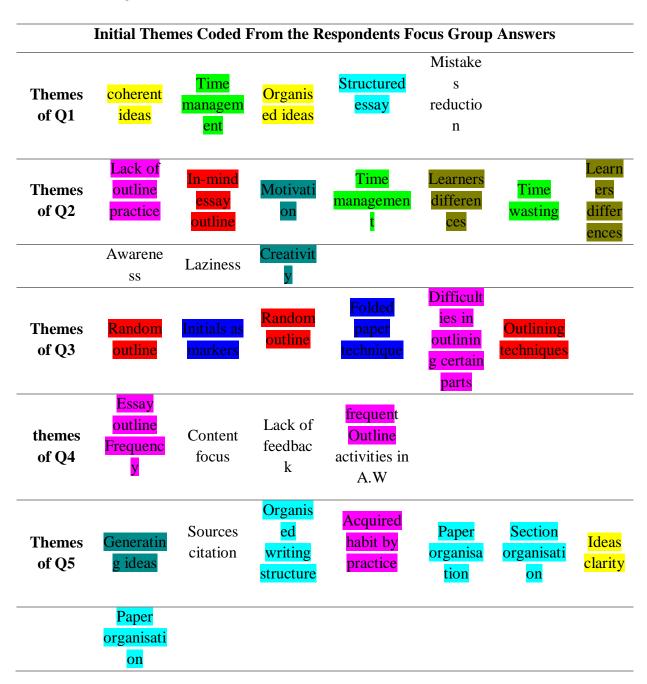


Table 4.6 represents the generated themes placed in horizontal order reduced from the five questions of the focus group. We tend to use different colours to highlight the related themes and mark them as different in comparison to other themes. This coding process is significantly important to prepare for the stage of selecting primary and sub-themes.

Table 4.7

Thematic Coding

Primary Themes	Sub-themes	Irrelevant Themes	
Organised ideas Structured essay	Coherent ideas Time management Mistakes reduction	Time wasting	
Lack of outline practice Awareness	In-mind essay outline Motivation Learners differences Laziness Time management Creativity	Acquired habit by practice	
Outlining techniques	Initials as markers Folded paper technique Random outline Difficulties in outlining certain parts		
Essay outline Frequency	Content focus Lack of feedback frequent Outline activities in A.W module		
Organised writing structure	Ideas clarity Generating ideas Sources citation Section organisation Paper organisation		

After grouping the coded data into three clusters namely primary themes, subthemes, and irrelevant themes, an in-depth description of the data is to be done before the final interpretation. The first raw in the thematic coding holds the primary topics that fit into the focus group questions; thus, they are wider in concept. The second raw contains the sub-themes that fall under the primary ones. They are seen to be more detailed topics generated from the colour coding stage. The final raw involves the leftover topics that did not fit into the primary and the sub-themes. Besides, they are topics that failed to answer the focus group questions.

4.2.2 Primary and Sub-themes and their Supporting Quotations from the

Respondents

Theme 1: Organised ideas and structured essay (7 out of 7 participants).

• Coherent ideas:

"I believe outline our essays make our writing coherent, also the flow of ideas is easier when I outline".

"Writing all ideas in the paper so I can find my thoughts and if I don't outline I will forget them".

"Outlining the essay will make the process more clear".

"Outlining structure the essay, ideas will be there to write the necessary paragraphs".

• Time management:

"It manages your time".

• Mistakes reduction:

"Reduce your mistakes. If you have the ideas written in the outline it will help you to revise again and again before writing the final essay".

Theme 2: Lack of outline practice and missing the necessary awareness.

• In-mind essay outline (2 out of 7 participants):

"The habit of outlining in my head".

• Motivation and creativity (5out of 7):

"I am not motivated to write because I can't come up with ideas".

"I can't outline because I can't find ideas. I prefer free writing more".

"Even though I know that outlining is important but I didn't outline accept recently".

• Laziness (1 out of 7):

"I am a lazy person".

• Time management:

"We have long essays in exams within short period of time".

