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**Note- Taking Strategies and Master 1 Student's Learning Behavior**

**During the Moodle Era.**

**A Case Study Master One EFL Students of Dr Moulay Taher University**

Dissertation submitted to the Department of English Language and Literature as a partial  
Fulfilment of the requirements for the degree Master in Didactics.

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**Academic Year: 2023/2024**

## **Declaration of Originality**

I hereby declare that this thesis is based on original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at any university or institution except for Dr. Moulay Tahar University of Saida.

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Praise be to Allah, Lord of the Worlds; God's blessings and peace be upon the noblest of prophets and messengers, our Prophet Muhammad, and upon his good relatives and companions

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## **Dedication**

From the bottom of my heart I dedicate this research work to my family: my father *We ask Allah to bless the deceased with his mercy and to accommodate him in his spacious garden*, my mother, my wife, my lovely sisters: Iman, Karima and my brothers without forgetting the angels of the family: Nourddine, Abderhame, and my new born Khadidja  
Lovely, congratulation on her birth

At the end, a special dedication and A big thank you to my best friends Amine and Mustapha and Hasni and Omar for standing by my side and supporting me in my weak moments, may Allah protect you.

*Thank you and I am glad to have you.*

## **Abstract**

The advent of distance-learning environments like Moodle, particularly in the aftermath of the pandemic, pushed the Algerian government to support digitalization in higher education which triggered tremendous changes in the teaching and learning practice. To this end, Moodle is just a platform, one of many. It is a general practice in a specific period of time that characterised all higher educational institutions. In our case, at our university we use moodle .In order to achieve the goals of the study, a mixed method approach used, incorporating both quantitative and qualitative methods or approaches, are employed to gather, analyse, and interpret data. Thirty-five first Year Master Students from department of English, University of Saida Dr. MoulayTehar The results showed that students frequently relied on the use of note taking both within the classroom and using the Moodle platform. This problem led to insufficient note-taking in terms of quantity and quality. The findings further demonstrated that note-taking strategies used by students are not suitable with the technological tools and characteristics of the modules available on the platform. They should be mindful of the significance of taking effective notes in the context of blended learning imposed by the university and teachers. Therefore, it necessary for teachers and students seems to me that the central object of your study is in fact the non use of the many apps available on moodle since the Algerian government is rapidly moving towards digitization and modern technology.

**Keywords:** Note-taking, Moodle Platform, Blended Learning, students, strategies

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## **List of acronyms**

- EFL:** English Foreign Language.
- Covid-19:** Coronavirus Disease 2019.
- HEIs:** higher education institutions.
- **UNESCO:** United Nations' Educational, Scientific, Cultural organization.
- OLE:** Online Learning Environments
- **EL:** Electronic Learning.
- ICT:** Information communication technology.
- **SNS:** Social Networking Sites
- VARK:** Visual, Aural, Read, and Kinaesthetic
- **ECAR:** Educause Center for Analysis and Research
- **ChatGPT:** Chat Generative Pre-Trained Transformer



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## *General introduction*

## **General introduction**

After the confinement caused by the covid-19 pandemic, universities changed their vision higher education instructional process, especially with the emergence of An online teaching tool that minimized the extent of the negative effects caused by the pandemic on higher education and saw in virtual learning and chat sites an appropriate virtual alternative compared to the Ordinary tools/practices used before the pandemic. In this respect, teachers relied on them to communicate with students remotely Moodle is adopted by our university other universities may use other platform There are universities that created their own platform. So the Moodle platform as a learning mediator between the professor and the student, facilitating access to lessons, assessment exams, and research project.

The main goal of research is to analyze the strategies students use when taking notes and examine any possible changes in behavior and strategies adopted during the Moodle era.

Also, the problem of research in light of blended learning, which she called a task, characterized the learning environment during and after the pandemic. In fact, new learning experiences influenced students' learning behavior, specifically their note-taking practice. This study is an attempt to explore the note-taking strategies of master's students at Saida University Dr. Moulay Taher in the Moodle era and shed some light on their behavior towards this specific educational practice.

In fact, the research is an attempt to add to the existing literature relevant to this field of work. This work will help identify the different strategies that Master 1 students use when they take notes during blended learning and how online learning affected their note-taking behavior. In addition, it will help the teacher design integrated, engaging and interactive lessons and students' behavior and attitudes towards note-taking.

This research focuses on the use of digital notes, which have become more prevalent during and after it due to the emergence of a new reality produced by the pandemic. The research attempts to study how technological development in the field of learning affects the attitudes and behaviors of first master's students regarding note-taking.

The research also examines how Master 1 students learn from the Moodle platform at Saida University. Moreover, this research seeks to provide an understanding of the attitudes of Master's students towards the practice of note-taking under the principle of blended learning.

So The main objectives of this work are

1. To evaluate the attitude of the students regarding note-taking
2. To analyse the learning of the students when using Moodle resources.

The present study primarily aims at investigating the psychological, and cognitive impacts on M1 EFL students' learning behavior covering issues like taking notes strategies, , as well as the challenges for learners encounter in relation to blended learning.

1. How do different note-taking (digital vs traditional) influence student's behavior?
2. What are the note-taking strategies employed by students using Moodle platform?
3. To what extent have note-taking practices changed in blended learning in general?

The transition to the blended learning influenced note-taking habits and behaviour for both students and teachers achievements at the University of Saida Dr. Moulay Tahar.

1. The different strategies of note-taking play major role to increase learning process.
- 2: Note-taking enhances flexibility and adaptation with different lecture style.
3. The Moodle platform changes the way we learn and take notes.

*Chapter One:*  
*Literature Review*

## 1. Introduction

Note-taking is a popular practice in the field of education, especially during lectures and courses. Note-taking is a vital skill in the learning process a strategy which all students need to master and a key to capture knowledge in a meaningful way ~~for them~~. In this chapter, the researcher presents previous works tackling note-taking. Further, the researcher provides some brief insight on the e-learning, Moodle and ~~the~~ blended learning.

### 1.1. Note-Taking

Taking notes is an essential learning approach that every student should adopt, as it allows them to retain information in a way that makes sense to them. One strategy to prevent forgetting things as much as possible is to take notes. Furthermore, taking notes is a related skill and a crucial tool for students, particularly at the university level,. For this reason, educators should stress the importance of note-taking. Note taking, as a learning strategy, enables students to absorb knowledge from books, lectures, handouts and any valuable relevant sources. Alloul 2018 found that practice is tempted to enhance and foster the student's recall of information in order to pass courses and perform better. In fact, notes made in class frequently include material that cannot be obtained anywhere else, making them valuable tools when studying for assessments Today's learners have limited comprehension.. of pertinent lecture materials and are weak note-takers; thus, more research is required on the subject of note-taking (Alloul, 2018).

In every scenario where foreign language instruction is being provided, note-taking is an advantageous procedure that needs to be taken into account. Furthermore, being one of the best tools for supporting their academic environment, note-taking techniques should be highly valued by students.

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### 1.1.1. Note-Taking Definition

Note-taking is one of the most important activities for students. It is a vital skill in the learning process, a strategy which all students need to master and a key to acquire knowledge in a meaningful way. Note-taking is one way to avoid forgetting the received input with few words it is defined in Oxford learner's dictionary as "a short piece of writing to help you remember something".

Many scholars defined note-taking differently. O'Malley and Chamot (1995:138) defined note-taking as "writing down the key words and concepts in abbreviated verbal, graphic, or numerical form to assist performance of a language task" Stated differently, taking notes involves jotting down the key points spoken in the lecture in a variety of formats that could aid students in their performance.

### 1.1.2. The importance of Note-Taking

The main purpose why notes taking practice is highly significant in the learning phase is that it involves all four types of learning styles including Visual, Aural, Read/Write, and Kinesthetic (VARK). That is to say the student uses different learning styles such as the Visual (here the learner views his teacher, text book, blackboard , and / or power point slides which might help in storing those information and retrieving them easily); the Aural (the lesson that the student listens to can enhance the receptivity of the memory as the audios can be reproached by the learner); Read/write (the student is supposed to jot down what s/he hears and sees in order to read it later for revision) and finally Kinesthetic (the physical process of writing opens a brain path) (Boch & Piolat, 2005).

Note taking as a sounding issue within the academic field received a remarkable attention. In a study Kiewra et al. (1991) investigated the impact of note taking on students. Their findings revealed that learners who tend to take notes during lectures perform better



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on both sudden and postponed memory assessment than learners who do not take notes. It reveals that students who tend to take notes during lecture and then review them later accomplish better outcome in their academic career.

In the same vein, Boch and Piolat (2005: 101) considered note-taking as a component of any curriculum devoted to teach the writing skill. It has two major benefits: note-taking aids learners to learn and aids them to learn how to write. The researchers argued that the most significant factor about the process of note taking is that it helps learners to capture the content of the lecture and improve their speed of writing.

In a recent study Bohay, Blakely, Tamplin, & Radvansky (2011) demonstrated that notes serve as a memory that allow remembering verbal or textual information to learners. They added that note-taking promotes deep understanding for learners, i.e., people who take notes are more likely to participate effectively in the subject matter. In the same context Khavazi, Yousefi & Kharaghan (2018) claimed that note-taking is an effective technique to ameliorate students' listening comprehension. The results of the study delineate that a good note taking strategy contributes to increasing other cognitive functions. Further, the scholars argued that It helps learners to get fully interested in the lesson by highlighting the key points that could have led to an improvement in listening comprehension.

Boch and Piolat (2005:104) stated that note taking facilitate the study of the different factors that play a role in the understanding and learning processes. On this ground, students take notes to record information for future learning, but the process is more than just creating an external information store. It aids in memorization and helps to resolve complex problems. Note-takers re-read their notes multiple times, using different methods like reading, highlighting, and summarizing. It is tempting to say that the intensity and effectiveness of the learning process increase with understanding and transformation operations where highlighting notes and summarizing them are better strategies.

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Slotte and Lonka (2001:141) similarly insisted that note-taking assists in maintaining concentration and preventing interruptions. Students will engage their intellect in the process of identifying and organising the main ideas while taking notes in class. Instead of engaging in inactive listening during class, they will actively participate in the learning process, preserving their time. Note-taking is further beneficial in that it encourages learners to observe more deeply, helps them to assess their knowledge of the subject matter, and increases retention of the material by requiring them to write down fundamental ideas. In the same fashion, taking notes aids to demonstrate what the instructor considers to be essential, transform that information into an ultimate study guide. On this respect, a set of concise, well-organized notes from each class session gives the learner what s/he needs for studying, learning, and reviewing after class.

### **1.1.3. The purpose of Note Taking**

Students tend to take notes for different reasons. Neville (2007: 2) have established numerous explanations for purposes of taking notes. In what follows some reasons why learners opt for note taking;

➤ Taking notes is a fundamental ability that allows students to permanently document the source of information (for future reference).

➤ They serve as memory aids. For example, if a student summarizes the lesson in his or her own words, it will be easier for them to remember the material on tests and exams.

➤ Revision is greatly aided by notes, particularly when preparing for exams or writing tasks.

➤ Notes enhance learners' focus and active participation during lectures. According to Lawson & Tran (2001: 282), college students often take notes to achieve various objectives:

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- Attention: Notes improve students' attentiveness.
- Understanding: They facilitate information retention in long-term memory and enhance comprehension of the lecture material.
- Organization: Notes enable students to establish connections between ideas and articulate a comprehensive explanation of lesson topics.
- Study aid: They serve as a reference for key points discussed in class.
- Homework aid: Notes provide students with essential materials for completing assignments.

### **1.1.4. Note-Taking Methods**

Scholars have proposed a variety of note-taking strategies over the years to help students arrange their notes for later reference. There are two types of note-taking styles: linear and nonlinear styles. Piolat (2001) claims that linear style, one of the most popular writing formats utilized by students, have a structure akin to that of traditional written texts. On the other hand, non-linear approaches rely on graphical representations and employ an unusual yet methodical note organization technique. The non-linear note-taking approach is more efficient than the linear style, according to Piolat, Olive, and Kellogg (2005), since it makes it easier to connect ideas.

The Cornell Method, the Outlining Method, the Charting Method, the Sentence Method, and the Mapping Method are the five typical note-taking techniques.

#### **1.1.4.1. The Cornell Method**

In the 1950s, Walter Pauk at Cornell University created the Cornell Method. The majority of EFL students use this method because it is efficient, well-organized, and time and effort-saving, particularly when they are participating in various learning scenarios. Pauk (2001) declared that taking notes randomly is not what the Cornell Method is about.

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But it's a method of arranging the notes into a useful study guide that encourages critical thinking and active learning.

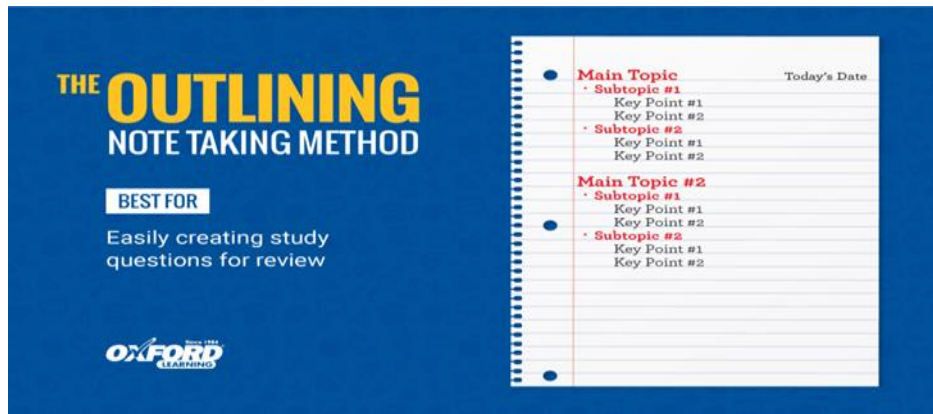
Figure 1.1. The Cornell Method Format (adapted from oxfordlearning /5-effective-note-taking-methods).



## 1.1.4.2. The Outlining Method

In this method, the notes are arranged from the most important points to the least important ones. Using Arabic numerals or uppercase letters is crucial for differentiating and identifying information levels. Among the methods employed by college students, the outline method stands out as the most commonly used. Wong (2010) argues that the outlining approach effectively illustrates connections between concepts and ideas by organizing data in a structured and coherent manner. Moreover, it reduces the time to edit the notes and makes it easy to review.

Figure 1.2. The Outlining Method Format (adapted from oxford learning /5-effective-note-taking-methods).



### 1.1.4.3. The Mapping Method

The Mapping note-taking method is a visual method for organizing class notes, aiding in understanding relationships between topics. It helps visual learners and those struggling with studying from notes by dividing the main topic into subtopics and highlighting important notes.

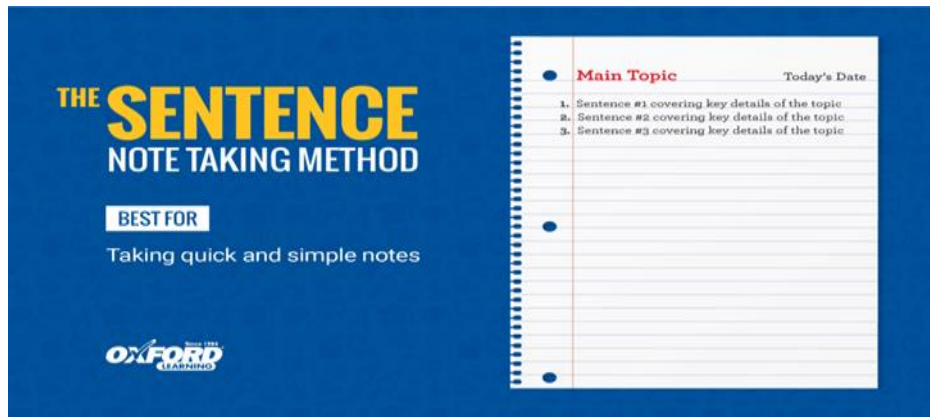
*Figure 1.3.* The Mapping Method Format (adapted from oxford learning /5-effective-note-taking-methods).



### 1.1.4.4. The Charting Method

The charting note taking method is a useful tool for organizing information in lessons covering numerous facts or relationships between topics. It is organized by category, with details in the rows below. The method is used to note down information about a specific category and move down one row when the next topic begins. This makes facts easy to review and highlights key information for each topic. Figure 04 is an example of the Charting Method format.





### 1.1.5. The in class Note-Taking

Before class, it's beneficial to review the notes from the previous lecture, ensuring clarity on the upcoming subject, and consult suggested readings to refresh your knowledge.

Once in the classroom, choose a comfortable and distraction-free seat and label your notes with the teacher's name, subject, and date. Organise your notes by numbering pages, distinguishing the introduction, main points, and conclusion, and maintaining focus on the subject matter. Cultivate active listening skills, paying attention to verbal cues and nonverbal signals such as facial expressions. Rather than transcribing everything, develop a personalised note-taking system incorporating colours, headings, numbering, columns, and diagrams, along with recognising handwriting and abbreviations. Leave room for missed information to revisit later, maximizing white space for easier revision, research, and content additions during the lecture. For a comprehensive understanding, connect handouts and recommended readings to your notes.

After class, revisit your notes to fill in any gaps and generate an original summary, reinforcing comprehension and enhancing long-term retention of the material.

### 1.1.6. Typing Notes vs. handwritten notes

Writing versus typing is a topic of discussion in classrooms. It all depends on how well each student processes information and what their particular needs are. For example, digital notes taking, i.e. typing study notes is most effective given that the student may edit their notes whenever needed. According to Mueller (2014: Page number)

*When people type their notes, they have this tendency to try to take verbatim notes and write down as much of the lecture as they can. The students who were taking longhand notes in our studies were forced to be more selective – because you can't write as fast as you can type. And that extra processing of the material that they were doing benefited them.*

Typing is quicker than handwriting, which makes taking verbatim notes in class easier. However, typing isn't just useful for that writing is significantly quicker, this might go further to facilitate taking more notes, edit and arrange for later study is, and enable for an efficient applicable sharing, backing up, and searching of the information highlighted within the notes.

Despite these advantages, studies showed that taking handwritten notes might help pupils learn and remember information better. Consider these distinctions before deciding what is best for you. There are few advantages to writing study notes over typing them, even though handwriting could take the idea is not well delivered. Writing the study notes by hand can be easier to make graphics and diagrams better for those who learn visually as well increases focus for people who are easily distracted.

It makes natural that students would turn to computers and other digital devices and apps to improve their learning experience as more instructors adopt interactive learning trends into their lectures and more institutions grow their online learning programs. It is hardly shocking that 63% of students who own laptops—of the 88% who do—use them in



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class (McGraw-Hill Education, 2017). In actuality, there are a growing number of note-taking applications for school administration available these days.

Even if a laptop or computer is the greatest option for students, it may not be as useful for taking notes because these devices do not always facilitate effective research, communication, or teamwork (McGraw-Hill Education, 2017). According to several studies by the National Center for Education Statistics, students who take notes on their laptops do less well than those who take notes by hand on conceptual exam problems (Mueller & Oppenheimer, 2014). In line with, Mueller & Oppenheimer (2014) students mainly just type out the lecture notes on their laptops, despite the fact that they can type more. Unlike when taking notes on paper, this practice deprives them of the chance to comprehend and process information in a way that allows them to reinterpret it in their own terms. A study of community college students conducted by ECAR findings is comparable to a learning disability. In essence, the lecture material is heard by the students and recorded. They might not be able to properly assimilate and process it, though. As a result, students are left with notes that might include information, but they do not contain any inferences from the lecture. They therefore find it difficult to respond to inquiries that are conceptual and open-ended. On the same paradox, in Mueller and Oppenheimer's (2014) study, they illustrated how longhand note-takers wrote noticeably fewer words than laptop-typists which might say that the quality of the notes is more significant than the quantity, additionally, it was elucidated that only 8.8% of the longhand notes and 14.6% of the laptop notes were identical.

Figure 1.6. Typing notes vs written notes



### 1.1.7. The Differences between Hand Written Notes and Digital Taken Notes

Mctiernan (2020) typing notes in the computer offer customizable organization with limitless folders, tags for easy access, and easy file movement. Its digital nature means no physical footprint, making it the best device for fast and easy organization, as it doesn't take up more space than traditional notebooks or papers. Moreover, computers offer easy share screens for instant document collaboration, allowing files to be easily emailed, texted, or shared via email, preserving original notes and typing is the fastest method, as it saves time and allows for more information to be added to the page for later review, importing lecture slides is a convenient method for those who prefer not to manually type out all the information a professor teaches also computers can backup notes manually or automatically, ensuring their safety and cost-effectiveness. Losing notes can be costly, especially during exams or time-consuming tasks, making backups a worry-free solution. By contrast, paper is a natural feel that is used in various aspects of our lives, including writing by hand, notebooks are portable and easy to carry, provided there aren't too many and a page is highly flexible, allowing for unlimited writing on it without any restrictions also pencils and notebooks are reasonably priced choices for people trying to reduce costs without sacrificing quality.

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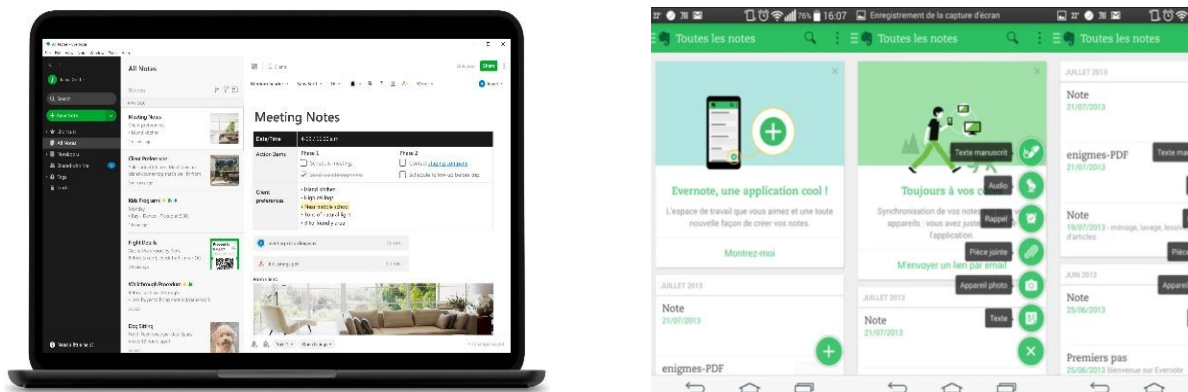
Bledsoe (2011) showcased that the average adult writer can produce 13 words per minute. On the other side, Typing.com (2017), stated that the average typing speed is currently about 40 words per minute. These in fact exhibited that laptop note-takers record more words from the lecture than longhand note-takers. This demonstrates how taking notes by hand may slow the taker down and provide them with more time to process the material. They are therefore able to come to their own judgements and provide additional side remarks. They can even draw diagrams based on their own conclusions, demonstrating a more in-depth comprehension of the course material. Conversely, using a laptop to type notes can cause the note-taker to become too preoccupied with typing and meticulous in their transcription of every word. This leads to a more cursory and limited comprehension. Put otherwise, typing can be compared to merely recording lessons without fully comprehending them.