"Thinking about time distract me".

• Learners' differences:

"Outlining depends on ones learning style. There is writers who plan everything and others don't plan".

Theme 3: Outline techniques.

• Initials as markers (1 out of 7):

"I start with brief sentences and I mark my sheet with letters like T.S for topic sentence".

• The folded paper technique (1 out of 7):

"I fold the paper into four and write each specific information in one of the folded parts".

Random outline:

"I didn't used to outline, I write random words and sentences".

"I start writing directly, no outline".

• Difficulties in outlining certain parts:

"I suffer with writing the introduction, it takes time".

Theme 4: Essays outline frequency.

• Frequent outline activities in A.W module:

"No, it happens in other modules too".

"Essay outline is not limited to academic writing but it is focused in this module"

"In A.W module, the teacher concentrate on the structure of the essay and then the content; however, the focus is more on grammar".

• Lack of feedback:

"We don't receive enough feedback about our mistakes so we keep repeating them".

Content focus:

"Other teachers should focus more on information, not grammar only. But A.W teacher said focus more on grammar because that what I am teaching you".

Theme 5: Organised writing structure.

- Ideas clarity.
- Generating ideas:

"Using the Cornell method help to generate ideas".

Source citation:

"It help you draft other sources to learn how to write research papers in the future".

"I can remember the source of the information if I want to add something new".

• Section organisation:

"It organise the parts of your writing each alone".

"It encourage you to write in columns to remember the information".

"Cornell system help you to make balance between the organisation and the content. In tests, for example, we focus more on generating ideas in a messy manner. When we follow this method it help us also on the organisation of the paper".

"Provide space for each part of the essay".

• Paper organisation:

"It help in organising the paper more than the ideas because it is direct and quick and help to gain time".

"The division of Cornell system make it easy to place different information in different parts and the paper at the end will look ordered".

4.2.3 The Focus Group Transcription Interpretation

Within a collective discussion session, the researcher interviewed seven participants to gather qualitative data that is of use to the study's main questions. According to the experience and the knowledge they acquired during the treatment sessions, we collected some insights that will help us explain and support the quantitative data. Following the same order of themes that have been reduced through coding, the first theme matches the students' agreement; claiming that before drafting the essay an outline has to be planned because it contributes to the organisation of ideas, as well as structuring the essay composition. Additionally, having a plan that is already set to work will save their time instead of chaotically jot down the ideas.

In the second theme, we sought to discover the reasons that urge the respondents to discard the outlining stage. Two ideas were dominantly discussed by most of the participants. The fact that they are used to free write can possibly be due to the long exposure to this method, which made it uneasy for them to adopt a specific outline system. The second idea is outlining essays in mind, where the student imagines the essay's sections and start drafting directly. Even though some of the participants asserted their attempts to mind draft essay outline, we found several missing parts that are essential to collect the ideas and create the necessary logical bond between paragraphs. Furthermore, the inability to generate fresh ideas demotivated the learners from outlining their essays. In addition, time restriction in the examination is another contributing factor. The need to practice essay outline as a preliminary step to prepare for examinations or tests was continuously discussed since the latter is done within a limited period. Consequently, thinking about time

restriction distracts them; however, this case is not generalised to all students because it depends on the way they process the information, their personality, as well as learning style. Similarly, they lack awareness concerning the importance of the outline stage in shaping one's essay composition.

In the third theme, we tried to spot the different outline techniques the participants use to plan their essays. We concluded that some of them use different methods where others randomly outline to document their thoughts. The frequency of outlining randomly was higher than having a stable outline technique. This supports the student's inability to write a coherent essay. Nevertheless, one respondent claimed that she uses a folded paper technique where she folds her draft sheet into four parts; each part involves a piece of certain information like the introduction section, conclusion, etc. Another one asserts using initials, such as (T.S, S.S, and C.S) to mark the different body paragraphs. Arguably, the major problem the students faced was finding the "right vocabulary" that suits the context of the essay and the appropriate word equivalent. Mainly, the sentence structure was quite challenging. In addition, most of them mentioned the difficulties they encounter when drafting the essay introduction saying that it requires more thinking and time, as well.

Continuously, theme four handled the frequency of drafting essays in the course of academic writing (AW). It appeared that the outlining process is more focused in this module because they are, most of the time, exposed to essay writing tasks. Concurrently, we should not ignore that essay outline is applied in other different courses that may include essay writing assignments. It is worthy to mention the teacher's intention in writing an essay composition because according to some participants, their teachers focus on grammar and spelling mistakes rather than the content organisation; in this case, essay outline is given less importance even though

it is a vital step in writing composition. Consequently, we noticed that they lack both awareness and feedback concerning the outline stage, which negatively affected their written production. Progressively, the researcher was curious to know if the redesigned Cornell outline system could help to construct an organised essay. The reaction of the students was positive saying that following the new essay outline system helped them to produce more organised writing in terms of ideas generation, paper organisation, and clear section order. Besides, learning how to site information is highly required to avoid plagiarism; therefore, having a section that allows them to document the sources of their information could help them cite and note down some supportive ideas that they might need to strengthen their writing. Furthermore, this method's format reduces unwanted or additional space that could disturb the learner when writing his/her ideas everywhere in the paper.

4.2.4 Drawing Inferences

Throughout the process of collecting the qualitative data, the researcher attempted to present the ways by which it can help to explain the quantitative results. Following the appropriate statistical procedures, the t-test resulted into rejecting the null hypothesis and automatically accepting the alternative one. According to the results drawn from the focus group, the use of the Cornell system influences different aspects that are related to the learners' writing. By coding the qualitative data, the focus group results went through several steps of thematic analysis in an attempt to extract topics that could help to interpret the overall results. Unsurprisingly, the final qualitative results can explain the positive effects of introducing the Cornell system to EFL learners' writing composition because the drawn results of the focus group support the findings of the t-test.

Conclusion

This chapter described, presented, and interpreted the findings drawn from two data gathering instruments. It included accurate statistical analysis used to analyse the t-test results and thematic analysis plus coding the qualitative data to reach valid interpretations. Essentially, the stated findings proved the correctness of the alternative hypothesis that claimed that adopting the Cornell system as a method could improve EFL learners' composition writing.

General Conclusion

EFL learners writing composition difficulties encountered by master one students of English instigated the researcher to carry out this research study mainly aiming at improving their written performance by introducing the Cornell system. Even though we had not enough time to observe our treatment results for a longer time, we deduced relevant data that show the significance of adopting a note-taking system, as well as an outline model based on the Cornell template. The researcher was motivated to work on this topic because it presents a new concept that involves recreating a note-taking template into an essay outline model and test it on the study's selected sample to examine its helpfulness. Moreover, during the piloting stage of this study, we observed from the preliminary focus group that involved 10 students the obstacles they tend to face in taking notes. Most of them followed no specific note-taking method to rely on in the process of recording their lectures; therefore, the researcher sought that it would be an excellent opportunity to seize and, consequently, conduct a research based on the shreds of the collected data.

In an attempt to direct our research on the right process, we posed three main questions:

- Why master students of English tend to underestimate the importance of outlining their essay composition be it a significant part of essay writing?
- How can the use of the Cornell note-taking system improve master students of English writing composition?
- Does the application of the Cornell method contribute in promoting master students' summarising, paraphrasing, and essay outlining skills?

Fundamentally, these questions are followed by three related research hypotheses, which are:

- EFL learners did not practice the skill of outlining before submitting the final essay draft, this might be the reason why their essays lack organisation.
- Introducing the Cornell system by teaching EFL master students how to write essays following this method can improve their written composition.
- It is assumed that the Cornell notes system is characterised by an organised format, as well as paraphrasing the received information and summarising the notes at the end of the page; therefore, their paraphrasing, summarising, and essay outline can be developed.