### **1.1.8. Note-Taking Applications**

Applications for taking notes are electronic "notebooks" that allow you to record ideas and much more. Evernote is a long-standing programme that constantly ranks at the top of this category of note-taking apps.

Evernote assists students in arranging a multitude of file types into personal notebooks, including text, contacts, task lists, and image files, including pictures of handouts and notes from class discussions (Korzaan & Lawrence, 2016). Additionally, the user can connect Microsoft Office documents, PDF files, and audio and video files. Evernote synchronizes all of the user's digital notes between devices and backs up data to the cloud, so s/he can create notes on different devices if s/he so choose.

Figure 1.7. Evernote Application of note-taking

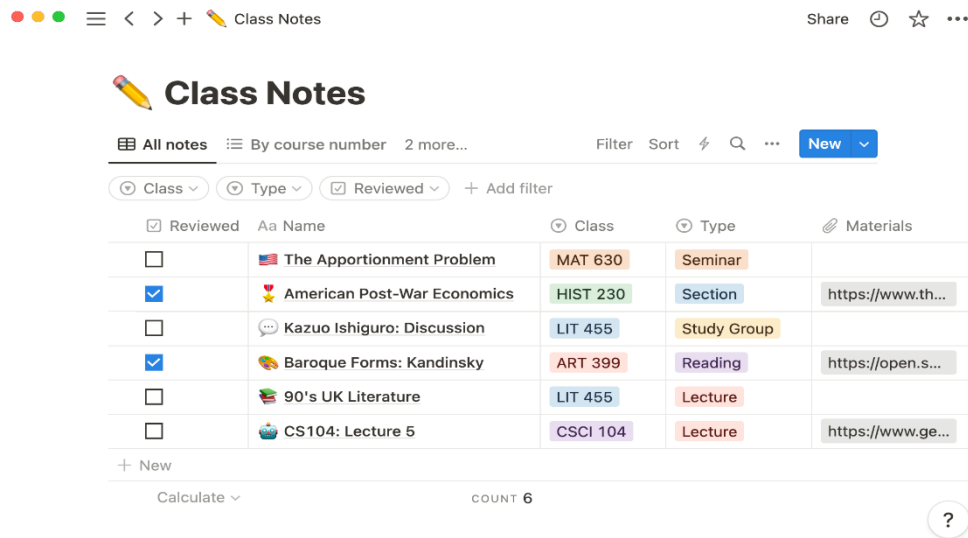


Korzaan and Lawrence (2016) specifically mentioned project management and application development as two Management Information Systems (MIS) subjects in the educational sphere where Evernote can be beneficial. For instance, Evernote can be used by students in a project management course as an agile virtual storyboard (Korzaan & Lawrence, 2016). The software can also be used as a tool for collaboration because it allows you to exchange ideas and reminders with other users.

According to fastercapital (2024), Notion is a flexible note-taking application featuring customisable templates and a drag-and-drop interface. In addition to writing articles, collaborating, embedding files, photos, and videos, and integrating databases for smooth information integration, users may also make and manage notes. It is ideal for content that is rich in multimedia.

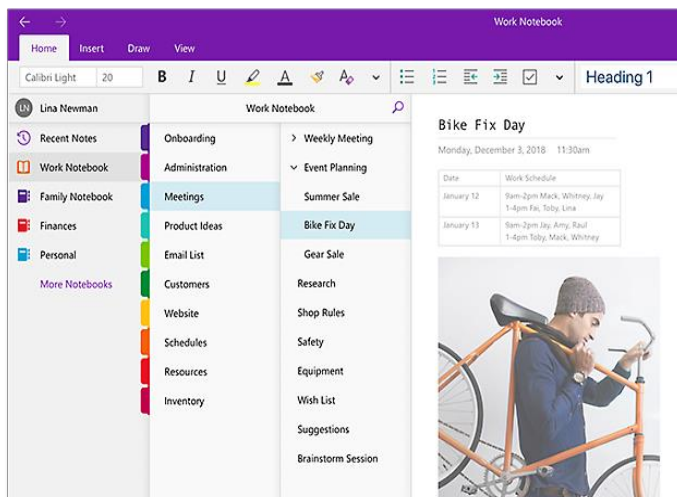
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Figure 1.8. Notion application sample



Furthermore, fastercapital (ibid) stated that Microsoft's note-taking application, OneNote, has strong functionality and is integrated into the Microsoft environment. It enables users to annotate PDFs, record audio, take notes in a hierarchical format, and draw with a stylus. It is also compatible with Teams and Outlook, which makes it a great option for anyone who already use Microsoft products.

Figure 1.9. Microsoft OneNote application

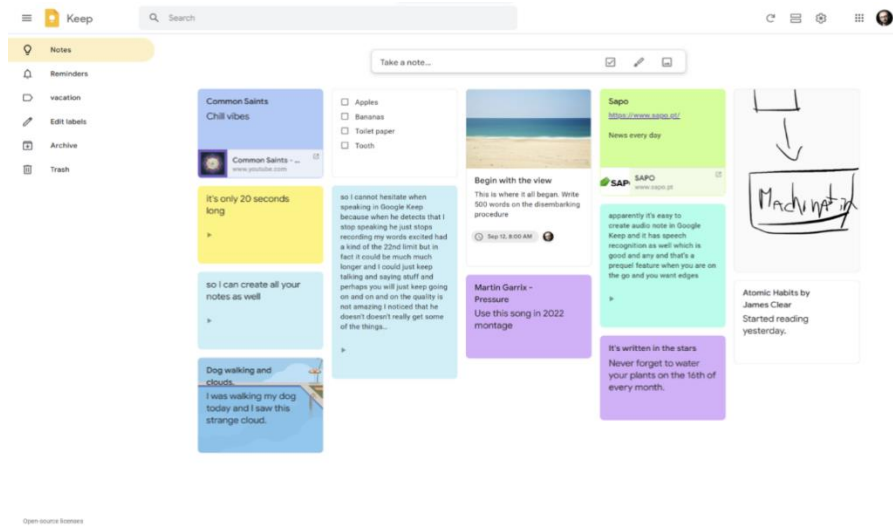


Korzaan and Lawrence (2016), on the same way mentioned that Google Keep is a simple note-taking app with an easy-to-use design that lets users take notes, make lists of things to do, and set reminders. It is a great option for anyone looking for simplicity and

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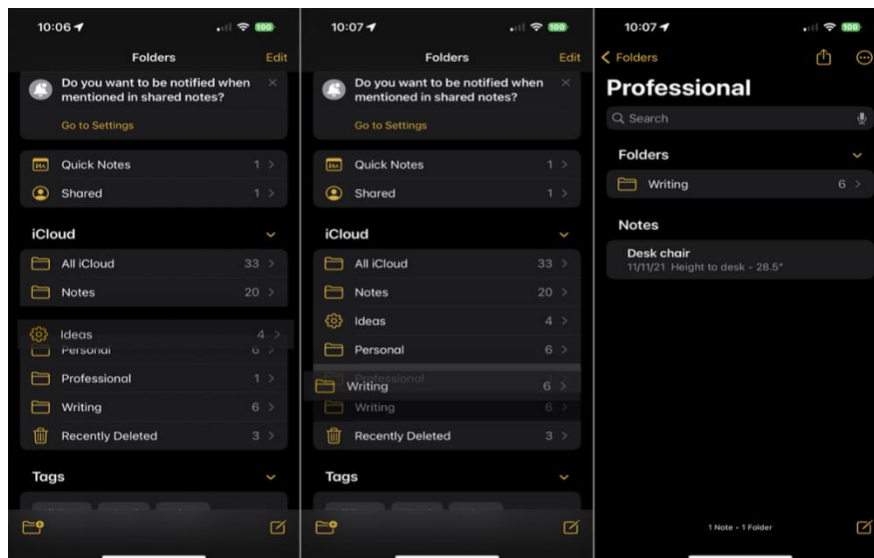
convenience of use because it provides strong search capabilities, seamless device synchronisation, and seamless connection with Google Documents and Calendar.

Figure 1.10. Google keep application



Apple Notes is a native app on all Apple devices that provides a simple note-taking experience (fastercapital, 2024). It allows users to create text, add images, draw, and scan documents. It also offers seamless synchronization across devices via iCloud, making it a reliable choice for paperless users.

Figure 1.11. AppleNote



### 1.1.9. Audio-Visual Aids on Effective Note-taking

Note-taking stands as a crucial skill, prompting numerous researchers to advocate for its explicit teaching at an early stage. Regrettably, many educators still neglect its inclusion in the curriculum (Hayati, 2009). To ensure mastery of this skill, teachers ought to provide clear guidance on effective note-taking starting from primary school to ensure that they will master this skill.

On other side, Johnstone & Su (1994) argue that students' notes can sometimes be inaccurate or misleading, particularly when capturing maps, mathematical figures, equations, and other essential materials (cited in (DeZure, Kaplan, & Deerman, 2001)). In the same context, Del Campo, Negro & Núñez (2013) asserted that highlight a concerning trend in academia where slides replace comprehensive texts or articles. They note that many students request PowerPoint slides from their instructors, presuming they contain all necessary information for study and examination preparation. (ibid, 194). On this ground, it is tempting to say that the students will become passive and will make no effort to take necessary notes during a lecture. Del Campo et al. added that

*“we have gone from students who spend their time in the classroom with their heads looking down at a sheet of paper on which they were taking notes copied, to students that remain with their head up and their eyes wide open, looking to text, pictures, graphics, videos.” (194)*

In a similar study entitled Students' Opinion towards Audio-Visual Aids Used in Lecture Classes, Nirmalya, Kaushik, and Rituparna (2015) asked the participants to Choose which teaching method they find the most helpful for taking notes. The results showed that 51 opted for a mixture of aids, 13 chose black/ white board and only 10 picked power point. The results revealed that students prefer to mix a variety of methods instead relying on one method

### **1. 2. Moodle Origins and Developments**

Moodle, a acronym for Modular Object-Oriented Developmental Learning, has been in development since the 1990s. Its founder, Martin Dougiamas, gained early exposure to distance learning during his upbringing in the Australian outback in the 1970s, taking lessons from the School of Air.

Martin was a Computer Science graduate of Curtin University where he had his experience with WebCT, then a graduate of Curtin's University of Technology but he pursued pedagogy studies at Masters and PhD levels. In 1999, he went on to help run the installation of WebCT at Curtin University, due to the difficulties faced with the software's proprietary licensing that prevented its adaptation. Dougiamas was urged to look for an alternative method for online learning and decided to create an alternative virtual learning environment which is open source and is rooted in social constructivist principles, what became the center of his PhD Moodle documentation. (2020)

#### **1.2.1. Moodle as an E-learning Online Management System:**

The Moodle is a global e-learning platform. This platform is made available by colleges, cities, schools, and educators so they can interact and share knowledge with their own learning communities. Moodle, created by Martin Dougiamas, is platforms with technological features that help users learn how to work together. Its open source design allows programmers to contribute new features and applications, contributing to its enormous popularity and making it one of the most popular platforms for distant learning. believe that despite all of the obstacles and lack of availability at various levels such as difficulty accessing the platform due to slow connections or servers that are struggling to cope with a large volume of users' data integration of these platforms deserves special consideration and should be included in educational settings. Moodle is useful in the EFL



## Chapter One: Literature Review

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setting because of the different features it offers for both teachers and students to connect synchronously and asynchronously.

Moodle offers four benefits. These benefits include improving student-teacher interaction, encouraging student independence, supporting students' research, and, finally, converting the traditional classroom into an online learning environment where all activities and evaluations can be completed virtually.

Moodle provides a secure platform for educators to interact with students and share research. According to Jeong (2017:4846-4847) argued that Moodle combines all instructional strategies and tools in one space". Additionally, he states that Moodle "may be effective in supporting collaboration and learner-centered learning environments as well as in promoting learner autonomy" (Jeong, 2017: 4847).