The aligned objectives on behalf of this research work are to spot the influence of adapting the Cornell note-taking method on EFL learners' written production and to identify problems generated from the lack of outlining their essay composition. Furthermore, to provide them with positive attitudes and effective note-taking practices in an attempt to raise their awareness on the importance of the Cornell note-taking system. Methodologically, the present research project is carried out under a Mixed-methods approach. Critically, it is conducted through a sequential explanatory design where two phases of data collection, analysis, and interpretation are involved to reach valid and credible results. A test, along with an online focus group were the

two major data gathering tools used to collect the needed information from 12 participants. In line with the chosen design, the data was analysed starting by quantitative data first then significantly shifting to a qualitative one.

Practically, the findings of this study denote the remarkable effects of acclimatizing a note-taking technique, which results into having an organised written product at the end of the class lecture and upgrading the skills of paraphrasing and summarising. Besides, taking advantage of the Cornell structure by redesigning it to outline academic essays has proven its success in EFL learners' composition and essay organisation. The results, therefore, support the hypothesis that states the efficiency of using the Cornell system. Furthermore, the findings prove the correctness of the claim made by the first hypothesis, which says that one of the reasons behind the students' lack of essay organisation is luckily due to the deficiency to outline essays. Accordingly, the null hypothesis is rejected and automatically the alternative one is accepted based on the pieces of evidence drawn from the t-test. This work contributes to the representation of a newly created outlining system used as a method to develop the students' essay writing composition. Its initial goal is to guarantee the organisation of the drafted essay and consequently generate the ideas clearly and systematically by knowing where and what to add or to remove certain information in the outlining stage. Furthermore, the learners will be able to acquire the necessary awareness regarding the structure of the essay and try not to write their ideas chaotically. As a result, this would grant them the opportunity to develop the writing skill and avoid the basic mistakes that could cost those scores.

Limitations and Future Research

 One of the major limitations that profoundly affected our study is the unexpected social constraints of the Corona virus. The researcher was lucky enough to start collecting quantitative data in an early stage; however, our planned goals were dropped because of the obligatory quarantine since we intended to have more than five treatment sessions. The reason is that we needed to closely examine the efficiency of adopting the Cornell system from multiple perspectives and expand the scope of the training sessions.

- Similarly, the inability to conduct the focus group in its fieldwork context created some inconveniences that went against the plans of the researcher. As was clarified in chapter three, the researcher opted for an online focus group. The latter canceled the option of collecting nonverbal communication aligned with the participants' desire, as it limited the chances of having more members to include within the group due to some technical issues, such as the unavailability of internet services.
- During the phase of collecting quantitative data, the sample had a loaded schedule in addition to the cycle's tests. Consequently, the timing of the treatment sessions was not appropriate for the students. Therefore, it is advised for future researchers to manage the timing in the morning because the learners will actively interact with the researcher and produce more data to serve the research requirements.
- Since this research study is built upon a sequential explanatory design, the steps of data collection require extra time in comparison to other designs because it contains two crucial phases that need to be separately investigated. Hence, the researcher was not granted enough time in the real fieldwork where detailed quantitative data should be collected. Unfortunately, this issue posed some serious constraints in the process of interpreting the data.

It is vital to state that this piece of work is opened for future investigation. The researcher may clarify certain points arose from this study where further ideas and problems can be investigated. Relatively, using the Cornell system to enhance the skill of note taking and applying all the necessary steps of this system aligned with the AVID rubric would create new perspectives to this research project, because the Cornell method was significantly directed to composition writing more than the note taking skill. Additionally, the relationship between revision and memorising under the Cornell concept could be quite helpful for learners to revise their tests, or examinations. The latter can target the progression in recording notes plus the cognitive mechanisms of the students.

Implications and Pedagogical Recommendations

In this section, we aim to address the importance of the present study and the difference it makes, along with the critical suggestions of some specific actions that should be taken in certain situations. This work resulted into producing an effective method that is used to help EFL learners in the process of setting out an outline to draft essays. Henceforth, following the advised steps will grant them the opportunity to improve the organisation of both their ideas, as well as the structure of the drafted paper. Besides, embracing the Cornell system as a note taking technique aids the students' paraphrasing and summarising skills because these two are considered essential parts of the Cornell system.