Moodle platform has allowed professors to give students all the information they require, including books, videos, assignments, and exercises. Moodle can also be useful for language acquisition. Moodle, like other Social Networking Sites (SNS), is a platform that allows users to share information about various subjects, including business, politics, and the economy. It also allows users to form groups and share activities and experiences. Teachers can use Moodle to communicate with students, guiding and monitoring "the deadline and timeframes for assignments-quizzes, forums, chats (Jeong, 2017: 4847)

### **1.2.2. E--learning in the Algerian Universities and the Adoption of Moodle**

Governments generally depended on virtual communication to complete their tasks during the COVID-19 epidemic. In particular, the ministries of education shifted their emphasis to using virtual platforms and promoted their application in instruction. (Page 21 of Moulay, 2020). Moreover, even if the project of integrating information and communication technologies (ICTs) is still in its early stages, governments in developing or less developed nations are highly interested in it (Sarnou, 2020:1).

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Few studies have examined the reasons behind students' perceptions, despite the number of research papers that academics have released on students' attitudes towards educational platforms like Moodle. Male et al. (2020) discovered that students would prefer go back to the old way of instruction since they detest the online format. Studies on how motivation and involvement impact students' opinions, however, have not been conducted. The attitudes of students and their academic performance have never been measured by researchers. Indriani and Widiastuti (2021) argued that students' attitudes towards online English learning through the Moodle LMS significantly impact their learning achievements. Initially, students faced difficulties due to unfamiliarity with the system, but with more frequent access, they showed increasingly positive attitudes and satisfactory performance. Teachers play a crucial role in encouraging students' positive attitudes by providing complete materials, clear instructions, and fair assessment methods).

According to Valantinaitė and Sederevičiūtė-Pačiauskienė (2020), a variety of factors could influence students' perceptions of distance learning. They claimed that among the elements influencing students' attitudes include a lack of engagement with teachers, a lack of guidance from teachers, electronic readiness and desire, internet issues, device restrictions, difficulties getting in, and financial difficulties. The majority of these research examined the effects of these variables, but none have looked into how different forms of online learning may influence students' attitudes and desire for

### **1.2.3. The Use of Online Learning Environments in Education during the Covid-19 pandemic**

According to Valantinaitė and Sederevičiūtė-Pačiauskienė (2020) their The study analyzed the factors influencing students' attitudes towards online learning environments (OLE) at the beginning and end of an educational project. The study found that students' attitudes towards OLE were more important than technical issues and computer literacy.

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Motivation helped overcome external distractions more easily, and as students became more familiar with OLE, their resistance to using OLE decreased. The role of the teacher as a mentor also increased. The study suggests that the beginning of the study is crucial for students' further learning, with clear instructions on how to connect to systems, use virtual tools, and evaluate studies. Teachers should also ensure their competence to work with OLE and maintain interaction throughout the semester.

### **1.2.4. Moodle –Based on Blended Reading Course after the Covid-19**

Moodle is a free, open-source e-learning software platform developed by Martin Dougiamas in 2004. It focuses on collaborative learning, creating a student-focused environment for students to build knowledge based on their skills and own knowledge. Moodle is often recommended for assignment instructions due to its 24/7/365 principle-based training, allowing students access to course materials, resources, and lecture notes at all times. Besides Moodle technology enhances learners' learning autonomy by allowing them to control their learning and participate in various activities at their own pace. This enhances motivation and promotes progress. Online courses on Moodle offer engaging activities, allowing students to access course materials and web resources. Krasnova, T.I., & Vanushin, I.S. (2016) said:

*Blended learning has become increasingly popular in teaching foreign languages. Blended learning can be very timesaving and provides convenience and flexibility of learning. It has a tremendous potential in teaching foreign languages as it offers an opportunity to integrate innovative and technological advances of online learning with interaction and participation of the best traditional practices. The success of blended learning courses is strongly de-pendent upon the students' perception. In this study we tried to investigate students' perception of online courses that usually accompany face-to-face instruction in blended learning. The results indicated that students' satisfaction with the online was mainly affected by convenience, clarity of design, ease-of-use and flexibility of learning. The findings*

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*of this study could have direct implications for the creation, development, and delivery of online courses in blended learning.*

The Covid-19 pandemic has led to a global crisis in education, with 82% of students no longer using traditional programs. UNESCO recommends learning online, and 165 countries have closed schools, affecting over 1.5 billion children and youth. Moodle, a web-based flexible learning environment, offers students, teachers, and administrators a customized learning climate. It facilitates collaboration between users, allowing teachers to upload and supply students with information and resources. Moodle includes features like forums, chats, private messaging, and can be used as an additional method to traditional education or exclusively online learning. It facilitates access to learning content, course creation, forum communication, assignments, and more, contributing to a new picture of the learning process. Moodle is widely used worldwide by universities, communities, schools, instructors, courses, teachers, and businesses. Its popularity is based on its simple installation, low resource demands, easy integration into existing systems, and intuitive working environment. The implementation of information and communication technology in education with e-learning enhances the effectiveness of education (Valantinait'e and Sedereviciūtė, 2020).

### **1.2.5. Algerian Vision towards Blended Learning**

This transition from almost exclusively face-to-face teaching to exclusively distance learning initially, then at a hybrid teaching in a second phase, attracts our attention in the this contribution which aims to both evaluate training in distance implemented, to identify the difficulties encountered for determine their origins and propose some avenues for reflection to optimize the evolution towards more successful hybrid teaching According to Assia Baghdadi (2022) Although they were not actually trained in quality distance learning, Algerian university teachers were forced to adopt this way of teaching and

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impose it on their students despite all constraints. This alarming reality makes it necessary to revise the modalities of distance learning, which incorporate the modes and activities of evaluation, to make them more compatible with the national context and the peculiarities of Algerian students. Thus, the current issues cannot be confined to the pedagogical aspect so that we can only turn to teachers. Indeed, the success of this project is conditional on the involvement of several sectors and the mutual efforts of all, because the challenges facing the Algerian university in the first place and across the country require a systematic approach and a clear vision, in the short and medium term. This approach must be mainly at the decision-making level.

### **1.2.6. Advantages of Blended Environment on EFL Teaching/Learning Process:**

Blended Learning (BL) is a new teaching paradigm that allows students and teachers to interact in real-time or asynchronously, reducing teacher workloads and allowing students to take full responsibility for their own learning. Studies show high satisfaction levels for BL courses, and students often choose to learn through BL when choosing between face-to-face or blended sections. The flexibility in manipulating learning according to learners' pace increases motivation to adopt this new learning environment. The main reasons for students choosing BL educational settings include flexibility, time, and place.

- ✓ Through the Internet, students had access to a seemingly endless supply of educational resources.

- ✓ They have flexible communication options with the teacher, other students, and others all across the world.

- ✓ Blended learning removes the barriers that hinder traditional classroom instruction.

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Research suggests that blended learning (BL) approach in EFL teaching has significant potential. It integrates online learning with traditional practices, enhancing students' reading proficiency and facilitating social interaction. BL courses also positively influence reading comprehension. The success of BL courses depends on students' perception, and understanding their attitudes towards BL is crucial for generalizing it to other EFL settings. The need for innovative teaching methods to expose EFL students to English is evident.

According to Graham (2006) Blending at the activity level takes place when a learning activity contains both face-to-face and online elements. Learners may take part of the lesson in class and may be asked to complete the rest of lesson online or vice versa. In addition, technology can be used to bring experts at a distance into the classroom, creating a simultaneous face-to-face and online experience. Simply, technological tools can be used to make learning activities more authentic. Course-level blending is one of the most common ways of blending. It entails a combination of some face-to-face and online activities within a given course. Also Graham (2006), some blended approaches engage learners in different but supportive face-to-face and online activities that overlap in time, while other approaches separate the time blocks so that they are sequenced chronologically but not overlapping.

### **1.3. Conclusion:**

Note-taking is an essential technique in education that helps in understanding, remembering, and organising information. It has various functions, such as capturing important ideas, helping in reviewing, and encouraging active participation. There are other ways available, such as digital and handwritten notes. Excessive dependence on audio-visual assistance can diminish active participation. E-learning platforms such as Moodle have significantly transformed the field of online education, particularly in light of

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the Covid-19 pandemic. Blended learning methods, which integrate online resources with conventional teaching, provide adaptability and individualised learning opportunities. With the evolution of education, the use of digital tools can improve teaching and learning experiences in various settings.

## **Chapter two: Methodology and design**



## Chapter Two: Methodology and Design

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### **2.1. Introduction**

While the first chapter dealt with the theoretical and general background of the current study, this chapter was devoted to testing the various theories and aspects mentioned in the first chapter of the literature review. We will first explain the research methodology followed to collect and analyze data in this study which aims to explore the various note-taking strategies used by master's students. Description of participants including students of Dr. Moulay Saida University. In addition to discussing and interpreting the data collected. Finally, this chapter will end by presenting the challenges and limitations encountered during the research. The main goal is to provide a comprehensive and understandable outline of this methodology that will form the basis of the study.

### **2.2. Research methodology**

Given the complexity of the research questions, the current research is a descriptive study. Given the urgency of achieving the research objectives, the primary objective is to evaluate students' note-taking skills. Recently, after the end of the epidemic and the emergence of a desire to return to normal life, but everything that appeared after the pandemic changed learning theories and methods, and the integration of the Moodle platform and blended learning into university environments led to the adoption of new strategies and behaviours among students.

In conducting my research, I used questionnaires as a tool to collect data from the sample to be studied, who are first-year master's students in the English Department. I tried to construct objective questions that included everything that was included in the theoretical aspect. The questions included various forms, including direct and optional, with the aim of knowing answers in which the student would be free to express the questions asked. Comfortably without influencing him to obtain pre-planned answers I used questionnaires

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for several purposes. First, they serve as valuable tools for collecting direct and easy-to-interpret data regarding individuals' behaviors. Second, questionnaires allow the exploration of the basic attitudes and opinions held by a particular group regarding a particular topic. This method provides insight into broader views within the group and helps in understanding prevailing views on the topic. Finally, questionnaires play an essential role in collecting uncomplicated data related to the behaviors of individuals, which facilitates a comprehensive analysis of the behavioral patterns of the group studied. By using questionnaires in this multifaceted way, I aim to gain comprehensive insights into student behavior and attitudes, thus enhancing the depth and breadth of my research findings. A questionnaire is a tool used to gather and document information about a specific issue. It should include a list of questions, clear instructions, and space for answers. The purpose of the questionnaire should be related to the research objectives, and it should be clear from the start how the findings will be used. Respondents should be informed about the research's purpose and how and when they will receive feedback (Bhandari 2023).

The decision was made using a mixed method approach, combining quantitative and qualitative methods to gather more reliable and clear data. We mixed between quantitative and qualitative to help provide realistic information because the direct questions provided us with statistics clarifying the student's choices from the various topics presented in the questionnaire. In addition, I resorted to open-ended questions, which, as I previously said, provide comfort for the student in expressing what he knows about the topic presented in the questions without restrictions that limit the expression of the student's feelings and experiences regarding the subject of study.

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Quantitative Method	Mixed-Method	Quantitative Method
Pre-determined	Both pre-determined and emerging methods	Emerging methods
Instrument Based questions	<b><u>Both open and closed-ended questions</u></b>	Open-ended questions
Performance data, Attitude data, Observational data, and Census data	Multiple forms of data drawing all possibilities	Interview data, observation data, and audio-visual data
Statistical analysis	Statistical and text analysis	Text and image analysis
Statistical interpretation	Across databases interpretation	Themes, patterns interpretation.