Learners tend to seek feedback on their writing production, but the fact that it is difficult for teachers to provide them with the necessary feedback due to the large number of students per one classroom weakened their writing. Thus, the researcher sought that giving the students homework after the lesson and score it to motivate them to increase their marks can be beneficial if the feedback is granted a separate

session. This would give them the chance to recognise their mistakes and demand the appropriate correction. Furthermore, teachers should motivate and encourage their learners to summarise and paraphrase the lecture using the Cornell method to aid the retention of the information, as well as the overall understanding of the lecture. In addition, providing more opportunities for students to review their notes in the class would develop their reviewing skills.

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Appendices

Appendix 1: The Pre-Post Test Sample

Writing Composition Pre-test

Student's Name:	Group:		
Practice Time: 1hour &30 mn.	Test date:		
Level: Master One	Score:	/20	

Part 01: Paraphrasing Skill

Activity One:

Paraphrase the following paragraphs:

- 1. "No historian should begin research with someone else's notes. Taking notes is the first (and perhaps most important step) in developing our own interpretation of a subject. It forces us to decide (again and again) what is interesting and important" (Reuben, 2005, p. 413).
- 2. Text messaging can commonly be seen to have some kind of deviated and irregular shortening and abbreviated words, phrases, and even sentences. It exhibits a short language of communication in texting in everyday life, such as short message service (SMS) and instant messages.

Part 02: Essay Composition

Activity One:

Write an <u>essay</u> on one of the following <u>topics</u> in which you <u>provide reasons and</u> <u>illustrate with examples to strengthen your arguments.</u>

➤ <u>Topic 1:</u> why note taking is considered to be a significant skill for university students?

➤ <u>Topic 2:</u> What are the impacts of social media texting (language) on EFL learners' academic writing?

Part 03: Summarising Skill

Activity One:

Summarise your essay (The one you have developed in part number 02).

Rules of essay writing:

- 1. Analyse the instruction carefully to make sure you answer what is asked.
- 2. Use academic English; do not use slang or 'txt' language.
- 3. Brainstorm the essay topic. i.e., outlining your ideas to have a clear mind map on 'How' you are going to organise the structure of the essay.
- 4. Organise your writing. i.e., you need to write in paragraphs: Start with an introduction, two body paragraphs, each paragraph should contain one topic sentence and two or three supporting sentences, and finally finish with a conclusion.

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Appendix 2: Head of the Section Administrative Consent Letter

Consent Letter for the Head of the Section of English

Dear Head of the English Section,

I am presently conducting a research into investigating the effectiveness of using the

Cornell note taking system to improve learners' writing composition. At this phase of

research, I will be carrying out a treatment on master one students of English

language willing to examine the effectiveness of exposing the Cornell method to

develop their writing composition skills.

Hence, I am seeking your consent to teach a group of master students of English over

a period of two weeks. Within this time frame, three sessions per week will be

organised. A pre-test, training sessions, and a post test that will be held respectively to

investigate the utility of the proposed method in improving students' writing.

Confidentiality, anonymity, and privacy of students' personal information and data

gathered throughout the process of conducting this research work will be guaranteed.

If you consent to the participation of the previously mentioned EFL students in this

study, please sign the attached consent form. Your permission and cooperation will be

highly appreciated.

Yours sincerely.

For further questions, you are welcome to contact the researcher.

Researcher Contact Details:

Bouthaina **BOUGUESBA**

Email: bbouguesba@gmail.com

Mohamed Kheider University of Biskra

Faculty of Letters and Foreign Languages

Section of English

I have read and clearly understood the researcher's request, I consent to the
participation of master one students at the section of English in the research project being
undertaken by Bouthaina BOUGUESBA.
Name: Tayer Bouliten
Name: Tayel Pouliten
University MA Chide of Biska
115 150: 100
Faculty: Letters & Foreign Yes
Department: Foreign less Section: English
Section: Chlud
Date: 26/02/2020
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Signature:
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Appendix 3: The Participants Informed Consent

Participant Informed Consent letter

Dear Muster One Students,

The present consent letter is designed for Master one students of English at Biskru University in order to ensure your approval to be a part of our research study, entitled, 'An Investigation into the Effectiveness of the Cornell Note Taking System in Improving Learners' Writing Composition'. At this phase of research, we will be carrying out a treatment on the participants to examine the effectiveness of teaching the Cornell system to help you improve your writing composition skills.

For that reason, you are kindly invited to take part in this research study. Within a period of two weeks, three sessions per week will be organised. A pre-test, treatment sessions, and a post-test will be regularly devised. In addition, a focus group will be held after the post-test takes place in an attempt to explore your opinions and reactions toward the implementation of the Cornell notes system.

Confidentiality, privacy, and anonymity of your personal information and the gathered data throughout the process of conducting this research work will be guaranteed. Your participation in this research study is voluntary, and your consent can be withdrawn at any time.

If you approve to participate in this research project, please sign the attached consent form. Your cooperation will be highly appreciated.

For further questions regarding this research study, you are welcome to contact the researcher.

Yours sincerely.

Researcher Contact Information:

BOUGUESBA Bouthaina

Email address: <u>bbouguesba@gmail.com</u>
Mohamed Kheider University of Biskra
Faculty of Letters and Foreign Languages
Section of English.

I have read and clearly understood the researcher's request. I consent to volunteer as a participant in the research study undertaken by BOUGUESBA Bouthaina.

F	Participant's full name	group	E-mail address	Signature
1	DRIDI JUTIRANT	02	OsiOi ObTitadi @gmail - com	Helipt
2	RIHADI BARIZA	02		超.
3	Khaldi youska	02	177 0	-
4	SAADA Haizia	02	hair a suada (Domail-Lom	TO C
5	Meltah Saleria	03	Sabriabac @ gmail. Com	The same
6	Bari Hamane	3	honome bori 5640 gravil som	BY
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University: Mohamed Kheider-Biskra.

Faculty: Faculty of Letters and Foreign Languages.

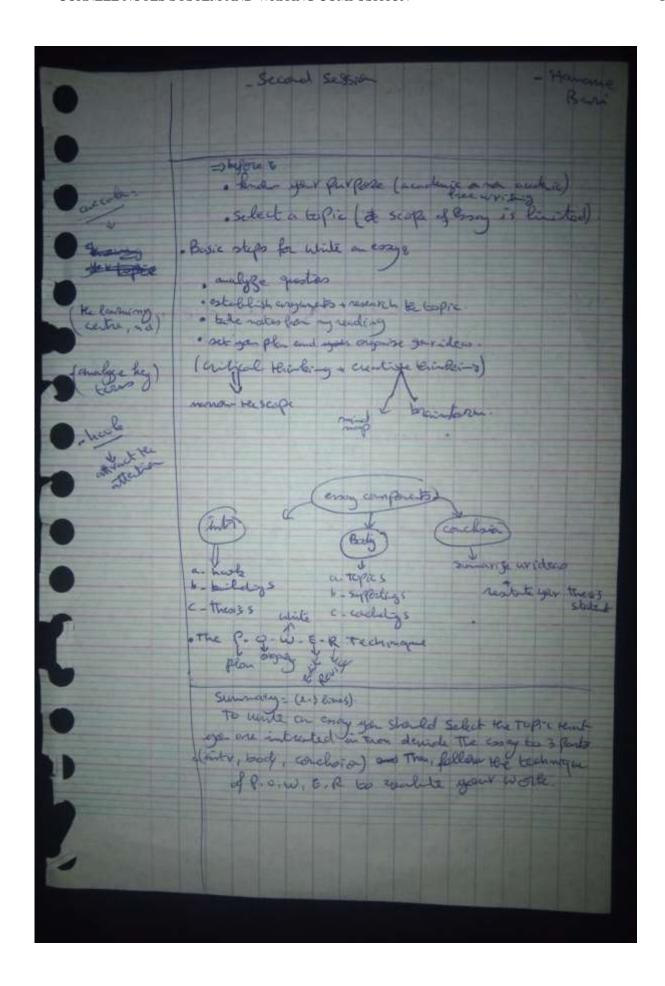
Department: Foreign Languages.