**Table 2.1** Difference between Quantitative, mixed method, and Quantitative method

Quantitative research involves quantifying things and asking questions such as "how long," "how many," and "the degree to which." Quantitative research aims to quantify the data and generalize findings from a sample of a study from varied perspectives. It requires collecting data, analyzing, and interpreting quantifiable data to prove the hypothesis produced in a specific study. Quantitative research relies on data collection and analysis, which is based on a logical method with a focus on testing theory, influenced by empiricist and positivist ideologies (Bryman, 2016).

Qualitative methods are a set of research techniques used to gather non-numerical data. They're particularly valuable when exploring complex phenomena, understanding perspectives, or investigating social dynamics. These methods often involve open-ended questions and observations (Bryman, 2016). In my research, an open-ended question is one that doesn't have a specific answer and allows for a variety of responses. It encourages deeper thought and discussion rather than just a simple yes or no. These questions often begin with words like "what," "how," or "why."

### **2.2.1. Participants:**

The population of this study consists of first-year master's students at Dr. Moulay Taher University in Saida. The sample size contained a total of 35 students out of 67 students, including females and males, with an average age of 22 years. The idea behind focusing on first-year master's students is that they are the category on which academic study is to be conducted, which makes them better at thinking compared to beginning students, such as first-year bachelor's students, and makes it easier for them to examine their learning strategies. However, even if it is preferable to include the entire population in a research study, it is not always practical to study the entire population (Acharya, 2013, p. 330, as cited in Noor, Golzar & Tojak 2022). Simple random sampling method was used in this study to select the sample.

The researcher decided to use random sampling from didactics and civilization groups to guarantee objective results applicable to a larger target group.

The research is being conducted in the Department of English Language and Literature at the Faculty of Arts and Languages at Saida University. The research was conducted at the end of the first semester and the beginning of the second semester of the academic year 2023/2024.

### **2.2.2. Description of Students' Questionnaire**

The questionnaire structure is based on the research objectives the current research. It consists of fourteen (14) thematic questions that are organized from general to specific. It is divided into four sections.

#### **A. Section One:** General Information (Q1 to Q2).

This section contains 2 questions. It aims at obtaining information about participants'

## Chapter Two: Methodology and Design

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**B. Section two:** perceptions of students. In this instance, participants evaluate themselves as they take notes during face-to-face learning (Q3 to Q7).

Section two comprises five questions. It attempts to investigate the EFL students' perception about Note-taking. The students were asked first if they take notes in the classroom, also they were asked to give its importance and benefits "Note-taking" using their own words. The following Section seeks to extract the preferred strategy they usually employ while taking notes in classroom.

**C. Section three:** Taking notes in e-learning (Q8 to Q10).

In this sections students were encouraged to uncover their opinion regarding In this section three questions were asked, and to self assess the strategies they employed. Preferences and digital tool as well as application for taking notes

**D. Section four:** Taking notes in blended learning using Moodle platform (Q11 to Q14).

Section four consists of four questions about taking notes in blended learning using the Moodle platform. It seeks to know how students behave to take notes with blended learning and Moodle by being familiar with this platform and how students accommodate themselves to take notes in online courses.

### 2.3. Limitations

The research like most other studies seems to have some limitations and drawbacks. We note:

- Several students expressed a lack of interest in responding to the questionnaire, resulting in unanswered questions without any explanation.
- Also due to the lack of attendance of students together in educational classes resulted in the collection of a limited amount of information

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- Our university library lacks books on note-taking strategies, study skills, and Moodle platform use. Our research's case study nature restricts it to a small sample and hinders generalization

### **2.4. CONCLUSION**

In conclusion, this chapter provides an overview of the chosen methodology appropriate for our explanatory research which aims to explore different note-taking strategies used by master's students. The tool used in this study allows the researcher to collect the necessary data and analyze student learning when using Moodle resources. For the purpose of collecting this data, a questionnaire and an interview were directed to the first master's students in the English Department. The chapter also discussed the population sample that contributed to this research. As well as an explanation of the research methods used to complete this study. Finally, the chapter highlighted the limitations of the study that I encountered during this research.

**Chapter three**  
**Data analysis and discussion**

### 3.1. Introduction

This chapter will be devoted to the practical part of this study, in which the data collected was analyzed and discussed in order to achieve and reach our main objectives of research in exploring the note-taking methods used by students in the electronic environment, especially the Moodle platform, and analyzing the performance of students of the first Master of English Language at the University of Dr. Moulay Taher in Saida.

### 3.2. Data Analysis

The present section will consist of presenting data acquired from the students' questionnaire. This section will present analysing data and the findings derived from the data collected from the students' questionnaire related to the research questions.

#### 3.2.1. Analysis of Students' Questionnaire

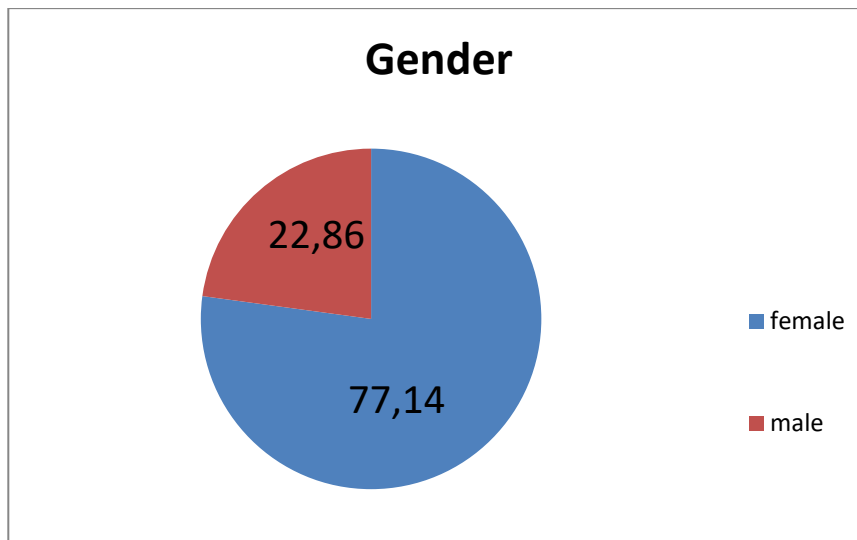
##### Section one: Personal information

**Answers for Q1:** select your gender

The first section of the questionnaire explored the demographic information of the target population. The first graph shows a noticeable imbalance in the gender distribution, greatly in favour of the females as they represent the majority of the student population with a percentage of 77.14%. On the other hand, the second part of male just 22.86%.

*Figure 3.1. Gender of the population*

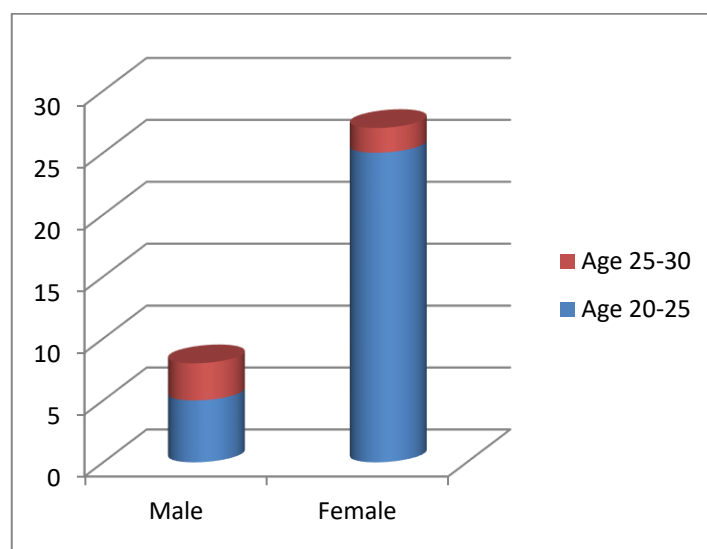




**Answers for Q2:** choose the category where your age

Question 2 attempts to distinguish between two age groups of respondents in order to determine whether they are **mature enough** to be aware of their behaviour when they take notes after the application of the Moodle platform. Regarding the findings of this question, the students' ages range from 20 to 25. It can be seen that the majority of them are between the ages of 20 and 22, which embodies 77% out of the total, while the remaining 22% are between the ages of 25 and 30

*Figure 3.2. The Age of the population*



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### Section two: Taking notes in face to face learning

**Answers for Q3:** Do you take notes while attending classes?

The purpose of this question is to find out whether students use consolidation during the classroom the data suggests that an important number of students (88, 57%) do indeed record notes during class attendance. Students likely engage in note-taking because they understand how important it is to facilitate their comprehension and retention of the subject matter.

The minority of students who do not take notes (4 participants) indicated that, although few may have different learning styles or personal preferences the vast majority find it advantageous and decide to participate in this practice in the classroom.

*Figure 3.3.* Taking notes in classroom



**Answers for Q4:** To what degree do you think taking notes in the EFL class is important?

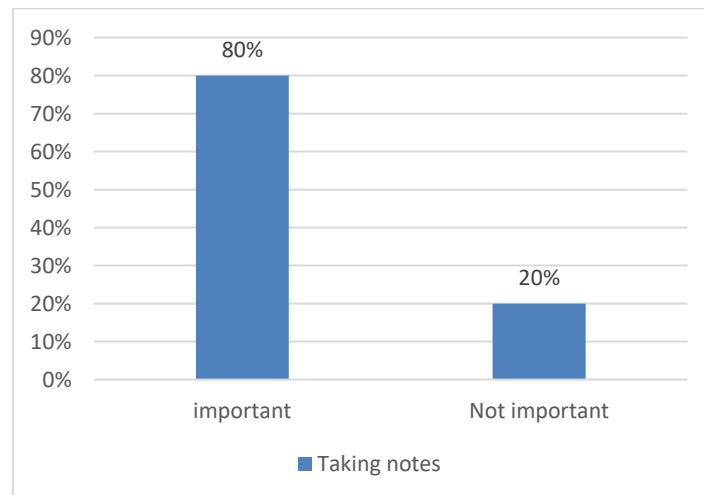
A large number of students, 80%, believed that note-taking during an EFL classroom is crucial. There are variations in student opinions or personal inclinations concerning note-taking, as indicated by the fact that 7 out of 35 students considered it to be unimportant. The fact that note-taking is regarded as a beneficial practice for learning

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English as a foreign language is, nevertheless, supported by the overwhelming majority that it essential.

*Figure 3.4.* The importance of taking notes



**Answers for Q5:** Taking notes in class is beneficial for

The participants' replies indicated that students are conscious of the advantageous of note-taking practice. The answers varied, yet the majority agreed on the following benefits associated with taking notes in class:

- **Data Collection and Organisation:** 57, 14% learners recognised their use of note-taking as a technique for acquiring and organising information that was delivered in lectures.

- **Exam and assessment preparation:** 62, 85% students note-taking to be an essential component of exam preparation, suggesting that their notes to be beneficial tools for studying.

- **In order to enhance concentration during lectures,** 34, 28% learners acknowledge that note-taking facilitates focused attention, implying that it promotes active participation and comprehension of the subject matter.

- **Memory Improvement:** Only 03 students say that they believe taking notes is beneficial to enhance their memory. Students able to encode information into memory

## Chapter Three: Data Analysis and Discussion

more efficiently through the practice of writing it down. In general, the responses the manifold benefits associated with the practice of taking notes during class.

- The lack of responses for items **B** and **E** indicates that the students either did not frequently mention these aspects or found them to be less relevant to their experiences.