Section: English.

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Appendix 4: In-Class Notes

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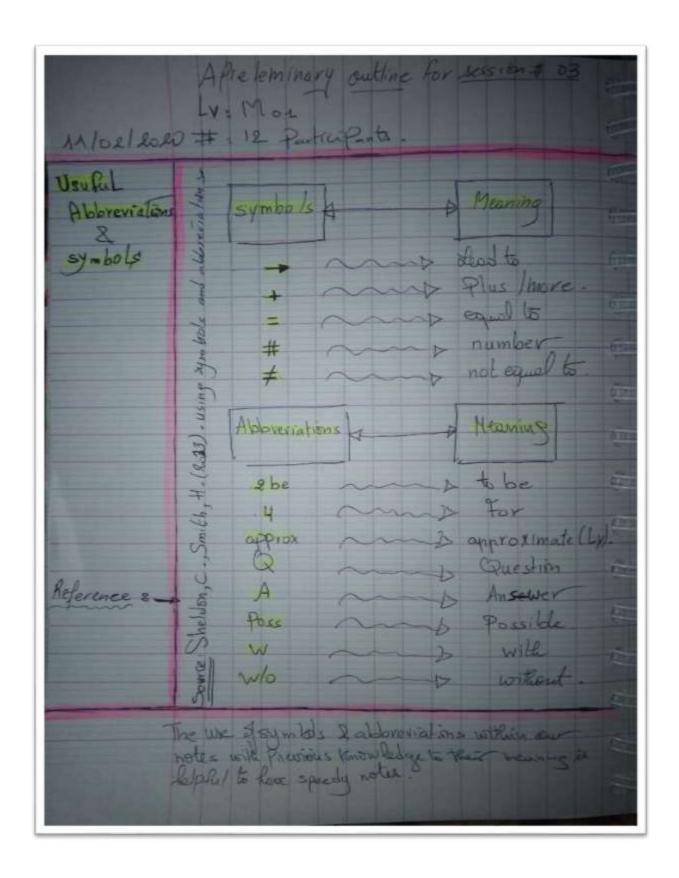
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Appendix 5: Homework

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Schnoune. Theories in Behaviourism.
Behaviourism is a school of psychology which only believes
in observable forces. Its main subjects of experiment were animals,
seltnough the theories that same explain much about human behaviour.
There are two theories of bohowious that had emerged normed clossical conditioning
and speciant conditioning. (18
The first theory is classical conductioning which was founded
by Ivan Paulov. According to Roundy, this conductioning happens when
one unintentionally lavous to associate two stimuli with a gestain
response. The best example is Aulou's experiment in which he feel a play
some food noting that the dog sollivates upon right of the food. Paulou stanted
runging abell when presenting the dog with the food and observed that
after doing the action continuously, the stoy also associated the sound of
the bell with food Therefore, whenever it hears the bell, it salivates thinking
that it will be fed. In some buston, this theory shows how the mind
involuntarily associates a stimular with another to resulting in the same
The next theory named operant conditioning was attacked
by B. F. Skinner. This theory on our how behaviour could be shonged through neinforcements or punishment. Rewarding a behaviour highers the possiblety
of its occurance whife penishing it has the opposite offect (Roundy). For
example, a boy in a classicom stirs trouble, so the teacher hopermands
him for it. This would souve the student to stop or floren his behaviour.
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the often help the learners to thier writing shill There are two major techniques improve writing skill games is an enjoybal suffort the player to avoid spel Eso, through musics and colors i memorize and Alment) retire to sulary expressions later in their

Appendix 6: An Example of the Cornell System during Session Three



Appendix 7: Paraphrasing and Summarising Tasks

TASK01

1). Paraphrase the following sentences:

- Morris and John (2014) stated that there are now more mountain gorillas than there were in the year 2000.
- -Wildlife groups worked hard to help the elephants and now nearly half of them live safely in a national park in Rwanda, Central Africa.
- -If you paraphrase well, you will not only demonstrate that you have understood the original content to your professor, you will also be demonstrating that you know how it relates to your ideas.

TASK02:

ILASINUL.

Decide if the following statements about writing a summary are true or false:

- a) A summary should not be short.
- b) You should use your own words to express the ideas in the text.
- c) You need to include all the information in a text.

Appendix 8: The Focus Group Informed Consent

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA

MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

MOHAMED KHEIDER UNIVERSITY - BISKRA

FACULTY OF LETTERS AND FOREIGN LANGUAGES

DEPARTMENT OF FOREIGN LANGUAGES

SECTION OF ENGLISH

Focus Group Informed consent

Dear participants,

The researcher BOUGUESBA Bouthaina is recently conducting a research study with the purpose to discover the effectiveness of introducing the Cornell note taking system to a group of Master one EFL students at Biskra's University to develop their writing composition skills. Therefore, you are kindly asked to take part in this phase of research.

If you agree to be a part in this study, you will be participating in 1 hour and a half audio-recorded focus group interview session. The recording will start from the moment the participants enter the session until the moment they leave. The session will be held in one of the CEIL rooms. Not to forget that your consent to participate is entirely voluntary, you can withdraw your consent at any time without risky consequences. Furthermore, the researcher will guarantee all the necessary procedures to assure anonymity of the participants in publication of the results.

The recorded data will remain confidential. Only the researcher can have access to the data that will be kept on a locked file with password protected computer. Consequently, all your personal data gathered from the focus group will be safely stored until the accomplishment of the study and then destroyed.

Signature of the Researcher



الملخص

يهدف هذا العمل البحثي إلى تقصى مدى فعالية إنباع نظام كورنال المستعمل في تدوين الملاحظات لطلبة أولى ماستر تخصص لغة انجليزية و ذلك بهدف تحسين مهارة الكتابة لديهم. من هذا المنطلق يكمن الهدف الأساسي للدراسة الحالية في تطوير نظام مبني على التشكيلة الأساسية لطريقة كورنال و تحويله إلى نظام يستعمل في التخطيط لكتابة مقال أكاديمي, من أجل تحقيق الأهداف المذكورة أعلاه قسم هذا البحث إلى جزئين. الجانب النظري و الذي يحتوي على فصلين حيث تناول الفصل الأول مهارة تدوين الملاحظات, تعريفها و كذا أنواعها و الطرق المتعددة في أخد الملاحظات من المحاضرة في حين سلط الفصل الثاني الضوء على المهارة الكتابية و كيفية تطويرها و خصصنا بالذكر الطريقة الصحيحة و الفعالة لكيفية كتابة مقال مع ذكر أنواع المقالات التي وجب على المتعلمين معرفتها من أجل إثراء رصيدهم المعرفي. الجانب الثاني هو الجانب التطبيقي و الذي بدوره يحتوي على فصلين أيضا, يتضمن هذا الأخير الدراسة الميدانية و المنهجية المتبعة و المتمثلة في الأدوات المستعملة لجمع البيانات, تحليلها و التوصل إلى خاتمة تجمع النتائج النهائية للدراسة. و كما هو موضح أدناه فإن النتائج المتصل عليها أثمرت عن التأثير الإيجابي الناتج عن إنباع نظام كورنال من أجل مرحلة التخطيط لكتابة الكتابي للمتعلمين كما أوضحت هذه الأخيرة فعالية النظام المعاد تأسيسه من أجل مرحلة التخطيط لكتابة مقال أكاديمي حيث عبر الطلبة عن فعاليته في تحسين طرقهم الكتابية وكذا تدوين الملاحظات.