*Table 3.1. The benefits of taking notes*

Taking Notes benefits	Point A	Point B	Point C	Point D	Point E	Point F
Gathering and organising data	20					
Composing essays and other assignments		00				
Preparing for assessments and exams			22			
To focus more intently in class				12		
To get ready for presentations					00	
Easy way to memories course and combine lessons						03

**Answers for Q6:** What do you prefer?

According to data collection, face to face learning had large acceptances (57, 14% students choose this approach) because this pedagogical approach facilitates direct student-teacher interaction and active participation, so creating an engaging educational environment. In fact, immediate feedback, group discussions, and activities are all highly beneficial.

The table bellows illustrates that 11 students select blended learning as their preferred method of learning. Blended learning integrates components from both in-person and virtual learning environments. This strategy can capitalise on the benefits of each approach, providing opportunities for interaction and engagement while maintaining flexibility.

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On the other hand, only 4 students preferred online learning over face to face learning. Online education supplies students with the freedom and accessibility to study at their preferred environment and at their own tempo. However, it can occasionally be devoid of the practical experiences and interpersonal engagement that are inherent in in-person education.

*Table 3.2. Students' preference of learning styles*

<i>Learning approach</i>	Face to face	Blended	Online
<i>Students' replies</i>	20	11	4
<i>Percentage</i>	57.14%	31.42%	11.42%

### **Answers for Q7: Which methods do you employ when taking notes?**

The results show cased that the students' methods of taking notes varied based on a wide range of opinions. According to 18 students, they focus on writing and listening skills using a pen and paper in a traditional manner. The students actively listen to the speaker, developing their ability to pick out important details and main ideas.

When students take notes, 06 of them recommend using clever applications like ChatGPT to give you a brief summary. However, 05 participants, in response to this question, indicate that the arrangement of principal ideas, titles, and subtitles should be hierarchical. Other 03 Students confirm that using abbreviations and writing down key words when taking notes is the norm. yet, 02 students believe that they summarise and paraphrase the lecture's important points. Finally, only 01 student asserts that she/he take lecture notes in the form of sentences.

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Table 3.3. Note taking methods employed by students

<b>Opinion students</b>	<b>number</b>	<b>percentage</b> <b>%</b>
Concentrate on listening and writing skills on paper	18	51,43 %
Use a smart app such ChatGPT	06	17,14 %
Organize main ideas, titles, and subtitles in a hierarchical manner	05	14,28%
Summaries and paraphrase the Important points	03	8,57 %
writing key words and using abbreviations	02	5,71 %
Writing notes in sentences	01	2,86 %
<b>Total</b>	<b>35</b>	<b>100 %</b>

### Section three: Taking notes in e-learning

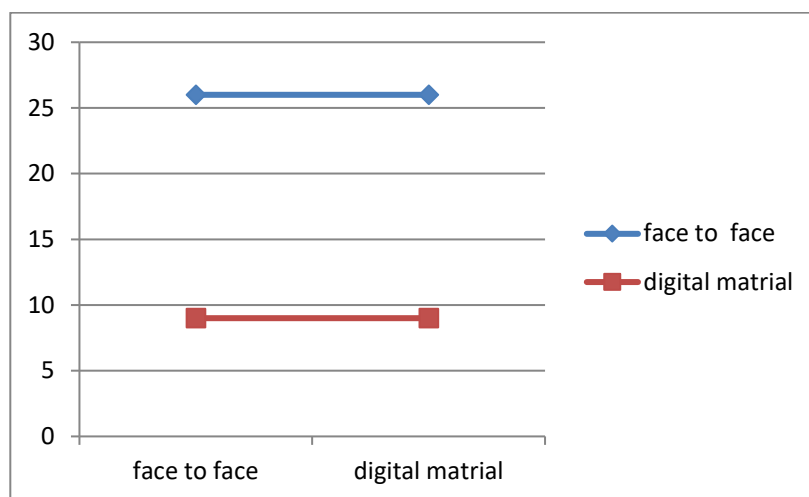
**Answers for Q8:** Do you prefer taking note in

The aim of this question is to know the extent to which students rely on in-class study or virtual study the large majority of 74, 28% students said that they prefer taking notes in face-to-face learning because they consider that engaging in direct note-taking during class can facilitate a more immediate connection with both the subject matter and the instructor. It allows immediate interaction with the information and provides the capability to ask questions.

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On the other hand, only 09 students prefer using digital material like mobile and other tools to note-taking because they see benefits such as easy organization, search ability, and accessibility from anywhere with an internet connection.

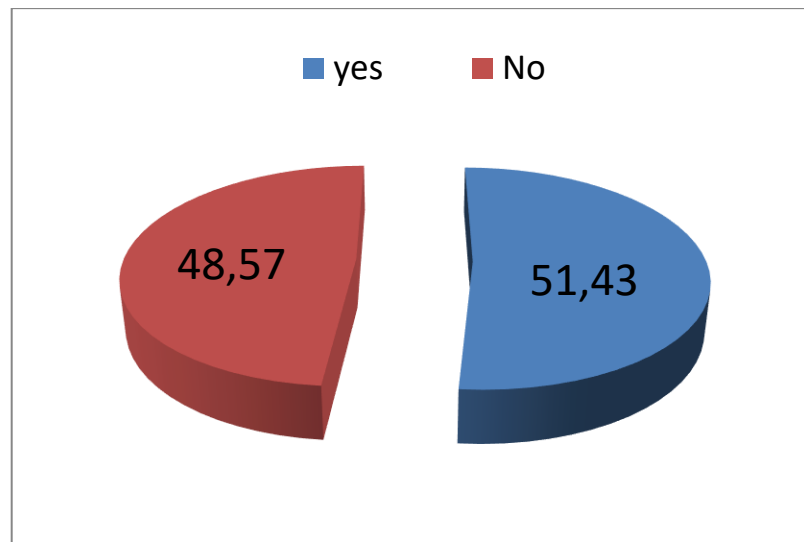


*Figure 3.5.* Chart graphic describe different kind of learning

**Answers for Q9:** Do you use digital tools when taking notes?

The aim of this question is to find out the electronic tool most used while practicing note-taking. In this question, 18 students confirmed their preference for taking notes and using digital tools, such as a mobile phone which students employ as a tool to take notes from pre-prepared lectures downloaded in the form of slides. Conversely, 17 students reported that they do not use a digital tool when taking notes. They state that writing by hand may be more comfortable or natural compared to typing on a keyboard, touch screen, or digital device.

*Figure 3.6.* Notes taking using digital devices



*Table3.4.preferable digital tools*

No	Tool used	Percentages
01	The use of mobile phone	From all students 15 of them who use smartphone note-taking, there were 83,33% students use mobile
02	The use of computer	From all students 09 of them who use computer note-taking, there were 50% students use computer
03	The use of laptop	From all students 07 of them who use digital note-taking, there were 38.88 % students use laptop

**Answers for Q10:** Is there any application (s) you utilise when taking notes?

The findings of this question present a plenty of reasons behind students' use applications of .note-taking To be specific, 37, 14% students report using note-taking applications, including One Note, Evernote, and Google Keep. And 09 students affirm that they use the application to summarise and paraphrase such as ChatGpt. Additionally, 05



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students state that they use a block note on their phone. By contrast, 08 students reply that they rely on the traditional way to take notes: by utilizing highlighter in a Word file or with a colour pen.

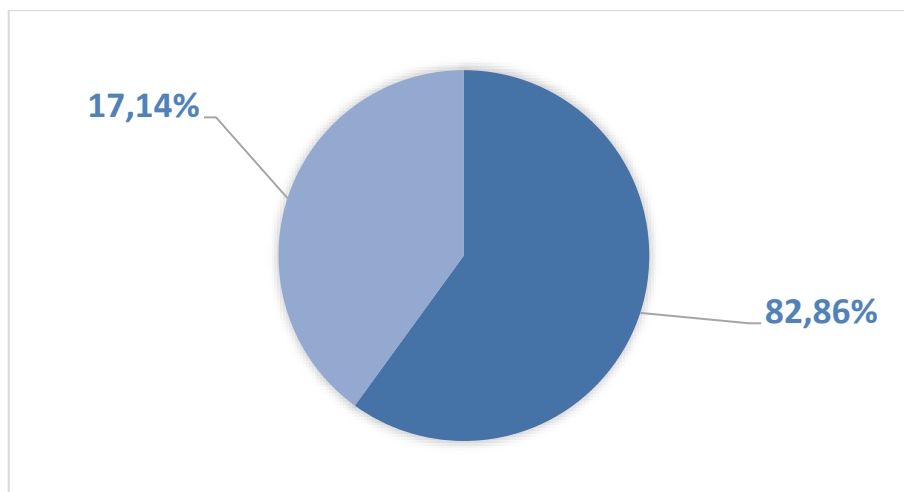
*Table 3.5. Students notes taking applications*

No	Students opinion	27 student say yes	Percentages
01	Students use <b>note taking app</b> such <b>Evernote and Google Keep...others</b>	13 students	From all students 13 of them who use note taking app, there were 48,15 % students
02	Students use <b>summarizing app</b> and <b>CHATGPT</b>	09 students	From all students 09 of them who use summarizing app and CHATGPT, there were 33, 33% students.
03	Students use <b>block note of the smartphone</b>	05 students	From all students 05 of them who use block note of the smartphone, there were 18,52% students

### **Answers for Q11:**

This question seeks to determine whether or not students prefer Moodle courses. The pie chart demonstrates that the majority (82, 86%) showed favourable attitudes towards the immersing of Moodle platform as they start to become familiar with the platform. Whereas only 06 students (17, 14%) do not prefer of the platform.

*Figure 3.7. Adaptation with Moodle platform*



**Answers for Q12:** Do you taken notes from courses that are available on the Moodle platform?

The aim of this question is to find out whether students take notes from the lessons published on the Moodle platform the respondents reply about taking notes from Moodle courses varied. The majority (22 learners) expressed a reliance on taking notes from courses uploaded on Moodle platform. On the other hand, 13students disagreed for various reasons. Understanding the reasons for their disagreement could offer valuable insights into the structure and delivery of Moodle courses, as well as how learners interact with the material. In contrast, 8 out of 13 respondents who answered "no" reported taking pictures, while 5 out of 13 reported recording audio.

*Table 3.6. Moodle's Disagree Course Functionality*

No	Students opinion	13 students say <b>no</b>	22 students say <b>yes</b>
01	Students use note taking applications such Evernote and Google Keep...others	22 students	All students express that the teacher made an effort to prepare and summarize the lecture, so
02	Students took photos from the	<b>08</b> out of 13	

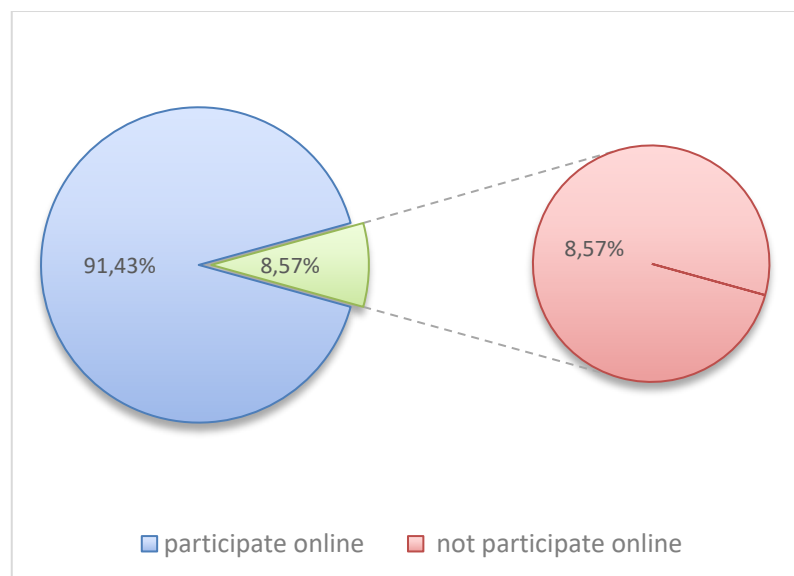
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	lesson slider published by teachers.	students	they only
03	Students recording audio from the lecture.	05 out of 13 Students	highlighted important ideas that were already mentioned in the platform

### Answers for Q13: Have even take an online session?

The aim of this question is to find out whether students practice taking notes during online lessons. Based on the results of this question, 32 students have experienced an online session during the COVID-19 pandemic, which means 91,43% of the population, but only 3 students said no, so 8,57% for different reasons.

Figure 3.8. Students' experience with the online session



### Answers for Q14:

When submitting this question, students justified their choice and provided a range of qualitative and objective evidence. this kind of answer reflects their feelings about a given obstacle or problem, so we find a variety of responses that enrich the subject matter. When asked this question, half of the participants (51.43%) answered negatively, noting that they

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had become accustomed to taking notes and becoming familiar with the platform since the Covid-19 pandemic. Conversely, 17 students, representing (48.57%), stated that they encounter difficulties with Moodle sessions and lack the necessary tools to take notes the professor's fast delivery during the virtual lesson makes it challenging to take notes and maintain a consistent learning format.

*Table 3.7. Online session difficulties using moodle platform*

Question 14	Yes answer	No answer
Percentage	48.57%	51.43%
Answer of students	The simultaneous participation of learners in classroom discussions can hinder their understanding of a specific idea.	The Moodle platform allows for more detailed lectures because I store them first after summarizing and rephrasing them.
	The online session creates a kind of mental connection between the student and the teacher, so I cannot take notes on the subject matter also online session is not encouraging or motivating participants to take notes	Taking notes poses no difficulty for me as I am accustomed to the practice also create a situation for following up and collecting information.
	Internet limitations have caused significant disruptions and disruptions to the Moodle platform, resulting in its inability to be sustainable.	equip myself to write down information both in face-to-face in class and through an online session on the Moodle platform.

### **3.3. Discuss of the results**

#### **Discuss the results of section one**

Starting with the demographics, Graphs 7 and 8 demonstrate a distinct gender and age distribution in our Master One English classes. The study primarily focuses on younger adults aged 20–30, with 75% of the total sample falling between 20-22. The distribution suggests a concentration in the early 20years, possibly reflecting demographics. A smaller but significant proportion (22% aged 25–30) includes older students with different perspectives. Most of the students conveyed their thoughts or opinions. A considerable number of students employed appropriate vocabulary to express themselves, demonstrating an important degree of self-awareness and an active interest.

#### **Discuss the results of section two**

The answers of Q3-Q4-Q5 demonstrate that the majority of students, 31 out of 35, engage in note-taking during class sessions. The respondents state that note-taking facilitates learning as they consider it a necessity to remember and organize ideas, to understand the lecture's content, recognizing its importance for enhancing comprehension and retention of subject matter. This is due to the effective organization and processing of information during lectures or discussions. Only 4 out of 35 students do not take notes, despite various learning styles. The data highlights the importance of effective note-taking strategies in supporting students' Studies and emphasizes the role of educators in promoting and fostering these skills. These results agree with Boch and Piolat (2005: 101) "the most significant factor about the process of note taking is that it helps learners to capture the content of the lecture". Indeed, the findings' interpretations are in accordance with Khavazi, Yousefi&Kharaghan (2018) who claimed that note taking helps learners to get fully interested in the lesson by highlighting the key points that could have led to an improvement in listening comprehension.

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The data clearly illustrates the perspectives of students concerning the practice of taking notes when acquiring English as a Foreign Language (EFL). A significant majority of 28 out of the 35 students surveyed hold the belief that note-taking is of the greatest importance in EFL. This suggests that an important percentage of students recognise the value and impact of note-taking as a language-acquisition-specific learning strategy. The large percentage of students who consider note-taking to be essential suggests that they perceive it to be a successful strategy for improving their comprehension and retention of English language material. This is consistent with the generally acknowledged belief that active participation, including the act of taking notes, can greatly facilitate the process of acquiring a new language by providing reinforcement for linguistic concepts, including vocabulary, grammar, and other elements introduced during the lesson.

The analysed data further offers valuable insights into students' perspectives on the advantages linked to taking notes during class sessions. Several significant themes arise from their responses. Firstly, gathering information and organising twenty learners, a substantial the majority of students, recognise note-taking as a beneficial strategy for learning and organising the information during lectures. Students recognise that notes are essential for gathering important information and organising it for future use. Secondly, prepare for exams and assessments. The majority of students (22) regard note-taking as crucial for preparing for exams, indicating that they see their notes as effective tools for studying. This indicates that students are aware of the benefits of taking notes to solidify their learning and prepare for tests.

When it comes to the idea of recording, Kiewra (1991) find that students recall and understand more lecture material if they record it in their own notes than the students who do not take notes and consequently perform better on tests. The informants stated that recording information is a useful task and a reminder to rely on for later use particularly to prepare for

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exams. Thirdly, note-taking improves focus and attention during lectures, encouraging active participation and understanding. A group of 12 learners has shown that it improves attentiveness and focus in the classroom.

Slotte and Lonka (2001: 141) stated that instead of engaging in inactive listening during class, you will actively participate in the learning process also encourages you to observe more deeply. The fourth, improvement of memory, while a smaller group of students have this view, they believe that note-taking enhances memory by facilitating the process of storing information in memory. This emphasises the supposed cognitive advantages of the practice, indicating that the act of writing information increases the ability to remember and retrieve it which was claimed by Boch and Piolat (2005: 104) “It aids in memorization and helps resolve complex problems”.

It is interesting to note that there were no comments for items B and E, suggesting that students either did not frequently discuss these issues or considered them to be less important in their experiences. The lack of note-taking may suggest that students may not recognise the usual advantages linked to it, such as improving critical thinking abilities or promoting discussion and collaboration.

In general, the comments highlight many benefits associated with taking notes during class. Students regard note-taking as a good technique that enhances their learning and academic achievement by facilitating information organisation, memory retention, and exam preparation.

When it come to students’ preference for different kinds of learning including face-to-face, online, and blended learning, the data shows that the highest preference was for face-to-face learning. A total of 20 students have chosen face-to-face learning due to its emphasis on interaction, active engagement, and an encouraging environment that supports group

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discussions and activities. Mixed learning, or blended learning, is the middle choice, as eleven students accepted this approach. Blended learning integrates components from both face-to-face and online learning environments, capitalizing on the benefits of each approach and providing opportunities for interaction and engagement while maintaining flexibility. Blended learning seems to offer a balanced approach using the strengths of both face-to-face and online learning. This result is confirmed by Graham (2006). Blending at the activity level takes place when a learning activity contains both face-to-face and online elements. Learners may take part of the lesson in class and may be asked to complete the rest of the lesson online or vice versa. In addition, technology can be used to bring experts at a distance into the classroom, creating a simultaneous face-to-face and online experience. Simply, technological tools can be used to make learning activities more authentic. Course-level blending is one of the most common ways of blending. It entails a combination of some face-to-face and online activities within a given course.

Finally, out of the total number of students, just four chose online learning as their preferred mode of education. They may like the variety that it provides, enabling them to learn in their favourite environment and at their own speed. However, they may also recognise the constraints of online learning in terms of offering practical lessons and human interaction, as opposed to face to face learning according to Allen, E., & Seaman, J. (2003) “an online course is defined as having at least 80% of the course content delivered online. Blended education courses are defined as having between 30% and 80% of the course content delivered online”.

The survey results highlight a predominant preference among the 18 students for traditional note-taking methods, specifically utilising pen and paper. Students actively engage with the speaker to discern important details and main ideas, valuing this approach for its emphasis on enhancing both writing and listening skills. However, the data also reveals a



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growing inclination towards incorporating technology into the note-taking process. Six students advocate for the use of innovative apps like ChatGPT and mobile note-taking applications such as OneNote, recognising their potential to streamline the note-taking experience by providing concise summaries. Moreover, five students emphasise the importance of hierarchical organisation in note-taking, suggesting a structured approach to capturing and organising information. Additionally, three students affirm the widespread practice of employing abbreviations and keywords to condense notes efficiently. Further insights from the survey show that two students actively engage in summarizing and paraphrasing lecture content, indicating a deeper level of engagement with the material. Lastly, one student stands out for their preference to structure lecture notes in the form of sentences, highlighting individual variations in note-taking strategies. Overall, the survey data underscores the diverse approaches students employ to optimise their note-taking process, balancing traditional methods with emerging technological tools and emphasising the importance of adaptability to individual learning preferences. So the results of the presentation show that the students are not familiar with academic methods of taking notes and the answers show that each student has his own way of taking notes.

The data shows a preference for face-to-face learning and traditional note-taking techniques over electronic alternatives among surveyed students. The majority of 26 students prefer face-to-face learning due to the immediate interaction with the material and instructor, fostering a deeper connection with the subject matter. Nine students prefer electronic note-taking for its organization and accessibility, on the other hand they constitute a minority. Despite these advantages, the majority still favour face-to-face learning, emphasizing the importance of immediate engagement and interpersonal interaction. These preferences may vary across different demographics and educational settings. Some students prefer digital note-taking due to its speed and ease, while others use

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both digital and traditional methods depending on the situation and conditions. Digital note-taking was preferred by students, who felt it made it faster and easier to use apps or platforms. This aligns with the belief that digital tools can improve the quality of note-taking. One of the factors that contributed to choosing to take notes face-to-face is that study in Algeria depends on direct study in the classroom, and in the last three years after the pandemic passed, the student was forced to adapt himself to the technology that the university included in its educational policy.

In the same vein, the research data shows a significant difference in students' preferences for digital note-taking tools. 17 students prefer traditional handwritten notes due to comfort and natural writing habits, while 18 students prefer digital tools like PowerPoint slides for their organization, accessibility, and multimedia integration. This preference highlights the importance of accommodating different learning styles and preferences in educational environments. The data suggests that a larger cohort of students prefer digital tools over handwritten notes, emphasizing the need to provide materials that best suit individual needs and preferences. This diversity highlights the need for educators to adapt to diverse learning styles and preferences in educational settings. On the same round, the findings identify that 50% prefer computer note-taking over traditional methods. This high adoption rate indicates that computer-based note-taking is widely perceived as a viable and effective approach by a significant portion of students. This trend reflects the growing integration of technology into educational practices and the advantages digital tools offer, such as enhanced organization, accessibility, and efficiency. The data highlights the popularity and relevance of computer note-taking in contemporary learning environments. Secondly According to the data, a staggering 83.33% of students who engage in mobile note-taking prefer this method. Specifically, the information suggests that out of all the students surveyed, a total of 15 use Smartphone note-taking techniques.

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This high percentage implies a clear preference among the surveyed students for mobile-based note-taking, indicating its widespread adoption as a convenient and practical approach. The widespread prevalence of smartphones and their easy ability to capture and organise notes while on the move highlight the significance of mobile note-taking. Moreover, the accessibility and versatility of mobile note-taking applications likely contribute to their popularity among students. This data sheds light on the pivotal role of mobile devices as indispensable tools for note-taking in contemporary educational settings, emphasising their significance in facilitating efficient and flexible learning experiences. Thirdly the data shows that 38.88% of surveyed students use a laptop for digital note-taking, with a significant minority preferring other digital devices. This suggests that while laptops are a popular choice, other digital methods like smartphones or tablets may be more popular. Factors such as convenience, portability, and personal preference may influence this preference. Despite being a viable option, laptops are not the dominant choice among students, highlighting the diverse preferences and considerations they have when selecting the most suitable tools for their note-taking needs.

Furthermore, the findings elucidate that 77.14% of students use note-taking applications, with five students preferring digital block note apps on their phones. Nine students use these apps for summarising, paraphrasing, or interacting with smart ChatGPT tools. Thirteen students use specific note-taking apps like One Note, Evernote, and Google Keep, indicating a range of preferences. However, eight students express a preference for traditional methods, such as highlighters in Word files or using a color pen. This suggests that, despite the popularity of digital tools, there is still a segment of students who prefer traditional methods. The data indicates that students widely adopt note-taking applications due to their convenience, functionality, and personal preference, while acknowledging the continued relevance of traditional methods for some individuals. Note-taking applications

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facilitate the sharing of notes between students and teachers. These notes can serve as reminders to complete assignments or as a pedagogical tool to elaborate on in-class lectures, create discussion questions, and more.

The majority of students, including 82.86% of 29 students, are in favour of adopting lessons on the Moodle platform, recognizing the benefits of online learning. This positive response reflects the digital platforms that the Algerian University has included in its academic teaching policy, in addition to the fact that during the past months, the first responsible in the sector of high education visited and supervised the complete digitization of the university model, Dr.MoulayTaherSaida, as a sample, and the priority is until it is circulated to all universities. However, a minority, 14%, or six individuals, refused to adopt the Moodle platform due to the limited Internet service in rural areas and the lack of students' access to the platform except at the request of professors, for example, sending evaluation papers and assignments, in order to improve the rate of students' access to the platform. This highlights the digital divide, where disparities in access to technology and internet infrastructure can hinder some students' engagement with online learning platforms.

The data provided sheds light on participants' attitudes towards taking notes from Moodle lessons, with a majority expressing agreement with this practice. Specifically, 22 out of the total participants indicated their support for taking notes from Moodle lessons, suggesting that they find value in the materials provided by teachers on the platform. However, it's equally important to understand the perspectives of the 13 participants who disagreed with the idea of taking notes from Moodle lessons. Their reasons for disagreement offer valuable insights into how learners interact with the materials presented on the platform. These reasons could vary widely and might include factors such as the

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structure and delivery of Moodle lessons, the relevance or quality of the materials provided, or individual preferences for note-taking methods.

Among the participants who disagreed, 8 out of 13 reported taking pictures from PowerPoint presentations, while 5 out of 13 stated that they recorded audio of the lesson instead. These alternative methods suggest that these learners may prefer more dynamic or multimedia-based approaches to capturing information, rather than traditional note-taking from written materials. This data highlights the importance of considering diverse learning preferences and styles when designing and delivering Moodle lessons. It suggests that providing varied and engaging content formats, such as multimedia presentations or audio recordings, may better cater to the needs and preferences of certain learners. Moreover, understanding why some participants choose alternative methods like taking pictures or recording audio can inform educators about potential areas for improvement in the delivery of Moodle lessons. This feedback can be used to enhance the effectiveness and accessibility of online learning materials, ultimately benefiting a wider range of learners. In summary, while a majority of participants support taking notes from Moodle lessons, it's crucial to acknowledge and address the perspectives of those who disagree. Their feedback can provide valuable insights into optimizing the structure, delivery, and content of Moodle lessons to better meet the diverse needs of learners.

The COVID-19 pandemic led to a significant increase in online distance learning, with 91.43% of students participating. However, 8.57% of students did not participate, mainly due to the lack of access to the Internet in rural areas and the fact that distance learning remains optional, so most students are not keen on entering distance classes. This highlights the digital divide, where disparities in internet infrastructure can hinder some students' ability to engage in online learning. Addressing digital inequalities is critical to achieving equitable access to education, especially during crises like the pandemic.

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Initiatives to bridge the digital divide may include expanding broadband infrastructure in rural areas, providing Internet access subsidies or support for economically disadvantaged students, and developing alternative learning modalities. Understanding the reasons behind students' lack of engagement can help develop more comprehensive educational strategies, such as offline learning materials or blended methods that combine online and offline components. In conclusion, addressing barriers such as Internet access in rural areas and adopting inclusive educational strategies can ensure equitable access to quality education for all students, regardless of their geographic location or socioeconomic background.

The presented data highlights an important aspect of the student experience on Moodle, particularly in live lessons where students interact with different files in different formats. Effective learning emphasizes the importance of understanding, assimilating, and summarizing the concepts presented in these files. However, the data suggest a challenge in the current process of taking notes and summarising material on the Moodle platform. One of the main concerns raised is the inefficiency and inconsistency of traditional note-taking methods, such as writing notes on paper and repeatedly reviewing files on a computer. The description of this processes as difficult and time-consuming highlights the need for a simpler and more integrated solution within the Moodle platform itself. The proposal to integrate a note-taking service directly into the Moodle platform addresses this challenge by providing a central space for students to record notes and summaries. By having a dedicated area within Moodle for taking notes, students can easily refer to their notes alongside their material, eliminating the need to switch between platforms or open a lot of different media. Furthermore, limiting access to these notes to the owner guarantees privacy and confidentiality, enabling students to confidently record their personal insights and ideas without worrying about unauthorised access. Implementing a note-taking feature within Moodle is consistent with the platform's goal of facilitating effective online learning

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experiences. It enhances student engagement by providing tools that support active learning practices, such as summarising content and taking personal notes. In addition, it simplifies the learning process by reducing the cognitive burden associated with controlling and managing multiple external tools or resources. Overall, the proposal to integrate note-taking services into the Moodle platform represents a proactive step towards improving the student experience and maximising the educational benefits of online learning environments. By meeting the specific needs and preferences of students, Moodle can enhance its effectiveness as a comprehensive learning management system.

### **3.4. Pedagogical Recommendations:**

#### **• For Students**

Students should review and take daily notes, deciding whether to use pen and paper or digital tools. They should be familiar with the latest digital note-taking applications to meet their needs and be more innovative. Students should use different note-taking methods and strategies according to their individual styles and preferences. They should follow appropriate guidelines for the successful use of audiovisual aids to avoid problems and misperceptions. Audio visual aids should be used as a supplementary tool with a predetermined goal, ensuring they are used effectively and efficiently.

- The reliance of blended teaching/learning through focusing on face to face learning and virtual learning in order to be acquainted about both types.

- The internet connectivity in Algeria is extremely poor. The unexpected disconnect hinders the effective use of any form of virtual learning environment. Therefore, the establishment of a secure system of interconnected components and wide connectivity would allow the execution of e-learning and enhance its accessibility.

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- **For teachers**

Several key considerations must guide the facilitation of effective learning experiences. Firstly, teachers should receive comprehensive training in the use of diverse educational technologies and official academic platforms provided by the university. This ensures proficiency in leveraging digital tools to enhance teaching and learning processes. Additionally, instructors should resist the temptation to prioritise lesson completion solely based on time constraints, recognising that modern pedagogy emphasises a blended learning approach where comprehension and engagement take precedence. To support this, the government and administrations should provide universities with advanced resources and laboratories to enable lecturers and students to effectively utilise ICT tools., fostering a conducive learning environment. Moreover, Teachers must increase learners' awareness about the value of mastering effective note-taking strategies, for example, by intentionally including a note-taking lesson in the first years of university. Lastly, students can reinforce their understanding and review course materials at their own pace by regularly receiving summaries of class content in PowerPoint presentations on the Moodle platform, which will facilitate comprehension and retention.

- Teachers and students may enrol in virtual or actual courses to obtain more knowledge about how to use Moodle platforms.



## **GENERAL CONCLUSION**

# General Conclusion

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## Conclusion

Note-taking is a common way of recording information in lectures at Higher education levels. Thus, students are expected to take notes to retain information for future reference. It is a complex activity in academic settings because it involves interweaving both comprehension and production processes

The study found that almost all students agree on the importance of taking notes on paper or digitally, which is a more efficient and convenient method for students. This is particularly true for laptops and mobile devices, which are always accessible to most students. E-Learning can address this issue. It can provide materials in a single medium or multiple media and in different formats to meet different learners' preferences in learning styles, needs, and abilities.

It offers learning opportunities to students anywhere the technology can reach, at any time, and usually at a reasonable cost Both male and female students agree on the effectiveness of note-taking, as it helps them remember material and fosters discipline. There are Three non-manual methods include Coloring Method, Symbols or Underlining Method, and Apps Method. Coloring Method uses different colors to highlight key points, while Symbols or Underlining Method uses symbols to emphasize important information. Apps Method allows students to choose from a range of options for each note they take, evaluating its impact in real-world settings.

The study also highlighted the importance of face-to-face learning over online learning due to the challenges faced during learning activities. Lecturers need to understand students' obstacles and try to solve their problems related to educational materials, increasing their reliance on technology to improve cognitive efficiency. The study also highlighted the positive influence of professors on students' note-taking during listening tests. It demonstrated the positive influence of teachers on students' note-taking

## General Conclusion

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by analyzing changes in the quality of notes before and after class. Blended learning was effective in increasing post-reading skills, especially: summarizing and writing responses to various topics. universities focused only on using Moodle while there are many other tools and alternatives that are seen by students as easier-to-use. Moreover they think that the e-learning use is not restricted to the Moodle use, which is the reality as it was mentioned. Also Students must participate in online training courses using a variety of teaching tools, such as taking notes directly within the Moodle platform using the built-in text editor or by responding to discussion prompts, assignment instructions, or posts.

Discussion opportunities through note-taking, group discussions, and obtaining one-on-one feedback from their teachers and peers in multiple learning settings (in the classroom and at home) Teaching effective note-taking strategies in class is crucial for successful test performance and student learning. Note-taking is a complex activity that involves intertwining comprehension and production processes. Working memory is a critical cognitive component, and individual differences in performance can be traced to the extent to which working memory demands are managed. Note-taking is not just a simple transcription of information, but a unique written activity that requires quick comprehension and recording of information.

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## **Appendix**

## **Students' Questionnaire.**

### **Questionnaire**

Please feel free to contribute meaningful responses to the recommended questions, which address students' note-taking techniques and learning behaviours in Moodle platform. Your responses will be very helpful in achieving the study's goal. Furthermore, none of your responses will be shared with anyone.

#### **Section one: Personal information**

Q 1: Kindly select your gender:

a. Male  b. Female

Q 2: Please choose the category where your age is included:

A-20-25                       b-25-30

#### **Section two: Taking notes in face to face learning**

Q 3: Do you take notes while attending classes?

a. Yes       b. No

Q4: To what degree do you think taking notes in the EFL class is important?

a. Very important  b. important  c. Neutral  d. not important

Q 5: Taking notes in class is beneficial for

A. Gathering and organising data

B. Composing essays and other assignments

C. Preparing for assessments and exams

D. To focus more intently in class

E. To get ready for presentations

F. Other .....

Q 6: What do you prefer?

a. Face to face learning       b. online learning       C. Blended learning

Q 7: Which methods do you employ when taking notes?

.....  
.....  
.....

**Section three: Taking notes in e-learning**

Q 8: Do you prefer taking note in

- A. Face to face       b. E-learning

Q 9: Do you use digital tools when taking notes?

- Yes       No

• If you say yes, please specify

- a. Computers     b. Smartphones     c. Laptops     d. Tablets

Q 10: Is there any application (s) you utilise when taking notes?

.....

**Section four: Taking notes in blended learning using Moodle platform**

Q 11: Are you adapted with Moodle courses?

- a. Yes     b. No

Q 12: Do you take notes from courses that are available on the Moodle platform?

- a. Yes     b. No

• If no, which of these reasons led you to give up taking notes?

- a. Lecture' availability on Moodle     b. Recording     c. Taking pictures

d. Other (specify please)

.....

Q 13: Have even take an online session?

- a. Yes     b. No

Q 14: Do you find it difficult to take notes in a virtual online session using the Moodle platform?

- a. Yes       b. No

Justify please .....

Thank you for your cooperation.